Dental Education

Self Study

Accreditation

Site Visit: November 12-14, 2013
Administrator Verification of the
Self-Study for a Dental Education Program

The Commission requires appropriate administrators of the institution* verify that the contents of the self-study are factually accurate.

<table>
<thead>
<tr>
<th>Sponsoring Organization:</th>
<th>University of Illinois at Chicago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address:</td>
<td>801 S Paulina Street</td>
</tr>
<tr>
<td>City, State &amp; Zip Code:</td>
<td>Chicago, IL 60612</td>
</tr>
<tr>
<td>Chief Executive Officer:</td>
<td>Paula Allen-Meares</td>
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<td></td>
<td>Chancellor</td>
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<td>Telephone Number:</td>
<td>(312) 413-3350</td>
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<td>Signature:</td>
<td>[Signature]</td>
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<tr>
<td>Date:</td>
<td>9/5/13</td>
</tr>
<tr>
<td>Dental School Dean:</td>
<td>Bruce S. Graham</td>
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<tr>
<td></td>
<td>Dean</td>
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<td>Telephone Number:</td>
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<tr>
<td>Signature:</td>
<td>[Signature]</td>
</tr>
<tr>
<td>Date:</td>
<td>9.9.13</td>
</tr>
<tr>
<td>Academic Dean</td>
<td>G. William Knight</td>
</tr>
<tr>
<td></td>
<td>Executive Associate Dean for Academic Affairs</td>
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<tr>
<td>Telephone Number:</td>
<td>(312) 355-4562</td>
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<tr>
<td>Fax Number:</td>
<td>(312) 996-1022</td>
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<tr>
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<td>9/9/2013</td>
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Previous Site Visit Recommendations

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Compliance with Commission Policies

Please provide documentation demonstrating the program’s compliance with the Commission’s policies on Third Party Comments, Complaints and Distance Education

1. Please provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission’s policy on Third Party Comments.

Signs were posted in all clinics and on bulletin boards throughout the College 90 days prior to the site visit. A copy of the posting will be available on site.

2. Please provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission’s policy on Complaints.

Students are notified by email at least once each academic year of the Commission’s policy on Complaints. Copies of these emails will be available on site.

3. If applicable, please provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission’s policy on Distance Education.

Not Applicable
Definition of Terms

Clinic Manager – Staff member who monitors student performance and reports to the Managing Partner

Group Practice Clinic – (GP) One of three predoctoral comprehensive care clinics (Monet, da Vinci and Rembrandt)

Managing Partner (MP) – Faculty member (there are three) responsible for student education and patient care in one of the Group Practice Clinics

Small Group Learning – (SGL) A component of the curriculum that is a student led, scenario driven learning environment consisting of 6-8 students and a faculty facilitator

Student Town Hall – A Town Hall meeting is held each term for each cohort. Deans from Academic Affairs and Clinical Affairs are present along with other Deans as appropriate.

Subcommittee on Student Promotions (SSP) – A six faculty member committee responsible for making academic decisions based on student performance

Acronyms Used

CAC – Curriculum Advisory Committee
CC – Curriculum Committee
CETL - UIC Council for Excellence in Teaching and Learning
COD – College of Dentistry
DAC - Diversity Advisory Committee
DSTP – Diversity Strategic Thinking and Planning
EC – Executive Committee
FAAC – Faculty Affairs Advisory Committee
GP – Group Practice Clinics
IDDP – International Dentist Degree Program
IDS – Interactive Didactic Session
MP – Managing Partner
OAA – Office of Academic Affairs
ODE – Office of Dental Education
OFA – Office of Faculty Affairs
OSDA – Office of Student and Diversity Affairs
SGL – Small Group Learning
SSP – Subcommittee on Student Promotions
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Foreword

Since the last site visit in 2006, the College of Dentistry has been engaged in fundamental and transformative change. The scope of this change has included right-sizing each program, significant curricular innovation, renovation of every patient care and prepatient clinic, renewal and expansion of research space, funding acquisition and design of building infrastructure modernization, and leadership changes in response to relocations and retirements.

This reflective and proactive accreditation self-study occurs as we celebrate the College of Dentistry Centennial Year. The College agenda during the past seven years has been shaped by thoughtful analyses and planning, a commitment to a shared vision by a remarkable group of faculty, creative leadership by the department heads and associate deans/dean, consistent University support, and State governmental action (with both positive and negative impacts). The self-study has helped us to examine and document where and who we are as a dental education institution at this juncture, and to set a course to continue to achieve our aspirations. It is quite apparent that true to our motto, we have a “Proud Past and a Brilliant Future.”

The College of Dentistry is one of three dental schools in the State of Illinois. We are unique in that we are located in and reflect the rich diversity of the great city of Chicago, offer six dental specialty programs and have a significant NIH funded research enterprise. Each of these factors contributes to enhanced educational opportunities for the students in our predoctoral degree program. As a result of the elimination of the State adult Medicaid for dentistry program and the large class size of the newest Illinois dental school, we have reduced the enrollment in the predoctoral program, and increased the enrollment of some post-graduate programs. These actions will ensure a continued rich patient base for predoctoral student clinical education, will enhance the clinical revenue of the postgraduate programs, and will provide the budgetary resources to stabilize student tuition.

The predoctoral education program has dramatically evolved since the last accreditation site visit. After several years of faculty study and planning, the College changed the degree awarded to dental students from the DDS to the DMD to symbolize the implementation of a problem-based curriculum in 2011, for the graduating class of 2015 and subsequent classes. Now in its third year, the curriculum’s outcomes have been positive for student performance and faculty engagement. We have also grown our 2006 pilot extramural service learning program to make it integral to our dental student’s clinical and social education.

This program is now required for all students and encompasses more than 4500 student days of experience each year in our community partner clinics. We have successfully augmented our student participation in research through our emphasis on evidence based decision making, our CaseCATs program and our DMD/PhD opportunity (with 7 students currently enrolled in the program). The predoctoral comprehensive care model, devoid of clinical requirements, has a proven record of robust clinical experiences for our learners. The predoctoral dental student implant program ensures that every student restores an implant supported over-denture and several single tooth restorations. A competitive selective program provides for some predoctoral students to surgically place dental implants for restoration.

The building renovation has been all encompassing. By January 2014, for the predoctoral program, there will be 5 newly-equipped and renovated comprehensive care clinics, a pediatric clinic, and an oral surgery clinic. These projects have included a complete rebuilding and re-equipping of the clinics with contemporary high technology units. There will also be a re-designed and fully equipped...
prepatient care clinic. Totally redesigned and re-equipped post graduate clinics have been built in the disciplines of pediatrics, orthodontics, endodontics, periodontics and prosthodontics. To support technology and advanced patient care there is a newly constructed Implant and Innovations Center that serves both post graduate and predoctoral students and their patients with multi-disciplinary care.

Over the past eighteen months fourth and fifth floor research laboratories have been completely rebuilt, and a new clinical research unit has been constructed. This renovation, supported by an NIH/RRC grant has increased the College capacity for funded laboratory and clinical research, and provided enhanced facilities for predoctoral and post graduate student research experiences.

Beginning in the spring of 2014 the HVAC systems, clinical compressors and evacuation systems, ceilings and lighting infrastructure will be completely renewed. A fire retardant sprinkler system will also be installed. This major capital project has been made possible through a $20.5M grant from the State of Illinois.

This accreditation self-study began in November of 2011 with the challenge from Dean Graham to conduct a thorough and critical review of the College's predoctoral and postgraduate dental specialty programs. He appointed the following members to serve as the Accreditation Steering Committee:

- Dr. William Knight (Chair) Executive Associate Dean for Academic Affairs
- Dr. Philip Patston Associate Professor, OMDS
- Dr. Ales Obrez Associate Professor, Restorative Dentistry
- Dr. Anne Koerber Professor, Pediatric Dentistry
- Dr. Seema Ashrafi Clinical Associate Professor, Periodontics
- Dr. Luisa DiPietro Associate Dean for Faculty Affairs
- Dr. Darryl Pendleton Associate Dean for Student and Diversity Affairs
- Dr. Melissa Burton Director of Clinics
- Dr. Phillip Marucha Associate Dean for Research

The committee established a regular weekly meeting time. They also individually and collectively identified team members for each Standard. The following timeline was established.

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Complete initial program review</td>
<td>June 1, 2012</td>
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<td>Group review and action plans</td>
<td>July 1, 2012-April 1, 2013</td>
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<td>Draft of final report</td>
<td>July 1, 2013</td>
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<td>Final document</td>
<td>August 15, 2013</td>
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<td>Submission of Self-Study</td>
<td>September 10, 2013</td>
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<td>Site Visit</td>
<td>November 12-14, 2013</td>
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The Committee met the timeline. The following table identifies the findings of the Committee, the actions taken and the results to date.
## Self-Study Findings

### Standard 1 Institutional Effectiveness

<table>
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<th>Issue</th>
<th>Priority</th>
<th>Action Plan</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>Inter-Professional Education</td>
<td>High</td>
<td>Engage with Health Sciences Colleges in planning for and delivering inter-professional education opportunities.</td>
<td>Held first IPE day with 880 health science participants in 2013 that included more than 20 faculty facilitators</td>
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<tr>
<td></td>
<td></td>
<td>Actively include dental issues into each IPE scenario used for training purposes</td>
<td>Have two dental faculty members on the IPE planning group</td>
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<td></td>
<td></td>
<td>Support student led IPE programs</td>
<td>Two dental students have leadership positions on Health Sciences Student Council</td>
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<td>Conflict of Interest guidelines</td>
<td>Low</td>
<td>Create and ratify a Conflict of Interest guideline for faculty</td>
<td>Developed and ratified COI Guidelines for faculty</td>
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### Standard 2 Educational Program

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<th>Issue</th>
<th>Priority</th>
<th>Action Plan</th>
<th>Status</th>
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<tbody>
<tr>
<td>Curriculum governance and management</td>
<td>High</td>
<td>Formalize existing ad hoc working groups and stakeholders working on DMD curriculum development, management and delivery into a defined structure with accountability and reporting</td>
<td>Faculty Bylaws revised for Curriculum Committee. (2013)</td>
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<td>Established the Curriculum Advisory Committee, approved by the Curriculum Committee (2013)</td>
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<td>Approved the End of Course report to implement Summer 2013</td>
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<td>Developing the Course Director role in course management, examination construction and scenario maintenance (in progress)</td>
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<tr>
<td>Learning Outcomes and Assessment Identification and Tracking</td>
<td>High</td>
<td>Review, rewrite, edit existing Learning Objectives</td>
<td>Sent LO’s to departments for comment review and edits as necessary. Restorative Dentistry has completed the review, Periodontics nearly finished.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establish a data base for tracking Learning Objectives and Assessments</td>
<td>Have completed the mapping of all LO’s used in DMD 1 and DMD 2 years</td>
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<td>Have a contract with data management company to map LO’s, assessments, cases, courses</td>
</tr>
<tr>
<td>Issue</td>
<td>Priority</td>
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<td>National Board Part I and Part II</td>
<td>High</td>
<td>Improve first time pass rate</td>
<td>Created Mock NB I exam, made part of DBCS326 a review section</td>
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<tr>
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<td>100% first time pass rate on NB I for Class of 2015</td>
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<td>Created a noontime review for students at risk on NB II mandatory for at risk but open to all.</td>
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<tr>
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<td></td>
<td>65/66 first time pass on NB II for Class of 2013</td>
</tr>
<tr>
<td>Small Group Learning Case Content Review</td>
<td>Medium</td>
<td>Identify and define key faculty roles in case review process</td>
<td>Created a model for continuous case content review involving Course Director, content experts and assessment team</td>
</tr>
<tr>
<td></td>
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<td>Develop a review process for each year</td>
<td>Worked with Exan Corp to create the ability to have student enter self-eval prior to faculty evaluation</td>
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<td>Held faculty in-service training sessions to acquaint faculty with evaluation protocol</td>
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<tr>
<td>Clinic Evaluation and Grading</td>
<td>Medium</td>
<td>Assure student self-evaluation is documented in clinic sessions</td>
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<td>Standard 3 Faculty and Staff</td>
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<tr>
<td>Faculty Mentoring</td>
<td>High</td>
<td>Establish a faculty mentoring program/process</td>
<td>Named an Associate Dean for Faculty Affairs 2012</td>
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<td>Established a Faculty Affairs Advisory Committee to identify needs and resources 2013</td>
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<td>Held an interactive presentation at Faculty Conference August, 2013</td>
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<tr>
<td>Promotion and/or Tenure</td>
<td>High</td>
<td>Enhance faculty understanding of process and expectations</td>
<td>Created one document that combined the existing three documents and ratified by faculty in July, 2013</td>
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<td></td>
<td>Establish two committees, one for tenure track considerations and one for clinic track considerations</td>
<td>Created two review committees, 1) tenured faculty to review tenure and promotion issues for tenure track, and 2) non-tenure track faculty to review clinic track faculty. The process was codified in the Faculty Bylaws, 2013</td>
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### Standard 4 Educational Support Services

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<th>Action Plan</th>
<th>Status</th>
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<tbody>
<tr>
<td>Update Admission Standards</td>
<td>High</td>
<td>Establish a Bachelor degree as a minimum requirement</td>
<td>Admissions Committee ratified Bachelor degree requirement</td>
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<tr>
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<td></td>
<td>Preference given to applicants who have taken undergraduate courses in biochemistry and anatomy</td>
<td>Website language reflects preference for biochemistry and anatomy courses</td>
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<tr>
<td>Reduce DMD Enrollment</td>
<td>High</td>
<td>Limit DMD enrollment to Illinois residents only, DMD/PhD and IDDP programs exempt from instate requirement</td>
<td>Reduced class of 2017 to 52 students and Class of 2018 to 50</td>
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<td>Beginning in admissions cycle for the Class of 2018, DMD class will be limited to Illinois residents</td>
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### Standard 5 Patient Care Services

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<th>Action Plan</th>
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<tbody>
<tr>
<td>Security</td>
<td>High</td>
<td>Increase hours for security personnel to be onsite from 2 hours to 9 hours daily</td>
<td>Hired a full time police officer to be present 7:30-4:30 Monday through Friday</td>
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<td>Install security cameras with monitor to cover all four first floor entry doors</td>
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<tr>
<td>Patient Base Issue</td>
<td>High</td>
<td>Maintain patient experiences for predoctoral program after loss of adult Medicaid</td>
<td>Established new reduced fee schedule for selected therapies Spring term 2013</td>
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<td>Maintain clinic revenue</td>
<td>Increased number of screenings per session to 36 as of December, 2012 yielding a 33% increase in registered patients for assignment</td>
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<td>Increased phone operator accessibility hours and dedicated phone numbers</td>
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<td>Reduced size of entering predoctoral class to 52 for the Class of 2017 and to 50 for the Class of 2008</td>
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<tr>
<td>OSHA Issues</td>
<td>High</td>
<td>Reduce risk for sharps exposures</td>
<td>Increase OSHA training communications related to sharps protocol</td>
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<td>Enhance amalgam scrap compliance</td>
<td>Increased number of sharps containers</td>
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<td>Increase number of amalgam scrap containers in prepatient care facility</td>
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<td>Increase in class attention to amalgam scrap policy and procedures</td>
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<tr>
<td>Issue</td>
<td>Priority</td>
<td>Action Plan</td>
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<tr>
<td>Improve Emergency Protocol Training</td>
<td>Medium</td>
<td>Assure training for all newly hired faculty and staff</td>
<td>Added training component to Human Resource new faculty/staff orientation program</td>
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<td>Increase emergency protocol signage throughout the College</td>
<td>Created stickers to place on the back of faculty/staff/student identification badges</td>
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<td>Increased signage throughout the building.</td>
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**Standard 6 Research**

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<tr>
<th>Issue</th>
<th>Priority</th>
<th>Action Plan</th>
<th>Status</th>
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<tbody>
<tr>
<td>Research Issues</td>
<td>High</td>
<td>Create time for dedicated research</td>
<td>D4 research time dedicated for DMD/PhD students</td>
</tr>
<tr>
<td>Program Issues</td>
<td>Medium</td>
<td>Create programs for MPH and MS in Clinical Research</td>
<td>Ongoing dialogue with program in the School of Public Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Established the MS in Clinical Research</td>
</tr>
</tbody>
</table>
The dental school must develop a clearly stated purpose/mission statement appropriate to dental education, addressing teaching, patient care, research and service.

Conclusion: The UIC College of Dentistry complies with Standard 1-1.

Description

The College had been operating under its Vision and Mission Statement developed in 2000 with a commitment to spending the first decade of the millennium developing educational and research programs that would focus on patient care, prevention and public health using emerging technology to integrate educational programs and develop centers of excellence in innovative and integrated research. In 2006, the faculty of the College engaged in a University wide Strategic Planning process that updated the Vision and Mission of the College and created the Strategic Plan that was endorsed by the faculty.

In 2010, the College undertook to review and revise the existing Vision and Mission Statement documents and to revise the existing Strategic Plan. Led by the Dean and the Department Heads, who actively sought input and comment from all stakeholders of the College, the process employed a SWOT analysis which identified the rapidly changing nature of student education, research, technology, patient care and the impact of declining state funding. The document evolved into a comprehensive strategic plan, UIC College of Dentistry Strategic Plan: Beyond 2010.

The outcomes of the 2000 strategic initiatives were positive with gains in all areas. Predoctoral dental student patient care revenue increased from less than $1 million to more than $4 million indicative of increased clinical learning experiences through the patient care provided by our learners. This enhancement of student experiences was the result of the elimination of numerical requirements and instituting student attendance as the only requirement. The College also began an extramural clinical education program which has expanded from 1600 student days in 2006 to its current 4700 student days in our community, national and international partner clinics. The community clinic partnerships have significantly enhanced student learning experiences and access to care for the patients served in these community clinics.

Beginning in 2004, the faculty planned, developed and beginning with the Fall term, 2011 implemented the DMD curriculum which is dependent on small group learning, case-based instruction (CBL) and integrated learning technologies. Now in its third year the Class of 2015 will be the first cohort to earn the DMD degree. Concomitantly, the students enrolled in the DDS curriculum have benefitted from continual curricular development including evidence-based patient care decision making, a systems based approach to learning basic sciences, case presentations and patient care portfolios.

The College's funded research has grown to $15 million in NIH funding in 2011 with proven strength in wound healing, tooth tissue bioengineering and cancer research. Included in our research mission is an integrated dual degree DDS/DMD-PhD. This is a seven year program which follows a pattern of one year of PhD study, one year of DDS/DMD which includes successfully completing National Board Part I, two years of research project development and three years of DDS/DMD training. The program is specifically and individually designed to allow candidates to continue and complete their research as well as to provide the education to be competent entry level general practitioners. The College also provides a DMD/MS in Oral Sciences program for selected students.
1. List the dental schools purpose/mission statement, that addresses teaching, patient care, research and service. If a philosophy has been developed for the school, quote the philosophy.

The College Strategic Plan: Beyond 2010 incorporates not only our Vision and Mission, but also clearly articulates our shared beliefs. The plan concludes with a set of eight goals with associated action plan expectations. Our Institutional Effectiveness Plan (Table 2) shows that for each action item a leader has been identified along with the expected reporting requirements. The Strategic Plan was unanimously endorsed by a vote of the faculty on January 6, 2011. It was distributed electronically to stakeholders and is posted on the College website.

The Vision is aspirational yet pragmatically addresses patient care, student learning and research. It serves as a touchstone in all we do. It is also consistent with the Mission of the University of Illinois at Chicago, our parent institution.

**UIC College of Dentistry Vision**

The University of Illinois at Chicago College of Dentistry will be recognized as a leader in:

- patient-centered, evidence-based, technically enhanced clinical care founded on the preventive and public health sciences;
- integrated educational programs based upon contemporary educational methods and technology; and,
- centers of research excellence that are interdisciplinary, use innovative methodology, and focus on relevant health and healthcare issues.

**UIC College of Dentistry Mission Statement**

The mission of the University of Illinois at Chicago College of Dentistry is to promote optimum oral and general health to the people of the State of Illinois through leadership in education, patient care, research, and service.

The College identifies the following Institutional Goals to meet this mission:

- **Goal 1:** To prepare well-qualified healthcare professionals, educators, scientists, and dental educators.
- **Goal 2:** To foster collaborative research and increase external research grant funding by developing specialized centers for innovative research in health and disease.
- **Goal 3:** To provide compassionate patient-centered care services for a diverse population.
- **Goal 4:** To renew/re-equip the College building infrastructure, clinical, and research facilities.
- **Goal 5:** To provide educational programs that prepares students for the evidence-based ethical practice of dentistry, continuous self-evaluation, and the pursuit of lifelong learning.
- **Goal 6:** To value and seek diversity in students, staff, faculty, and patients.
- **Goal 7:** To provide an environment for individual growth founded on mutual respect and professionalism.
- **Goal 8:** To optimize enrollment and tuition levels for all College educational programs.
2. List the parent institution’s purpose/mission statement. Describe how the school’s purpose/mission statement supports and is related to the University’s purpose/mission statement.

The College of Dentistry is part of the University of Illinois at Chicago. As such, the College is committed to supporting the Mission of the University as well.

**UIC Scope and Mission Statement**

- To create knowledge that transforms our views of the world and, through sharing and application, transforms the world.
- To provide a wide range of students with the educational opportunity only a leading research university can offer.
- To address the challenges and opportunities facing not only Chicago but all Great Cities of the 21st century, as expressed by our Great Cities Commitment.
- To foster scholarship and practices that reflect and respond to the increasing diversity of the U.S. in a rapidly globalizing world.
- To train professionals in a wide range of public service disciplines, serving Illinois as the principal educator of health science professionals and as a major healthcare provider to underserved communities.

Ratified by the Faculty Senate of the University of Illinois at Chicago, April 27, 2006

3. How frequently is the purpose/mission re-assessed? What was the date of the last review and/or revision?

The College Vision and Mission statements are reviewed annually to assess currency and relevance. There is no set time frame mandated for formal rewriting.

The current Strategic Plan was approved by the faculty of the College on January 11, 2011.

**Supportive Documentation**

- **Appendix A-2:** Table 2 – Outcomes Assessment
- **Appendix B-1:** UIC College of Dentistry Vision and Mission Statements
- **Appendix B-2:** UIC College of Dentistry Strategic Plan: Beyond 2010
1-2 Ongoing planning for, assessment of and improvement of educational quality and program effectiveness at the dental school must be broad-based, systematic, continuous, and designed to promote achievement of institutional goals related to institutional effectiveness, student achievement, patient care, research, and service.

Conclusion: The UIC College of Dentistry complies with Standard 1-2.

Description

The College Strategic Plan: Beyond 2010 identifies eight goals that touch on every aspect of the Mission to enhance the College’s stature as a leading dental education institution by creating and nurturing pre-eminent educational, service and research programs. While identifying the desired outcomes for student learning, patient care, research and service, the goals extend to include enhancement of the infrastructure, leadership in health care policy locally and nationally, and financial stability. Each goal and sub-goal has identified a leader responsible for monitoring, accomplishing and reporting on a regular basis to appropriate constituencies.

The College goals, although predating the University goal statements, are congruent with and support the UIC Goals as articulated by the Chancellor in January, 2012

1. List the university and dental school goals

University of Illinois at Chicago: Goals (January 30, 2012)

UIC will advance six overarching goals:

1. Focus on our academic excellence, student access and student success
2. Emphasize transformative impact and the social good
3. Grow our translational, entrepreneurial and engaged research and discovery enterprise to include many approaches to knowing
4. Foster diversity and a global perspective
5. Honor and partner with Chicago and the State to enhance the human condition of its citizens
6. Innovate within to build greater efficiencies and future strengths

College of Dentistry Goals (January 6, 2011)

Goal 1: To prepare well-qualified healthcare professionals, educators, scientists, and dental educators.

Goal 2: To foster collaborative research and increase external research grant funding by developing specialized centers for innovative research in health and disease.

Goal 3: To provide compassionate patient-centered care services for a diverse population
Goal 4: To renew/re-equip the College building infrastructure, clinical, and research facilities.

Goal 5: To provide educational programs that prepares students for the evidence-based ethical practice of dentistry, continuous self-evaluation, and the pursuit of lifelong learning.

Goal 6: To value and seek diversity in students, staff, faculty, and patients.

Goal 7: To provide an environment for individual growth founded on mutual respect and professionalism.

Goal 8: To optimize enrollment and tuition levels for all College educational programs.

2. Describe how the university and dental school goals relate.

Although the College goals were established a year prior to the UIC goals the two goal sets are clearly aligned.

<table>
<thead>
<tr>
<th>University of Illinois at Chicago Goal</th>
<th>College of Dentistry Goal(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1, 5, 7, 8</td>
</tr>
<tr>
<td>2</td>
<td>3, 5, 8</td>
</tr>
<tr>
<td>3</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
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<td>3, 6</td>
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<td>5</td>
<td>1, 3</td>
</tr>
<tr>
<td>6</td>
<td>4, 8</td>
</tr>
</tbody>
</table>

3. How, when and by whom are the dental school goals reviewed, evaluated and revised? To what degree is the university involved with this process?

The College annually reviews its’ Mission and Goals. For each goal a leader has been established with the responsibility to monitor College process (refer to Table 2) and to report, as needed, to the identified stake holders.

The University has no direct involvement with this process. The Dean does, however, have monthly meetings with the Provost and occasional meetings with the Chancellor wherein significant outcomes are reported. The Dean also submits an annual report based upon Activities of a Dean to the Provost. The report requires detailed descriptions to each of these defining elements of a dean’s performance.

1. Provide leadership to the college by articulating an inspiring vision for the college’s future, translating that vision into specific goals, and obtaining the support necessary to achieve those goals.

2. Foster student intellectual development and college’s academic mission through sound educational policy and a contemporary curriculum.

3. Promote the recruitment, retention and academic progress of undergraduate, graduate and professional students.

STANDARD 1-2

A Proud Past
4. Recruit and retain faculty of the highest caliber; promote excellence among the faculty; set a standard personally for academic scholarship, engagement and integrity.

5. Recruit and retain staff of the highest quality and promote their development; build an effective and reputable leadership team.

6. Foster and promote gender equity and ethnic diversity among students, faculty and staff to enrich the university environment.

7. Consult and communicate regularly with the faculty on policy, planning and actions significant to the college.

8. Manage resources wisely, through the allocation of space and budget in support of defined priorities and the continuous development of new sources of revenue.

9. Promote the creation of new knowledge and the cultivation of funding sources appropriate to that endeavor.

10. Represent and advance the interests of the college and UIC by skillfully developing relationships with parties external to the college, both on and off campus.

11. Increase the external financial support for the college through fundraising efforts and through the relationships referenced in item 10.

12. Align the college’s activities and goals with the greater interests of the campus and university.

4. Discuss the assessment methods/outcomes measures utilized to determine the degree to which these stated goals and/or objectives are being met. Assessments employed must be continuous and ongoing; include defined formative and summative measures; involve a full range of relevant internal and external stakeholders; permit anonymous input; provide for collective analysis of findings; and be used to evaluate trends over time.

Please refer to Table 2, Column labeled “Action Plan/Outcome” for most recent progress reports.

5. Discuss the results/findings of the assessment process.

Please refer to Table 2, Column labeled “Action Plan/Outcome” for most recent progress reports.

6. Summarize the recommendations that have emerged from the school’s outcomes assessment process and indicate which recommendations have been implemented.

*Goal 1: To prepare well-qualified healthcare professionals, educators, scientists, and dental educators.*

We have made significant progress in our educational program. We are in the third year of the DMD curriculum with excellent outcomes to date including much improved performance on NB I (100% first time pass rate for the Class of 2015). We have expanded teaching opportunities, extramural experiences and have begun MS programs in Public Health and Oral Sciences for predoctoral students. We have also strategically reduced the size of the predoctoral class to assure quality experiences in

A Brilliant Future
the light of draconian cuts in State of Illinois support of the dental Medicaid program which challenged the size of our patient base.

**Goal 2: To foster collaborative research and increase external research grant funding by developing specialized centers for innovative research in health and disease.**

We have completed an NIH funded $10 million renovation of our 4th and 5th floor research spaces. In spite of reduced NIH funding and lowering of funded scores, we have maintained our research income. We have recruited a new department head with experience in developing departmental research projects to enhance not only our research mission, but our postgraduate education research opportunities. Funding for faculty at the RO1 level is becoming more difficult in spite of continued applications.

**Goal 3: To provide compassionate patient-centered care services for a diverse population**

The College has established the following mission for its patient care clinics: to provide quality oral health care services to a diverse group of patients in a professional, caring, efficient, and safe environment. This is achieved through seven goals outlined in the College's clinic manual. Patient services are monitored and evaluated routinely to ensure adherence to this mission.

**Goal 4: To renew/re-equip the College building infrastructure, clinical, and research facilities**

In 2011, the College initiated a complete renovation of outdated clinical facilities. This includes updates in infrastructure, equipment and layout that are more conducive to a patient-centered environment, compliance with federal and state regulations, and facilitation of instruction. All predoctoral clinics, including the addition of an Advanced Predoctoral General Clinic are expected to be completed in Fall of 2013. By Summer of 2014, it is expected that all clinics, including all postgraduate clinics, will have been updated.

**Goal 5: To provide educational programs that prepares students for the evidence-based ethical practice of dentistry, continuous self-evaluation, and the pursuit of lifelong learning**

The College has established a Competency Model that requires us to sample the student’s ability to systematically, consistently and accurately self-assess their work and learning. This assessment is ubiquitous throughout every course in our curriculum. We are also committed to the use of evidence based discovery and decision making in the predoctoral program. Beginning in the first week of orientation and continuing through the fourth year of the curriculum the process of evidence based practice is defined, developed and used in learning and in patient care. Every course in the predoctoral program features either small group learning where learners identify knowledge gaps and seek the best information available or has clinical (simulated or live) seminars in which students explore and justify their clinical patient care decisions.
Goal 6: To value and seek diversity in students, staff, faculty, and patients.

Student Population: The College enjoys a most diverse student population. With our current enrollment of 344 students (264 DDS/DMD and 80 IDDP), we celebrate the richness of diversity as seen in the following tables. We have an institutional commitment to diversity.

### DDS/DMD Enrollment Demographics

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native America</td>
<td>2</td>
</tr>
<tr>
<td>African American</td>
<td>31</td>
</tr>
<tr>
<td>Asian</td>
<td>94</td>
</tr>
<tr>
<td>Hispanic</td>
<td>27</td>
</tr>
<tr>
<td>Caucasian</td>
<td>182</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>17</td>
</tr>
<tr>
<td>Did Not Report</td>
<td>7</td>
</tr>
</tbody>
</table>

### IDDP Enrollment Demographics

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native America</td>
<td>0</td>
</tr>
<tr>
<td>African American</td>
<td>4</td>
</tr>
<tr>
<td>Asian</td>
<td>96</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15</td>
</tr>
<tr>
<td>Caucasian</td>
<td>50</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>11</td>
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</tbody>
</table>

Staff Population: Being located in a richly diverse metropolitan area makes it possible for us to hire and maintain a diverse staff.

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>34</td>
</tr>
<tr>
<td>Asian</td>
<td>11</td>
</tr>
<tr>
<td>Hispanic</td>
<td>58</td>
</tr>
<tr>
<td>Caucasian</td>
<td>37</td>
</tr>
<tr>
<td>Female</td>
<td>114</td>
</tr>
<tr>
<td>Male</td>
<td>26</td>
</tr>
</tbody>
</table>

Faculty Population: The commitment to diversity is recognized in our faculty ranks and also in our faculty recruitment. As of August 1, 2013 the total faculty population numbered 214 faculty members accounting for 129.5 FTE. The diversity among faculty is as follows.

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>Number</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>9</td>
<td>7.4</td>
</tr>
<tr>
<td>Asian</td>
<td>38</td>
<td>25.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>14</td>
<td>8.6</td>
</tr>
<tr>
<td>Caucasian</td>
<td>138</td>
<td>79.5</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>15</td>
<td>8.6</td>
</tr>
<tr>
<td>Female</td>
<td>84</td>
<td>51.5</td>
</tr>
<tr>
<td>Male</td>
<td>130</td>
<td>78.0</td>
</tr>
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</table>

Patient Population: The College constantly monitors our patient population to assure that our learners achieve competence in managing a diverse population and to serve the community in which we are located. In the most recent year, 2012, we served 26,000 patients in over 99,000 visits and rendered more than 225,000 treatments. Female patients represented 55% of the patients. Ethnically we served African Americans (25%), Hispanic (25%), Caucasian (23%), Asian (3%) and
various other demographic groups. Ages treated were children 1-18 (33%), adults 19-54 (49%) and seniors (15%). These demographics very well represent the city and our service area. We treat students (6%), retired persons (9%), employed (21%), and unemployed (15%).

**Goal 7: To provide an environment for individual growth founded on mutual respect and professionalism**

Several recommendations were made to encourage professional growth and to support professionalism. In response to a recommendation for the creation of a portfolio of faculty development activities and a faculty mentoring program, the College Office of Faculty Affairs (OFA), led by the Associate Dean for Faculty Affairs, was created in 2012. The charge of this office is to “develop, implement, and evaluate the effectiveness of programs that are responsive to the professional development needs of the faculty.” A Faculty Affairs Advisory Committee (FAAC) was created and includes nine members that represent a cross-section of the faculty.

A Faculty Development Program has been created that includes both a formal Faculty Mentoring Program as well as regular workshops. Workshops are offered on numerous topics relevant to Goal 7, such as Working with the Distressed Student (January 2013), Promotion Guidelines (March 2013), SafeZone Training (April 2013) and Preparing your CV (April 2013). In response to a recommendation to enhance activities for staff development, the OFA and the Office of Human Resources now work together to support both faculty and staff development whenever possible. Many of the workshops sponsored by OFA are open to both faculty and staff. The College also sponsors both faculty and staff in their attendance at campus-wide professional development programs. Campus programs include the annual Women’s Leadership Forum and workshops on conflict resolution, communication, integrity, and other relevant issues.

A recommendation for the creation of regular recognition activities has been implemented by 1) recognition sections within the College newsletter, Word of Mouth; and 2) the production of a regular Faculty Affairs Bulletin that provides notice of events and recognition of activity.

In response to a recommendation for sustained implementation and reassessment of the existing student and faculty codes of professionalism, the standards described in Academic Professionalism for Students continue to be regularly reviewed with students by the Office of Student and Diversity Affairs. Faculty standards of professionalism are outlined within the University Code of Conduct and also in the Ethical Mission of the College Faculty. At the August 2013 Faculty Conference, these documents were reviewed with the faculty by the Dean and the College document was re-ratified.

**Goal 8: To optimize enrollment and tuition levels for all College educational programs.**

Goal 8 is addressed as part of the annual review by the administration and department heads. Following the elimination of State-funded adult dental Medicaid in 2012, and with the addition of a new dental school in the State, the College decided to adjust program enrollments. Beginning with the DMD Class of 2017, the College has reduced the four year DMD program class size to 52 students from the previous level of 66. In August 2014, the class size will be reduced to 50. We will continue to matriculate 40 international degree students into the two year DMD program. This decision allows the College to maintain our traditionally high number of patient care experiences for the predoctoral program students. At the same time, the College will increase the enrollment in the post-graduate programs in pediatric dentistry, prosthodontics, and orthodontics. This restructuring allows the College to ensure the excellence of student learning, to respond to the high demand for our dental specialty programs’ clinical services and align our programs’ enrollments with our estimation of the future health care provider needs of the State of Illinois. These enrollments will also maintain
the College’s tuition revenue stability by substituting lost predoctoral student tuition with additional postgraduate dental specialty student tuition and clinic revenue and allow for student tuition increases which are closer to the increase in the Consumer Price Index.

**Supportive Documentation**

- **Appendix A-2**: Table 2 - Outcomes Assessment
- **Appendix B-1**: UIC College of Dentistry Vision and Mission Statements
- **Appendix B-2**: UIC College of Dentistry Strategic Plan: Beyond 2010
- **Appendix B-3**: Activities of a Dean
- **Appendix C-1**: Academic Professionalism for Students
- **Appendix D-1**: COD Faculty Mentoring Program
- **Appendix D-2**: Ethical Mission of the College Faculty
- **Appendix E-1**: Institutional Commitment to Diversity
- **Appendix F-1**: Clinic Manual: Mission for Patient Care Clinics

Available On Site

University Code of Conduct
1-3 The dental education program must have a stated commitment to a humanistic culture and learning environment that is regularly evaluated.

Conclusion: The UIC College of Dentistry complies with Standard 1-3.

Description

Consistent with the goals of UIC Office of Diversity, the College by policies, practices and spirit is committed to maintaining a welcoming, inclusive and culturally vibrant learning environment. Our learning environment recognizes and embraces professionalism, collegiality, and diversity of culture and thought not only for students, but also for faculty, staff, and patients. The College engages in a continual review of its organizational culture and milieu, as we recognize the ever-changing world, national and local cultural landscapes. The Chicago metropolitan area is most fortunate to be a geographical area that is rich in cultural, ethnic, racial and ideological diversity which we can and do draw on to enhance our learning environment.

As described below, the College regularly convenes representative groups of faculty and students to be proactive in our mission and vision. We also use the same openness, within the bounds of applicable laws and policies, when addressing recognized areas of challenge to the humanistic environment. Staff members are engaged to participate to the extent allowed under the Civil Service and organized labor regulations of the State of Illinois.

1. Describe how the dental school provides an environment and culture that promotes professional, harmonious, and ethical behavior among students, faculty, administrators and staff. Describe how the dental school environment is regularly assessed, provide the summary data that has been collected, and note any changes that have occurred following analysis of the data.

The College is committed to promoting diversity and inclusion for our students, faculty, staff and patients, as well as providing a humanistic culture and learning environment in the College. In order to accomplish this, the College collaborates with a variety of University units and professional organizations that embrace the University’s commitment to diversity and inclusion such as the UIC Office of Diversity and the UIC Office of Access and Equity (OAE).

The OAE, as part of the Office of the Chancellor, strives to increase access to employment, programs, and services in an environment free of unlawful discrimination and harassment. OAE provides confidential consultation, facilitation and mediation services to all UIC faculty, staff and students. OAE provides both in-person and online interactive educational programs. Each training session is designed to be informative and engaging. The leadership of the College works closely with OAE to assure that the College environment and culture is professional, harmonious and ethical.

All faculty, students and staff of the College are informed during orientation sessions of the existence of OAE and the services and resources that are offered. The College has also utilized OAE training services related to workplace behavior, meditation and consultation. OAE’s information can be found on the College’s website. In addition, the College provides OAE trainings during Faculty Conferences.
student Town Hall Meetings as well as staff meetings. The following training sessions have been conducted:

- Affirmative Action in the Academic Hiring Process
- Dispute Resolution Services (DRS)
- How to Create a More Engaging Environment
- Myths, Fears, & Stereotypes: Disability Accommodations under the Americans With Disabilities Act (ADA)
- Respect in the Workplace: Promoting Diversity and Preventing Discrimination
- Understanding and Preventing Sexual Harassment
- Supervisor’s Toolkit: Avoiding and Handling Employee Complaints

To facilitate the implementation of our commitment to diversity, the College established the Office of Student and Diversity Affairs (OSDA) in 2003. A significant task for the OSDA is the administration and coordination of the College’s diversity and inclusion programming. The OSDA serves as a resource for the College on matters regarding diversity, inclusion, humanistic culture and the learning environment. The OSDA develops and implements policies and practices to achieve diversity and inclusion among our students, faculty and staff; and to improve the institutional climate to support diversity. The OSDA is overseen by the Associate Dean for Student and Diversity Affairs who reports to the Dean.

The OSDA offers training in diversity and cultural competency including but not limited to Title VII of the Civil Rights Act, the Americans with Disabilities Act (ADA) and other related topics as needed. The office also provides facilitation, feedback and information related to the College’s student admissions, access to programs and activities, and with searches for academic vacancies. The OSDA assists university offices in investigating claims of sexual harassment, when formal complaints are filed, and presents recommendations to designated University representatives. In addition, OSDA routinely evaluates and monitors the College climate regarding diversity and inclusion. The OSDA collaborates with the University to formulate reports on the racial, ethnic and gender composition of various components of our student body and workforce, including faculty.

The College’s Diversity Advisory Committee (DAC) was founded in 2003. The Committee has played a pivotal role in fostering inclusivity and multicultural awareness at the College. The DAC consists of faculty, staff, and students. In 2012, the DAC became a formal committee of the College. The committee is responsible for overseeing the College’s diversity strategic plan, goals, strategies, programs and policies and procedures. The DAC coordinates the College diversity activities in collaboration with the diversity activities of the university and the College community. The DAC College activities included sponsoring Diversity Lunch and Learns that showcase the diversity present in our students, faculty and staff with emphasis on topics such as providing socially sensitive healthcare services to persons with disabilities.

DAC members also volunteer their services to university diversity committees and bring ideas and activities to the College from these resources. As an example, one faculty member is the co-chair of the Chancellor’s Committee for Status of Asian Americans. As a result, seminars and programs have been held to promote networking and communications among the Asian American faculty/staff and post-doctoral fellows. Another member is very active on the Chancellor’s Committee for Persons with Disabilities.
The College routinely collaborates with university and campus units to monitor the humanistic environment and climate of the College. In 2008, UIC launched the Diversity Strategic Thinking and Planning (DSTP) at both the campus level and within Colleges and administrative units. The purpose of DSTP is to coordinate and structure our approaches to diversity, inclusion and the campus environment at both the campus level and within Colleges and administrative units. The College participates in the campus DSTP. To facilitate the implementation of DSTP at UIC, a campus-level DSTP Committee chaired by the Vice Provost for Diversity and Vice Provost for Planning and Programs works collaboratively with the diversity committees within the Colleges and administrative units on campus. College faculty and staff serve on several DSTP Committees and the College collaborates with DSTP to implement programming. As part of the DSPT initiatives, in 2009 the College began developing a Diversity Strategic Plan, in coordination with the University’s Diversity Strategic Plan.

In 2009, the College conducted Strengths, Weakness, Opportunities and Treats (SWOT) analysis of the state of diversity and inclusion within our student body. All predoctoral students participated in the SWOT analysis during their Fall and Spring Town Hall meetings. The SWOT analysis was conducted by the College’s s Diversity Advisory Committee.

The information obtained has enabled the College to implement institutional transformation as we define our diversity priorities. One of the recommendations was to promote a wider definition of diversity and inclusion to account for groups other than the traditional racial and gender categories. Also, the College was encouraged to optimize contribution of our international faculty and students to enhance cultural awareness.

In the Fall of 2011, the College participated in a University-Wide Climate Survey of the University of Illinois conducted by the Office of the Vice President for Academic Affairs at the direction of the University’s President. The purpose of the survey was to assess perceptions of inclusiveness, friendliness, cooperation, professionalism, recognition, support and opportunities for advancement and academic success at the University of Illinois. All faculty, students and staff of the College were encouraged to participate in this web based anonymous survey. The results for the University-Wide Climate Survey of the University of Illinois show positive overall climate ratings by faculty, students and staff (scores respectively of 3.5, 3.7, and 3.4 on a scale where 1 is least favorable and 5 is most favorable).

### 2. Describe dental school policy on expected behaviors and consequences for deviation from the policy. How do students participate in formation, implementation and assessment of the effectiveness of the policy?

**University Level**

The UIC Nondiscrimination Statement states in part:

> The commitment of the University of Illinois to the most fundamental principles of academic freedom, equality of opportunity, and human dignity requires that decisions involving students and employees be based on individual merit and be free from discrimination in all its forms.

The UIC Office of Vice Chancellor for Faculty Affairs is responsible for developing and maintaining the university’s Faculty Handbook. The Handbook provides all UIC faculty information on expected UIC faculty behaviors. Also, the UIC Office of the Vice Chancellor for Student Affairs, is responsible for
developing and maintaining the university’s Student Disciplinary Policy. The Policy provides all UIC students with information on expected student behaviors and the consequences associated with them.

The College’s Offices of Human Resources, Faculty Affairs, Academic Affairs and Student and Diversity Affairs work very closely with the University and serve as resources for information regarding the University's expected behavior and consequences for all faculty, staff and students.

**College Level**

In 2001, the College **Mission and Vision** Statements were developed with input from faculty, students, and staff. The Mission and Vision Statements included nine goals, three of which speak to our commitment to a humanistic, diverse and ethical learning environment. As articulated below the College aspired to these goals.

**Goal 2:** the College is committed to providing patient centered care that is comprehensive and compassionate for a culturally diverse population;

**Goal 7:** the College is committed to providing an environment for individual growth founded on mutual respect and professionalism; and

**Goal 8:** the College is committed to valuing and seeking diversity in students, staff, faculty and patients.

The Vision and Mission was revisited in 2009 which led to the development and adoption of a more encompassing document to serve the faculty, staff and students of College. The revised document, The **Strategic Plan: Beyond 2010** identified eight goals to support the Mission, four of which speak to our commitment to a humanistic, diverse and ethical learning environment.

**Goal 3:** To provide compassionate patient-centered care services for a diverse population.

**Goal 5:** To provide educational programs that prepare students for the evidence-based ethical practice of dentistry, continuous self-evaluation, and the pursuit of lifelong learning.

**Goal 6:** To value and seek diversity in students, staff, faculty, and patients.

**Goal 7:** To provide an environment for individual growth founded on mutual respect and professionalism.

The Strategic Plan: Beyond 2010 also identifies five Belief Statements to guide our planning, implementation and evaluation of all that we do in the College. Beyond each statement, the College also identified key behaviors to serve as examples of how our behaviors should manifest our beliefs. Precisely because of the difficult financial times in Illinois, the weight of student debt, the importance of rewarding dedicated faculty and staff, and the desire to maintain a technologically superior learning and patient care facility, we are continually challenged in our decision making process, but are well guided by our Belief and Behavior statements.

**Belief 1:** We believe that dental education and scholarship make the world a better place in a profound way, because oral health and oral health behavior are essential to the general health and well-being of all.

**Behavior**

- We take pride in our place in the world, tempered with a solemn appreciation for the resultant opportunities and responsibilities that we are privileged to receive.
Belief 2: We demonstrate that the Vision and Mission of the College is more important than our individual needs, wants and desires within the College.

Behaviors
- We make personal sacrifices for the good of the College.
- In all our actions and decisions, we give primacy to the College’s progress toward its Vision and the fulfillment of its Mission over the interests of individual departments and academic units.
- As our first inclination, we seize every opportunity to collaborate and cooperate with each other.

Belief 3: We believe in “collegial education” for our students, as manifested by a supportive, humanistic, and effective learning environment for them.

Behaviors
- We treat each other with mutual respect, kindness, and civility.
- In interpersonal communications, we listen to each other empathetically, seeking to understand each other’s points of view before espousing our own.

Belief 4: We believe that all College community members and our patients must always be treated fairly and equitably.

Behaviors
- We are dedicated to the service of each other and our patients.
- We behave ethically in all we do.
- We embrace the rich diversity of our College community in all its manifestations.
- We strive to provide universal access to the College’s services for students, staff, faculty, and patients from all racial, ethnic, and cultural groups and socioeconomic circumstances.

Belief 5: We believe in the constant pursuit of pre-eminent excellence in everything we do.

Behaviors
- We constantly strive to perform at our highest personal level of potential for excellence.
- We embrace continuous improvement toward pre-eminent excellence, and the process of constant change that is essential to the achievement of improvement. We confront the anxiety that accompanies change through open dialogue, effective communication and courageous risk-taking.
- We pursue rigorous scientific inquiry and discovery in the service of humanity through improving health.
- We embrace a scholarly approach to everything that we do.
- We seek the best evidence in all decision-making.
- We are careful stewards of the College’s human, physical, and fiscal resources.

Students and faculty of the College have developed the Academic Professionalism for Students policy. The policy calls upon students, faculty, administration, and staff to demonstrate the highest of ethical standards, the primary goal of which is the benefit of the patient and education of the student. This policy serves as a reminder to the students that our entire oral health care community commits to possessing not only appropriate knowledge, skill and technical competence, but also those traits of character that foster adherence to all ethical principles. Qualities of compassion, kindness, integrity,
fairness, respect, and service are fundamental to the ethical practice of dentistry and essential in defining true professionalism.

The Academic Professionalism for Students policy is updated every five years (last updated 2011) by a committee of students and faculty to determine its effectiveness. All students receive a copy of the policies during their first year orientation and each year during their first Town Hall meeting of the Fall semester. All students are held accountable for the expected behaviors outlined in the policy. Failure to comply with the policies may result in disciplinary and training directed by the Subcommittee for Student Promotion (SSP) for academic issues, the Subcommittee on Student Discipline for University or social issues, and the Compliance Committee for Clinic Issues.

Similarly, the faculty, in 2010, wrote and approved The Ethical Mission of the Faculty of the College of Dentistry. This document is posted on the College's intranet for faculty reference.

3. Describe how faculty are encouraged to serve as mentors and positive role models for students.

The College offers a variety of opportunities for faculty to serve as mentors and positive role models for students. These opportunities are both formal and informal to all students. The following are a few of the formal opportunities faculty have to engage in mentoring.

The Managing Partners of the Group Practice Clinics and the clinical faculty act as role models of appropriate dentist behavior. Each Group Practice Clinic is structured to link a consistent team of faculty clinicians with the students to ensure ongoing mentoring opportunities.

The College offers DMD/PhD and DMD/MS training programs. Each student participating in the programs is assigned a faculty mentor to assist with their professional and personal growth. The College also sponsors summer research programming for predoctoral and dental students. The programs are ten weeks in length. Participating students are assigned a mentor, a lab and a research project. The program prepares students and postdoctoral fellows to shape the future of oral health research and clinical care. Beyond the formal research programs, predoctoral students are also engaged with faculty in departmental projects, individual projects and frequently in Critically Appraised Topics (CATs) presentations during Clinic and Research Day.

The College’s Mentors Program introduces students to dental professionals, who are not faculty members, but who are members of the Chicago Dental Society. The program is a joint collaboration between the University of Illinois at Chicago Dental Alumni Association, the University of Illinois at Chicago College of Dentistry, and the Chicago Dental Society. Faculty who are CDS members participate in the program and serve as role models for our students. The program fosters relationships between practitioners and students during their training. It also provides an avenue for students to explore when looking for additional information, considering career options and seeking opinions from “someone who has been there.” The Mentors Program additionally introduces students to the concerns and issues that will be important in their future careers. Mentors are also available through College of Dentistry partnerships with other organized dentistry entities such as the National Dental Association and the Hispanic Dental Association.

The College also supports and coordinates student organizations that contribute positively to humanistic and educational value added experiences. Each student organization is required to have
faculty advisors who serve as mentors. Students are encouraged to participate in student organizations. The student organizations assist in facilitating mentoring between students and faculty.

The Urban Health Program is the University of Illinois recruitment and retention program for underrepresented minority students. All of the university’s six health sciences Colleges participate in the program. The program provides a variety of services for underrepresented students and faculty. The program provides underrepresented faculty with opportunities to mentor students and faculty.

The College mentors undergraduate predental students enrolled in the University’s Honors College. Beginning in their sophomore year, each Honors College student is assigned to an Honors College fellow (a faculty member typically in the student’s major area of study) who serves as an honors advisor and mentor for the student. In serving as an advisor, the fellow approves and provides guidance, when necessary, in deciding on an honors activity each term. The fellow provides final approval of the student’s honors activity each semester by signing the Honors Agreement form which is to be submitted by all Honors College students by the end of the third week of each term. Numerous College faculty participate in the program.

The College is most fortunate to be located in Chicago, the home of the American Dental Association and the Chicago Dental Society (CDS). Our faculty hold many key positions in both groups and the College actively promotes student participation in organized dentistry, often side by side with our faculty. Each year, the predoctoral clinics are closed for the CDS Midwinter Meeting, one of the largest dental professional meetings in the country. The 3rd and 4th year DDS/DMD students and the 2nd year IDDP students attend the meeting frequently serving as room monitors for the CE programs at the meeting.

The College also provides the opportunity for selected 3rd and 4th year students to teach in the pre-patient care program particularly in restorative dentistry, pediatric dentistry, periodontics and small group facilitation. In these roles the students and faculty work side by side in the learning environment. This program has resulted in several students electing part time teaching as part of their post-graduation professional life, both at UIC and at dental schools across the country.

4. Describe any all-school events that bring together faculty, staff and students.

The College annually presents and supports events that bring faculty, staff, students and often alumni and other stakeholders together to interact. The events are planned and implemented by different departments and committees within the College and are well supported by the entire College community. The departments within the College collaborate and coordinate so that classes, clinics, labs and meetings are rescheduled or canceled to allow for full College participation in the events. The following events are examples of how the College seeks to enhance our environment by regularly bring faculty, students and staff together.

The College's Student-Faculty Relations Committee consists of six faculty members, six student members and the Associate Dean for Student and Diversity Affairs. The committee meets regularly to plan and implement activities and events that bring faculty, students and staff together to improve faculty, student and staff relations. The Committee plans and implements our Annual Welcome Back Coffee/Breakfast that kicks off each academic year.
Every year, the College’s Diversity Advisory Committee (DAC) plans the annual Diversity Day Celebration. The event is a College inclusive event held over an extended lunch hour where our diverse student organizations, faculty and staff showcase food from their culture, provide entertainment unique to their culture and provide a learning component of their group’s culture. Past themes have been Harvest of Diversity, Learning through Diversity, and Images of Diversity.

In a similar spirit the annual Holiday Celebration unites students, staff and faculty and brings the College together to celebrate one another and the Holiday’s celebrated by members of our College community. Beyond a lunch and multicultural entertainment we recognize and celebrate members of our faculty and staff community by awarding certificates and pins for years of service.

Every year, the College’s Office of Research Affairs convenes an advisory group of students, faculty and staff to plan and implement the College’s annual Clinic and Research Day. The Clinic and Research day event provides a forum for students, faculty and staff to present their research achievements to the College and the larger University research community. Continuing education opportunities, dental products and services exhibits, a keynote lecture and student awards are all part of the event. It is an all-day event that includes basic science and clinical research as well as evidence-based presentations by our predoctoral and postgraduate students, faculty and staff.

A signature event each year is the Dental Charity Ball. This event is organized solely by the College’s Dental Student Council including the selection of the venue, ticket sales and the solicitation of silent auction items. The event is very well attended and supported by students, faculty and staff. Proceeds are donated to local agencies providing dental service to underserved children and adults.

Every year, the College’s Office of Student and Diversity Affairs coordinates our White Coat Ceremony for matriculating students. The White Coat Ceremony is an auspicious experience as students enter dental school. In the presence of family, guests, and faculty members, students are welcomed into the dental community by leaders of the College. The event welcomes the new students to the profession and patient care while focusing on professionalism. The White Coat Ceremony occurs each fall shortly after the activities of orientation week. The culmination of the ceremony is the reciting of the Dentist’s Pledge by the students and the attending faculty. The event is well attended by the entire College community.

The College also supports and coordinates many student organization events that contribute positively to humanistic and educational value added experiences. Each student organization is required to have faculty advisor. Throughout the year, these student organizations plan and implement activities and events that bring faculty, students and staff together and enhance our culture and environment. Examples of such events include: Hispanic Student Dental Association’s Dental, Spanish Classes; Middle Eastern Dental Student Association, Ramadan celebration and American Association of Women Dentists, specialty night.

The following are registered student organizations:

- American Association of Public Health Dentists
- American Association of Women Dentists
- American Student Dental Association
- Association of Muslim Dental Students
- Christian Medical and Dental Association
- Hispanic Student Dental Association
- Illinois Academy of General Dentistry
- Indian Student Dental Association
As described in the Faculty Bylaws there is one regular meeting of the faculty each term. The College also schedules at least one additional meeting per term. It is at these meetings that all College policy and procedure decisions brought forth by the various committees are discussed and ratified. Most of the standing and sub-committees include student representation. At each meeting the Dean also presents an administrative report which culminates in a question and answer session. Recent outcomes of these meetings have been the discussion and adoption of expanded faculty committees and/or redefinition of committee responsibilities in the Faculty Bylaws, rewriting of the guidelines for promotion and/or tenure, and formalization of the Diversity Advisory Committee.

Each department of the College holds, at a minimum, an annual meeting to discuss such issues relevant to departmental operations. Issues related to curriculum content, materials review, department representation on various College and University committees and continuing education are routinely decided.

Each term, each of the six classes has a Town Hall meeting with administrators and invited faculty to discuss issues related to the College, learning environment, physical plant, personal safety and patient care. The meetings begin with announcements of relevance to the class present, followed by open discussion. Among the issues that have been discussed are, for example, facilities issues, class and examination schedules, cheating allegations, plagiarism, ethical conduct, construction schedules and implications, and the regional licensing agencies. Not infrequently, schedules have been modified, syllabi have been edited to better clarify definitions of “group” versus “individual” projects, and most recently the College has arranged for representatives of CRDTS and NERB to make presentations to classes which have resulted in the class determining which regional licensure examination is administered. Another significant result of these meetings has been the incorporation of acculturation activities in the orientation of all matriculating students (DMD and IDDP).

Once a month the class officers from each class meet with the key administrators to discuss common and individual class issues. The meetings are open, honest, and reportable action items are generated and assigned for investigation and/or resolution. The officers in turn report on class activities, accomplishments and issues that need to be addressed. One major topic that was resolved recently came as a result of the State of Illinois eliminating Medicaid coverage for adults. This action had a significant impact on our patient base and was addressed by administration and students discussing strategies that resulted in adjusting fee schedules on selected services. In spite of losing 4,500 covered persons, student clinical experiences have been maintained, as a result of the strategies collaboratively developed by students and administrators in monthly meetings.
Supportive Documentation
Appendix B-1: UIC College of Dentistry Vision and Mission Statements
Appendix B-2: UIC College of Dentistry Strategic Plan: Beyond 2010
Appendix B-4: UIC Nondiscrimination Statement
Appendix C-1: Academic Professionalism for Students
Appendix D-2: Ethical Mission of the College Faculty
Appendix D-3: COD Faculty Bylaws

Available On Site
UIC Climate Survey
COD Faculty Meeting Minutes
Student Town Hall Meeting Minutes
1-4 The dental school must have policies and practices to:
   a. achieve appropriate levels of diversity among its students, faculty and staff;
   b. engage in ongoing systematic and focused efforts to attract and retain students, faculty and staff from diverse backgrounds; and
   c. systematically evaluate comprehensive strategies to improve the institutional climate for diversity.

Conclusion: The UIC College of Dentistry complies with Standard 1-4.

Description

The College is located in the city of Chicago, which enjoys a wonderfully diverse population. Within the city limits live 2.7 million people of whom 33% are African American/Black, 29% Hispanic and 33% Caucasian (US Census Bureau 2010). Including the collar counties the population swells to 9.7 million making it the third largest metropolitan area in the United States. The significant diversity, including ethnic, racial, cultural, socioeconomic, and gender identity make Chicago a vibrant center that satisfies a wide range of interests. Precisely because of this diversity and mid-western approach to life, the College is able to attract a rich number of candidates for faculty, staff and student positions.

The College is a unit of the University of Illinois at Chicago and is part of the University of Illinois. As such we are an entity of the State of Illinois and are bound to follow the State’s policies and procedures related to recruitment, employment and retention of faculty and staff.

Institutional Climate

In all ways the College has been consistent in creating and maintaining a welcoming environment for all. In our practices, behaviors and programs we consistently demonstrate a commitment to embracing diverse ideas, learning from and celebrating the benefits that are derived from interactions with diverse peoples, and engaging in activities that are purposely designed to explore diverse ideas.

Of the eight goals identified by the College three are specifically directed toward creating and maintaining a richly diverse milieu within the College’s institutional climate:

   Goal 3: To provide compassionate patient-centered care services for a diverse population
   Goal 6: To value and seek diversity in students, staff, faculty, and patients.
   Goal 7: To provide an environment for individual growth founded on mutual respect and professionalism.

1. Describe dental school goals, strategies, programs, policies, and procedures which address the dimensions of diversity, including structure, curriculum, and institutional climate. Include a discussion of the schools focused, significant, and sustained programs to recruit and retain suitably diverse students, faculty, and staff.
The College sponsors several programs each year specifically designed to bring the College community together to learn from and interact with one another. Among these programs are Diversity Day, the Holiday Party, Clinic and Research Day, CPR classes; and training for Compliance (HIPAA and OSHA), Lunch and Learns and numerous seminars and workshops. Diversity Day and the Holiday Party especially emphasize the rich cultural diversity present in the College. This is accomplished through presentations made by staff, students and faculty as well as the enjoyment of food specialties from our various cultures.

Curriculum Diversity

The DDS and DMD curricula each offer a broad diversity of learning experiences and added opportunities.

Students in the DDS program have experienced and continue to experience varied learning experiences. While primarily a traditional lecture, laboratory and clinical program, our students have nonetheless experienced less traditional pedagogy. Chief among these is the fourth year extramural program. Each student has at least two rotations to community partner sites that comprise fifty days at a minimum. While patient care is part of the rotation, it is not the only learning outcome focus. Rather, students are expected to observe, question and understand the various funding mechanisms supporting the care facility, the types of patients served and how each community site contributes to the health care delivery system locally, statewide and nationally. For each rotation the student writes a reflection paper. Additionally, during each rotation period the entire group assigned (usually 12-18 students representing 6-15 sites) meet to discuss the experiences at each of the sites. In this way every student sees how each site is like or not like the site the student is assigned to.

We offer opportunities for selected students to pursue additional degrees while enrolled in the DDS program. We provide a combined program leading to a PhD degree for one to two students each year. We have designed customized DDS/DMD curricula to assure the time and sequence of learning maximizes their pursuit of both degrees. Currently the program is sequenced to provide one year of PhD coursework followed by three terms of a thoughtfully modified DDS/DMD curriculum to include preparation for and the challenging of the National Board Part I. The students then spend a two year period finishing the PhD course requirements, writing supporting grant(s) and developing and pursuing their research project. The student then re-enters the DDS/DMD curriculum by taking the clinical portion of the DDS/DMD first and second year, most of the second year systems curriculum and all of the third and fourth year curricula. In the fourth year, these students are afforded the opportunity, in collaboration with the Managing Partner, the research mentor and the Research and Academic Deans to use a portion of the clinical rotation time to continue their research projects and dissertation completion.

We also have created the opportunity for selected students to pursue a Master of Science in Oral Sciences. This past year in the Class of 2013 we had our first two students successfully complete the degree. There are currently two more students who have begun the degree. We have just initiated a similar opportunity for students to work toward an MPH degree with the School of Public Health. Two students from the Class of 2016 are taking the first of the course required. We are most fortunate that the courses for both programs are offered in an online format.

The College has actively pursued a program designed toward creating student interest in exploring post-graduation full and part time faculty positions. To support this pursuit we have created time (up to fifteen three-hour sessions per term) for fourth year students to teach in the first and second year
program. The teaching includes facilitating small group sessions and/or overseeing prepatient experiences in restorative, periodontic and pediatric dentistry courses. To date this program has been most successful insofar as we have hired recent graduates who had the experience into part time teaching positions.

We are now in the third year of our DMD curriculum and each of the above described opportunities continue or will continue to be offered. However, the DMD curriculum in and of itself offers a wide diversity of learning situations. While the vast majority of lectures have been replaced, some do remain. We have observed that, especially for clinical treatments learning, the lecture can be an effective means to convey the “what to do and how to do it” concepts. Most of the former lecture sessions have been removed however, and replaced with small group sessions (7-9 students with a facilitator) utilizing faculty designed patient scenarios. Clinic huddle sessions (7-9 students with a clinic instructor) and split group (half class) interactive didactic sessions are also extensively used in the DMD curriculum. Students identify knowledge gaps, assign peer members to research needed information, and collaborate on their own learning both formally within their assigned group and through their use of informal interactive social media methods.

Structural Diversity

The College of Dentistry is an active participant in the UIC Urban Health Program (UHP). The mission of the UHP is to improve the quality of health care services for medically underserved urban populations. This is done by expanding health professions education opportunities for URM students and faculty interested in serving in Health Professions Shortage Areas of Illinois. The College participates in this program.

The primary aims of the UHP at the College are to assist underrepresented minority and disadvantaged individuals aspiring to become dentists and to increase the number of minority enrollees at the College. The program is operated out of the College’s Office of Student and Diversity Affairs.

The program provides extensive services for undergraduate Underrepresented Minority (URM) students, including advising for predental course selection and planning, Dental Admission Test information, and dental school admissions information. The UHP provides assistance to students during the entire application process. Programs include: a pre-matriculation program for incoming first year URM dental students, a post-baccalaureate program for pre-dental students applying for admission to the College, and a Dental Admission Test review course. The program also provides services for URM dental students such as counseling, academic advising, and opportunities in dental research.

The College offers an International Dentist Degree Program (IDDP) for foreign trained dentists who wish to practice dentistry in United States. Upon the successful completion of the program the participant is awarded a Doctor of Dental Medicine (DMD) degree. The participants in the program enhance the diversity of the College. The entire College community benefits from their presence.

The College UHP is committed to assisting the with identifying and developing URM candidates for faculty positions. To accomplish this, the College has developed a comprehensive Minority Dental Faculty Development (MDFD) Program. The fund is sponsored in part by ADEA, the Kellogg Foundation and the College’s Urban Health Program. The goal of the program is to provide services and programs that attract, encourage, nurture, and produce URM dental faculty. By partnering with the
College’s post-graduate training programs, the MDFD program provides resources and assistance necessary to develop and retain URM dental faculty. All URM faculties can utilize the program resources and services such as support for CE, conference registration and travel and mentoring resources.

The College participates in the University’s Office of Faculty Affairs Underrepresented Faculty Recruitment Program (UFRP). UFRP is responsible for a university wide, minority faculty recruitment program that includes salary and research resources. The UFRP is allowing the College to recruit and hire a cadre of outstanding faculty.

The College works closely with the UIC Women in Science and Engineering System Transformation (WISEST) to increase the number of women in dentistry and dental education. The goal of WISEST is to increase the number, participation, and leadership status of women in academic science and engineering at UIC, and to “Create an institutional environment that promotes the retention and advancement of women faculty in science and engineering. Collaborate with faculty, staff, and university leaders to affect institutional transformation.”

All recruitment for faculty positions greater than 0.5 FTE must be accomplished through an open search process. The search committee must demonstrate and document that applications were actively encouraged from women and minorities. The University’s Office of Access and Equity is charged with oversight authority for all searches. As seen in Standard 3-1 the College has been very successful in recruiting women and minorities.

2. Discuss how the diversity goals, strategies, programs, policies, and procedures interface with the University and the local/state community.

As presented in Standard 1-2 the College’s goals and policies related to diversity are absolutely congruent with our parent University. As mentioned above, because faculty and staff are State of Illinois employees, we meet all policy and procedural diversity mandates of the State. In addition we consistently inform staff of various programs within the University and, with proper application procedure, provide the time for employees to take advantage of the various training and informational sessions sponsored by the University.

The College was instrumental in the development of both the State of Illinois and City of Chicago Oral Health Plans. Each plan has diversity goals and objectives that interface with the College’s diversity goals, strategies, programs, policies, and procedures.

3. Describe how the dental school determines the appropriate level of diversity and assesses whether diversity goals are achieved. Provide data that has been collected on the school’s diversity goals and describe changes that have occurred following analysis of the data.

As mentioned earlier, the College is located in a spectacularly diverse city. Diversity of race, ethnicity, gender, religion, politics, sexual orientation, and ideologies abound. Living and working here creates awareness and an appreciation for the value added through a diverse environment. Whether recruiting faculty, students or staff we are ever mindful to seek the most highly qualified and diverse group of individuals possible. Because of the diverse population of our city we are most successful in our ability to attract an excellent and diverse applicant pool.
The College utilizes the resources and services provided by the University's UHP to achieve diversity within the College. The UHP works with the College to monitor diversity within the College. In addition, the College has received support from the American Dental Association, American Dental Education Association, the Robert Wood Johnson Pipeline, and the W.K. Kellogg Foundation. Their support was specifically focused on enhancing our recruitment and retention of URM students. The Office of Student and Diversity Affairs developed and implemented strategies toward achieving the following outcomes: an average predoctoral URM enrollment of 16% for the past year; above the national average of 12%.

The Associate Dean for Student and Diversity Affairs and the College's Diversity Advisory Committee (DAC) meet regularly to review and monitor the College's Diversity data. When necessary, recommendations are made to the appropriate College committee or departments.

Recommendations made that resulted in change include:
- Providing a mother’s room for nursing students, faculty and staff;
- Improving signage in the building;
- Providing a Quiet Room used for prayer and meditation;
- Recognizing all religious observances;
- Better utilization and promotion of University disability resources; and
- Encouraging staff to participate in dental Spanish classes offered to students.

4. Is there an individual or group designated as the program or institutional leader for diversity efforts? Describe the role and responsibilities of the institutional leader.

The Office of Student and Diversity Affairs (OSDA) led by Dr. Darryl Pendleton, Associate Dean is the College’s primary department for diversity efforts particularly related to the recruitment, matriculation and retention of students.

The Office of Faculty Affairs led by Dr. Luisa DiPietro, Associate Dean is the College’s primary contact for faculty recruitment, development and retention. Dr DiPietro works closely with College and University Units to implement and monitor our diversity efforts with respect to faculty.

The College’s Human Resources Office directed by Ms. Leticia Sanchez administers the University policies for diversity issues related to recruitment, hiring and employment of faculty and staff members. As the College employees are employees of the State of Illinois the College follows and is accountable for all State of Illinois laws and rules.
5. Describe any commitment to social justice criteria and/or community service criteria used for:
   a. admission of students,
   b. recruitment and retention of faculty, and/or
   c. recruitment and retention of staff.

a. admission of students

The College prides itself on serving the underserved. Applicants to the DMD program are expected to have obtained a variety of experiences, including community service and volunteer work. The experiences do not have to be specifically dentistry related, but these experiences may be helpful to one’s own understanding of selfless giving, compassion for others and exposure to diverse populations. The admissions committee does look for evidence of community service when reviewing applications and interviewing candidates.

A feature of our predoctoral program is our robust extramural community based program. Beginning in the first year each student participates in school based oral health education for children and caregivers. The capstone experiences occur in the fourth year with each student spending a minimum of fifty days in a community or internationally based clinic. This program commitment is well known by our applicants and by report; it is a factor in applying to our program.

b. recruitment and retention of faculty, and/or

All faculty are expected to support the College’s commitment to community service.

c. recruitment and retention of staff.

All staff are expected to support the College’s commitment to community service.

6. Describe any ongoing engagement with local and/or state stakeholders, especially in communities with unmet oral health-related needs.

The College benefits greatly from our relationship with seventeen community sites in Chicago and the state, a relationship with migrant worker care in Colorado and three international sites at which our students not only engage in patient care, but also study the care delivery models and how these sites contribute to the healthcare system. Every one of the sites, regardless of funding model, provides care for underserved populations.

Each year we also sponsor a College based Give Kids a Smile day that includes media coverage to raise awareness for the needs in children’s health. We also enjoy the support of the Governor of Illinois and the President of Cook County in promoting this event.

Our student government also sponsors our Charity Ball. A special evening for students, faculty and staff to gather at an elegant venue to interact socially and through ticket sales and a silent auction raise money for children’s or other community health support. For the past several years the event has generated nearly $10,000 for charity each year.
Our students, faculty, and staff are actively involved with the Chicago Community Oral Health Forum and IFLOSS—the state’s oral health coalition. In addition, our students, faculty, and staff participate in the State’s Oral Health Conference directed at Community Health Centers, Federally Qualified Health Centers, and County Health departments. They also provide oral health education at community health fairs in and around Chicago.

**Supportive Documentation**

*Appendix E-1: Institutional Commitment to Diversity*

Available On Site
Diversity Advisory Committee Meeting Minutes
UIC Climate Survey
1-5 The financial resources must be sufficient to support the dental school’s stated purpose/mission, goals and objectives.

Conclusion: The UIC College of Dentistry complies with Standard 1-5.

Description

The Dean is delegated budget authority by the University of Illinois Board of Trustees, and develops the College’s annual operating budget and five-year financial plan in consultation with the Executive Committee, Department Heads, and the Associate Deans. There are two components to the College budget -- general funds and earnings accounts (clinic revenue accounts).

1. Describe/explain the process utilized to develop the program’s budget. Include the time-frame, individuals involved, and final decision making body/individual(s).

The UIC Provost begins the University operational budget planning process in December of each year for the ensuing fiscal year (which runs from July 1 to June 30) by establishing budget planning parameters and assumptions for State allocation, salary increase program, and obligatory campus central services reallocation. The Dean and Associate Dean for Finance and Administration prepare a draft budget that is reviewed with the Provost and his staff in March and April.

The College budget structure is largely centralized to ensure equitable decision-making in strategic responses to annual State budgetary allocation reductions. Strategic budgetary initiatives are also facilitated by an “all funds” approach to financial planning and budgeting. After the Provost budgetary meetings are concluded, and the overall parameters of the budget are established, the Dean and Associate Dean for Finance and Administration subsequently meet, individually, with each of the Department Heads and Associate/Assistant Deans, to develop the operating budgets for each component unit. The need to budget for specific faculty and staff new recruitments/replacements in each of the units is the primary focus of these meetings. The Dean also fosters the development of consensus decisions with the Department Heads/Associate Deans, in their monthly individual meetings, continuously working with them to build and maintain a robust faculty/staff complement for each unit. Investment decisions are also made in these meetings in order to continuously develop and improve the College’s educational, research, and service programs. Every effort is made to align the College’s fiscal resources with its Vision and Mission.

2. Describe the five-year plan developed to assist the school in achieving stable and adequate funding.

Approximately 75% of the budgeted expenditures are faculty and staff salary and benefits, while supplies and services account for the remaining 25%. The revenue budget is composed of 85% of the tuition paid by students, the Clinic Infrastructure Assessment (student fee), the College’s share of the State appropriation to the University, and the College earnings accounts (clinics, continuing education, etc.).
The College’s budgeting process supports the annual salaries of our research faculty. It also funds start up packages for new recruits for up to five years. The College receives 47.25% of the ICR dollars of which 5% is returned to the Principal Investigator.

3. Provide information on the school’s budget for the previous, current and ensuing fiscal years.

The annual State allocation to the College has decreased by $4.4 million since 2006. The economy is expected to improve very little in Illinois over the next few years. Therefore, the University expects no increases to its budget, and anticipates additional appropriation reductions by the State Legislature. The College is pursuing an integrated program of strategic initiatives to replace declining State support with clinic revenue growth, student enrollment management, and tuition increases. Like most public dental schools, our dental student tuition has increased by 64% since 2006, as State funding has relentlessly declined. We know that this rate of tuition increase will ultimately have deleterious effects on student applications and graduating student educational debt, so we plan to limit future tuition increases to a maximum annual rate of 4%, while replacing lost State allocation revenue with clinic revenue growth.

The College’s 2006 Accreditation Self Study explained a plan to repay a $10.8 million accumulated cash deficit. The deficit was eliminated effective March 31, 2013.

The College has maintained an active faculty recruitment program since 2000 to continuously replace retiring and relocating faculty, and strategically strengthen our education, research, and service missions. Seventy-four new fulltime faculty members have been recruited since 2000. Although there was a salary freeze in FY10 and FY11, caused by the national recession and reductions in State appropriations, salary increases of 2 to 2.5% resumed in FY12. In recognition of the cost of living in the Chicago region, the College also made material market adjustments to clinical faculty member salaries in FY12, so that salaries now exceed national averages. The College will maintain competitive market salaries for faculty in the future.

A fund-raising capital campaign has raised gift funds to renew the College’s clinical equipment and facilities. The clinic renewal has also been made possible through enhanced reimbursement funding from the State and federal governments for clinical services provided to Medicaid patients. All of the College clinics will be renewed by February, 2014. The College’s five-year budget plan identifies annual funding for future equipment maintenance and replacement.

The renovation and re-equipping of twenty thousand square feet of research laboratory space on the College building’s fourth and fifth floors was completed during August 2013, bringing the total square footage of modern research laboratories in the College to 36,000 square feet. The most recent renewal of research laboratory space was funded by a $9.9 million NIH/NCRR ARRA CO6 grant. Previous research laboratory renewals were funded by research grant indirect cost recovery funds and gifts from donors and foundations.

The College’s annual operating budget provides for the purchase of supplies, teaching aids, and computer equipment by the academic departments, Office of Academic Affairs, and Office of Clinical Affairs. In 2011, the College converted its dental student curriculum to case-based small student group learning. A Learning Laboratory (“smart classroom”) was funded by the UIC Provost’s Office to support this new student learning environment.
According to the ADA Survey of Dental Education Volume 5, 2010-11, the College ranked 26th out of 58 dental schools in Direct, Indirect, and Total Expenditures per FTE, and 25th in Total Expenditures Excluding Research and Faculty Practice per FTE, in FY10. In FY10, our Total Expenditures per FTE were $113,105, compared to a mean of $109,974 for all dental schools, while our Total Expenditures per FTE excluding Research and Faculty Practice in FY10 were $91,729, compared to the mean for all dental schools of $89,933.

Supportive Documentation

- **Appendix B-1:** UIC College of Dentistry Vision and Mission Statements
- **Appendix B-5:** Revenue and Expenditure Budget information for FYE 2009-13
- **Appendix B-6:** Table of financial resources for FYE 2014
- **Appendix B-7:** Expenditure Budget information for FYE 2014
- **Appendix B-8:** Five-Year Budget Plan for FYE 2014-18

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A Brilliant Future

STANDARD 1-5

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1-6 The sponsoring institution must ensure that support from entities outside of the institution does not compromise the teaching, clinical and research components of the program.

Conclusion: The UIC College of Dentistry complies with Standard 1-6.

Description

The College is governed by the University of Illinois system which is a State of Illinois institution. As a result, all contracts, purchases, affiliation agreements and gifts are regulated according to State of Illinois Procurement Code. The University of Illinois Office of Business and Financial Services assists the College.

1. Describe the dental school and university policy, procedures, and safeguards in place to prevent conflict of interest related to the teaching, clinical and research components of the program.

In 2010 the College took existing models of Conflict of Interest statements and developed an internal document to guide faculty, students, staff and administrators. The resulting Guidelines for Management of Potential Conflicts of Interest with Health Care Industry document was ratified by the faculty in September of 2011. The objective of the policy states in part:

It is recognized that interactions between the health care industry and faculty, staff, residents, and students are multi-layered and complex. No set of rules or policies can cover or anticipate all exigencies. Therefore, each situation should be managed with the aim of ensuring that the College educational curriculum, research and patient care decisions are based on the best available evidence and provide appropriate opportunities for faculty and trainees to interact with the health care industry to foster collaborations in a creative, scientific, and conflict free environment. In summary, each interaction should be managed by the College member so as to:

1. Encourage the College faculty to evaluate various patient care modalities, seeking information from all sources available (including the health care industry), evaluate the quality of that information, determine the applicability of the information to patient care, and evaluate the outcomes as related to patient care;

2. Allow College researchers to conduct independent study with full understanding of the role, if any, of the health care industry;

3. Design, implement and continually review curricula that are congruent with contemporary practice, based on the best available clinical and research evidence employing effective and efficient pedagogy; incorporate leading edge techniques and technology; and assure that all curricular content is free of bias from whatever source. Foster honorable and ethical relationships with the health care industry that benefit the educational, research, service and community goals of the College entity mission statement.
4. In all interactions assure that personal preferences are clearly identified as such, and do not place the University in the position of endorsement or critic of any health care industry entity.

In addition the Continuing Education Committee requires all proposed programs to be reviewed by the committee which is comprised of faculty members from each department. Each program must complete an Activity Proposal/Approval Form which requires disclosure of Commercial Support interests. A similar process is used by the Office of Student and Diversity Affairs in determining the appropriateness of presentations in the College’s Student Lunch and Learn series.

Each year the State of Illinois, Office of the Secretary of State requires each University faculty member to complete a Statement of Economic Interests document. This process requires a faculty member to disclose all personal and immediate family activities that exceed prescribed dollar limits. Additionally, all faculty are required to complete and submit a Report of Non-University Activities each year.

2. Describe any situations that require review by or approval by a governing board (board of trustees) of the school or university prior to any action being taken.

All supplies or services (including equipment) that exceed $53,700, any construction project that exceeds $75,300 and any professional and artistic service that exceeds $20,000 must be submitted for bidding. Any purchases that exceed $1,000,000 for professional services, or supplies and equipment require prior approval by the Board of Trustees. Similarly, any capital project exceeding $5,000,000 and construction contracts exceeding $2,500,000 require prior approval by the Board of Trustees.

A sole source procurement for an estimated purchase equal to or greater than the bid limits is permissible when a requirement is available from only a single supplier or contractor or when only one supplier or contractor is deemed economically feasible. A requirement for a particular proprietary item does not justify a sole source procurement if there is more than one potential bidder or offer or authorized vendor to provide that item.

In all instances all contracts are subject to review by the Procurement Policy Board (PPB) of the State of Illinois. Sole source procurements and awards made pursuant to a competitive bid process are subject to review by the PPB. The PPB was established as an independent State agency with the authority to hold hearings regarding the implementation and administration of the Illinois Procurement Code, to review specific procurement transactions, and to recommend related policies.

Public Act 93-0839 requires that the PPB review procurements prior to the issuance of a contract or purchase order. The PPB reviews sole sources and awards posted on the Illinois Higher Education Procurement Bulletin. The PPB has 30 days to: grant a waiver from review, request more information about the transaction, or conduct a more in-depth review. A purchase order or contract cannot be issued by the University until approval has been received from the PPB, or the 30-day review period has expired.

Supportive Documentation
Appendix B-11: Guidelines for Management of Potential Conflicts of Interest
Appendix D-4: Continuing Education Activity Proposal/Approval Form

Available On Site
Contracts/Agreements between the institution/program and sponsor(s)
1-7 The authority and final responsibility for curriculum development and approval, student selection, faculty selection and administrative matters must rest within the sponsoring institution.

Conclusion: The UIC College of Dentistry complies with Standard 1-7.

Description

The College has the authority and the responsibility to develop, monitor and deliver curriculum development and approval, student selection, faculty selection and administrative matters. The Dean of the College, as Chief Administrative Officer for the College, is charged with the overall responsibility. The Activities of a Dean (the University’s description of the duties of the dean) describes twelve (12) elements central to the position of dean and are used for the evaluation of the dean’s performance. Among those elements are several that specifically address the dean’s authority and responsibility for the activities related to curriculum, student selection, faculty selection and administrative issues. The specific elements related are:

2. Foster student intellectual development and college’s academic mission through sound educational policy and a contemporary curriculum.

3. Promote the recruitment, retention and academic progress of undergraduate, graduate and professional students.

4. Recruit and retain faculty of the highest caliber; promote excellence among the faculty; set a standard personally for academic scholarship, engagement and integrity.

6. Foster and promote gender equity and ethnic diversity among students, faculty and staff to enrich the university environment.

8. Manage resources wisely, through the allocation of space and budget in support of defined priorities and the continuous development of new sources of revenue.

9. Promote the creation of new knowledge and the cultivation of funding sources appropriate to that endeavor.

10. Represent and advance the interests of the college and UIC by skillfully developing relationships with parties external to the college, both on and off campus.

11. Increase the external financial support for the college through fundraising efforts and through the relationships referenced above.

The Faculty Bylaws establish the Executive Committee and twelve standing committees to serve the College. The administrative structure has three major components:

- Department Heads of each of the eight academic departments in the College report to the Dean.
- Associate and Assistant Deans report to the Dean.
- College standing committees report to the Executive Committee and, ultimately, to the faculty of the College.

These three components allow issues to be raised and addressed from a broad perspective and foster broad input by the College faculty community.
The curriculum development and approval rest solely with the faculty. The Bylaws establish a Subcommittee of the Executive Committee on the Curriculum that is charged to:

a. Review proposals for new courses and programs, and significant curricular changes.

b. Monitor the effectiveness of the curriculum through review of reports from the Curriculum Advisory Committee (CAC), Assessment Team, Director of Academic Affairs and others.

c. Through consultative deliberations with the CAC, finalize and approve action plans to be carried out by the CAC and Course Teams, and review progress on prior action plans annually or more frequently as needed.

d. Consider recommendations received from the CAC, Curriculum Committee members, the Executive Associate Dean for Academic Affairs and others regarding curricular policies, plans and actions requiring broad faculty input

e. Advise the Executive Associate Dean for Academic Affairs on curricular resource needs

f. Advise the Executive Associate Dean for Academic Affairs on the design of instruments to assess the curriculum at the course and program levels

g. Make recommendations to the Executive Committee regarding significant changes to curricular policies and plans requiring a vote of the Faculty

The recommendations and annual report of the Curriculum Committee are sent to the Executive Committee which acts “to review and make recommendations to the Faculty on the actions and recommendations of all other standing committees unless otherwise indicated in these Bylaws.” The vote of the faculty at a regularly or special scheduled meeting decides the recommendation. The faculty of the College is the final authority on issues of curriculum.

The Curriculum Committee is comprised of the following members:

1. Membership
   a. Voting Membership
      1) Faculty Members
         a) There shall be one faculty member from each Academic Department. The Department Head, in collaboration with the department faculty, nominates a faculty member for a two-year term according to the schedule below.

         b) The Department Head shall also appoint an alternate should the primary member be unable to attend. This department alternate designee shall be permitted to vote.

         c) The Director of the International Dental Degree Program (IDDP) shall be a voting member.
2) Student Members
   a) There shall be one student member, elected by the class, from each DDS/DMD and IDDP class for a one-year term.
   b) There is no limit to the number of consecutive terms.

b. Non-Voting Membership
   1) Administration
      a) Executive Associate Dean for Academic Affairs
      b) Associate Dean for Clinical Affairs
      c) Director of the Office of Dental Education
      d) Director of Academic Affairs
      e) Director of Graduate Studies
   2) Faculty
      a) DMD Coordinating Team Members
      b) Assessment Team Coordinator
      c) Scenario Writing Team Coordinator
      d) Department alternate member
      e) Faculty active in curricular development, as appointed by the Executive Associate Dean
   3) One student alternate from each class

Student Admissions

Student admission to the DMD curriculum is solely the responsibility of the Subcommittee of the Executive Committee on Student Admissions. The Admissions Committee is comprised of faculty members from each of the Departments in the College. The Committee responsibility includes admission to the DMD, International Dentist Degree Program (IDDP), Guaranteed Professional Program Admission (GPPA) and Post baccalaureate programs. The Committee reports its activity annually to the Executive Committee.

The Committee membership is:

- This committee shall consist of at least fourteen faculty members from the College and up to five representatives of appropriate units outside the College, all of whom are appointed annually by the Dean with the approval of the Executive Committee.
- The Associate Dean for Student and Diversity Affairs, the Director of Admissions, and the Director of IDDP shall serve as ex-officio members without a vote.
- After all departments are represented on the committee, membership can include more than one individual from the same department.
- Committee members shall serve no more than six consecutive terms, unless otherwise appointed by the Dean.
Faculty Selection

Faculty selection is departmentally driven. There are currently eight (8) departmental academic units within the College, Endodontics, Oral Biology, Oral and Maxillofacial Surgery, Oral Medicine and Diagnostic Sciences, Orthodontics, Pediatric Dentistry, Periodontics, and Restorative Dentistry. Departmental need is developed by the Department Head in consultation with department faculty and presented to the Dean for consideration. The Dean has final approval authority. The Provost, through the budget process, monitors faculty complements throughout the University.

For faculty within a department the search committee is chaired and primarily staffed by faculty within the department. Should the vacancy be a Department Head, a Department Head from another department or an Associate Dean is selected by the Dean to Chair the Search Committee. the search committee while strongly representing the department faculty also includes faculty and/or staff from other departments.

Administrative Matters

Administrative matters are addressed by two groups. The first is the Department Head Meeting chaired by the Dean and comprised of the Department Heads and the Assistant and Associate Deans. The group meets monthly to bring forth issues relevant to the College or to discuss issues and make recommendations for resolution.

A second meeting is a twice monthly meeting of the Leadership Committee chaired by the Dean. The group consists of the Associate and Assistant Deans and focuses on administrative issues relevant to each area of responsibility.

2. Describe the schools participation in the governance of the University, in accordance with its policies and procedures.

The Dean is a member of the Dean’s Council which is made up of the dean of each of the Colleges in UIC. Working with the Provost (Chairperson) the deans discuss common issues and receive information related university and governmental issues affecting the University. The Dean also serves on the Dean's Council of the Health Sciences Campus. This body is charged with administrative issues related to dentistry, medicine, nursing, pharmacy and allied health. The group is chaired by the Provost.

Each of the Assistant and Associate Deans of the College serve on the appropriate campus leadership groups related to their area of responsibility, academic affairs, clinical affairs, research, faculty development, and advancement.

The College is also well represented in the Faculty Senate of the University of Illinois at Chicago. The Senate is, as defined in the University of Illinois Statutes, Article II, Section 1, which provides for a senate to be constituted at each campus of the University, to exercise legislative functions in matters of educational policy, such as requirements for admission to colleges and schools, requirements for degrees and certificates, and the academic calendar.
The College currently has fourteen (14) faculty members serving in the Senate. They are:

Fadavi, Shahrbano '14  Luan, Xiang '13  Ricker, James '15  Wang, Chiayeng '14
Fayz, Farhad '13      Parsons, Terry '13  Rowan, Susan '13  Zhou, Xiaofeng '14
Kaste, Linda '14       Patston, Philip '14  Schwartz, Joel '14
Kaszuba, James '15     Raja, Sheela '13    Sroussi, Herve '13

Dr. Philip Patston also serves as the Chair of Senate Executive Committee and Secretary of the Senate of The University of Illinois at Chicago. This is the key leadership position of the UIC Senate.

3. Describe University policies and procedures which ensure that the dental school is autonomous in matters related to curriculum development and approval; student selection; faculty selection; and administration.

The College, while given great latitude, is nonetheless subject to the applicable University policies and procedures and, as the University of Illinois is a State of Illinois institution, the College is bound by the laws and regulatory divisions of the State of Illinois.

For curricular issues, major changes such as our recent change from the DDS to the DMD curriculum required the approval by the College faculty, and was then reviewed by the UIC Senate Committee on Educational Policy, subsequently approved by the UIC Senate and submitted to the Illinois Board of Higher Education by the UIC Senate.

Student selection is clearly controlled within the College and is administered in accordance with our internal policies and procedures. The College is congruent with all UIC admissions norms and practices, and as with all public universities we adhere to State and Federal statutes related to student selection and admission.

All faculty members are employees of the State of Illinois and the selection of individuals is therefore determined by College need, and regulated through University approval and is in compliance with State of Illinois statutes related to employees.

Similarly administrative matters are also subject to College need and within University purchasing practices require budget approval. The State has recently added an additional layer of regulation through the establishment of a State Procurement Office which has significant oversight rights.

Supportive Documentation
Appendix B-3: Activities of a Dean
Appendix B-9: COD Organizational Chart
Appendix B-10: UIC Organizational Chart
Appendix D-3: COD Faculty Bylaws
1-8 The dental school must be a component of a higher education institution that is accredited by a regional accrediting agency.

Conclusion: The UIC College of Dentistry complies with Standard 1-8.

Description

The University received its original accreditation in 1970 and its status was last confirmed by the Higher Learning Commission on October 23, 2007. This status is confirmed upon the University until its next review which is scheduled in 2017.

Appendix B-12: University of Illinois at Chicago Accreditation Document, October 23, 2007
1-9 The dental school must show evidence of interaction with other components of the higher education, health care education and/or health care delivery systems.

Conclusion: The UIC College of Dentistry complies with Standard 1-9.

Description

The College has meaningful interactions with our parent university on education and research matters as well as active participation with our health sciences Colleges on campus and the at the hospital. We also have strong alliances with our Big Ten dental school colleagues and a strong and broad participation with ADEA. Our curriculum is highly reliant on extramural training and study of health care policy through our interactions with our community partner clinics.

Administrative Interactions

The College is fully integrated into the University of Illinois at Chicago academic structure, as one of the sixteen colleges/schools in the University. The Dean reports directly to the Vice Chancellor for Academic Affairs (VCAA)/Provost for all education and research matters. The Dean meets individually with the VCAA/Provost once each month, and in a monthly Deans Council meeting with the VCAA/Provost and other deans.

The seven health professions colleges (Dentistry, Medicine, Pharmacy, Nursing, Allied Health Sciences, Public Health, and Social Work) report to the Vice President for Health Affairs (VPHA) for matters related to the clinical patient care enterprise. They meet with the VPHA as a University of Illinois Hospital and Health Sciences System (UIH HSS) Leadership Team on a monthly basis. This group is also convened by the VCAA/Provost in a monthly meeting of the Health Sciences Council to oversee the Center for Clinical and Translational Science, and the Cancer Center.

All Deans ultimately report to the University of Illinois’ Board of Trustees, through the VCAA/Provost to the Chancellor for education and research, and through the VPHA to the President of the University of Illinois for clinical patient care activities.

While the College’s clinical activities operate independently from the University of Illinois Hospital and Health Sciences System (UIH HSS), they are seen as an integral part of the UIH HSS patient care enterprise. Oral health care services to patients are valued by the UIH HSS as a “value-added” health care service, which is unique to UIH HSS among health care centers in Chicago and Illinois.

The Dean of the College meets frequently with the Vice Chancellor for Research, to ensure that the College’s faculty fully benefit from the services of the UIC Office for Research.

The Dean is also in frequent contact with the Chancellor, particularly with respect to community and governmental affairs.
Health Care Education

The Health Sciences Colleges have recently engaged in Inter-professional Education activities. On April 5, 2013 over 800 students from the Health Sciences Colleges met in multi-disciplinary teams to explore issues related to a simulated patient. While the simulated patient, was an inpatient, there were, nonetheless had oral health issues involved. The College participation included not only our entire 3rd year class, but we contributed more small group facilitators (nearly 20 dental faculty members participated) than any other of the participating Colleges.

The Health Sciences Colleges also support the Health Professions Student Council (HPSC). The HPSC officers attend the deans meeting to present the results of past year’s activities. The Collaborative Healthcare Series (CHS) is purposely designed to explore ideas for moving forward interdisciplinary activities into the next academic year. The focus of this meeting is two-fold. First, the attendees discuss incentives for students to attend events. Secondly, attendees propose ideas for future events. Most recently the incentive for the College of Medicine – dean’s letter honorable mention was discussed as a model for the other Colleges to adopt as each of the Colleges is considering more pass/fail as opposed to letter grading issues.

Community Based Health Care Systems

Fourth year DDS students at UIC, College are enrolled in a for credit course Community Based Dental Education (DADM325) which will become Dentistry, Community Learning Experience (DCLE341, 342, and 343) in the DMD curriculum. The primary purpose is to elevate student awareness, knowledge and sensitivity to the oral health needs of the underserved in the State of Illinois and elsewhere. The courses also provide clinical experiences for our students. The courses are graded and are a requisite for graduation. The course entails a didactic element that focuses on issues of health disparities, access to care, and social justice.

Community-based service-learning rotations were first initiated as a pilot in 2005. Now in their seventh year the extramural rotations have expanded to eighteen weeks or 90 days. The College has formal affiliation agreements with all nineteen sites used for the rotations. The rotations are scheduled, for the near Chicago sites in a 1x1 in fashion, students spend one week at the College and one week at the community site. For the distant experiences, US (Colorado, Alaska) and international (China, Tanzania, and Guatemala), the experiences occur in set blocks of 4 or 6 weeks.

The course is centered on the various facets of the health care system and the role of dentists in the health care system. The array of delivery, funding and organization of the healthcare system are represented by a variety of sites to which students rotate. The sites are located in and serve various communities that include urban, suburban, rural, Hispanic and African American. Each site is a medical/dental facility and is unique in its organization, administration, and reimbursement structure. Each provides unique sets and ranges of services to specifically defined underserved population groups. Sites are dedicated to their own particular service and operational objectives that emphasize varying aspects of social justice, issues of access to care, and health disparities.

Student exposure to a broad range of health systems, underserved communities, and related health issues is the critical aspect of the course. For example, the sites include federally qualified health centers (FQHCs) as stand-alone entities, FQHCs within local health department structures, a faith based site, hospital-based sites, philanthropically supported health centers, a site providing care for
the developmentally disabled only, a closed-panel and union run site, and sites that operate from mobile facilities.

Credentialed and adjunct faculties provide supervision and direction for students at each site. A complete list of the rotation sites is shown on the next page.

Community Partner Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>City</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Children’s Clinic</td>
<td>Oak Park, IL</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>2  Community Health Partnership</td>
<td>Aurora, IL</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>3  Crusader Clinic</td>
<td>Rockford, IL (2 sites)</td>
<td>FQHC</td>
</tr>
<tr>
<td>4  Erie Family Health Center</td>
<td>Chicago, IL (2 sites)</td>
<td>FQHC</td>
</tr>
<tr>
<td>5  Heartland Alliance</td>
<td>Chicago, IL (2 sites)</td>
<td>FQHC</td>
</tr>
<tr>
<td>6  Hines VA Hospital</td>
<td>Hines, IL</td>
<td>Hospital based clinic</td>
</tr>
<tr>
<td>7  Infant Welfare Society of Chicago</td>
<td>Chicago, IL</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>8  Illinois Masonic Medical Center</td>
<td>Chicago, IL</td>
<td>Hospital based clinic</td>
</tr>
<tr>
<td>9  Lake County Department</td>
<td>Waukegan, IL</td>
<td>Hospital based clinic</td>
</tr>
<tr>
<td>10 Lawndale Christian Health Center</td>
<td>Chicago, IL (2 sites)</td>
<td>FQHC, Faith Based</td>
</tr>
<tr>
<td>11 Milestone Inc., Dental Clinic</td>
<td>Rockford, IL</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>12 MUHAS School of Dentistry, Muhimbili University of Health and Allied Sciences</td>
<td>Dar es Salam, Tanzania</td>
<td>Hospital based clinic</td>
</tr>
<tr>
<td>13 Northwest Community Healthcare</td>
<td>Arlington Heights, IL</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>14 Salud Family Health Center</td>
<td>Colorado (6 sites)</td>
<td>FQHC</td>
</tr>
<tr>
<td>15 Salud y Paz</td>
<td>Camanchaj, Guatemala</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>16 St. Bernard Hospital</td>
<td>Chicago, IL</td>
<td>Hospital based clinic</td>
</tr>
<tr>
<td>17 Sun Yat Sen University</td>
<td>Guangzhou province, China</td>
<td>Hospital based clinic</td>
</tr>
<tr>
<td>18 UFCW Union Medical Center Dental Clinic</td>
<td>Chicago, IL</td>
<td>Closed Panel</td>
</tr>
<tr>
<td>19 Whiteside Medical Center</td>
<td>Rock Falls, IL</td>
<td>Community Based Organization</td>
</tr>
</tbody>
</table>

The DADM325 syllabus also contains an option for students to propose an ad hoc rotation as an alternative to those that the College has developed. Students must present the ad hoc site proposal to the course director by a specified date early in the academic year in order to obtain permission to pursue the option. It is expected of the student that he or she make the contacts and obtain the
necessary information and agreement from the site regarding the feasibility of the rotation. The
student needs to demonstrate that the rotation satisfies the course objectives and expectations as
outlined in the syllabus. Tentative agreement by the site and the proposed preceptor must be
presented. Any travel, maintenance, or lodging expense would be the responsibility of the student, the
site, or some other acceptable intermediary. These types of rotations are typically only scheduled for
late in the academic year due to the additional work entailed in developing the experience. The
ad
hoc rotation option has enabled students to complete rotations in Tanzania, Africa, in collaboration
with dental students from New York University; in Los Angeles at the Union Rescue Mission in
collaboration with the University of Southern California School of Dentistry; at a site in Boston through
the Henry M. Goldman School of Dental Medicine at Boston University; at the White Earth Indian
Reservation and sites in Alaska through agreement with the Indian Health Service (IHS); in Northern
California at La Clinica de la Raza and at the Vanderburgh County Health Department, a clinic in
Indiana.

In addition, senior dental students have the option to apply for rotation experiences at international
settings including Guatemala, China and Tanzania. Rich in learning opportunities as well as personal
and professional growth, all experiences build upon course goals and the College’s mission to promote
optimum oral and general health through excellence in education, patient care, research, and service.

After completion of an essay application and interview with the College’s Division of Prevention and
Public Health faculty, accepted students are assigned to desired locations where they will travel during
the last semester of the academic year. Each rotation respective to their region of the world provides
a different point-of-view regarding oral health as it relates to overall health:

Guatemala: For four weeks in April, students participate in the Salud y Paz led by adjunct faculty
member, Dr. Philip Plunk. Students assess and treat the oral health needs of extremely poor, below
poverty level Mayan elementary students. In this remote, rural section of Guatemala, many have never
seen a dentist or had any professional dental treatment. Furthermore, many will never see a dentist
ever again. During their stay, students have an up-close and personal look at the significant lack of
access to care many Guatemalans face as it pertains to their oral health.

Sun Yat Sen University, Guangzhou province, China-(SYSU): Students traveling to China and spend four
weeks learning from faculty members and students at the School of Stomatology in Guangzhou. This
introduces students to the practices of dental medicine as stomatology. UIC students engage faculty
members and current dental students in lecture, conversation and observation at University clinics.
This exceptional experience introduces students to world health and medicine; similarities and
differences among practices, procedures, beliefs, treatment and more.

School of Dentistry, Muhimbili University, Dar es Salaam, Tanzania: The four-week community based
service learning rotation to Dar es Salaam occurs in April each year. A portion of the experience will
takes place at the Muhimbili University School of Dentistry where students provide clinical care. For
the remainder of time, students are off-site rendering care in a rural environment of Tanzania.

As noted, experiences vary from providing volunteer care in a significantly remote area of the world,
to learning higher education teaching approaches and clinical beliefs in well-developed technologically
savvy regions of the world. While UIC dental students will make discoveries from different
perspectives, all receive unique interactions with delivery systems, and health care education as it
relates to the hosting country.
All students are required to write a paper on the service model of their assigned site and how the service model fits with oral health. The paper results in a comprehensive review of the practice model. The essence of the paper is to demonstrate deeper understanding of the delivery environment. The paper addresses the following types of questions:

- What type of site is it? (closed panel/FQHC/philanthropic)
- What is the history of the organization/site?
- How is the site funded?
- Who are the stakeholders (governing board, staff, patients, community members)?
- How is the site administered?
- Who governs the site?
- What is the service eligibility?

A unique opportunity for third year dental students developed over the 2012/2013 academic year on behalf of program lead by UIC faculty member, Dr. Michael Santucci. For the first time, D3 students participated in an extramural rotation. Sponsored by the Christian Dental Society, Dr. Santucci led and supervised four students who took part in a mission trip to Mavis Bank, Jamaica, a rural mountainous village one hour from Kingston. During the visit, students provided patient oral examinations, restorations and extractions services for the local population. Some patients travelled many miles to be seen, lining up early in the morning to wait all day for treatment.

**Faculty Development**

There are several mechanisms by which the College interacts with University and other Health Sciences colleges in efforts to support faculty development. At the campus level, interactions include shared workshops on the tenure and promotion process, on faculty mentoring, and on gender/diversity issues. The majority of these activities are organized by the UIC Office of the Vice Provost for Faculty Affairs, the Chancellor’s Office, or the Office of the Provost. Senior administrators for faculty affairs from all UIC colleges, including Dentistry, meet together regularly with the Vice Provost for Faculty Affairs to discuss the professional needs of the faculty and to develop shared resources.

College faculty are active as members and chairs on many of the cross-college Chancellor’s Status Committees. These committees serve faculty and staff in assuring that the professional and cultural needs of diverse communities are met, and make specific recommendations to the Chancellor to improve the climate for their constituencies. The Chancellor’s Status Committees currently include committees specific to Women, Blacks, Asians, Latinos, Persons with Disabilities and the Gay, Lesbian, Bisexual & Transgender Community.

**Research**

Another important source of cross-college interaction for faculty development is the UIC Center for Clinical and Translational Sciences (CCTS). The CCTS provides an important resource that engages faculty from across the entire UIC campus, with a focus on those who are involved in translational research. Activities sponsored by the CCTS include workshops on grant preparation, human subjects
research, and career development consultations. The CCTS is home of the Mentoring Academy, a cross-college group of senior faculty mentors (including several from our College) who meet regularly and assist in the implementation of new faculty development and mentoring programs.

Dental students are similarly engaged through participation in regional and national research opportunities including presentations at Illinois State Dental Society meetings, IADR/AADR presentations, ADA and ADEA programs, both though organization leadership and attendance.

Supportive Documentation

Available On Site
Formal agreement(s) with co-sponsored or affiliated institutions
Course Syllabi
In advance of each course or other unit of instruction, students must be provided written information about the goals and requirements of each course, the nature of the course content and the method(s) of evaluation to be used and how grades and competency are determined.

**Conclusion:** The UIC College of Dentistry complies with Standard 2-1.

**Description**

Prior to the start of each course, students are provided with a syllabus for each course which contains all the information required by this standard. The students are informed of the goals and content of each course, the evaluation methods to be used, the determination of grades, and the College competencies to be addressed.

Course Directors distribute a course syllabus and other course documents to the students at the beginning of each course. These documents are posted on the Blackboard site for each course, and handed out as hard copies as needed. Course Directors also provide the Office of Academic Affairs (OAA) with a copy of the syllabus. The courses required for completion of the DMD and DDS are available in the UIC Graduate College catalog website, and the schedule of courses by class and semester are on the College website.

The College has a standardized format for all course syllabi, as required by University policy. Course specific information required on all syllabi include faculty contact information, course description, required and recommended textbooks and other resources, session times and locations, competencies addressed, evaluation methods and grading policies. Course syllabi also contain general UIC and College policies such as disability accommodations, remediation guidelines, academic dishonesty, absences, and religious holiday accommodation. The evaluation and assessment methods and the grading systems used will vary depending on the content, learning objectives and competencies for each course.

**Goals and Requirements**

The goals and requirements for each course are included in each syllabus. The goals of each course are the acquisition and application of the relevant knowledge and skills, as determined by the varied assessment criteria in use at the College. The exact criteria will depend on the nature of the course. Each syllabus indicates which of the College competencies are addressed by the course. The competencies are described in more detail in Standard 2-4.
Nature of Course Content
The DDS curriculum was a traditional discipline based curriculum. The course content in biomedical sciences in the D1 and D2 years was for the biomedical science disciplines and is further described in Standards 2-11 to 2-14. The clinical content was interdisciplinary being taught within the context of comprehensive care courses in the pre-patient care components, and then reinforced in the group practice patient care clinics. Specific clinical disciplines were still taught by discipline based departments.

DBCS: (DMD1 and DMD2 years) consist of a blend of large group interactive didactic sessions, and small group learning. During the D1 year these courses also have anatomy and histology laboratory sessions.

DAOB: (D1 through D4 years) consist of large group interactive didactic sessions, pre-patient care clinic activities, and small group learning sessions. The D3 and D4 year courses in DAOB move from pre-patient care activities and training to patient care in the clinics.

DOST: (DMD3 year) is a case-based didactic course which uses virtual patients on an educational AxiUm database (not connected to the live patient AxiUm database), which has been designated “AxiUm Ed”. The virtual patients in this database have a full spectrum of systemic, orofacial and behavioral conditions. The students use the skill set they mastered during the DMD1 and DMD2 years to apply their knowledge to patients scenarios in the patient care environment.

DOSI: (DMD4 year) currently in development, will use a grand rounds approach to address management of patients with system-specific and multi-systems diseases and conditions. The expectation is that the students will be able to continually integrate the foundational knowledge in biomedical, clinical and behavioral sciences and apply this into a comprehensive diagnostic and treatment plan for increasingly clinically complex patient scenarios.

Methods of Evaluation
The methods of evaluation are described in more detail in Standard 2-5 Standard 2-23 and will not be duplicated here. However, an overarching feature of the guiding principles of evaluation is that we use four domains to determine that students have achieved competence:

- Varied assessments;
- Faculty observation;
- Performance examinations; and
- Student self-evaluation.

Within each of these domains there are multiple ways in which we can specifically sample each one. In this model, although the designation of student competence is based on a combination of formative and summative assessments it is a predictive judgment of the faculty of future performance of the student. Specifically the faculty are saying that given a clinical situation our graduates will be able to independently manage a patient problem in a clinically acceptable manner. This is summarized in the figure below:
Determination of Grades
Based on the evaluations used in the courses a final grade is determined. Each course will differ in the weight given to different components. This is described in the syllabi and explained to the students. The final percentage grade is assigned a letter grade as described in the syllabi. A more detailed description of evaluation methods used is given in Standard 2-5. The specifics of assessment and evaluation of clinical skills and competencies are given in Standard 2-23. However, in each course in addition to achieving an overall passing grade, the student must achieve a passing evaluation in each course component.

Determination of Competency
The procedure just described with the diverse assessments in the four domains is used to determine if the student is proficient in a particular topic, discipline, technique or skill, and therefore if they can be deemed competent. The College has seven competency statements, and all courses and associated evaluations relate back to these. As required in Standards 2-4 and 2-5 the Competencies are described in more detail along with the evaluation methods.
College of Dentistry Competency Statements

Given a diverse PATIENT and/or a COMMUNITY population, a graduate of the predoctoral program will, within the scope of a general practitioner and in consideration of the patient’s/community’s total health status, and employing the best scientific research and clinical EVIDENCE, be competent to:

1. Act, in all circumstances, in accordance with the principles of PROFESSIONALISM, ETHICAL BEHAVIOR, and CULTURAL COMPETENCE;
2. Lead a productive DIALOGUE to establish the goals, objectives and expectations of the patient or community;
3. Engage in an ongoing ASSESSMENT of the state of health;
4. Formulate DIFFERENTIAL DIAGNOSES based on the assessment;
5. Produce a prioritized PLAN that addresses each diagnosis and includes health promotion, maintenance and prevention, alternatives, the rationale and prognosis for the intervention as well as needed referrals;
6. Deliver/Manage the INTERVENTION, within personal skill level, that is evidence-based, comprehensive and is in keeping with the best practices of care; and
7. Systematically and accurately EVALUATE THE OUTCOME of the intervention.

STANDARD 2-1
In addition to these College competencies, there are the twenty-six specific CODA defined competencies as delineated in Standards 2-9, 2-14, 2-15, 2-16, 2-17, 2-18, 2-19, 2-20, 2-21, 2-22, 2-23 (a through o) and 2-24. The evaluation procedures indicated above will also ensure the students meet these competencies. The descriptions of each of Standards will provide further information.

In addition to specific course syllabi the Clinic Manual provides a clear set of guidelines and policies for all students, faculty and staff who work in the student pre-patient and patient care clinics. It is published by the Office of the Associate Dean for Clinical Affairs. It is available on the College intranet and in hard copy in each patient clinic and department office. The Clinic Manual is described in more detail in Standard 5.

**Supportive Documentation**

**Appendix A-3A:** Table 3-A Schedule of Courses-DDS  
**Appendix A-3B:** Table 3-B Schedule of Courses-DMD  
**Appendix C-2:** COD Predoctoral Graduate Competencies  
**Appendix C-3:** Competency Statement Diagram  
**Appendix C-4:** COD Predoctoral Competency Model  
**Appendix F-1:** Clinic Manual  

Available On Site  
Course Syllabi
2-2 If students do not meet the didactic, behavioral and/or clinical criteria as published and distributed, individual evaluations must be performed that lead to an appropriate decision in accordance with institutional due process policies.

Conclusion: The UIC College of Dentistry complies with Standard 2-2.

Description

The College has established a clearly defined set of procedures for ongoing evaluation of a student’s performance in all areas. There is timely reporting of any issue to the Subcommittee on Student Promotions (SSP), which works with the Offices of Academic Affairs, Student Affairs and Clinical Affairs, to determine an appropriate plan of action for the student, tailored to the specific circumstance.

1. Describe policies and procedures for remediation of students who do not meet didactic or clinical skills criteria. How frequently is the student made aware of his/her performance? What resources are available to the student?

The methods by which students are evaluated during courses and in patient care activities are described in detail in Standards 2-5 and 2-23. The resources available to the student are also described in further detail in Standard 4-6.

Course Directors report to the SSP at the end of each assessment period. Progress grades from module examinations as well as final exam grades are reported to the SSP. Additionally, any other concerns about a particular student which might not necessarily be reflected in the grades (i.e. attendance, attitude) may also be reported to the SSP. The role of the SSP is to monitor progress of all students, approve remediation plans, and, when necessary, direct that the Executive Associate Dean for Academic Affairs, and/or the Associate Dean for Student Affairs meet with the student.

In the event a student receives a failing grade in a course, the SSP evaluates the overall progress of the student and determines a plan of action. If a student who is in otherwise good academic standing fails a course, the SSP will attempt to determine the cause for the student failure and identify options for remediation. The College has a remediation policy which outlines the procedures and policies for remediation. Most courses have multiple components which contribute to the final grade, as was indicated in Standard 2-1 and will be described in detail in Standard 2-5. The student needs to receive a passing grade in all components of a course in order to receive a passing grade in that course. Remediation might be simple, such as retaking a written or multiple choice exam or a laboratory performance exam. In such cases, the student is usually required to complete remediation by the end of the subsequent term. In more complex cases where passing the course requires a remediation process which is not feasible due to multiple deficiencies the SSP can require the student to repeat the academic year. This is more likely to occur if there are multiple course failures.

In rare cases, a student has deficiencies which they do not correct, resulting in failed courses and a GPA remaining below 2.0. In addition, a student might present with a persistent behavioral problem, or an ethical violation such as an act of academic dishonesty. In such cases, the SSP will convene a review hearing with the student, as described in the SSP Charge, Rules and Procedures. At the review hearing the SSP will discuss the student’s case, interview the student, and invite the student to make a statement. The student may present witnesses and is encouraged to have an advocate.
Although the SSP is empowered to dismiss a student who fails to meet minimum academic standards it is extremely rare for the committee to do so before having exhausted all possible means to enable the student to succeed. Such measures can include, but are not limited to, academic and personal counseling (by appropriately-trained personnel), development of an action plan for remediation of poor academic performance, and repetition of an entire academic year. The student also has the right to appeal the decision of SSP as described in the SSP Rules and Procedures. All procedures are in accordance with University rules and regulations.

The College relies on sampling of four domains to establish the competence of student performance. Regardless of course, Course Directors seek information on each student in each of the four domains, wherever possible.

In each of the four academic years of the DDS/DMD curricula there is significant faculty-student interaction and ongoing assessment of student performance. This is particularly important in the first year where faculty ensure that vulnerable students are identified and supported as soon as possible. Regularly scheduled examination weeks provide information for identification of students who are in academic or other difficulty within the first 7 weeks of the curriculum and every 5 weeks thereafter in the D1 through D3 years. Appropriate and individualized interventions at an early stage are prescribed and implemented. The scheduling of 3 exam periods per semester for the DBCS and DAOB and later in the D3 and D4 year DOST, DOSI and DAOB courses, plus the continual observation and evaluation of students in laboratory and the small group sessions, allows for responsive and timely feedback to the students and the SSP.

Because of the ongoing assessment and observation of student progress it is possible, and desirable, to identify students who are not performing as expected while the course is still taking place, so as to provide timely intervention. The faculty member who observes a student in difficulty informs the Course Director, the Office of Academic Affairs (OAA), and the Office of Student and Diversity Affairs (OSDA). The SSP and the OAA monitor the progress of all students, not just those in difficulty, so that trends can be identified and interventions can take place before too much time has passed. In this way students are served in a responsive and timely manner. The Charges, Rules and Procedures of the SSP describe the processes to be followed.

In some cases students underperform during their first semester because they need to adapt to the work load and life in a professional school environment. Early intervention, with appropriate input from the OSDA, is often enough to allow the student to adopt more effective study and time management habits and to proceed without further problems. The OSDA will provide further direction to a student to determine whether counseling and/or tutoring is needed. The OSDA may also provide other assistance as may be appropriate to a particular situation. The OSDA arranges for testing of the students for learning disabilities through the UIC Disability Resource Center (DRC). The DRC interacts with the Executive Associate Dean for Academic Affairs to establish reasonable accommodations which may be available to the student. Typically such accommodations have minimal impact on the student’s progress through the course and generally involve extra time for test taking and distraction free test-taking environments. There is however no extra-time accommodations granted for simulated or actual patient care.

To pass a course the student must not only obtain an overall passing grade, but must pass all the individual components which make up the entirety of the course (for example: quizzes, laboratory exams, final exam, self-evaluation, small group grade). Failure of any component will result in failure of the course. A plan for remediation of the failed component is presented to the SSP by the Course
Director, and upon approval, the Course Director discusses and implements the plan for the student. Upon successful remediation the final passing grade is awarded.

A student needs to maintain a GPA of 2.0 or higher (on a 4.0) scale to remain in good academic standing. Failing to maintain this grade will result in the student being placed on academic probation until such time as the SSP deems that appropriate remediation has taken place and failing grades been rectified. If the failure is in a pre-patient care course, the student is ineligible to provide patient care.

**Resources Available to Students**

The mission of the Office of Student an Diversity Affairs is to provide comprehensive programs and services that will encourage students and connect them with the resources they need to achieve both academic and personal goals. The College has a resource library that offers a wide variety study materials to students in particular materials for the NBDE. In addition, students who fail the NBDE, are provided the opportunity to participate in either an NBDE Part 1 or 2 webinar course offered by UMKC School of Dentistry, as well as an online Kaplan Course. The College also offers a supplemental education program, where upper classmen who have been identified by course instructors act as peer educators. We continue to collaborate with the Illinois State Dental Society, the Chicago Dental Society and the ADA in coordinating a series of educational sessions and programs for our dental students, such as the ADA/ISDS success seminars. As we strive to be proactive in identifying and assisting students by intervening early for students who appear to be having academic or health/safety issues, the College also works closely with the Academic Center for Excellence and the Counseling Center at UIC. The centers have counselors who are specifically responsible for meeting the academic and personal support needs for student pursuing careers in the health profession.

2. Describe the policy and procedures for students with behavioral problems. Specifically address:
   a. Professionalism and ethics.
   b. Substance abuse.
   c. Legal issues or ethical misconduct outside of the dental school setting.

   a. Professionalism and ethics.

   The expectations for Ethics and Professionalism are made very clear in Section 4 of the Clinic Manual, and in the document Academic Professionalism for Students, which is presented to the students and is available on the internet. Course faculty will report any student who is showing signs of behaviors which could be problematic. These signs might include repeated tardiness or absenteeism, unexpected drop in the quality of his or her work, or other indications that a student might need an intervention. The faculty can tell the Office of Student Affairs about concerns regarding a student, and they will arrange to talk to the student to offer help. The faculty have received training in recognition of students at risk in Faculty Conferences.

   More often than not, there are no breaches of professionalism and ethics but, particularly in the first year, merely that the students are just adjusting to the rigorous schedule of dental school, and do not always perform at their best. The OSDA will offer advice, counseling and services regarding study habits and so on. Students can also be tested for learning disabilities, and be given accommodations as required by law.
In the event the student has behavioral problems for which there is not a legitimate reason, such as cheating on an exam or misrepresentation of work as his or her own, and so on, he or she will be reported to the Executive Associate Dean for Academic Affairs and the SSP. The SSP discusses the issue and arranges for a hearing with the student. The outcome ranges from intervention to correct the behavioral problems to possibly dismissal from the program.

b. Substance abuse.

UIC and the College are committed to maintaining a drug and alcohol-free environment for its students and employees in compliance with applicable federal, state, and local laws. Students and employees who violate federal, state, or local laws concerning drugs or alcohol are subject to criminal prosecution; those who violate University policies may also be subjected to institutional sanctions or dismissal. The UIC Dean of Students Office and the College's OSDA serve as resources for student needing assistance with drug or alcohol abuse problems. These students are referred to resources such as the University Counseling center, the Department of Family Medicine or the UIC Wellness Center. The Clinic Manual also has policies and procedures that address student impairment related to patient care.

The UIC and the College Offices of Human Resources serve faculty and staff needing assistance with drug or alcohol abuse problems. These individuals are referred to campus resources such as the UIC Employee Assistance Program, Employee Health or the UIC Wellness Center.

c. Legal issues or ethical misconduct outside of the dental school setting.

All students enrolled at the College are governed by both the UIC Student Disciplinary Policy for students the College's Academic Policies for Professionalism and the Clinic Manual while both on and off campus. These policies cover both academic and behavior misconduct. The College's Office of Student and Diversity Affairs provides resources and services for students needing assistance with legal or ethical outside of dental school. The University has attorneys and legal advisors available for students.

Supportive Documentation:

Appendix C-1: Academic Professionalism for Students
Appendix C-5: Policy on Remediation
Appendix D-5: Subcommittee on Student Promotion (SSP) Charge, Rules and Procedures
Appendix E-2: COD Student Services Handbook
Appendix F-1: Clinic Manual: Section 4-Ethics and Professionalism

Available On Site

University policies and procedures (due process)
2-3 The curriculum must include at least four academic years of instruction or its equivalent.

Conclusion: The UIC College of Dentistry complies with Standard 2-3.

Description

The DDS degree, which is currently in its final year with the Class of 2014 in their D4 year, consisted of 4 consecutive academic years with 11 terms total. The DMD curriculum, which was introduced in the fall of 2011 for the graduating Class of 2015, also consists of 4 consecutive academic years with 11 terms total. The International Dentist Degree Program (IDDP) which will award its last DDS degree for the Class of 2014 and is now integrated in the DMD program beginning with the Class of 2015 consists of 6 terms (2 academic years).

1. Summarize the educational experiences and/or curricular themes of the didactic and clinical courses offered in each semester/trimester/quarter (as applicable) of the curriculum.

The DMD and DDS academic program of the College consist of four years (eleven consecutive terms) of instruction and patient care. The D1 year begins in August and consists of two terms, the D2, D3 and D4 years begin in May and consist of 3 terms each. Moving from DDS to DMD is a significant change in pedagogy along with increased emphasis on the development of self-evaluation and critical thinking skills. However, the need to prepare the students to take and pass the Part I Board examination prior to being approved for patient care activities, and the amount of time needed for development of patient care skills means that in general terms, the overall layout of content within the D1, D2, D3 and D4 years for both the DDS and DMD are similar, essentially both having this pattern:

- D1 - biomedical sciences and pre-patient care clinical sciences and behavioral sciences
- D2 - pathology, pharmacology and pain control, continuation of pre-patient care clinical and behavioral sciences
- D3 and D4 - patient care, clinical and behavioral sciences, however, with the implementation of the DMD curriculum there is a significant addition of the biomedical sciences into both the D3 and D4 curricula.

The DDS program has been a traditional 2+2 curriculum with the first two years essentially being discipline based basic biomedical science and pre-patient care courses and the last two years being patient care activities and didactic clinical courses. The final DDS class is the Class of 2014. Hence these students are in their D4 year at the time of this CODA site visit. In the D1 year of the curriculum the basic sciences were taught in discipline based lectures, but topics from each course were clustered so that topics on the same body system in the different disciplines were synchronized. This is described in more detail in Standard 2-11. The clinical sciences were taught in a comprehensive care context, and this carried into the clinics where students see patients in comprehensive care group practice clinics. D4 students also spend a significant amount of time at off-site extramural rotation clinics.

The DMD curriculum was implemented in the fall of 2011 with the graduating Class of 2015. The curriculum was designed to integrate the didactic biomedical, behavioral and clinical sciences within
the context of patient care. The curriculum is organized so that the first year educational experiences and curricula themes are integrated around systems rather than disciplines. This eliminates the problems encountered in a traditional discipline based curriculum of non-integrated silos. Also introduced was the concept of a loop structure. The term loop is used, as the intent is that topics and content areas will be encountered again and again but in more complex or more clinical contexts. Thus each loop revisits and builds upon the knowledge and skills in that particular area. A loop is not intended to be equivalent to a course, or to a block of time such as a term. The intent of the loop structure is that students will understand how to use and build upon existing knowledge, and to understand that all topics are integrated and co-reliant.

The body systems are divided up into musculoskeletal, neural, endocrine, immune, hematopoietic, cardiovascular, pulmonary, gastrointestinal, hepatic, renal and reproductive. The orofacial complex is also studied from the context that it is a system, in the similar integrated way in which other body systems are covered. For each system the students study and learn the traditional basic biomedical sciences (anatomy, embryology, neuroanatomy, histology, physiology, biochemistry, microbiology, immunology, and pathology). Through patient scenarios and interactive didactic sessions the applied science of pharmacology is introduced where understanding the mechanism of action of a particular drug is a useful aide in understanding the basic functions of a particular aspect of that system. For example, heparin, aspirin and warfarin are all helpful in explaining the processes in hemostasis. The body systems are covered in the DBCS courses.

For the orofacial system there is also extra emphasis on the biomedical sciences of oral anatomy, embryology and histology, human dentition and occlusion, the cranial nerves and special senses, oral microbiology and oral pathology. The D1 year also introduces the traditional clinical sciences within the scope of a graduating general dentist, and these continue through all four years (general dentistry knowledge and skills, radiology, diagnosis and treatment planning, restorative dentistry and implants, periodontology, endodontics, pediatric dentistry, orthodontics, pharmacology and therapeutics, oral medicine, and oral surgery). The D1 year also introduces professionalism, communication skills, ethics, evidence based dentistry, epidemiology and public health topics, all of which are revisited and used throughout the four years. All orofacial pre-patient care dentistry and behavioral/professional topics are covered in the DAOB courses.

When the students enter the D2 summer term the emphasis of the content in DBCS courses changes to an in depth study of disease associated with systems. In this way the students revisit the basic of systems covered in the D1 year, enabling them to reinforce their grasp of the material and apply it to understanding pathophysiology and pathology. At the end of the D2 summer term the students are given a 400 question mock Part I board examination. The grade does not become part of the student record but the examination is used to assist us in identifying gaps and weaknesses in their knowledge. A course was created for the end of the fall term of the D2 year (DBCS326) which is devoted to review of material for the NBDE Part I examination, which also provides us the ability to adapt content if there are areas which need extra attention. Students who do well in DBCS326 are allowed to take the board exam after the term ends in December. Students who might be at risk for failing are given extra time to prepare, and offered learning resources as needed by the Office of Student Affairs.

All DBCS and DAOB courses have a similar mix of pedagogical approaches to give a variety of experiences and learning environments. The D1 DBCS courses have extensive and thorough gross anatomy labs which drive the sequencing of the systems based content. Dissection is the primary activity in the anatomy laboratory. In addition to dissection, students participate in challenging video diaries and photo journal assignments that are used for formative assessment. Weekly histology
laboratories allow students to assimilate cell and tissue structure using high definition images. The large group sessions with the entire class are not called lectures, but rather interactive didactic sessions (IDS). The key component of the IDS is the interactive nature, whereby the faculty member will make use of audience response clickers, will give quizzes, or work through case and problem sets with students, and encourage an interactive dialog with the students.

A distinguishing feature of the DMD is the extensive use of small group learning (SGL). The SGL process is a type of problem based learning (PBL). Groups of 6 to 8 students are assigned a facilitator who guides them through discussion of the case used in the SGL sessions. Each case takes three three-hour sessions.

Day 1 of the case: students are presented with a scenario designed to stimulate a discussion of the featured topic. The students are not told of the specific learning objectives, but through interactive discussions they identify the key topics. Areas which they do not know are designated knowledge gaps. Usually each case has 3 to 4 pages to work through on Day 1. The facilitator ensures that the students stay focused and on topic, and will guide them by asking questions and prompting them as needed. The facilitator also ensures that all group members participate, and ensure that the group displays civility, fairness and professional behavior. By the end of the day the students have created well defined learning issues (LIs) out of the broader knowledge gaps. Each student now investigates the LIs using the required textbooks or other faculty recommended resources.

Day 2 of the case: (which is from 2 to 5 days later depending on the specific class schedule) the students discuss and share what they have learned about the LIs. The group is presented with new pages of the case for further discussion and LI creation.

Day 3 of the case: students continue their presentations and discussions. After this session they are presented with the learning objective criteria for the case, and spend time discussing any objections they did adequately investigate or understand. Each session ends with feedback and evaluation from the facilitator as well as peer to peer evaluation. The facilitator uses a detailed assessment rubric for giving each student an SGL grade.

The anatomy, histology, IDS and SGL topics align with the system being covered in the DBCS courses, and collectively cover all traditional basic biomedical science disciplines. The content covered in the DAOB and DBCS courses are also linked through the SGL cases. Each SGL case covers content from both DBCS and DAOB courses so as to highlight the integrated nature of the oral cavity with the rest of the body, and the importance to the dentist of understanding systemic biology and disease. Appendix C-6 lists the content covered in each of the cases used in SGL, and a sample case is included.

The majority of students are ready to challenge the Part I National Board Exams by the end of the D2 fall term or early in the D2 Spring term, as was indicated above. In the Spring of the D2 year the students refine their clinical skills and knowledge in DAOB as preparation for entry into the clinics, and continue with more in-depth pharmacology in the DBCS courses, where there is now considerable overlap with clinical topics. The D3 and D4 courses, DOST and DOSI, represent the traditional clinical topics with heightened emphasis on community and public health, and reinforcement of the underlying biological processes and mechanisms. This is accomplished through the use of simulated patient scenarios on AxiUm Ed and small group learning. The pre-patient care clinical sciences are taught in a comprehensive care context, and this continues into the clinics where students see adult patients in comprehensive care group practice clinics. D4 students also spend a significant amount of time at off-site extramural rotation clinics.
The International Dentist Degree Program (IDDP) students all have a DDS or equivalent, and often have practiced dentistry in their native countries. They have already mastered the content covered during D1 year as validated by the fact that they have successfully passed the Part I National Board Examination. Most have also usually successfully passed the Part II National Board Examination. The IDDP program is six terms starting in summer term after a month-long orientation. They join the D2 class and take the same DAOB and DBCS courses, including the small group learning, until the end of the fall term when the D2 class take DBCS326 which is a Part I board preparation course. At this point the IDDP class starts limited patient care activities. IDDP students continue with the D2 courses through the spring term. They begin their second year in the Summer term tracking with the D3 DMD curriculum and begin focusing on patient care. D4 courses are followed in the final Spring term of the IDDP program. The IDDP students do not participate in the external rotations.

Supportive Documentation
Appendix A-3A: Table 3-A Schedule of Courses-DDS
Appendix A-3B: Table 3-B Schedule of Courses-DMD
Appendix C-6: SGL Case Content
Appendix C-7: Sample SGL Case
Appendix C-8: Academic Schedules for current year
Appendix C-9: SGL Grading Form
Appendix C-10: Academic Calendar
Appendix E-2: COD Student Services Handbook

Available On Site
SGL Cases
Course Syllabi
2-4 The stated goals of the dental education program must be focused on educational outcomes and define the competencies needed for graduation, including the preparation of graduates who possess the knowledge, skills and values to begin the practice of general dentistry.

Conclusion: The UIC College of Dentistry complies with Standard 2-4.

Description

The College has adopted seven competencies that establish student preparedness for entry level general practice, as well as a Vision and Mission document which frame the goals of the dental education program, and the knowledge, skills and values we expect UIC graduates to have.

1. Describe the parameters and/or scope of the general practice of dentistry on which the institution is basing its educational program.

The parameters and/or scope of the general practice of dentistry on which we base our educational program are defined by three documents:

- College Competency Statements;
- Standards of Clinical Care; and
- Curriculum learning objectives.

The competencies are not free standing but are interlinked as shown in the competency diagram:
At the center of the diagram are the **Patient** and the **Community**. We specifically have not made the dentist the center to reflect the intent of the Vision and Mission that our graduates will work from a patient-centered ethos.

Surrounding the patient and community we indicate that our graduates will adhere to the Ethical and Professionalism practices expected by the profession, use of Evidence in all s/he does, and be Culturally Competent. The expectation is that these four themes will be integral to the six topics in the outer ring.

The outer ring, sequenced to follow prudent patient care steps, begins with the Dialogue between the dentist and the patient/community. Embedded in this are skills associated with communication and cultural awareness.

This is followed by Assessment. Embedded in this is the knowledge and skills associated with the basic biomedical sciences, pathology and of course clinical dentistry.

From this it follows that graduates need to be competent in making **Differential Diagnoses** based on the findings, and develop a **Treatment Plan** that meets diagnostic problems and patient values and expectations.

This mutually approved treatment plan would encompass the specific dental procedures to be carried out based on an evidence and rationalized by the evaluation of the entirety of the patient’s situation. Based on this dialog with the patient and any other necessary actions such as medical or specialist referrals, evaluation of alternative options which might be needed due to insurance and cost variables, and any appropriate plan modifications, the next step is **Intervention**.

Intervention encompasses the comprehensive clinical skill set needed to carry out the dental treatment procedures.

The graduate must then be able to **Evaluate the Outcome**, both on an immediate basis, but also through long term follow up. Implicit in each of these steps is the skill of the graduate to accurately self-evaluate and use evidence to assess the outcomes, and consider modifications and future plans. Dialogue with the patient now continues the ongoing process of patient care.

Collectively the competencies and their supporting structural basis define the parameters and scope of the general practice of dentistry for which we have designed our educational programs.

Section 5 of the Clinic Manual “Standards of Care, Competencies, and Quality Assurance” defines Standard of Care as follows:

Standards of Care describe the proper care for the patient based on the care expected to be rendered by the preponderance of practitioners in a specific geographic area. The standards should be patient-centered, focused on comprehensive care, and written in a format that facilitates assessment with measurable criteria.

There are six criteria to be met under Standards of Patient Care:

1. Patients are offered (when applicable) and, if they accept it, provided comprehensive patient care to meet their oral health needs.
2. Patient care is provided in a timely manner to ensure that the treatment progresses appropriately to the patient’s clinical needs.
3. Patients receive high quality care.
4. Patients are satisfied with the care they receive.
5. Confidentiality of patient records is maintained

6. Federal, state, local and institutional guidelines and policies are followed to insure the safety and rights of our patients.

Standard 5 will address these criteria more specifically.

In order to educate our students in the context of the competencies we are developing a database of Learning Objectives. In Standard 2-3, the design and intent of the DMD curriculum was described and provides the framework for the sequencing of the specific content. Through a process, in which faculty within Departments identified both broad and specific learning objectives for their disciplines and content within their expertise, we identified the learning objectives associated with the loops. Associated with the learning objectives, are the knowledge, skills, and attitudes which are the specific items which then provide the basis for both instruction and assessment (see also Standard 2-5). The learning objectives represent the body of knowledge, skills and values the students will master in order achieve the competencies.

2. Describe how the goals of the dental education program prepare graduates with the knowledge, skills and values to begin to practice general dentistry, as defined by the institution.

The educational environment at the College is more than a set of courses for the students to pass so that they can then graduate. The environment we have developed for the DMD educational program is driven by the Vision and Missions Statements as well as the Beliefs and Behaviors outlined in the Strategic Plan: Beyond 2010.

These values not only apply to faculty as individuals, but to the College in its entirety. Thus these are values to be assimilated and embraced by our students. To this end the students pledge to a Code of Ethics.

The Outcomes Assessment analysis shown in Table 2 addresses the progress towards achieving these goals. In addition specific topics pertaining to patient care are addressed in Standards 2-8 and 2-23.

Supportive Documentation
Appendix A-2: Table 2 – Outcomes Assessment
Appendix B-1: UIC College of Dentistry Vision and Mission Statements
Appendix B-2: UIC College of Dentistry Strategic Plan: Beyond 2010
Appendix C-1: Academic Professionalism for Students
Appendix C-2: COD Predoctoral Graduate Competencies
Appendix F-1: Clinic Manual-Section 5: Standards of Care
2-5 The dental school must employ student evaluation methods that measure the defined competencies.

Conclusion: The UIC College of Dentistry complies with Standard 2-5.

Description

The evaluation methods used in the College to determine if a student is competent are based on four components: Varied Experiences, Faculty Observation, Performance Examinations and Student Self-Evaluation. Within each of these four components there are a variety of evaluation methods used. These different evaluation modalities enable us to measure and award a grade to the students in regard to their knowledge, skills and behaviors for a particular topic, as part of meeting the competencies for our graduates.

1. Provide a listing of the formative and summative competency assessments for:
   a. clinical procedures,
   b. problem solving,
   c. clinical reasoning,
   d. professionalism,
   e. ethical decision-making, and
   f. communication skills.

Throughout the curriculum, the faculty use a variety of assessment methods to ensure the students are meeting the desired levels of knowledge, skills and behaviors for a particular topic, whether it be a didactic knowledge, a clinical skill, or other area. As was described in Standard 2-4 the College has a set of seven clinically oriented and overarching competencies, rather than narrow, discipline specific competencies for each knowledge topic or motor skill. The totality of the educational experiences and assessments contributes to the determination of competence for our graduating dentists.

Having defined our competencies, we have also defined criteria by which we can assess whether our students have attained competence in the Competency Model. We believe that when stating that a student is competent, we are making a prediction of future performance. The presumption is that the assessment methods enable the faculty to predict that the students will be competent in the future, not just that they met certain defined criteria or requirements in a controlled examination setting. In making that prediction, faculty sample data from the four domains of Varied Experiences, Faculty Observation, Performance Examinations and Student Self-Evaluation.

The Competency Model has four components to the assessment procedures by which we predict competence. The assessments which contribute to these four components can range from traditional multiple choice exams, group projects and assignments, and the higher-order-thinking skills of analysis, problem-solving and self-evaluation.
The four components, with examples, not in any order of priority, are:

1. **Varied student experiences in the highest fidelity situation possible for the particular experience.**

In the didactic arena we use small group learning scenarios as an important vehicle to present foundational topics (biomedical sciences, introductory clinical topics and so on), utilizing the context of a patient. The biomedical sciences are anatomy and system driven, and therefore fully integrated by system, rather than being discipline based. Therefore this places biomedical sciences in the highest fidelity situation possible at this level.

This patient-centered learning concept is further developed by use of "virtual patients" in an educational AxiUm database which is being used in the current DOST courses and are planned for use in the DOSI courses in the fourth year of the DMD curriculum.

Clinical skill development experiences begin in our pre-patient care courses. Students learn most of the essential clinical skills in a high-fidelity setting in our pre-patient care clinic. Using patient-operator positioning and employing all clinic infection control protocol as well as maintaining electronic patient record protocols, students perform clinical procedures on manikins and on each other. Beginning in the Fall Term of the second year, students gain experiences on selected live patients through various rotations. This exposure to varied experiences continues through the remainder of the clinical program. Their experiences are also greatly enhanced through the fourth year extramural clinical experiences.

2. **Direct faculty observation of student practice.**

Beginning in the D1 year the attending faculty actively use direct observation to assist students formatively and to evaluate summatively. This observation occurs in both the didactic and the clinic learning environments.

Each small group learning session features a facilitator who gives feedback to the students during the session as well as individually outside of the group session. Similarly there is ongoing dialog in anatomy laboratory where the faculty use small group huddles as well as circulating through the dissection laboratory where students work in groups of four.

Pre-patient care education has extensive faculty observation and evaluations. The assigned faculty work with groups of 8-9 students in the pre-patient care clinic. There is widespread use of huddle sessions where faculty facilitate and give feedback on student led discussions of the salient topics of the day. The faculty also circulate among their students while the students practice on manikins or each other.

For live patient care clinical sessions, regardless of the clinical assignment, faculty have numerous opportunities for direct observation and feedback in pre and post-patient care activities, individual huddles, patient presentations, and in reviewing portfolios. The feedback is both formative and summative. When students are learning at our extramural partner sites, the adjunct faculty preceptors at the sites provide observational reports on each of the students supervised that are used by the Managing Partners equally with the onsite evaluations.

3. **Independent student performance examinations.**

Didactically independent performance is most frequently in the form of written midterm or final examinations using traditional methods such as multiple choice questions, matching and sequence identification. There is also the use of short answer and fill in in the blank questions. Students are
also challenged with projects that take the form of evidence-based papers, short literature reviews, simulated patient assessment and treatment planning projects.

Clinically, in both simulated and actual patient care venues, students challenge departmentally based performance examinations. In these examinations students perform the prescribed simulated or patient care without input from faculty. These examinations are discipline based, departmentally driven tests of student problem-solving, clinical judgment and psychomotor skills. The College has developed written criteria forms that are used in daily practice as well as in the performance examinations. Students are trained to apply the treatment performance criteria beginning in the first semester of the curriculum and continue to use the forms throughout the pre-patient and patient care educational process.

Other performance examination projects are employed as well. Among these are patient case presentations, evidence based papers and patient care portfolios. Each spring, every student, regardless of curricular year, challenges our electronic Case-Based Examination which is a computer based OSCE like examination.

4. Student self-evaluation which is systematic, consistent and accurate.
Self-evaluation training and use is ubiquitous throughout the curriculum. Student skill in self-evaluation is highly regarded by the College. We hold that this skill is one of the most important skills required of a professional.

Starting in small group learning the students are expected to conduct reflective, criteria referenced self-evaluation as well as peer evaluation. Development of this skill continues in nearly every aspect of the program. Students are required to reflect on portfolios, patient presentations, and reflective essays. A requisite component of the extramural program is to write a paper describing, among other items, how the experience changed the student.

In pre-patient and patient care, students are required to self-evaluate. Every project or product has incorporated into it the necessity for students to apply the written criteria to their effort at not only the conclusion but frequently enroute as well. Each performance examination includes two components, the quality of the outcome and, the accuracy of the student self-assessment. Both components must be successfully passed in order to pass the examination.

Further information on these four assessment components is given in the next section. A detailed description of evaluation of clinical knowledge skills and behaviors is given in Standard 2-23 and Appendices C-11a and C-11b.

2. Include the types of assessments utilized for each of the above areas (i.e., Objective Structured Clinical Examination (OSCE), etc.).

**Varied Experiences**
Assessment for Varied Experiences relies almost entirely on faculty management. Specifically, the faculty design curricular activities purposely to assure that students have opportunities to acquire information and skills and then to apply their learning in various novel situations. Faculty members frequently review the curriculum and simulated and live patient experiences to assure that students do in fact have the breadth and depth of experiences that contribute to the determination of competency by the faculty.
The DDS curriculum has been a more traditional lecture, lab and clinic based curriculum. But even within this structure, the experiences offered to the students have been very varied. The Comprehensive care courses (DADM314, DADM315, DADM321, DADM322 and DADM323) taken in the D1 and D2 years offered an integrated approach to dentistry, and included lab activities, small group discussions, and portfolios employed as assessments. The pre-patient care exercises have been relocated from low fidelity laboratories to a high fidelity clinic and provide a more effective and efficient learning situation.

The DMD curriculum contains varied pedagogical methods (plenary sessions, small group learning, patient simulations) so that the students are in very a interactive and dynamic environment. In the DAOB courses (DAOB311, DAOB312, DAOB321, DAOB322 and DAOB323) there is a blend of group didactic sessions, small group huddle discussions, pre-patient care laboratories, and use of electronic tools such as Blackboard, AxiUm Ed, ECHO360 and SoftChalk. The same varied mix applies to DBCS courses (DBCS311, DBCS312, DBCS313, DBCS314, DBCS315 and DBCS316) where, in addition to small group sessions, there are also anatomy and histology labs. Both courses include problem based learning small group sessions which present patient scenarios. Embedded in these scenarios are topics in the basic biomedical sciences, dental sciences, professionalism and public health. The goal of these scenarios is to present realistic patients which act as the vehicle for the students to research and discover the associated assessment criteria. Initially in the D1 year these scenarios focus on basic content pertaining to the systems and the oral cavity, and introductory topics in dentistry. These all employ health and the normal variation of health as underlying themes. Assessment of student learning is provided by group facilitators.

The DAOB311 course, taken during the D1 fall semester, introduces the use of portfolios. Portfolios subsequently are used throughout the curriculum and are a very important component of assessment. This is a summative case report/assessment. Students gather information all semester long and in different aspects of the DAOB course. When they organize it into a report, they include in their portfolio “what”, “so what”, “now what”, and “how” in regards to patient care. Specifically, the goal of is for the students to demonstrate their ability to complete a Comprehensive Oral Exam, fabricate diagnostic casts, interpret the findings and propose an evidence based plan for patient care. In addition, the students have to demonstrate their ability to self-evaluate by identifying areas of improvement and understanding and creating an action plan for the future.

In regards to patient care the Managing Partners assign patients to students based on their skill levels and experience needs. All patient care is comprehensive and driven by a sequenced treatment plan. The determination that students have a range of experiences is made through student interviews, faculty report and data from the electronic patient record. The students also generate portfolios that cover most of the major categories of patient care. Students generate a patient care based portfolio during each of the last seven semesters of the curriculum. These portfolios are used to document student experiences and as part of overall assessment of learning.

The College has an eight year history of community-based practice experiences, which provide rich patient care opportunities away from the College in non-traditional settings. These opportunities allow our students to participate in care settings that enhance their understanding of various patient care delivery models. The community-based service-learning experience and associated coursework for the D4 students is less about learning new aspects of dentistry per se (although the students provide a great deal of care while on these rotations, and refine their skills enormously), but is more focused on the health system and its various facets, the populations, communities and cultures served by these facets, and how oral health is integrated into the services and issues of overall health and welfare. In that context, each D4 completes a reflective essay that addresses their
assessment/reaction to the parameters just outlined. The students also evaluate the clinics and preceptors at those sites; in turn the students are also assessed by the adjunct faculty at the sites. Our development of the community rotations as an integral part of the clinical education for the DDS students (which will continue with the DMD students) was recognized by our professional peers in the awarding of the 2012 ADEA William J. Gies Award for Innovation in Clinical Education to the College.

**Faculty Observation**

Starting in the D1 year there is considerable faculty observation of students. In all pre-patient care experiences, students work in 1:8 or 1:9 faculty/student ratios. Faculty observation, modeling and feedback are key components in student learning and end of course evaluation. The faculty observations are also a key component of student promotions discussions for the Subcommittee on Student Promotions (SSP). Similarly, the small group sessions enable the facilitator to give ongoing constructive feedback to the student. The response of the student to feedback is taken into account when a grade is assigned by the facilitator for the small group session.

In the patient care setting, students work in a 1:5 or 1:6 faculty/student ratio. At the end of each patient care clinic experience, the supervising faculty member reviews and approves the student’s patient notes. Once the notes are approved by the faculty member, a daily evaluation form is displayed.

The faculty member evaluates the student on six criteria:

- Examination Diagnosis and Treatment Planning;
- Technical Competence;
- Development of Clinical Judgment and Commitment to Learning;
- Patient Management;
- Ethical Behavior; and
- Infection Control.

For each criterion the faculty member indicates the student performance as E (excellent), CA (clinically acceptable), or SNM (standard not met). Faculty are encouraged to include open ended text comments for each encounter. However, when the faculty awards a SNM, a written statement must be made for explanation purposes and to give guidance to the Managing Partner when meeting with the student. Periodically, the Managing Partners review the evaluations with the faculty member for clarification, amplification and for remediation plans. The evaluations are viewed globally by the Managing Partners. The evaluations are then compared by selecting evaluations from early in a term with evaluations from the end of a term as a means of showing progress. More weight is given for evaluations made toward the end of a given grading period (July, December and April). Based on individual faculty daily evaluations, each faculty is asked to submit a summative assessment that is also reviewed by the Managing Partner. The daily evaluations are reviewed for patterns of student deficiencies that might be identified and used to structure a customized student learning plan.

The evaluations are available to each student at any time through our electronic patient record system. The Managing Partners have a formal meeting with each student assigned to their clinic at least once a term to review clinical skill development and patient care issues. Students, in preparation for this meeting, are required to self-evaluate using the same form as the faculty use. In cases where a student isn’t making satisfactory progress toward competency, the Managing Partner
meets more frequently with the student. Using the four central measures, including the faculty evaluations, the Managing Partner establishes an action plan for the student to follow to improve performance. The action plans are measurable and frequently time dependent. There is a requirement for periodic (usually weekly) meetings with the student to monitor progress.

As indicated above the preceptors and adjunct faculty at the off-site clinics evaluate the students. The students write reflective essays which are assessed and graded. The students are also assessed by the Managing Partners upon their return to the College. The rotations are one week out and one week in College in a repetitive cycle. Consequently, the Managing Partners also assess the effects of the rotations on student learning and skill development on a regular and consistent basis.

**Independent Student Performance Exams**

Independent student performance is also a factor the College employs when assessing whether the student is competent. Several methods of testing student independent performance are used among which are:

- Written examinations;
- Lab examinations;
- Simulated patient care examinations;
- Patient care examinations;
- Portfolios;
- Patient presentations;
- Electronic Case-Based Examination (eCBE)
- Mock Board examinations;
- Oral examinations; and
- Evidence-based solutions to clinical problems.

Written exams often include traditional multiple choice and short answer question formats. Lab exams in topics such as anatomy and histology involve identification of structures and their function. Similarly, in pathology, identification of a particular lesion or pathological condition from projected slides or photographs are used. For assessing the ability of the student to apply the knowledge, methods such as the eCBE, case-presentation, group problem-solving and portfolio submission are utilized. The Treatment Planning component of a DAOB course, offered in the second year, requires students to participate in a group project involving a health related problem to solve. Relying on current literature, the group proposes a solution and justifies their position with supporting literature. The evaluation includes not only the process, the literature and the outcome, but also peer evaluation on participation. In the third and fourth years each student presents a patient case summary in a seminar. The presentation is evaluated by peers and attending faculty. The written version of the presentation is evaluated most frequently by the individual’s Managing Partner. The College also employs locally generated Mock National Board Part I and Part II examinations.

The Electronic Case-Based Examination (e-CBE) requires further comment as this has been recently introduced into the curriculum. The e-CBE is a multiple-choice test whose stems are based on patient vignettes. A blueprint is formed for each test. Ideally, every aspect of general dentistry, pharmacology, behavioral science and basic science questions are incorporated into the test. A new
test is written each year and administered to every student regardless of curricular year. The goals of the test are to verify that the curriculum adds value to the learners’ knowledge base and to provide feedback on the students’ strengths and weaknesses. The results of the e-CBE should demonstrate that the learner has adequately applied the knowledge that they have gained during their time at the College. The scores should reflect advanced applied learning from matriculation to graduation. The examination is used formatively for the first and second year students and summatively for the third and fourth year students.

We have developed a set of goals for the e-CBE that include:

- Measure and demonstrate value added to student learning through the curriculum. The D4s do better than D3s than D2s than D1s.
- Compare year to year DDS vs DMD student outcomes
- Potentially use it as a Gateway that students must pass (questions appropriate to their year) in order to go on to the next year of the curriculum.
- Questions should challenge critical thinking skills, not just rote memory.
- Questions are case based and should tie into basic biomedical sciences and behavioral sciences.
- The test is used as a summative measure as well as formative. The students not only demonstrate what they know, but as a result of being allowed to access the internet, they also learn as they look up information. They have access to the answers and explanations for each test question once the test is graded.

The e-CBE is conducted in the dental clinics (spring term) which allows each student at least two partial walls surrounding the unit for privacy as well as a computer and computer chair. Written instructions are given to each student several weeks before the test as well as minutes prior to starting the test. Scantron forms are used by the students to record their choices in multiple choice questions. The students were provided verbal and written instructions at the beginning of the computerized test. Students are split into three cohorts to challenge the test (8:00 A.M.to 10:30 A.M, or 11:00 AM to 1:30 PM or 2:00 PM to 4:30 PM). Students are allowed and encouraged to use books, manuals and the internet to research their answers during the testing period. This is based on the rationale that in private practice, general dentists have access to the internet to verify information, use evidence based dentistry to make clinical decisions and advance their knowledge.

The data has consistently shown that with each additional year a cohort has in the curriculum the better is the performance. There is a flattening of gain between the third and fourth year classes suggesting that perhaps the fourth year is focusing on a different skill development set. Item analysis for each question is reviewed and poorly performing questions are dropped and reviewed by content experts. The College is in the process of validating test items. Third and fourth year students who do not meet the minimum passing score of 75% must remediate the test.

Patient care skills are evaluated in both pre-patient and patient care settings through the use of discipline-based and comprehensive independent effort performance examinations. In every instance students are required to self-evaluate their performance. Success is determined by the student demonstrating clinically acceptable performance (as measured by written performance criteria) skill in both patient care skills and self-evaluation skill. Each year the fourth year students must also challenge a Mock Clinical Board examination which includes both patient care and simulated care.
**Student Self-Evaluation** (this is also described in Standard 2-10):
The College places high value on the ability of students to consistently, systematically, and accurately apply relevant criteria to their personal performance. We believe that the ability to self-evaluation is a skill that must be mastered by a professional. Beginning in the first semester of the D1 year in DAOB311, the student begins the development of self-evaluation skills. These skills are used throughout the four year curriculum.

In the small groups sessions the students are required to conduct self-assessment as part of their grade. They also conduct peer assessment, and they are given feedback by the facilitator. The ability of students to identify their strengths and weaknesses is just one aspect. They are also expected to identify ways to correct these weaknesses and subsequently show that they are indeed trying to do so. They are graded on all these parts of the process.

3. Describe how students are deemed ready to challenge (sit for, take) the competency assessments, including any specific prerequisites.

The seven College competencies are complex and integrated, and so are not amenable to direct examination per se. The achievement of those competencies is the culmination of the curriculum in its entirety. However, within that, there are specific checkpoints and controls to ensure that students are progressing at an acceptable level. For the D1 and D2 years the DBCS and DAOB courses and for other didactic courses, students have a variety of different exams, and other graded work, all of which need to receive a passing grade for the entire course to be passed. Standard 2-2 goes into more detail on the procedures we have in place when students fail components of a course or the entire course. The various types of assessments have been described above.

With the introduction of DMD curriculum there was introduced a Mock Part I Board Exam, which is taken at the start of the D2 fall semester. The score achieved is for information only. This enables the individual students to identify areas in which they are weak or lack sufficient preparation. More globally it allows us to identify areas in which the class as a whole might benefit from additional instruction. The results of the examination coupled with performance in curriculum determine whether a student is certified to challenge the examination. Later in the Fall D2 semester, DBCS326, is course devoted entirely to board review, and content and emphasis is tailored in part by the information from this exam. The students need to show success in this course, as well as being in overall good academic standing in order to be allowed to challenge the board exam starting in December. Students identified as not yet be ready are given extra help in areas of weakness, and extra time to prepare. Passing of the National Board Part I examination is a pre-requisite for patient care activities.

Students who have successfully passed the boards and completed the D1 and D2 pre-patient courses, including the performance exams, are deemed qualified to perform patient care that is provided in the group practice clinics. There are no prerequisites for challenging clinical performance examinations; however students are strongly encouraged to avoid taking a performance exam on their first patient experience in that particular domain. Most frequently, the attending faculty, in discussions with the students, determine the appropriate time to challenge a specific clinical examination. The Managing Partners of the clinics ensure that each student progresses at a satisfactory rate. (See Appendix C-11a and C-11b).

Fourth year students challenge a Mock National Board Part II examination early in the fall term of the fourth year. The results of this examination determine whether the student is certified to challenge...
the actual examination. For those students who do not achieve a satisfactory score, there are mandatory seminars held on each of the topic areas. Once the seminars are completed, these students challenge a second mock examination. Those achieving a satisfactory score are then certified. Should there be any remaining students, individual sessions with faculty experts on the deficient topic area prescribe a study strategy with the student.

4. Describe how faculty members are calibrated to evaluate student performance. Can all faculty members (full-time and part-time) assess student performance, or are there specific faculty who assess student performance? How is this determined?

Given the complex nature of the varied assessments which contribute to evaluation of competence we have a variety of faculty training and calibration procedures in place. For the small group learning, all facilitators have undergone training. Initially a number of faculty trained at Indiana University Dental School. Currently all facilitators undergo on-site training by the director of small group facilitation (see Standard 2-7). The training is mandatory before a facilitator is permitted to lead a group.

For the clinical performance examiners each Department trains faculty in their area of specialization. All clinical faculty members (full and part time) have received initial training in using assessment tools. The College also holds periodic refresher seminars on assessment. All teaching faculty assess student performance daily using the AxiUm electronic record. Faculty calibration is addressed in faculty development sessions. For example, in Restorative Dentistry, faculty attend the interactive sessions that precede the skill sessions and they view the same discussions of criteria that occur with students. Turning Point (“clicker”) activities are used during large faculty development sessions to stimulate discussion of criteria and to calibrate faculty regarding assessment expectations. Another example is in Periodontics, where fulltime and part-time faculty calibration is done on an ongoing basis through instructional development conferences and semester faculty meetings. All fulltime and part time faculty can then assess student performance.

For the ethics components of courses, we strive to make the evaluation of the ethics essays calibrated by the use of rubrics, training the graders to the rubric, and spot checking the graders, all done by the course director. All essays from students with failing grades, or from students whose grades are borderline between grade levels, are reviewed by the course director.

In restorative dentistry the full-time faculty have worked together for a number of years and all know the content and expectations in detail due to frequent course planning meetings. This means that all faculty are cross-trained in the core restorative curriculum and can all contribute to grading sessions. The part-time faculty are often selected from recent graduates who have excelled in meeting expectations in restorative dentistry while they were students. Similarly, the D4 teaching assistants have been selected in a competitive interview process which has allowed us to add D4’s who have excelled in our courses earlier in their academic careers and that have shown excellent interpersonal skills in addition to an interest in teaching. These students, while fully engaged in instruction, by University and College policy may not participate in student grading.

Prior to any performance exam, there is a calibration session to clarify any possible discrepancies that can reasonably be anticipated. We have implemented a formal assessment procedure where each instructor evaluates all performance exam outcomes for one or several criteria, thereby ensuring consistency across all students. An instructor does not evaluate a completed exercise for all criteria -
Student evaluation in a course is a multifaceted process. There are no courses that have just one evaluation; there are always multiple sources that determine student grades. The College has spent many years in developing, training and using specific criteria for each process and procedure assessment used in the curriculum. These range from check lists, to topical rubrics, to criteria forms for clinical procedures. Further, all high stakes examinations utilize code numbers to de-identify students. Finally, it is exceedingly rare that one faculty member will determine performance on a high stakes examination and in nearly every failing situation a confirming faculty evaluation occurs.

Beginning in the D1 year with small group learning, the facilitators will change every 2-3 scenarios (depending on the exact schedules). This enables each student to get feedback, as well as evaluation, from different facilitators and so allow for an objective assessment of the student over time. Grades are determined by written and practical examinations, projects and performance examinations.
In the pre-patient care environment the grading system is such that many faculty participate and the grading occurs anonymously.

Direct patient care does not address the goal of objective assessment because it is not generally feasible to separate the student from the patient undergoing treatment. However, in these cases there are at least two and often three faculty evaluators. The only occasion where there is separation accomplished is during the mock board patient exam, which simulates the regional board examination structure. For these mock examinations, patients are treated in one clinic, and escorted by a student assistant to the assessment clinic. The Manikin Performance Exams which assess fixed prosthodontic competency in the preparation and provisionalization of teeth are completed using an anonymous numbering system, so that the grading is completed separately from the student, and therefore with objectivity.

For Periodontics multiple skills are assessed on daily basis by different faculty continuously through the defined parameters in the clinical competency assessment form. These parameters include:

- Professionalism and Ethical Behavior
- Dialogue
- Assessment of State of health
- Differential Diagnosis
- Plan of Action
- Intervention
- Student Evaluation of outcome

The above criterion are graded either “E” (for Excellent) or “I” (indicating Improvement needed). If the item is left blank, it indicates the student performance was acceptable. Faculty are required to write comments justifying a mark at either extreme to give guidance to the Managing Partner when meeting with the student.”

Nearly all written examinations are recorded electronically without faculty participation. For some written examinations where diagrams, drawings or short answer are required, the student number is used and the pages are separated from any identifying documentation.

Supportive Documentation
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-3: Competency Statement Diagram
Appendix C-4: COD Predoctoral Competency Model
Appendix C-11a: Competency Map – DDS
Appendix C-11b: Competency Map – DMD
Appendix C-21: Competency Statements 2010

Available On Site
Course Syllabi
Portfolio information
All forms and criteria utilized for determining if students successfully achieved competency
Schedule of faculty calibration sessions
eCBE information and examples, DDS vs DMD data, data from compared classes
2-6 Biomedical, behavioral and clinical science instruction must be integrated and of sufficient depth, scope, timeliness, quality and emphasis to ensure the achievement of the curriculum’s defined competencies.

Conclusion: The UIC College of Dentistry complies with Standard 2-6.

Description

The change to the DMD from a DDS degree was driven by and accompanied by changes in curriculum organization and pedagogy to allow for enhanced integration of biomedical, behavioral and clinical sciences. The changes are the culmination of a nine-year process of curriculum evolution in the didactic and patient care arenas, which have been accompanied by significant renovations in the College infrastructure to support the educational objectives.

1. Describe how biomedical, behavioral and clinical sciences are integrated in the curriculum. Give examples of “team-taught” courses with biomedical, behavioral and/or clinical faculty.

The DDS curriculum (which ends after the current D4 class graduates in 2014) was organized around typical department and discipline-based courses, but in recent years we had made significant steps towards more integration in the DDS curriculum in keeping with the trends in dental education. In Standard 2-11 we describe how we sequenced lecture content in the D1 year biomedical sciences to emphasize the connections between disciplines in different body systems. Similarly, the pre-patient care clinical dentistry topics had been arranged within integrated comprehensive care courses, rather than as stand-alone disciplines. Faculty, representing different clinical disciplines, were involved in these team-taught courses. The same approach of using a comprehensive care team was introduced into the clinics as part of larger reorganization of clinical activities in the College as described in the next three paragraphs. All courses are linked to the College competencies as has been described in Standards 2-1 and 2-4. The course syllabi indicate which competencies are addressed.

Beginning in 2002, the College implemented a sequence of improvements in clinical education to prepare students to provide oral health care to traditionally underserved patients, and to advocate for universal oral health care for all. In 2002, the College was one of 15 U.S. dental schools chosen for a Robert Wood Johnson Foundation initiative to improve the curriculum and improve access to dental care for underserved populations. The $1.5 million grant allowed the College to focus on educating dentists committed to treating oral diseases of vulnerable urban, rural, and special needs populations, including minority, economically disadvantaged, and developmentally disabled. That same year, separate discipline-based clinics were eliminated at the College, and three integrated group practice clinics were created to provide students with a “real world dental practice.” Each clinic consisted of 56 operatories. A Managing Partner was chosen for each clinic, to lead an interdisciplinary team of faculty comprised of restorative dentists, prosthodontists, periodontists, endodontists, and oral and maxillofacial surgeons.

In addition, the College eliminated outdated preclinical teaching laboratories and replaced them with a simulation clinic, made up of 52 patient care units identical to those in the group practice clinics. In the 2003-04 academic year, the College added a summer term of instruction between the first and second years of the DDS program that allowed students an earlier introduction into clinical education, and for better coordination of biomedical and clinical sciences. The curriculum also changed to
substitute mandatory clinical attendance for clinical procedure requirements for third- and fourth-year students.

The College has partnered with seventeen community dental clinics throughout Chicago and Illinois to provide students with the opportunity to enrich their education and to treat patients outside of the College clinics. The extramural rotation program provides fourth-year students with 50 to 100 days of experience. Students also participate in rotations in Colorado, Tanzania and Guatemala. In 2012-13, fourth-year dental students provided in excess of 4,000 days of patient appointment visits in the community clinics. This has enabled a significant increase in student clinical experiences as well as increased clinic revenues. In particular though, these rotations give the students unique an important training in public health topics and issues such as various health care delivery systems and how each contributes to developing and implementing health care policy which would not be available at the College. Peer recognition of the successes we have had in revitalizing the clinical curriculum was shown when the College received the 2012 ADEA William J. Gies Award for Innovation in an Academic Dental Institution.

In order to further the development of integrated education, the DMD curriculum was developed. The process began in 2002, concurrently with the developments in clinical education described above. The rationale for change and the adoption of problem-based learning in the new curriculum were described in a publication in *Journal of Dental Education* (Crawford et al, 2007). The DMD curriculum is designed to be organized in an integrated, multidisciplinary and team-taught manner. All planning for each course involves clinical, biomedical and behavioral faculty members. There are no typical discipline based courses as would be found in a traditional curriculum. The goal is to eliminate the false distinction between “basic”, “behavioral”, “public health” and “clinical” sciences, to train the students to approach a topic from a cognitively integrated perspective, and to be trained in a comprehensive care clinical setting. In this regard, the College Competencies deliberately do not reference specific topics, disciplines, techniques or departments. This has been described in Standard 2-3.

The DMD curriculum uses a blend of different pedagogies. There is reduced reliance on traditional lectures, and the large group sessions have been renamed as “Interactive Didactic Sessions”, or “IDS”, to emphasize the expected interactive nature. Thus faculty are encouraged, when possible, to use other techniques in addition to lecturing including use of audience response clickers, quizzes, case study, and significant discussion and question and answer time. Similarly, students are expected to be actively engaged and not just passive observers. The most significant development in the DMD curriculum and one of its foundations is the use of small group learning (SGL) sessions. SGL at the College is a student-centered pedagogy and a form of problem-based learning (PBL). This pedagogical method is characterized by the use of patient case scenarios as a context for students to acquire knowledge and the essential concepts of the curriculum, and to develop critical thinking and problem solving skills. The cases that the SGL groups of students investigate are interdisciplinary clinical scenarios designed to guide the students towards mastery of learning objectives that have been defined by faculty members and that contribute to the content of the curriculum. The focus of this pedagogy consists of collaborative and cooperative learning, critical thinking, problem solving, self and peer evaluation, student reflection, and the development of skills for life-long learning. The content of each SGL case overlaps with the corresponding DBCS and DAOB courses in the D1 and D2 years, and DAOB, DOSI and DOST courses in the D3 and D4 years. Appendix C-6 summarizes the content covered in each SGL case, and how it coordinates with topics in these courses. The SGL process uses groups of 6-8 students, each with a facilitator, typically a faculty member. The faculty are from a variety of biomedical, behavioral and clinical science disciplines to ensure that the
students are exposed to a wide variety of facilitator experiences and knowledge. However, the major role of the facilitator is to manage process, not content.

In regards to biomedical sciences in the D1 fall the students take DBCS311, DBCS312 and DBCS313 which incorporate all topics organized around a systems base. Thus although driven by anatomy, the courses incorporate all the traditional biomedical sciences: histology, neuroanatomy, physiology, biochemistry, immunology and microbiology. The systems courses continue in the winter D1 year with DBCS314 and DBCS315. The students participate in a mix of IDS, SGL, anatomy labs, and histology labs. A transition then occurs into the pathological basis of disease in DBCS316. In the Summer D2 term this emphasis on disease and pathology continues with DBCS321, DBCS322 and DBCS323 and into the D2 fall with DBCS324, and DBCS325. DBCS326 is a course entirely devoted to review of content for Part I of the NDBE. The rationale for this course design and structure is presented in Standards 2-11, 2-12, 2-13 and 2-14. The timing of the courses is such that the students will have covered all the required content in order to challenge the Part I NDSE by the end of the D2 fall term (December) or the start of the D2 spring term (January). Students who do not show adequate progress towards being prepared to challenge the boards are not allowed to take them until later in the spring term. The remainder of the DBCS courses in the D2 year cover in depth understanding and application of pharmacology.

As with the biomedical sciences, the clinical sciences have also been organized so that they integrate and contextualize all learning in relation to patient care. In this framework, the orofacial complex is studied as a system that is analogous to other body systems, integrating relevant foundational knowledge such as anatomy, physiology, histology, biochemistry, microbiology and pathology with clinical skills including those that fall into cognitive, psychomotor and behavioral domains. These topics are covered in the DAOB courses in the D1 and D2 years. Content for DAOB courses is also included in the SGL scenarios, providing further integration of biomedical and clinical sciences.

As an example, DAOB311 is the introductory course in clinical dentistry. The students are introduced to the behavioral sciences as the students begin by interviewing each other to develop interviewing and history taking skills. At this point, issues of ethics and confidentiality are introduced, along with cultural awareness. They also learn basic physical examination skills such as taking blood pressure and listening to heart sounds. This reinforces cardiovascular physiology. Similarly, measurement of blood glucose and awareness of diabetes reinforces understanding of metabolism. Radiology is introduced from the context of anatomy, as are mandibular movement and TMJ function. Students are introduced to the principles of evidence-based dentistry (EBD) as they learn to carry out searches and how to evaluate the quality of the literature. This course also has a significant introduction of oral anatomy, cariology and periodontology. The DAOB courses in the D1 and D2 years thus encompass all the pre-patient care topics, but using a team-taught and interdisciplinary approach.

In the D3 and D4 years the DBCS courses are replaced by DOST and DOSI. DOST uses the “AxilUm Ed” database and extends the SGL format into application of biomedical and behavioral sciences to higher fidelity authentic clinical scenarios. The goal is to reinforce the integration and importance of the biomedical and behavioral sciences to patient care. In DOSI the students will consider more in-depth and complex medical, behavioral and social situations and apply them to comprehensive diagnostic and treatment plans.
2. Describe the depth, scope, timeliness, quality, and emphasis of the biomedical, behavioral and clinical science courses. What criteria are used to determine the depth, scope, timeliness, quality, and emphasis?

The traditional approach of the DDS curriculum meant that the course director and the faculty teaching within the course determined the depth, scope, timeliness, and emphasis of the content in that course. Although this allowed for good coverage of topics, it did not allow for good integration and coordination with other disciplines. Course quality was evaluated by use of students feedback using CourseEval software. In planning for the DMD curriculum there were extensive discussions with the College Departments to determine learning objectives for the entire curriculum. Thus the faculty in each Department, who represented the different disciplines and specialties, contributed to developing the content. This data was developed into a learning objectives database which was used as a basis for then developing the DBCS, DAOB, DOST and DOSI course structures. In order to get approval for the degree and course changes we submitted a detailed proposal to the UIC Senate Committee on Educational Policy for their approval prior to approval by the UIC Senate. Details of the rationale for change and intent of the courses is given in the Program Change Proposal. Each course has a course director who in collaboration with the content experts, SGL case writers, and IDS presenters develops the topics to be covered. The ongoing management of the DMD curriculum is described in detail in Standard 2-7. The course teams for each of the 4 years are responsible for ensuring the correct depth, scope, timeliness, quality, and emphasis of the biomedical, behavioral and clinical science topics, in collaboration with the various contributors and experts.

Supportive Documentation
Appendix A-3a: Table 3-A Schedule of Courses-DDS
Appendix A-3b: Table 3-B Schedule of Courses-DMD
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-3: Competency Statement Diagram
Appendix C-4: COD Predoctoral Competency Model
Appendix C-6: SGL Case Content
Appendix C-7: Sample SGL Case
Appendix C-12: Crawford et al, 2007
Appendix C-13: Program Change Proposal (From DDS to DMD)
Appendix C-18: National Dental Board Scores
Appendix C-21: Competency Statements 2010

Available On Site
Course Syllabi
Student Assessment Forms
Curriculum Committee meeting minutes
Curriculum Advisory Committee (CAC) meeting minutes

STANDARD 2-6 A Proud Past
2-7 The dental school must have a curriculum management plan that ensures:

a. an ongoing curriculum review and evaluation process which includes input from faculty, students, administration and other appropriate sources;

b. evaluation of all courses with respect to the defined competencies of the school to include student evaluation of instruction; and

c. elimination of unwarranted repetition and outdated and unnecessary material;

d. incorporation of emerging information and achievement of appropriate sequencing.

Conclusion: The UIC College of Dentistry complies with Standard 2-7.

Description

The development of the DMD has resulted in significant changes of all aspects of the curriculum resulting in a redesigned and more responsive curriculum governance and management structure. This new structure allows for ongoing curriculum evaluation to ensure that all content is relevant, necessary, and scheduled appropriately, and that courses meet desired competencies and learning outcomes.

1. Describe the overall curriculum review process. Describe how students, faculty, administration and other sources have input into the process.

In the fall of 2011 the new incoming D1 class (graduating class of 2015) was the first to matriculate into the DMD degree program. The continuing students (classes of 2012, 2013 and 2014) completed, and will complete, the DDS degree. Similarly students entering in April of 2013 the International Dentist Degree Program will now also graduate with the DMD. The change from DDS to DMD represents the result of many years of ongoing changes and planning to adapt the educational program in response to numerous forces. In 1995 the Institute of Medicine Report, Dental Education at the Crossroads: Challenges and Changes, provided the initial impetus for a critical evaluation of dental education curriculum across the country. For many years the American Dental Education Association (ADEA) has advocated for curriculum change through their efforts such as the Commission on Change and Innovation in Dental Education (CCI) and programs at their annual meetings. The College representatives on the CCI proposed as their “project” that the electronic patient record AxiUm could be used as a teaching tool to present “virtual patients”. This is now a reality in the DOST courses as described elsewhere. This development is just part of a significant curriculum review process undertaken here as will be described.

In 2004 the College embarked on a planning process to evaluate all aspects of the curriculum and identify new directions and strategies. Concomitant with this process the College had already implemented changes in the clinics with elimination of discipline based clinics and the introduction of comprehensive care group practice clinics. The College also became committed to public health, teaching about health disparities and community based programs as being integral to dental education. With a grant from the Robert Wood Johnson Foundation, we began the successful community clinic rotations for D4 students. Recognition of the success of this program resulted in the College being awarded the 2012 William J. Gies award for Innovation in Clinical Education.

The outcome of our initial planning process resulted in a publication in the Journal of Dental Education (Curriculum restructuring at a North American dental school: rationale for change. Crawford
JM, Adami G, Johnson BR, Knight GW, Knoernschild K, Obrez A, Patston PA, Punwani I, Zaki AM, Licari FW. J Dent Educ. 2007; 71:524-31). We began our deliberations by predicting that a dentist practicing in 2030 will need a different skill set from that acquired in the curriculum existing at that time. We believed that our graduating students should possess the ability to:

- consistently and accurately self-evaluate;
- access, and assess the quality of, information;
- solve problems through the application of relevant information;
- develop and use requisite motor skills;
- evolve with changing evidence.

As discussed in the publication, it was evident that the traditional lecture-intensive, discipline-based 2+2 curriculum was not the most optimal structure for development of this skill set. Evidence from the educational theory literature on adult learning, and from the experiences and practices at a number of medical and dental schools, indicated that some form of Problem Based Learning (PBL) was a critical component of a contemporary health professions education. As part of our data gathering process we observed the PBL processes used at Indiana University School of Dentistry, and spoke with curriculum experts at University of Southern California and Harvard Dental Schools, and from Wichita State University and Loyola University. In addition, we have revised the curriculum management and administration structures and procedures (see below). We also have developed and approved a new set of competencies which are closely aligned with the goals of the curriculum (see Standards 2-4 and 2-5). The development of the new curriculum with widespread changes in both the pre-patient care and patient care courses and activities, and the underlying change in philosophy of the educational process, prompted us to also change the degree from DDS to DMD. Although in functional terms the two degrees are recognized as equivalent, the change is an important and symbolic one as it represents the significant changes we have made in the curriculum.

As part of the process in developing the new curriculum, groups of faculty content experts identified all topics which were covered or taught, and developed a list of Learning Objectives for the entire curriculum. A feature of the DMD curriculum is that it is interdisciplinary in nature throughout. By consolidating content around “systems” rather than disciplines we have been able to eliminate redundancies, repetition and inconsistencies, and strengthen the connections between disciplines. This enables the students to better conceptualize how a system works at all levels of structure and function, rather than having to place it together piecemeal from different discipline based content. Thus, in the D1 and D2 years the DBCS courses cover all of the content traditionally covered in the independent courses of anatomy, neuroanatomy, histology, biochemistry, physiology, microbiology and immunology, pathology and pharmacology, but in an integrated manner, in the context of a particular body system in health and disease and in relation to patient care. The DBCS courses consist of a combination of gross anatomy laboratory, histology laboratory, interactive didactic sessions, and small group learning.

**Curriculum Management**

Similarly the DAOB courses cover oral structure and function in health and disease in an integrated way between disciplines. Importantly, because the SGL cases include topics from both DBCS and DAOB courses we are able to link the oral cavity with the rest of human biology in a way not possible in the old system of discipline based courses.
Because of the challenges involved in planning, designing and implementing a radically redesigned curriculum, we had also devoted considerable attention to the infrastructure required for its successful operation. We have identified these as Curriculum Governance, Curriculum Management and Curriculum Support. In each case we have assigned specific functions and responsibilities to each of the components. As described in the following there are numerous examples of overlap, but this is an attempt to define roles that different individuals and groups of individuals play in the entirety of the curriculum. A significant aspect of clearly defining roles and responsibilities is that no function is dependent on a specific person. Therefore, the natural turnover of faculty and support staff which occurs at any institution will not result in loss of institutional memory and therefore potential impact on the curriculum, as each role has clearly defined functions. In addition, this structure represents an attempt, which to our knowledge is unique in dental education, of linking the organizational structure to curricula coherence. This approach to re-organizing the curriculum management structure based on the needs of a new curriculum, and not trying to fit the new system into an outmoded structure, was the basis for a paper published in the Journal of Dental Education in 2013 (Fitting Form to Function: Reorganization of Faculty Roles for a New Dental Curriculum and Its Governance. Briggs CL, Patston PA, Knight GW, Alexander L and Norman N. J Dent Educ 2013 77, 4-16). In this paper we provided an evidence-based foundation for the importance of a well thought out and implemented curriculum governance, management and support structure. This is an ongoing process, and the realities of faculty responsibilities and time constraints, as well as experience on the practical usefulness of the processes described in the paper, have led to modifications. In the next few sections we will describe the current curriculum governance, management/development and support systems as they are currently operating.

The curriculum governance and management/development processes are shown in the following figure:
Governance of the curriculum is a process proscribed by the University of Illinois Statutes and College Bylaws. At the College the eligible faculty members need to approve all major curricular changes. These changes need to be subsequently approved by the UIC Senate and the Board of Trustees of the University of Illinois. A recent example was the change from DDS to DMD and the associated course changes. Before the faculty vote on any curriculum changes there are other bodies with considerable oversight. The College Executive Committee, which acts as advisory body to the Dean, oversees many aspects of College activities including the academic program. A subcommittee of the Executive Committee is the Curriculum Committee. The Curriculum Committee is charged with oversight of the DDS and DMD programs, as described in the College Bylaws. The Curriculum Committee is composed of a representative of each Department, appointed by the Department Head, and this person acts as the conduit to his or her Department. Also, each class of students (4 classes of dental students and 2 classes of IDDP students) has a voting representative on the Curriculum Committee thereby providing student input in curriculum governance. The Executive Associate Dean for Academic Affairs is co-chair in non-voting status except in the case of a tied vote, in which case the Executive Associate Dean for Academic Affairs may cast the deciding vote.

The processes involved in management and development of the curriculum are dynamic, flexible and interactive. The Curriculum Advisory Committee (CAC) is a body that was specifically created to serve the day to day needs of the DMD degree. The primary group responsible for management of DDS had been the Curriculum Committee, but given the complexity and innovation of the DMD degree, we developed the CAC to be a critical component of curriculum governance, and the interface with curriculum management. CAC provides operational management of the curriculum. Its members play an active day-to-day role in monitoring and implementing the curriculum. It acts as a conduit for communication from all the stakeholders and participants. Members of the CAC are faculty who are more directly involved with the day to day curriculum operations, and who have first-hand knowledge of problems encountered, issues to be addressed, and so on. Thus, CAC is composed of a variety of course directors, managing partners and other faculty who have significant teaching responsibilities in the DMD courses. The Executive Associate Dean for Academic Affairs is an ex-officio member. The CAC directly interacts with teams of faculty responsible for management of each year of the curriculum. The CAC reports to the Curriculum Committee.

In order to coordinate more closely the activities we have a set of Curriculum Development Teams for the D1 class, the D2/I1 classes and the D3/D4/I2 classes. These teams are composed of faculty who are closely involved with each class/classes, who work together to allow for integration of biomedical and clinical sciences, to ensure that sequencing and content of courses are correct, to work on schedules and room assignments, and so forth. These teams work with the Content Experts, who are faculty with specific areas of expertise, and with the Scenario Writing and Assessment Team.

The Scenario Writing and Assessment Team is a group responsible for writing and revising the scenarios used in small group learning (SGL), for coordinating the content in the scenarios with content in other parts of the courses (laboratories, interactive didactic sessions), and for ensuring relevance and accuracy of content by interacting with the content experts and course directors. To enable this, a Director of Small Group Facilitation position was created who is responsible for the management of the scenario writing and small group learning process. The Director of Small Group Facilitation, who was selected from within the faculty in 2011, oversees scenario writing and revision, SGL facilitator training, and volunteer student training. The SGL facilitators report to the Director of Small Group Facilitation, who collects and reports SGL grades to the Course Directors (see below), and issues pertaining to the scenarios to the members of the scenario writing team. As the SGL is part of both the DBCS and DAOB courses and most of the DOST courses there is considerable communication with the D1, D2/I1 and D3 curriculum development teams. In order to ensure the SGL
cases are evaluated for effectiveness and revised each year to remain current and aligned with other course components, we have a process whereby facilitators provide feedback in facilitator to blog on Blackboard, and meet in person to debrief. These notes are used to assist the scenario writing and curriculum development teams revise each case, in collaboration with course directors.

Assessment of students is an essential part of student education, but one which is often overlooked. In order to develop and use assessment methods which accurately evaluate student learning and other skills, we created the role of Assessment Coordinator who was subsequently selected from within the faculty in 2011. One of the tenets of the DMD curriculum is that use of validated assessment methods is critical for the faculty to determine that the students meet the competency criteria (see Standards 2-5 and 2-23). The Assessment Coordinator organized a series of faculty development sessions on assessment, with experts from the Department of Medical Education in the College of Medicine, and provides input into the development of examinations and tests of different types, on evaluating the validity of the scores, and ensuring (along with the scenario writing team and Course Directors) that examinations accurately assess the course objectives.

At the center of the curriculum management and development circle are the Course Directors who ultimately are responsible for the logistics involved in each course, and ensure that all aspects of a course are being managed and implemented. Due to the varied components within each course the role of the Course Director will vary depending on the course. Although the traditional role of being the primary content expert and, therefore, the primary provider of content for the students still exists to some extent. However, the fact that courses cover numerous traditional disciplines and use varied pedagogies within each one means that the Course Director now assumes the role of coordinator of the different components of a course. As such the Course Director interacts with the course faculty who run laboratories, who present the interactive didactic sessions and the scenario writing team and assessment coordinator. The Course Director coordinates schedules and exams and work with the Assessment Coordinator as indicated above. Due to the complex nature of courses, particularly those with the DAOB rubric, we also have assistant course directors who manage their own specific component within the courses. The Course Director and the faculty involved in the course determine the learning objectives and hence the topics to be covered, the methods of content delivery (lecture, laboratory, small group, and so forth). This collaborative process ensures that there is no unwanted duplication and that content is up to date and relevant. At the end of each course an End of Course Evaluation is submitted by the Course Director to the CAC. Course Directors are asked to evaluate how successfully they feel the course achieved the objectives, to identify problems, and to suggest ways they could improve the course. The CAC discusses the reports and forwards them to the Curriculum Committee for review and action, thereby ensuring further student and departmental involvement in curriculum quality control.

The Executive Associate Dean for Academic Affairs is involved in the curriculum administration, but does not direct it. The curriculum is driven and owned by the faculty. The Executive Associate Dean for Academic Affairs will facilitate and negotiate, on behalf of the Curriculum Committee, CAC, course directors and faculty, any infrastructure and personnel needs. This is particularly important for the budgetary and faculty resource process and provides a critical interface with departments and department heads. In addition, the Office of Academic Affairs provides a support staff to assist in many curriculum and course related issues. Due to the increased use of electronic resources the Office of Academic Affairs recruited an Instructional Technologist responsible for assisting faculty with programs such as Blackboard, Soft Chalk and ECHO360 lecture capture, to present training sessions in use of technology. This person also coordinates with the College’s IT unit regarding AxiUm Ed and other College infrastructure needs, and with the University Academic Computing Center (ACCC).
addition we are expanding the use of technology through use of iPads and video projects in anatomy laboratory, and expanded use of iPads throughout the curriculum starting with the current D1 cohort.

In regard to student input, in addition to students serving on the Curriculum Committee, students have significant opportunities for input via class wide town hall meetings, student leadership meetings with the Executive Associate Dean for Academic Affairs and electronic course evaluations at the end of each term. Course Directors and Department Heads are given access to the survey results after final grades have been entered. Department Heads are also given access to all of the courses taught by faculty members in their department. The Course Directors use this information to modify and revise courses as needed. Department Heads use information for faculty performance in annual faculty reviews, for merit pay raises, and for promotion and tenure decisions.

2. Does the school’s course review process require an assessment to determine if the course is contributing to the schools competencies? Does the school’s review process assess the learning outcomes of the course?

The processes used to develop and evaluate courses have been described above. The syllabus of each course is required to show which of the College competencies are addressed in that course. The syllabus is included with the end of course report provided by Course Directors to the CAC and Curriculum Committee. The end of course report includes information on student success rates in the course. The report also includes descriptions of problems encountered during the course (academic, personnel, infrastructure) as well as suggestions for changes and modifications. The curriculum management structure and processes outlined above means that we can very quickly identify problems and design solutions, as well as have an ongoing quality control process for all aspects of the curriculum. Due to the frequent and varied assessments used (both formative and summative), students who have difficulties can be readily identified, and reported to the Office of Academic Affairs and the SSP committee for intervention (see Standard 2-2).

3. Describe the process that the school has used to eliminate unwarranted repetition and outdated unnecessary material from the curriculum.

The processes described above enable us to address the issues of unwanted repetition (in contrast to desired reinforcement), and to help keep material relevant and current. This is why content experts and Course Directors are integral to the discussions, as described above.

4. Describe how the school has added innovative methods and emerging information to the curriculum. Describe how your school has achieved the proper sequencing of courses.

Above we described the genesis of the DMD curriculum and the ways in which it is managed and subject to ongoing quality control and development. This Curriculum Development Teams in particular are important in ensuring the proper sequencing of courses. We have eliminated discipline based courses in the biomedical sciences to allow for an interdisciplinary integrated approach based around systems. These extend the developments which began in the DDS curriculum to eliminate unnecessary and limiting boundaries in clinical education, so that students learn patient care from a comprehensive care viewpoint. These innovations in clinical education and those we have introduced with community
clinch rotations have been described in Standard 2-6 and 2-23. The extensive use of small group learning (SGL) in the D1, D2/I1 and D3 years is a major innovation for us. With a few notable exceptions, small group learning has only been used as an adjunct to conventional discipline based teaching at dental schools. By eliminating the false barriers of being tied and enclosed by teaching within disciplines our curriculum has been freed up to develop our own version of problem based learning. We developed patient scenarios which are interdisciplinary across biomedical, behavioral and clinical sciences, and as much as is possible represent realistic patient situations. As well as being central to the acquisition, learning and understanding of didactic knowledge base, the SGL process is important in developing critical thinking skills (see Standard 2-9), for development of lifelong learning and self-assessment skills (see Standard 2-10) and in understanding how to work within a health care team (see Standard 2-19). An innovative new development, which might be unique in dental education, is the use of the electronic patient record, AxiUm as a teaching tool. This initiated as an idea for use in the ADEA CCI process. We developed a teaching database AxiUm Ed for use by D3 and D4 students in their small group to apply their problem based learning skills acquired in their D1 and D2 years to a more authentic patient record (complete with medical histories, radiographs and social issues). Taken in their totality we view the many changes we have made, and continue to make in our curriculum, as being very innovative.

Supportive Documentation

Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-3: Competency Statement Diagram
Appendix C-4: COD Predoctoral Competency Model
Appendix C-11a: Competency Map – DDS
Appendix C-11b: Competency Map – DMD
Appendix C-12: Crawford et al, 2007
Appendix C-14: Briggs et al, 2013
Appendix C-15: End of Course Report
Appendix C-16: Curriculum Management and Governance Diagram
Appendix C-21: Competency Statements 2010
Appendix D-3: Faculty Bylaws (Curriculum Committee)

Available On Site
Course Evaluations
List of assessment faculty development seminars
Student Town Hall Meeting Minutes
Curriculum/course review schedule
Detailed course review flowchart outlining process
Current curriculum management plan

A Brilliant Future

STANDARD 2-7

- 97 -
The dental school must ensure the availability of adequate patient experiences that afford all students the opportunity to achieve its stated competencies within a reasonable time.

Conclusion: The UIC College of Dentistry complies with Standard 2-8.

Description

The dental school is located in a large metropolitan area of Chicago and draws patients from a large geographic area. There are adequate numbers of patients registered in the college’s predoctoral program to satisfy the clinical educational experience for all students. On average there are nearly 100,000 patient visits per year to the College clinics with over 54,000 seen in the predoctoral clinics. The predoctoral students provided more than 110,000 treatment procedures for these patients in the 2013 academic year. The College currently enrolls 67 D4, 65 D3, 67 D2, 52 D1 and 79 International students. Since the last site visit nearly every predoctoral student has graduated with a May diploma. In no instance was the failure to graduate on time related to lack of patient experiences.

The college accepts patients into the undergraduate clinics who have care needs appropriate for predoctoral teaching and learning experiences for students. As part of its mission the college seeks to “provide patient-centered care that is comprehensive and compassionate for a culturally diverse population”. Our comprehensive care program has been in place for over ten years and integrates all disciplines into the general clinics except Pediatric Dentistry and Orthodontics for which students see patients in those unique clinics. Our patient population is very diverse with regard to age, medical statuses, and cultural backgrounds.

Two types of patients are seen – urgent care and comprehensive care. Students are assigned to an urgent care rotation and treat patients presenting with varying urgent care needs, but primarily requiring extractions or endodontic procedures. Faculty from the Oral Medicine and Diagnostic Sciences department supervise these students who treat the patients in the general clinics. Often based upon positive urgent care experiences, patients request and are granted acceptance into the comprehensive care program if they are appropriate for undergraduate care.

The majority of comprehensive care patients are accepted through a screening visit at which time students and faculty determine the appropriateness of each patient’s needs for care in the predoctoral clinics. These judgments are based upon three criteria: patient’s medical history, patient ability to abide by college policies including attendance and payment, and the difficulty level of the care needed. Patient’s who do not meet the screening criteria for the predoctoral program are referred to the postgraduate programs, regional GPR’s, or private practice.

For patients who are accepted, a faculty approved form is filled out at the screening visit with information regarding general case type resulting from an intraoral inspection. The patient is taken to radiology the same day to have a prescribed panoramic radiograph. After review of the panoramic radiograph for abnormalities by the director of initial patient care services, the chart containing the screening form and panoramic radiograph is delivered to the Managing Partner of the clinic where the
patient was screened for assignment to a student. The Managing Partner (MP) at this time still has the option of declining the patient based upon information provided along with the panoramic.

Patient assimilation process:

1. Patient Calls to Make Screening Appointment
   - Telephone Operator
     - Makes appointment
     - Gives information orally
     - Mails brochure

2. Patient Presents to Registration
   - Admissions Staff
     - Demographics entered in AxiUm
     - Insurance information entered
     - Patient assigned to a clinic

3. Patient Referred to Designated Clinic: DaVinci, Monet or Rembrandt

4. Screening Process
   - Medical History Reviewed
   - Clinic Policies Reviewed
   - Patient General Case Typing

5. Patient Accepted
   - Panoramic Radiograph
   - Radiographic Review
   - Screening Form and Panoramic To MP
   - Assigned to Student
   - Student Contacts Patient For COE Exam

6. Patient Not Accepted
   - Referral Letter sent to patient (PG, GPR, Private Practice)

The MPs maintain patient request information from the students in order to make judgments on student-patient matching. The MPs are responsible for equitable assignment of patients to provide for adequate and varied experiences for the students. Students meet formally each semester with their MP to review progress, assess their patient pool, and to set goals toward competency and graduation. A typical mature roster of active and recall patients per student would number 40-50 patients. This number will fluctuate over time due to inactivation of current patients and assignment of new patients from the screening or urgent care entry.

Over the course of the clinical curriculum the MPs assure an adequate number and assortment of patient case types are provided to each student to ensure varied experiences in all of the basic disciplines. There are no specific numerical requirements but each student is assigned patients to gain the requisite basic experiences in restorative, periodontic, endodontic, oral surgery, and pediatric dentistry within the curricular time. The MPs have access to reports that detail procedures that individual students have completed, have in progress and have treatment planned but not yet started for their assigned patients. These data are monitored on a continual basis.
2. Summarize the students' patient care experiences. What procedures and policies are in place to assure that all students have sufficient experiences to successfully challenge the school's clinical competency assessments?

Over the course of time allotted for clinical practice students are assigned to various rotations in urgent care, radiology, oral surgery, pediatric dentistry, and oral medicine in the junior year. In the senior year students who are sanctioned participate in an extensive extramural rotation program where they spend alternating weeks at the College and off school sites. When not assigned to rotations, students are expected to be in the general clinics providing general practice care to adult patients assigned to them. In the general clinics students treat patients whose needs encompass the various disciplines in dentistry including direct and indirect restorations of single unit teeth; replacement of missing teeth with fixed partial dentures, removable partial dentures, complete dentures, and implants; root canal therapy; prophylaxis, SRP, and periodontal maintenance; and other varied procedures which are a part of everyday general practice.

Students and faculty can generate reports from the AxiUm electronic patient record system which provides detailed listing of all procedures either completed or in progress by the student. These are grouped by ADA codes related to procedure category. The MPs and the specialty liaisons from periodontics and endodontics monitor these reports and use this information along with faculty input to identify areas where students need more experience and thus more patients. Patient care is driven by phased comprehensive treatment plans. Care out of phase is not permitted therefore; faculty will move patients among students to accommodate student needs while providing timely, sequenced care to the patient. The College is fortunate to be located in a main metropolitan area and as such draws patients from a broad area. To date the number of patients admitted to the college has been adequate to serve the basic needs of the students. Recently with the elimination of adult Medicaid for dentistry it has become difficult to fulfill all experiences for all students and thus the MPs are reducing fees for patients to enable the patient to have procedures done. Most frequent examples of this are endodontic and fixed partial dentures for which some patients cannot afford the full fee.

Competency implies that the student has obtained enough experience to independently begin practice. Performing numbers of procedures in itself does not ensure competency. It is the ability to repeatedly and successfully deliver services to patients that makes a student competent. This is why the faculty make judgments upon the quality of the services and the patient management skills that parallel the clinical skills of the student. The various performance exams offer the students the opportunities to prove independence in obtaining competency. There are a number of performance exams in restorative dentistry, periodontics, endodontics, pediatrics, oral and maxillofacial surgery and urgent care that the students challenge in the general clinics. Most are on patients but some are on manikins that also serve as preparatory opportunities for regional licensing board examinations. These are graded on a pass/no pass basis and students must pass all in order to complete course requirements. Any exam not passed must be remediated before credit is given for the performance exam. Passing of the exams is considered as one of the factors in judging competency for graduation. Faculty attend calibration sessions prior to evaluating the exams.

Students also gain valuable experience in our extramural clinic sites. Data related to procedures accomplished at the sites is reported to the College and is considered as part of the students overall experience every bit the equal of experiences performed in the College.
The following table lists the students who did not graduate on time, and the reason for the delay. With the exception of three students from the class of 2012 who will have failed to successfully challenge part II of the National Dental Board Exam, all students completed their degrees in August of their graduation year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Graduates/Cohort</th>
<th>Reason for Delay</th>
</tr>
</thead>
</table>
| 2013 | 95/97            | Failing to PASS NBDE, II - 1  
Completing Coursework – 1 |
| 2012 | 86/93            | Failing to PASS NBDE, II - 5  
Completing Coursework – 1  
Disciplinary Action/repeat course - 1 |
| 2011 | 89/93            | Failing to PASS NBDE, II – 2  
Completing Coursework – 1  
Preparing for regional board* - 1 |
|      |                  | *The patient boards are not required for graduation however we allowed this student to continue to work with our faculty and patients in order to prepare to re-challenge the exam. |
| 2010 | 90/90            | NA               |
| 2009 | 80/87            | Completing Coursework – 6  
Disciplinary Action/repeat course - 1 |

4. Describe the overall curriculum review process. Describe how students, faculty, administration and other sources have input into the process. List the reasons for students not graduating on time. What actions has the school taken to address the most common reasons for students not graduating on time?

The curriculum review process has been previously described.

The vast majorities of students graduate on time and receive their diploma in May upon completion of all course work and National Board certification. There are a limited number of students who continue enrollment beyond graduation day. For the past 5 years, of the 20 students who did not graduate on time the reasons included failure to pass National Board Part II (9 students), disciplinary action (2 students) and students who the faculty determined had not reached competency as entry level general practitioners (8 students). Even though these students have been assigned adequate patients, they had not achieved competency. These students are required to continue their education at the College to develop their skills to provide clinically acceptable appropriate treatment. This lack of competency was related to inability to demonstrate adequate diagnostic, reasoning, and/or motor skills in the provision of clinically acceptable appropriate patient care.

The College has addressed unacceptable National Board Part II first time pass rates through the administration of the mock Board examination early in the Fall term of the fourth year. However,
instead of working with the students to identify their areas of weakness and suggesting study strategies, we have added a structured study plan for each student who performs poorly on the mock examination. The study plan includes personal study and review sessions with faculty content experts. Upon completion of the study plan the student re-challenges the examination and if still determined to be at risk is given additional study resources.

While only instituted during the last academic year, there were nearly twenty students out of seventy-nine (Some IDDP students had not passed National Board Part II prior to matriculation) who were deemed at risk after the initial examination. They entered the required structured study plan. After completing the plan all but two were certified to challenge the National Board Part II examination. All of the certified students but one passed the examination on the first attempt and the one student passed it on the second attempt. The remaining two students who were not certified received additional formal support including study skills counseling. Both of these individuals subsequently passed the examination on the first attempt.

Supportive Documentation
Appendix C-24a: Student Clinical Experiences – Class of 2013
Appendix C-24b: Student Clinical Experiences – Class of 2015
2-9 Graduates must be competent in the use of critical thinking and problem-solving, including their use in the comprehensive care of patients, scientific inquiry and research methodology.

Conclusion: The UIC College of Dentistry complies with Standard 2-9.

Description

The DMD curriculum uses a wide variety of experiences to train the students in critical thinking and problem solving, and then to apply the skills in the comprehensive care of patients, scientific inquiry and research methodology. Training, application and evaluation occur in a variety of settings that include small group learning, evidence based dentistry application exercises, extensive use of portfolios, and clinical case presentations.

Critical thinking and problem solving are two related, but independent and distinct, topics. To describe how we assess that our students are competent in these two topics it is necessary to define what these topics encompass. In doing so we can identify where in the curriculum they are covered and how we assess them, and ultimately determine student competence.

In designing the DMD curriculum we had five skill sets we considered to be important for our graduates to possess (as described in Crawford et al, 2007; See also Standard 2-7), namely:

1. Self-evaluation;
2. Information gathering and assessment;
3. Problem solving;
4. Motor skills; and
5. Ability to evolve with changing evidence.

In June 2007, the College representatives to ADEA CCI attended the ADEA CCI Liaisons conference. One of the topics covered was Critical Thinking with a presentation from Dr. Richard Paul of The Foundation for Critical Thinking. It was apparent that these five skill sets were closely aligned with following definition of critical thinking from The Foundation for Critical Thinking:

Critical thinking is that mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism.

Deconstructing this statement it becomes apparent that critical thinking is a multifaceted process and not a single entity for competence. It is about the process of thinking and not about the end point of solving the problem. Problem solving itself is one of the abilities which is often the outcome of the process of critical thinking. In this abstract view of critical thinking the solution to the problem per se is less important than the thought processes and strategies used to arrive at the solution.
Critical thinking is a skill to be used to aid the healthcare practitioner in arriving at the best and most appropriate solution to the problems presented by the patient.

Therefore, in the training of competent graduating dentists it is necessary to address critical thinking at a more practical level. Competence in critical thinking is a summation or end point of mastery of a number of separate skills. In the context of the graduating dentist these include:

- communication with the patient/community
- cultural awareness and competency
- patient assessment
- use of evidence based approaches in analysis, diagnosis and development of the treatment plan
- ability to self-assess one's abilities and limitations
- ability to assess the outcome of one's work, and take adaptive and/or corrective action as needed
- behave and carry out work using the professional, legal and ethical expectations of the profession.

These topics are included in our Competency Model (see also standard 2-4):

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STANDARD 2-9

A Proud Past
Furthermore, it follows that critical thinking must be embedded within the design of the DMD curriculum, and that critical thinking is inherent and implicit in the entirety of the Vision and Mission Statements and most particularly as articulated in the first two goal statements:

7. To provide patient-centered care that is evidence-based, comprehensive, and compassionate for a culturally diverse population;

8. To provide student-oriented educational programs that prepare learners to engage in the evidence-supported, thoughtful, ethical practice of dentistry.

Problem solving is a component, most frequently the outcome, of the critical thinking process. However, problem solving in itself does not imply that a critical thinking process has been used to solve the problem. The ability to arrive at the best and most appropriate solution to a particular problem must include:

- good patient communication to develop rapport and identify chief complaint
- the ability to correctly conduct comprehensive oral and extra-oral exams
- understanding and application of the foundational knowledge in biomedical, behavioral and clinical sciences
- critical analysis to arrive at differential diagnoses
- use of best evidence and practices to develop a treatment plan within the scope of practice and skill level of the graduate
- communication of that plan to the patient
- implementation of that plan
- the ability to self-assess and to assess the outcomes

Thus, competence in problem solving represents the cumulative end point of the student's progress through the curriculum. It encompasses all the didactic knowledge within the biomedical, behavioral and clinical sciences, all the practical skills and techniques at the level of mastery expected of a graduate.

1. Describe the use of any educational models/formats that promote critical thinking/problem solving.

Throughout the curriculum students are challenged to be active in thinking and learning and not just be passive listeners. Active learning is an essential step in the training of critical thinking and problem solving. Students are introduced to and engaged in applying the principles of critical thinking from the start of the D1 year in the patient scenarios used in the small group learning (SGL) sessions. The SGL takes place over three 3-hour sessions. On day 1 the case is presented and the students discuss the biomedical, behavioral and clinical topics embedded in each case. The students are required to explore in depth their pre-existing knowledge of a topic and then identify knowledge gaps. Toward the end of the session the existing knowledge gaps are developed into learning issues for day 2. The students investigate the learning issues outside of the class, and at the beginning of the next session present their findings to the group. This in turn stimulates further discussion and exploration. Additional information of the scenario is distributed and discussed, for development of issues which are then presented on day 3. During the SGL process, the students are expected to discuss what
they know, identify their knowledge gaps, use the correct resources to find the correct information, present this information to others clearly, evaluate the information. At the end of Day 3 the students are presented with the learning objectives that had been intended for them to master. This provides stimulus for further discussion of topics and clarification where needed. Part of the process also requires the students to self-assess individual strengths and weaknesses, and to evaluate their peers and give feedback. The SGL process models much of what is entailed in critical thinking and problem solving. This format is used throughout the D1 and D2 years. In the D3 and D4 years small group discussion in a modified format is continued by using patient scenarios presented in the AxiUm Ed database.

In the D1 year the curriculum introduces the students to the skills of evaluating evidence and conducting literature searches and analyses. There is an evidenced based dentistry (EBD) component in the Dentistry-Applied Oral and Behavioral Sciences 311 (DAOB311) course. The goals are to ensure that students can and do:

- access information;
- evaluate the quality of the information;
- attempt to assess the applicability of the information to the patient;
- render opinions on the outcomes of having applied the information.

The students also learn how to use the Evidenced Based process PICO question where P is Population, I is Intervention, C is Comparison and O is Outcome(s). In Dentistry-Applied Oral and Behavioral Sciences 312 (DAOB312) and Dentistry-Applied Oral and Behavioral Sciences 321 (DAOB321) there are specific EBD assignments.

Another important activity is the use of portfolios throughout the curriculum. The portfolios require the students to show that they are applying appropriate data gathering and information analysis skills. In DAOB311 in the fall of the D1 year the students produce a comprehensive “Partner Case Report” designed to train and assess the students’ ability to carry out a comprehensive oral exam. In Dentistry-Applied Oral and Behavioral Sciences 331 (DAOB331) there is a Pediatric Patient Experience portfolio and in DAOB333 the students will submit a clinical case portfolio highlighting behavioral and ethical issues involved in patient care.

An Assessment and Diagnosis portfolio is completed for a Comprehensive Care Patient, in the Spring Term of the DDS D2 year in DAOB323 and beginning in 2014, the Spring of the DMD D3 year in the designed DAOB333 course. The focus of the portfolio is assessment, diagnosis, interactions of systemic and oral health, and prevention. The portfolio is a written (narrative) analysis, not just a reporting of findings and facts. Portfolios that receive high marks demonstrate a careful consideration of the available information, a critical review of the information, application and synthesis of this information and a self-reflective component. The following areas are addressed in the portfolio: Medical, dental, and social history; risk factors; EBD analysis of three articles that address the patient’s specific risk factors; assessments of the patient including clinical and radiographic examination and appropriate diagnostic testing; dental and medical consultations; determination of prognoses; behavior modification; and a self-reflection component.

A Cariology portfolio is required in the D3 Summer term of both the DDS and DMD curricula in courses DADM331 and DAOB331. The goal of this portfolio is for the student to demonstrate ability to assess caries risk for a patient and how to customize a caries management plan for a high risk...
patient. The components include: selection of a high risk patient and completion of the caries risk and prevention plan EPR in AxiUm; appropriate rationales developed with a discussion and critique of two articles; reflection and debriefing including comments on caries detection experience, uncertainties in diagnosis, patients' compliance, alternative therapies, behavioral aspects, communication, and impact on practitioner.

Similarly there is a Periodontics reevaluation portfolio in DADM320 Comprehensive Care Illb of the DDS curriculum and Dentistry-Applied Oral and Behavioral Sciences 332 (DAOB332) of the DMD curriculum. The students are requested to select a patient with Periodontitis that have completed phase 1 treatment and the periodontal phase 1 reevaluation (D0170). The students are to describe and document the changes in the periodontal tissues that have occurred between the initial examination and the phase 1 periodontal reevaluation. They must explain how and why these changes have occurred. The report must include comparison chartings (pre-op/post-op) for probing depths, attachment levels and bleeding points. No photos or other chartings are needed for this project. The students must answer the following questions:

1. What are the purposes of the periodontal reevaluation appointment for patients with periodontitis?
2. What are the procedures involved in the periodontal reevaluation appointment?
3. Describe examples of clinical findings at the phase 1 periodontal reevaluation appointment (D0170) that would indicate the need for referral to a periodontist.

Another example of where critical thinking is expected are Endodontic case presentations related to pulp diagnosis and a completed endodontic case. This occurs in ENDO363 in the DDS D4 year, which will become DAOB343 in the DMD. In addition, in endodontic clinic sessions students are required to use problem solving to determine their ability to perform necessary patient care by establishing the difficulty of the presenting condition and deciding whether to treat or refer.

While participating in the Oral Medicine Clinic rotation students are expected to write an evidence-based case project during their D3 year. Students are required to access and utilize publications and textbooks independently of faculty. The report is described below:

- Students will complete a report either as a group of no more than three students or individually.
- Students must use one of the patients they will see in the Oral Medicine Clinic for this report.
- It is expected that the report will be a comprehensive case report of the patient including outcomes of the treatment and follow up if indicated for that patient.
- The report will include a short literature summary of fundamental information on the condition for which the patient was treated. This will include information on the epidemiology, the clinical presentation, the prognosis, and the oral health considerations for that condition. The students will be able to consult with the faculty of this component to select the proper literature to review.
- The report will be evaluated by the faculty and assigned a satisfactory or unsatisfactory grade. If unsatisfactory, the students will be asked to revise the report based on the comments made by the faculty.

In the D3 and D4 curricula as part of their work within the group practices, the students present specific cases to their peers and faculty. They perform comprehensive oral examinations and patient
Care procedures that they present in small group sessions. These presentations are presented either in live sessions using PowerPoint or in written format that is submitted through the appropriate Blackboard site. In all instances the presentations include:

- Medical History
- Dental History
- Social History
- Oral and Peri-oral Examination findings
- Radiographic interpretation findings
- Problem list and diagnoses
- Treatment plan and alternatives
- Treatment summary and evaluation
- Evidence-based support for selected decisions
- Reflections

In preparation for this presentation the student meets with faculty to discuss the findings of the examination and radiographs. A treatment plan or plans are developed and presented to the patient. The student then begins treatment under faculty supervision. When the care is completed, the results are presented at a formal session with fellow students and faculty. Questions are required of the audience which the presenter addresses and the group discuss. In this manner, a lively discussion follows with the intended outcome of better patient and treatment understanding.

In addition to the formal case presentations, the students meet with faculty at treatment planning sessions for all patients. The cases are studied taking into account all of the data collected. During these meetings plans are developed for patient discussion. When the case is complex, 2 or 3 faculty will join the conversation to ensure that the students have evaluated all aspects of the case and to ensure the optimal treatment plan and patient care. Treatment planning performance exams are taken by students in their D3 year, and, without faculty aid, a treatment plan is developed. The student defends the choices made using the evidence based approach for their decisions.

Other DDS D4 year courses where portfolios are used are Comprehensive Care IVa (DADM332) with a Practice Assessment Portfolio, Comprehensive Care IVb (DADM333) with a Professional Growth Portfolio, and Comprehensive Care IVc (DADM334) with an Implant Patient Portfolio. These portfolios will become part of Dentistry-Applied Oral and Behavioral Sciences courses (DAOB341, DAOB342 and DAOB343) in the DMD D4 year.
2. Describe how students are deemed competent in the use of critical thinking and problem-solving in the areas of:
   a. comprehensive care of patients
   b. scientific inquiry and research methodology

   a. comprehensive care of patients

   Our Competency Model requires the sampling of four domains; Varied Experiences, Faculty Observation, Performance Examinations and Self-Assessment. Through the use of patient care and/or simulated patient care each of our Competencies are practiced by students (see Standard 2-23) and information is sampled from each of the Competency domains.

   Student intramural experiences are tracked through AxiUm records and are collected from the student extramural experiences for all patient care, including assessment, diagnosis, and treatment planning supported by student discovered evidence.

   Faculty observations related to critical thinking and clinical problem-solving in all aspects of patient care, portfolio evaluation, and patient presentations are also used in the assessment of competency. Student skills are also assessed in the small group experiences that are present in every term of the DMD curriculum. The one on one faculty/student dialogues provide excellent opportunity to shape and assess student skills in these skills of thinking and problem solving.

   As described above there exist many Performance Examinations that require independent skill in accessing and applying relevant information correctly and effectively to patient care issues. The measures used include live and simulated patient care examinations, written portfolios, live case presentations, and the electronic Case Based Examination among others.

   In daily patient care students are required to self-evaluate and the faculty look at and provide feedback on the relevance and accuracy of the student’s thoughts. Similarly, throughout the curriculum self-evaluation (reflection) is a frequently employed instructional strategy. Often in the portfolios students answer the questions “if you could do this again, what would you change, what evidence exists to support the change, and what would the expected outcome be?”

   b. scientific inquiry and research methodology

   As described in Standard 6-3 students are exposed to developing critical thinking skills in the research arena. Research permeates all aspects of dental student life at the College. There are multiple opportunities for students to engage in research and other scholarly activities that the College provides, encourages and supports. Among these activities are included research training activities, summer research, attendance at scientific meetings, seminars, an active student research group, Clinic and Research Day and the curricular reliance on evidence based learning and practice. These activities are all strongly mentored by clinical and research faculty.

   Students are expected to use the EBD process to determine the quality of information, and they are questioned on the level of evidence they used and how the evidence supports their clinical decision.

   The patient portfolio presentations used are evaluated according to specific criteria related to critical thinking and problem solving. Similarly, understanding and use of scientific inquiry and research
methodology requires practice. And this is one of the expected outcomes of the SGL process, and is embedded within the SGL assessment criteria. The DAOB321 EBD assignment specifically addresses understanding of research literature.

Supportive Documentation
Appendix C-4: COD Predoctoral Competency Model
Appendix C-12: Crawford et al, 2007

Available On Site
Course syllabi
Case presentation, performance exam, portfolio etc. criteria
2-10  Graduates must demonstrate the ability to self-assess, including the development of professional competencies and the demonstration of professional values and capacities associated with self-directed, lifelong learning.

Conclusion: The UIC College of Dentistry complies with Standard 2-10.

Description

Self-assessment is built into both the DDS and DMD curricula, particularly in the pre-patient and patient care clinical courses. The implementation of the DMD curriculum gave us the opportunity to add this to the small group learning (SGL component) used from the start of the D1 year. The use of self-assessment in the various course settings throughout the curriculum is intended to prepare the students to employ self-assessment skills for the process of lifelong learning throughout their professional careers.

Goal 5 of the College Mission statement specifically addresses the topic: To provide educational programs that prepares students for the evidence-based ethical practice of dentistry, continuous self-evaluation, and the pursuit of lifelong learning. Self-assessment is an integral part of the determination of student competence, as was discussed in Standard 2-5. It is essential for critical thinking as was discussed in Standard 2-9. Moreover, this is important in meeting College competency number 7, “Systematically and accurately evaluate the outcome of the intervention.” The ability to self-assess one’s work in the context of the outcome, and to learn and adjust as appropriate is critical to this competency and to this Standard, 2-10.

1. Describe any self-assessment processes that students use in the preclinical laboratory and in the clinical portion of the curriculum.

Self-assessment is a part of most components of the curriculum, as will be discussed with examples below. In general, regardless of the specific application of self-assessment, the process carried out by the students can entail three parts:

a. The students, using faculty generated, evidence-based and purposely sequenced criteria forms, are required to evaluate their performance product, consider, by marking their performance level on the form, all aspects of how they reached this end point including the identification and investigation of the problem, the use of evidence in decision making, the formulation of an improvement plan, and the implementation of the plan to reach the clinically acceptable end point of the completed work. This represents the qualitative aspect of the process. The faculty provide feedback through evaluating the student performance formatively in practice sessions and summatively during the students’ independent performance examinations;

b. The students are required at this end point to determine its quality, determine if it is the right solution to the problem, and importantly, consider what they could have done differently, or what they can still do to improve the product or project. There has to be a justified written rationale for their conclusions about quality. This represents the quantitative aspect of the process; and

c. Depending on the particular application of self-assessment the students might then use reflection to reinforce the lessons learned.
Depending on the particular project or performance all aspects of this self-evaluation process can be graded and used as part of the determination of competence. The reflective component is often used in portfolios. The students receive two grades when participating in skill-related activities and performance examinations for pre-patient care and during clinical patient care. One grade is for the quality of the product and the second is for the accuracy of the self-evaluation. Both components must be passed to achieve a passing grade on the product.

Specific examples of where and how self-assessment is used:

**Small Group Learning**
Self-assessment is an important part of the SGL process. At the end of every SGL session each student is provided with assessment from the facilitator, from peers, to compare with their personal self-assessment. While this feedback can include assessments of specific knowledge on a topic, it is used more in regard to the student’s participation and thought process skills. Students are expected to identify weaknesses in how they added to the SGL process within the group and identify ways to improve. Equally importantly the students are expected to identify aspects they think they accomplished well. The ability to accurately self-assess is part of the criteria used by the facilitator for grading the student. This is discussed with each student individually at the end of each SGL module.

**Behavioral Sciences and Communication Skills.**
The Behavioral Sciences faculty use self-assessment throughout the curriculum. The commitment to peer and self-assessment in the DDS curriculum is an essential component of learning in these Comprehensive Care courses: DADM317 (CC IIB), DADM318 (CC IIC), DADM319 (CC IIIA), DADM321 (CC IIIIC), DADM332 (CC IVA). In the DMD curriculum we include peer and self-assessment in DAOB311, DAOB312, DAOB321, DAOB331, DAOB333.

In these courses students use self-assessment as a learning tool during in-class role play specifically employing standardized checklists with behavioral anchors to guide their self-assessment. They routinely use these checklists as a starting point to develop communication and behavioral skills goals that are specific to their own professional development. Students also write reflection papers that are graded on a pass-fail basis, based on ability to identify personal strengths and weaknesses and set specific, measurable goals for professional growth.

**Restorative Dentistry**
Beginning with the D1 fall term (DDS-DADM314; DMD DAOB311), students self-assess each of their dental anatomy waxing projects prior to obtaining faculty feedback. The students self-assess (grade) their own work to determine for each criterion what is “excellent”, “acceptable”, and what is “standard not met”. This strategy helps the students develop skills to identify areas of improvement. Combined with feedback from faculty, students can then create action plans to address the problems in their projects prior to final submission. The final grade results in two grades, one grade for the quality of the project or process, and a separate grade for the accuracy of the self-evaluation. In order to achieve a passing performance, both components must receive a satisfactory grade.

For the first restorative preparation performance examination, self-assessment constitutes 100% of the grade. The student performs the preparation and self-assesses. The faculty then evaluates the preparation and the final grade is determined using a scoring matrix to assess how well the student self-assessment matches the faculty assessment. As students progress through the curriculum, culminating in the final performance examinations in the fourth year, self-assessment is gradually weighted less and the quality of the project or performance is weighted more.
Endodontics
In the Endodontics courses in the DDS curriculum (ENDO352, ENDO353 and ENDO363) and in the DMD curriculum self-assessment is part of DBCS327 and DAOB322. Specifically, students are required to evaluate prepatient care activities prior to receiving faculty feedback, when doing clinical care, especially performance examinations, using the Endodontic Self Evaluation Form and also in determining patient care difficulty through using the AAE self-assessment is used.

Oral Medicine
In the Oral Medicine clinic students self-assess during each rotation session using the self-assessment instruments developed for patient assessment and diagnosis in the comprehensive oral and head and neck examinations.

Oral Surgery
While participating in Oral Surgery rotations in both the DDS and DMD curricula the AxiUm self-assessment is also employed. This compliments the direct faculty assessment for patient evaluation, presentation, treatment modifications, and treatment. The student is expected to collate all of his or her knowledge and resources during dialogue with the supervising faculty while on the rotation. The students also self and peer evaluate in the recently designed and implemented mock urgent/emergency scenarios at the beginning of each session.

Pediatric Dentistry
In the Pediatric Dentistry rotations the students use self-assessment forms in the pre-patient care simulated patient care exercises including in the performance examinations administered during the course. In the patient care clinics students are required to self-assess in two clinical examinations (restorative, and diagnosis/treatment planning). In addition self-assessment/reflection is part of the portfolio presentation.

Periodontics
In the patient care clinical components of both DDS and DMD the students are required to select one of their patients with periodontitis upon whom the student has completed phase 1 treatment (scaling and root planing) and has also completed the periodontal phase 1 reevaluation (D0170). As well as describing, documenting and explaining the changes in the periodontal tissues that have occurred between the initial examination and the phase 1 periodontal reevaluation, they also write a reflective essay in which they self-assess their ability to discriminate the tissue changes for the treatment portfolio to help determine competency. If the student is not able to demonstrate good understanding, the remediation plan is for the student to meets one-on-one with the periodontology manager to review the portfolio patient findings and complete two new patients requiring periodontal re-evaluation in the clinic including the documentation described above.

Community-Based Service Learning
The community-based service-learning experience and course (DADM325) for D4s is less about patient care (although the students provide a great deal of care while on these rotations) but is more focused on the health care delivery system and its various facets, the populations served, communities and cultures impacted by these facets, and how oral health is integrated into the services and issues of overall health and welfare. In that context, each D4 completes a self-reflective essay in which the student assesses his/her reaction to the parameters just outlined. These essays are assessed and graded, to ensure understanding of the importance of the relevant community health topics.
2. Describe how students must demonstrate the ability to access and utilize resources independent of direct faculty input and direction.

The DDS and DMD curricula specifically develop student skill in the evidence based approach to learning and patient care. An important component of this skill development is that the students can access and evaluate information relevant to the practice of general dentistry. The students must be able to:

- Formulate a searchable clinical question
- Access information
- Evaluate the quality of the information
- Establish the applicability of the information to the patient/situation in question
- Apply the information to the clinical problem, and
- Evaluate the outcome

To this end the skills needed for this are presented in the EBD component of DAOB311, including how to develop a PICO question (Population, Intervention, Comparison and Outcome(s)). Emphasis is also placed in the student’s skill in accessing information.

The skills to access and evaluate information are also developed during the ongoing SGL sessions’ process in the DMD curriculum which begin in the first week of the D1 year and continue throughout the curriculum. During SGL the students learn how to how investigate a topic by considering all aspects by using an acronym DAMIEN-BES. This covers the following very broadly defined classification topics:

- Developmental,
- Allergy and Immune,
- Metabolic,
- Infections,
- Environmental,
- Neoplasia,
- Behavioral,
- Economic and
- Societal

Using this acronym enables students to investigate topics not limited by the boundaries of biomedical or clinical science disciplines. Students gain skill to identify and to research a topic, through accessing and evaluating the relevant information and resources. The ability to access resources is a skill utilized in the portfolios and other activities indicated above.
3. Describe how the dental school encourages students to attend and critically evaluate continuing education programs.

Through curricular scheduling students are able and required to attend the Midwinter Meeting of the Chicago Dental Society. Attendance is mandatory for the D3, D4 and I2 student classes and each student is required to report on a session attended at the meeting concentrating on the quality of evidence used by the presenter to support the position taken. Associated with this student development is the mandatory attendance at the annual College Clinic and Research Day. The College also has routine Lunch and Learn sessions which cover a variety of topics relevant to the profession and students are encouraged to ask questions to determine whether the information presented supports the author’s position. In Standard 6-3 we describe the involvement of students in research activities in more detail.

Supportive Documentation
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-3: Competency Statement Diagram
Appendix C-4: COD Predoctoral Competency Model
Appendix C-9: SGL Grading Form
Appendix C-21: Competency Statements 2010

Available On Site
Course Syllabi
Self-assessment forms
List of Lunch and Learn Topics
2-11 Biomedical science instruction in dental education must ensure an in-depth understanding of basic biological principles, consisting of a core of information on the fundamental structures, functions and interrelationships of the body systems.

Conclusion: The UIC College of Dentistry complies with Standard 2-11.

**DDS Program**

(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)

**Description**

The core biomedical/basic science DDS curriculum was taught during the D1 and the summer and fall semesters of the D2 years. The major change from the traditional curriculum was horizontal integration of the discipline-based courses with a significant emphasis on synchronizing the learning of the body systems across the curriculum. We initiated the transition of the traditional discipline-based biomedical sciences DDS curriculum to its integrated system-based approach. At that time the clinical sciences had already been successfully integrated in the pre-patient care courses and in the clinic group practices. The goal of this curricular restructuring was to coordinate and rearrange the sequence of course content, not to change the content itself, all within the structure of the existing discipline-based courses of anatomy, neuroanatomy, histology, physiology, biochemistry, microbiology/immunology and general and oral pathology. After re-examining the existing DDS biomedical sciences curriculum, the existing anatomy lecture and laboratory schedule was used as a template for the timing and sequencing of the remaining curricular course content. For example, biochemistry with nutrition and metabolism was covered within the GI, liver and endocrine systems, while molecular biology topics covered fundamentals to study cancer. This approach of curricular change had minimal impact on the discipline-based courses, since only their sequence was changed and not their content. This was especially desirable for the time when all of physiology and part of microbiology/immunology courses were taught by faculty from the College of Medicine. The above described restructured biomedical science curriculum was in place for two years (classes of 2013 and 2014).
The following is a brief synopsis of the biomedical sciences course content and sequence experienced by the Class of 2013 in the DDS Curriculum:

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Course</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>ANAT315</td>
<td>Anatomy I</td>
<td>The emphasis is on head and neck anatomy with the introduction to the basic systems (nervous, musculoskeletal, circulatory, lymphatic). The focus of the head and neck portion of the course is strongly developmental and functional with special emphasis on jaw mechanics and mastication, including the temporomandibular joint and the oral cavity and dental arches.</td>
</tr>
<tr>
<td>D1</td>
<td>ANAT316</td>
<td>Anatomy II</td>
<td>The course focuses on the body cavities, thoracic, abdominal and pelvic viscera, and their functional relationships with structures of the head and neck.</td>
</tr>
<tr>
<td>D1</td>
<td>BCMG411</td>
<td>Biochemistry</td>
<td>The focus of this course is on basic protein synthesis, structure and function, nucleic acid biochemistry, gene regulation and genetic engineering, and metabolism. Special emphasis is on the role of the organs in the metabolic regulatory mechanisms.</td>
</tr>
<tr>
<td>D1</td>
<td>HSTL451</td>
<td>Histology I and II</td>
<td>The courses emphasize cell biology and tissue structure from a functional perspective. Histology II also focuses on dental ontogeny in the context of the orofacial development.</td>
</tr>
<tr>
<td>D1</td>
<td>MIMX322</td>
<td>Microbiology and Immunology</td>
<td>The emphasis is on microbial biology and genetics, immunology, virology, oral bacterial environment, and the microbiology of oral and infectious diseases.</td>
</tr>
<tr>
<td>D1</td>
<td>ORLA312</td>
<td>Biology of the Human Dentition</td>
<td>Addresses dental morphology as well as the tissues supporting the teeth in the jaws, including their development.</td>
</tr>
<tr>
<td>D1</td>
<td>PHYB321</td>
<td>Physiology I and II</td>
<td>The emphasis of both is on all of the major organ and regulatory (neurophysiological and endocrine) systems of the body.</td>
</tr>
<tr>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>This course continues with coverage of the content in PATH421 and PATH422 by focusing on signs, symptoms, etiology, differential diagnosis and treatment of oral diseases and oral manifestations of systemic diseases.</td>
</tr>
<tr>
<td>D2</td>
<td>PCOL331</td>
<td>Pharmacology</td>
<td>The course focuses on the pharmacokinetics and metabolism of drugs and provides specific information on drugs relevant to different systems (e.g., cardiovascular).</td>
</tr>
<tr>
<td>D1</td>
<td>PHYB321</td>
<td>Physiology I and II</td>
<td>The emphasis of both is on all of the major organ and regulatory (neurophysiological and endocrine) systems of the body.</td>
</tr>
</tbody>
</table>

Continued on next page.
<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Course</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>ORLA313</td>
<td>Dental Neuroanatomy</td>
<td>The emphasis is on basic structural and functional anatomy of the central and peripheral nervous systems, including neurophysiology of mastication and orofacial pain.</td>
</tr>
<tr>
<td></td>
<td>PATH421</td>
<td>Pathology I and II</td>
<td>These two courses start with general pathology, the theoretical background of the study of all human disease. Considerable time is spent addressing injury, inflammation, repair, immune diseases, developmental and genetic diseases, neoplasia, environmental and metabolic diseases, and infectious in order to apply these concepts to the study of all body systems, including the orofacial complex. Each body system is covered within the basic concepts of the disease framework. There is a strong emphasis on the application of the concepts and background knowledge to the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D1</td>
<td>PHYB321</td>
<td>Physiology I and II</td>
<td>The emphasis of both is on all of the major organ and regulatory (neurophysiological and endocrine) systems of the body.</td>
</tr>
<tr>
<td>D2</td>
<td>OMD5424</td>
<td>Oral Pathology</td>
<td>This course continues with coverage of the content in PATH421 and PATH422 by focusing on signs, symptoms, etiology, differential diagnosis and treatment of oral diseases and oral manifestations of systemic diseases.</td>
</tr>
<tr>
<td>D2</td>
<td>PCOL331</td>
<td>Pharmacology</td>
<td>The course focuses on the pharmacokinetics and metabolism of drugs and provides specific information on drugs relevant to different systems (e.g., cardiovascular).</td>
</tr>
</tbody>
</table>

2. How does the school ensure that students have an in-depth understanding of basic biological principles?

The assessment of the students’ knowledge and understanding of the subject matter in all the courses was by the standard testing methods, such as multiple choice, short open questions, mix and match, station-to-station and/or by the short answers to an image projected on the screen or printed on the exam paper. Remediation for those students that failed any of the components of the module was offered in the form of the written and/or oral re-examinations after structured review of the material by the student.

Annual e-CBE (electronic case-based exam) is a multiple-choice exam that tests D1 to D4 student knowledge of basic biological principles and their relationship to clinical dentistry. The results as demonstrated by the scores achieved had shown marked improvement in understanding and application of the basic sciences and all areas of clinical dentistry as the students progressed through the program.

National Dental Examination Board, Part 1 results over several years attest to the increasing effectiveness of the biomedical sciences curriculum at the College. In 1999, the class average was
substantially below the national average, as was the class pass rate. By 2001, the class average and pass rate had risen to equal the national averages.

The results of the most recent D4/I2 exit surveys (classes of 2012 and 2013) regarding preparation in the various biomedical sciences are also favorable. In most disciplines, students felt their preparedness ranged from adequately prepared to well prepared.

**Supportive Documentation**

- Appendix A-4a: Table 4-A Biomedical Sciences-DDS
- Appendix C-18: National Dental Board Scores
- Appendix C-19: D4 Exit Survey (Class of 2013)
- Appendix C-20: D4 Exit Survey Summary

Available On Site

Course Syllabi
2-12 The biomedical knowledge base must emphasize that the oro-facial complex is an important anatomical area existing in a complex biological interrelationship with the entire body.

Conclusion: The UIC College of Dentistry complies with Standard 2-12.

**DDS Program**

*Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15."

Description

It is essential that students understand how the biomedical and clinical sciences interrelate in structure and function, and how these relationships play a very important role, both in health and in disease. To emphasize these relationships, the biomedical sciences were taught within a patient-centered context rather than in an abstract way. Furthermore, all the biomedical science courses strived to emphasize the orofacial complex within a systemic biological framework.

1. Describe how the oro-facial complex is integrated and emphasized in the instruction of biomedical sciences.

One of the most important goals of the DDS biomedical science curriculum revision had been to decrease the artificial separation between the orofacial and systemic biomedical, clinical and socio-behavioral/professional subject areas. These changes in curriculum fostered better support for the students’ earlier introduction to the clinical practice while following a model in which the orofacial complex was closely integrated with the rest of the body systems. For example, the traditional anatomy curriculum consisted of a separate systemic and head and neck anatomy courses. Similarly, histology was thought in two separate courses, namely general and oral histology courses. The revised curriculum in anatomy introduced the head and neck portion of Anatomy I (ANAT315) in conjunction with general introduction to the body systems. Similarly, in Histology I (HSTL415) oral histology was taught in parallel with general histology, after the introduction to cells and germ layer development.

To demonstrate the College's compliance with this standard we selected the following three topic areas as the examples of the above-described DDS curricular integration. These topics are periodontal disease, diabetes and wound healing. Each of these areas integrates foundational knowledge of the orofacial signs and symptoms that are associated with the systemic condition.
## DDS Curricular Integration Example 1.

<table>
<thead>
<tr>
<th>Periodontal Disease</th>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D1</td>
<td>DADM314</td>
<td>Comprehensive Care Ia</td>
<td>Structure and function of the periodontal ligament (including molecular and supramolecular structure of PDL fibers), introduction to AxiUm™ module regarding risk assessment for periodontal disease. Biofilms and the etiology of periodontal diseases (taught in part by research faculty).</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>DADM315</td>
<td>Comprehensive Care Ib</td>
<td>Techniques of oral hygiene instruction with a clinical exercise, behavioral aspects of oral hygiene instruction with role-playing in the clinic.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>HSTL451</td>
<td>Histology I</td>
<td>Morphology of PDL fibers and collagen turnover, cementum formation and structure, gingival tissues, including epithelium and connective tissue histology, and alveolar bone histology.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>MIMX322</td>
<td>Microbiology</td>
<td>Microbiology of Gram negative bacteria, microbiological and immunological concepts related to periodontal diseases (taught in part by College clinical faculty).</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>ORLA312</td>
<td>Biology of the Human Dentition</td>
<td>Structure and function of the periodontal ligament and the major structural and functional features of the gingival attachment apparatus.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>Includes injury, inflammation, and repair, with emphasis on oral diseases; neoplasia with emphasis on oral cancer; autoimmune disease with emphasis on those diseases that affect the orofacial complex; immune defects (congenital and acquired); nutritional diseases (i.e. scurvy); and infections (i.e. necrotizing ulcerative periodontitis, noma).</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Includes systemic diseases that may affect the orofacial complex (i.e. Diabetes mellitus, Crohn disease, blood disorders, endocrine disorders, etc.).</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Includes pertinent topics such as: epulides (i.e. focal fibrous hyperplasia, peripheral giant cell granuloma, peripheral ossifying fibroma, pyogenic granuloma, peripheral); odontogenic cysts and tumors (i.e. peripheral ameloblastoma); autoimmune diseases (i.e. mucous membrane pemphigoid); neoplasms of the gingival and periodontal area (i.e. gingival squamous cell carcinoma, lymphoma, chronic localized Langerhans cell histiocytosis); non-microbial gingivitis (i.e. foreign body gingivitis); oral manifestations of systemic diseases (i.e. leukemia).</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>DADM321</td>
<td>Comprehensive Care IIc</td>
<td>Implants and periodontal issues.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Implications of periodontal disease for the geriatric patient.</td>
</tr>
<tr>
<td>Year</td>
<td>Rubric</td>
<td>Title</td>
<td>Content Summary</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>DADM317</td>
<td>Comprehensive Care IIb</td>
<td>Includes wound healing of the periodontal ligament after non-surgical and surgical treatment; clinical significance of PDL structure at the cellular level with tooth mobility in health and disease, basic immunology applied to periodontal tissues and periodontal diseases (involves faculty with research experience in immunology and clinical experience), clinical relevance of behavior modification (nutrition, oral care habits) to periodontal care, biofilms and the etiology of periodontal diseases (taught in part by research faculty), the relationship between diabetes and increased susceptibility to periodontitis and the possible reciprocal relationship between periodontitis and the control of plasma glucose, aggressive periodontitis and periodontitis associated with systemic diseases such as defects in the expression of cell adhesion molecules (LAD I and LAD II), and other syndromes associated with severe periodontitis such as Papillon Lefevre syndrome, Hypophosphatasia, the Langerhans cell granulomatosis, and HIV. Students are also exposed to the possible association between gene polymorphisms at the IL-1 locus with an increased susceptibility to periodontitis; the incidence of bacteriemias after manipulations of periodontal tissues and the possible association with endocarditis in susceptible patients; the relationship of inflammation in the process of atheroma formation and destabilization; the association between periodontal disease and an increases in plasma pro-inflammatory cytokines; the association between atherosclerosis and elevated levels of pro-inflammatory cytokines and possible association between coronary artery disease and periodontitis; and to the relationship between pre-term low birth weight and periodontitis.</td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>DADM318</td>
<td>Comprehensive Care IIc [Patient communication]</td>
<td>Patient education with respect to oral hygiene using concepts from motivational interviewing (videotaped role playing exercises during the D3 and D4 years reinforce these concepts).</td>
<td></td>
</tr>
</tbody>
</table>
# DDS Curricular Integration Example 2

<table>
<thead>
<tr>
<th>Diabetes Mellitus</th>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D1</td>
<td>BCMG411</td>
<td>Biochemistry</td>
<td>Metabolic pathways and their regulation including glycolysis, gluconeogenesis, lipids and ketone bodies, glycogen, insulin structure, secretion and mechanism of action, glucagon, biochemical basis of type 1 and type 2 diabetes, ketoacidosis.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>DADM314</td>
<td>Comp Care Ia</td>
<td>Measurement of blood glucose.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>HSTL451</td>
<td>Histology</td>
<td>Roles of alpha and beta cells of the pancreas.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>Influence of Diabetes mellitus types 1 and 2 on healing, susceptibility to infection, and susceptibility to atherosclerosis.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>PHYB322</td>
<td>Physiology</td>
<td>Alterations of normal renal physiology (fluid and electrolytes) in diabetes, and hemostatic role of insulin.</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Diseases of endocrine pancreas including Diabetes mellitus types 1 and 2; metabolic syndrome and obesity, and the risk of Diabetes mellitus type 2; autoimmune disease and the risk of Diabetes mellitus type 1; and manifestations of Diabetes mellitus on multiple body systems.</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Oral manifestations of Diabetes mellitus types 1 and 2</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>OSUR320</td>
<td>Pain Control I</td>
<td>Importance of diabetes in differential diagnosis of loss of consciousness, seizure, hypoglycemia, syncope.</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>OSUR323</td>
<td>Introduction to Oral and Maxillofacial Surgery</td>
<td>Carbohydrate metabolism, insulin, type 1 and type 2 diabetes, ketoacidosis, drug therapy, dehydration, small vessel disease, infection, diet, medical management, dental treatment modification.</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>PCOL331</td>
<td>Pharmacology</td>
<td>Insulin and oral anti-diabetic drugs.</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>PEDD334</td>
<td>Introduction to Pediatric Dentistry</td>
<td>Oral manifestations of Diabetes mellitus in children.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>DADM321</td>
<td>Compe Care I</td>
<td>Systemic effects of Diabetes mellitus and implant care.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>DADM341</td>
<td>Dental Therapeutics</td>
<td>Pathophysiolo\y and oral implications, oral antidiabetic drugs (insulin secretagogues and sensitizers, alpha-glucosidase inhibitors), insulin therapy.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>OMDS334</td>
<td>Clinical Oral Pathology</td>
<td>Oral manifestations of Diabetes mellitus including but not limited to candidiasis, sialosis, and dry mouth.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Impact of diabetes on oral health of the geriatric patient.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>OSUR334</td>
<td>Internal Medicine</td>
<td>Types, laboratory findings, blood sugar levels, metabolic pathways, pancreatic function and islets of Langerhans, diet and exercise, small vessel disease, infections, organ complications (ocular, vascular, cardiac, neurological), medical management, dental treatment modifications.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>PEDD337</td>
<td>Hospital Dentistry</td>
<td>Diabetes mellitus and medical emergencies.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>PEDD338</td>
<td>Pediatric Dentistry Clinic I</td>
<td>Special needs of the diabetic pediatric patient (e.g., scheduling appointments based on their eating schedule)</td>
</tr>
</tbody>
</table>

Continued on next page.
### Diabetes Mellitus continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D4</td>
<td>DBSC345</td>
<td>Special Patient Care</td>
<td>Diabetes mellitus within the context of geriatric patient care.</td>
</tr>
<tr>
<td>D4</td>
<td>OSUR342</td>
<td>Advanced Oral and Maxillofacial Surgery</td>
<td>Insulin and metabolism, beta cells, epinephrine, diet and exercise, small vessel disease, infections, medical management, dental treatment modifications.</td>
</tr>
<tr>
<td>D4</td>
<td>OSUR343</td>
<td>Medical Emergencies</td>
<td>Insulin reaction, glucose sources, differential diagnosis of loss of consciousness and seizure.</td>
</tr>
</tbody>
</table>

### DDS Curricular Integration Example 3

#### Wound Healing

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>HSTL451</td>
<td>Histology I</td>
<td>Morphology of PDL fibers and collagen turnover, cementum formation and structure, gingival tissues, including epithelium and connective tissue histology, alveolar bone microanatomy.</td>
</tr>
<tr>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>Detailed examination of injury, inflammation, necrosis, and repair at the molecular, cellular and tissue levels, within framework of the comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Application of the principles of injury, inflammation, and repair (covered in PATH421) to the diseases of all the body systems. For example, these principles are applied to healing after a myocardial infarction, or to chronic inflammation leading to liver cirrhosis.</td>
</tr>
<tr>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Application of the principles of injury, inflammation, and repair (covered in PATH421) to the diseases of the orofacial complex.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM317</td>
<td>Comp Care Iib</td>
<td>Biofilms and the etiology of periodontal disease (taught in part by research faculty), wound healing of the periodontal ligament after non-surgical and surgical treatment, clinical significance of PDL structure at the cellular level with tooth mobility in health and disease, basic immunology applied to periodontal tissues and periodontal diseases (involves faculty with research experience in immunology and clinical experience), and clinical relevance of behavior modification (nutrition, oral care habits) to periodontal care.</td>
</tr>
<tr>
<td>D2</td>
<td>PCOL331</td>
<td>Pharmacology</td>
<td>Steroidal and non-steroidal anti-inflammatory medications.</td>
</tr>
<tr>
<td>D3</td>
<td>DADM321</td>
<td>Comp Care IIic</td>
<td>Implants and wound healing</td>
</tr>
<tr>
<td>D3</td>
<td>DADM341</td>
<td>Dental Therapeutics</td>
<td>Clinical application of steroidal and non-steroidal anti-inflammatory medications.</td>
</tr>
<tr>
<td>D3</td>
<td>PEDD337</td>
<td>Hospital Dentistry</td>
<td>Wound healing in the context of medical emergencies.</td>
</tr>
</tbody>
</table>
The above examples of two systemic disorders diabetes and wound healing demonstrate how the courses enabled the integration of the basic biomedical, socio-behavioral/professional and clinical sciences in a patient-centered context, and thus ensured that the orofacial complex was taught within the context of the entire body. The DDS curriculum therefore ensured that the College was in compliance with Standard 2-12.

In general, assessment of the students’ knowledge and understanding of the material in all the courses discussed above was by standard testing methods, such as multiple choice, short answer questions, or extended-choice matching questions. In Pathology and Oral Pathology, there were weekly online quizzes intended as formative assessments, and examinations that served as summative assessments. In the three pathology courses, there was a strong emphasis on virtual cases in the weekly online quizzes and the exams. These cases included clinical, microscopic, or radiographic images printed in the exam or displayed within the online quizzes.

National Dental Examination Board, Part 1 results over the last several years attest to the increasing effectiveness of the biomedical sciences curriculum at the College. In 1999, the class average was substantially below the national average, as was the class pass rate. By 2001, the class average and pass rate had risen to equal the national averages.

The results of the most recent D4 exit survey regarding preparation in the various biomedical sciences are also favorable. In most disciplines, students felt their preparedness ranged from adequately prepared to well-prepared.

Supportive Documentation
Appendix A-3a: Table 3-A Schedule of Courses-DDS
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-18: National Dental Board Scores
Appendix C-19: D4 Exit Survey (Class of 2013)
Appendix C-20: D4 Exit Survey Summary
Appendix C-21: Competency Statements 2010

Available On Site
Course Syllabi
2-13 In-depth information on abnormal biological conditions must be provided to support a high level of understanding of the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis for oral and oral-related diseases.


**DDS Program**

*(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)*

**Description**

The courses that include biomedical sciences along with their horizontal and vertical integration with clinical, community and behavioral sciences exemplify critical and essential reinforcement in the DDS curriculum of the biomedical science knowledge.

1. Summarize the in-depth information presented to students on abnormal biologic conditions, including etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis for oral and oral-related diseases.

The majority of abnormal biology in the DDS curriculum was discussed in the Pathology I and II courses (PATH421 and PATH422), which included discussions of important considerations in developmental/genetic, allergic/immune, metabolic, infectious, environmental/reactive, and neoplastic diseases of all major organ systems. Special emphasis was placed on information that was important for the practice of comprehensive dental medicine. Oral Pathology (OMDS424) and Clinical Oral Pathology (OMDS334) courses focused specifically on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of oral and oral-related diseases. Most of the other biomedical science courses also discussed abnormal biological conditions. Some examples of these courses are:

Anatomy I and II (ANAT315, ANAT316) had a strong developmental focus and a concomitant focus on congenital disorders in all body systems. Students were routinely exposed to the physical ramifications of these and other disorders during the anatomy laboratory sessions.

Physiology I and II (PHYB321, PHYB322) discussed pathophysiology and disease of the various organ systems, as for example diabetes, diseases leading to ion and acid-base imbalances in the context of the urinary system, diseases associated with the principal endocrine organs, and CNS pathologies such as common motor disorders, Parkinson’s and Huntington’s disease, epilepsy, aphasias, and degenerative diseases.

Dental Neuroanatomy (ORLA313) exposed students to the issue of orofacial pain.
Genetics and genetic diseases were discussed in Biochemistry (BCM411), Microbiology and Immunology (MIMX322), Comprehensive Care IIb - Periodontology component (DADM317), Pathology I (PATH421), and Oral Pathology (OMDS424).

Biochemistry (BCM411) covered molecular mechanisms of cancer and metabolic and nutritional disorders such as diabetes. Throughout this course, clinical conditions were used to enhance the biochemical topic under discussion. A few examples included protein structure/collagen/osteogenesis imperfecta and scurvy, purine metabolism/gout, amino acid metabolism/phenylketonuria and maple syrup urine disease.

Microbiology and Immunology (MIMX322) included the detailed discussion of infectious disease agents (particularly those related to oral disease or oral transmission), viruses and retroviruses, hypersensitivity, autoimmunity, malignancies, and immuno-deficiency.

The Comprehensive Care Ia, Ib, Iic, Ilc (DADM314, DADM315, DADM317, DADM321) courses which are/were offered throughout the four year DDS curriculum, strive to incorporate all the information required in this Standard within the context of patient care (see also Standard 2-12). A similar example is Diagnosis and Treatment Planning (REST323). In this course, the main focus was on the patient history taking, oral and systemic diseases and their etiologies, and patient anxiety in order to generate the correct differential diagnosis and appropriate treatment plan. In summary, all the clinical courses emphasize the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of the relevant oral and oral-related diseases.

In order to further demonstrate compliance we selected the following seven topic areas that represent the examples of the above-described curricular integration of the orofacial signs and symptoms with the high level of understanding of the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of oral and oral-related diseases. These topic areas are caries, periodontal disease, oral cancer, hemostasis and thrombosis, diabetes, TMD and HIV/AIDS.

Curriculum Integration Example 1

<table>
<thead>
<tr>
<th>Caries</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>DADM314</td>
<td>Comprehensive Care Ia</td>
<td>Introduction to AxiUm™ module regarding risk assessment for caries.</td>
</tr>
<tr>
<td>D1</td>
<td>DADM315</td>
<td>Comprehensive Care Ib</td>
<td>Etiology and caries progression patterns, caries risk assessment, assessment of carious infections, surgical management of carious defects.</td>
</tr>
<tr>
<td>D1</td>
<td>MIMX322</td>
<td>Microbiology and Immunology</td>
<td>Pathogens that produce caries.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM316</td>
<td>Comprehensive Care Iia</td>
<td>Detection and assessment of carious lesions, excavation of carious lesions.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM317</td>
<td>Comprehensive Care Iib</td>
<td>Patient interaction, behavior modification and compliance with respect to caries prevention and treatment.</td>
</tr>
<tr>
<td>D2</td>
<td>PEDD334</td>
<td>Introduction to Pediatric Dentistry</td>
<td>Prevention and management of caries.</td>
</tr>
</tbody>
</table>

Continued on next page.
### Caries continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Sequelae of untreated caries, including such conditions as periapical granuloma, periapical cyst, periapical abscess, draining fistula, periostitis ossificans, Ludwig angina, osteomyelitis, etc. This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of these diseases, which are all part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D3</td>
<td>DBSC310</td>
<td>Public Health</td>
<td>Health care disparities, cultural awareness.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Caries as it relates to a geriatric patient.</td>
</tr>
<tr>
<td>D3</td>
<td>REST351-</td>
<td>Restorative Junior Clinics</td>
<td>Oral hygiene instructions, caries risk assessment based on the medical condition, eating habits and possible genetic component, caries diagnosis, its excavation and restoration of the tooth morphology with direct and indirect dental restorations.</td>
</tr>
<tr>
<td>D4</td>
<td>REST361-</td>
<td>Restorative Senior Clinics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DBSC321</td>
<td>Dental Ethics</td>
<td>Access to dental care and rendering care.</td>
</tr>
</tbody>
</table>

### Curriculum Integration Example 2

#### Periodontal Disease

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>DADM314</td>
<td>Comprehensive Care Ia</td>
<td>Structure and function of the periodontal ligament (including molecular and histological structure of PDL fibers), introduction to AxiUm™ module regarding risk assessment of the periodontal disease; biofilms and the etiology of periodontal diseases (taught in part by research faculty).</td>
</tr>
<tr>
<td>D1</td>
<td>DADM315</td>
<td>Comprehensive Care Ib</td>
<td>Oral hygiene instruction including its behavioral aspects with role-playing in the clinic.</td>
</tr>
<tr>
<td>D1</td>
<td>HSTL451</td>
<td>Histology I</td>
<td>Histology of the alveolar bone, cementum, gingival tissue including its epithelium and connective tissue, and PDL fibers and collagen turnover.</td>
</tr>
<tr>
<td>D1</td>
<td>MIMX322</td>
<td>Microbiology</td>
<td>Microbiology of Gram negative bacteria, microbiological and immunological concepts related to periodontal diseases (taught in part by College clinical faculty).</td>
</tr>
<tr>
<td>D1</td>
<td>ORLA312</td>
<td>Biology of the Human Dentition</td>
<td>Structure and function of the periodontal ligament including gingival attachment apparatus.</td>
</tr>
</tbody>
</table>

Continued on next page.
# Periodontal Disease continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>Injury, inflammation, and repair, neoplasia, autoimmune disease, immune defects (congenital and acquired), nutritional diseases (i.e. scurvy), infections (i.e. necrotizing ulcerative periodontitis, noma). This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D1</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Systemic diseases that may affect the orofacial complex (i.e. Crohn disease, blood disorders, endocrine disorders) This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM317</td>
<td>Comprehensive Care Iib</td>
<td>Biofilms and the etiology of periodontal disease (taught in part by research faculty). Wound healing of the periodontal ligament after non-surgical and surgical treatment, clinical significance of PDL structure at the cellular level with tooth mobility in health and disease, basic immunology applied to periodontal tissues and periodontal disease (involves faculty with research experience in immunology and clinical experience), clinical relevance of behavior modification (nutrition, oral care habits) to periodontal care.</td>
</tr>
<tr>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Epulides (i.e. focal fibrous hyperplasia, peripheral giant cell granuloma, peripheral ossifying fibroma, pyogenic granuloma, peripheral odontogenic cysts and tumors (i.e. peripheral ameloblastoma), autoimmune diseases (i.e. mucous membrane pemphigoid), neoplasms of the gingival and periodontal area (i.e. gingival squamous cell carcinoma, lymphoma, chronic localized Langerhans cell histiocytosis), non-microbial gingivitis (i.e. foreign body gingivitis), and oral manifestations of systemic diseases (i.e. leukemia). Special emphasis is given to the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of these diseases, which are all part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM318</td>
<td>Comprehensive Care Iic</td>
<td>Patient education with respect to oral hygiene using concepts from motivational interviewing (videotaped role playing exercises during the D3 and D4 years reinforcing these concepts).</td>
</tr>
</tbody>
</table>

Continued on next page.
<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Epulides (i.e. focal fibrous hyperplasia, peripheral giant cell granuloma, peripheral ossifying fibroma, pyogenic granuloma, peripheral odontogenic cysts and tumors (i.e. peripheral ameloblastoma), autoimmune diseases (i.e. mucous membrane pemphigoid), neoplasms of the gingival and periodontal area (i.e. gingival squamous cell carcinoma, lymphoma, chronic localized Langerhans cell histiocytosis), non-microbial gingivitis (i.e. foreign body gingivitis), and oral manifestations of systemic diseases (i.e. leukemia). Special emphasis is given to the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of these diseases, which are all part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM318</td>
<td>Comprehensive Care IIc [Patient communication]</td>
<td>Patient education with respect to oral hygiene using concepts from motivational interviewing (videotaped role playing exercises during the D3 and D4 years reinforcing these concepts).</td>
</tr>
<tr>
<td>D3</td>
<td>DADM321</td>
<td>Comprehensive Care IIIc</td>
<td>Implants and periodontal issues.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Implications of periodontal disease for the geriatric patient.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Implications of periodontal disease for the geriatric patient.</td>
</tr>
</tbody>
</table>
## Curriculum Integration Example 3

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>ANAT315</td>
<td>Anatomy I</td>
<td>Spread of oral cancer via lymphatic drainage.</td>
</tr>
<tr>
<td>D1</td>
<td>BCMG411</td>
<td>Biochemistry</td>
<td>Introduction to cancer with foundational knowledge of oral cancer as the example.</td>
</tr>
<tr>
<td>D1</td>
<td>DADM314</td>
<td>Comprehensive Care Ia</td>
<td>Introduction to the AxiUm™ module regarding risk assessment for oral cancer.</td>
</tr>
<tr>
<td>D1</td>
<td>DADM315</td>
<td>Comprehensive Care Ib</td>
<td>Oral health care compliance; smoking cessation, discussion of recent articles re: oral cancer.</td>
</tr>
<tr>
<td>D1</td>
<td>MIMX322</td>
<td>Microbiology/Immunology</td>
<td>Tumor immunology and malignancy.</td>
</tr>
<tr>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>Molecular, cellular, clinical, diagnostic, behavioral, environmental, genetic, and prognostic aspects of neoplasia. This includes an emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of neoplasms that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM317</td>
<td>Comprehensive Care IIb</td>
<td>Smoking cessation, motivational interview to reinforce the need and relevance of skills in behavior modification.</td>
</tr>
<tr>
<td>D2</td>
<td>DADM318</td>
<td>Comprehensive Care IIc</td>
<td>Patient communication of cancer patients using oral cancer as an example.</td>
</tr>
<tr>
<td>D2</td>
<td>PATH424</td>
<td>Oral Pathology</td>
<td>Malignancies of epithelium, connective tissue and blood that occur in or metastasize to the oral and maxillofacial complex; emphasis on oral squamous cell carcinoma, salivary gland tumors and odontogenic tumors; premalignant conditions (i.e. dysplasia, oral submucous fibrosis); conditions that impart or appear to impart additional risk of malignancy (i.e. lichen planus, Paget disease, fibrous dysplasia); and oral consequences of cancer therapy. Includes an emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of these diseases.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS334</td>
<td>Clinical Oral Pathology</td>
<td>Oncology, early recognition and diagnosis of malignant disease in the head and neck and oral cavity, oral and dental care prior to, during and following the cancer therapy.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Oral cancer and the geriatric patient.</td>
</tr>
</tbody>
</table>
## Curriculum Integration Example 4

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>BCMG411</td>
<td>Biochemistry</td>
<td>Biochemistry of serine proteases, activation of the coagulation reactions and thrombin generation and inhibition, fibrin generation, role of platelets, heparin, aspirin and cyclooxygenase inhibition, warfarin and vitamin K, risk factors including cholesterol and atherosclerosis.</td>
</tr>
<tr>
<td>D1</td>
<td>HSTL451</td>
<td>Histology</td>
<td>Platelet formation, structure and function, endothelium and circulatory system.</td>
</tr>
<tr>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>Hemodynamics, shock, disorders of coagulation, blood vessel diseases, arteriosclerosis, atherosclerosis, thrombi, emboli, aneurysms. This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Cardiovascular pathology. This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine. Example: infectious endocarditis.</td>
</tr>
<tr>
<td>D2</td>
<td>PCOL331</td>
<td>Pharmacology</td>
<td>Basic mechanisms and actions of heparin, coumarin, antiplatelet drugs, fibrinolytic drugs, and anti-atherosclerotic drugs.</td>
</tr>
<tr>
<td>D2</td>
<td>PEDD334</td>
<td>Introduction to Pediatric Dentistry</td>
<td>Implications of coagulation disorders for pediatric dentistry.</td>
</tr>
<tr>
<td>D2</td>
<td>OSUR323</td>
<td>Introduction to Oral and Maxillofacial Surgery</td>
<td>Signs and symptoms of bleeding and clotting, antiplatelet (aspirin, Plavix) and anticoagulant (heparin, Lovenox, Coumadin) drugs, vitamin K, medical management, dental treatment modification.</td>
</tr>
<tr>
<td>D3</td>
<td>DADM341</td>
<td>Dental Therapeutics</td>
<td>Anticoagulation considerations in the dental patients, risks for bleeding and clotting, warfarin and INR, heparin and aPTT, low molecular weight heparin, drug interactions.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS334</td>
<td>Clinical Oral Pathology</td>
<td>Bleeding disorders associated with hematopoietic malignancies.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Coagulation disorders and their impact on the geriatric patient.</td>
</tr>
</tbody>
</table>

Continued on next page.
### Hemostasis and Thrombosis continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3</td>
<td>DADM341</td>
<td>Dental Therapeutics</td>
<td>Anticoagulation considerations in the dental patients, risks for bleeding and clotting, warfarin and INR, heparin and aPTT, low molecular weight heparin, drug interactions.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS334</td>
<td>Clinical Oral Pathology</td>
<td>Bleeding disorders associated with hematopoietic malignancies.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Coagulation disorders and their impact on the geriatric patient.</td>
</tr>
<tr>
<td>D3</td>
<td>OSUR334</td>
<td>Internal Medicine</td>
<td>Hemostatic mechanisms, platelet and coagulation disorders including hemophilia and von Willebrand's disease, anti-platelet and anticoagulant drugs, affect of liver disease on hemostasis, dental treatment/management of medically compromised patients.</td>
</tr>
<tr>
<td>D3</td>
<td>PEDD337</td>
<td>Hospital Dentistry</td>
<td>Coagulation issues in the context of medical emergencies.</td>
</tr>
<tr>
<td>D3</td>
<td>PEDD338</td>
<td>Pediatric Dentistry Clinic I</td>
<td>Special needs of the pediatric patient with coagulation disorders.</td>
</tr>
<tr>
<td>D4</td>
<td>DBSC345</td>
<td>Special Patient Care</td>
<td>Coagulation disorders and the geriatric patient.</td>
</tr>
<tr>
<td>D4</td>
<td>OSUR342</td>
<td>Advanced Oral and Maxillofacial Surgery</td>
<td>Anti-platelet and anticoagulant drugs, medical management and dental treatment modifications.</td>
</tr>
</tbody>
</table>

### Curriculum Integration Example 5

<table>
<thead>
<tr>
<th>Diabetic Mellitus</th>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>D1</td>
<td>BCMG411</td>
<td>Biochemistry</td>
<td>Metabolic pathways and their regulation including glycolysis, gluconeogenesis, lipids and ketone bodies, glycogen, insulin structure, secretion and mechanism of action, glucagon, biochemical basis of type 1 and type 2 diabetes, ketoacidosis.</td>
</tr>
<tr>
<td>D1</td>
<td>D1</td>
<td>DADM314</td>
<td>Comprehensive Care Ia</td>
<td>Measurement of blood glucose.</td>
</tr>
<tr>
<td>D1</td>
<td>D1</td>
<td>HSTL451</td>
<td>Histology</td>
<td>Roles of the pancreatic alpha and beta cells.</td>
</tr>
<tr>
<td>D1</td>
<td>D1</td>
<td>PHYB322</td>
<td>Physiology</td>
<td>Renal pathophysiology (fluid and electrolytes) in diabetes, hemostatic role of insulin.</td>
</tr>
<tr>
<td>D1</td>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>The effect of Diabetes mellitus types 1 and 2 on healing, susceptibility to infection, and susceptibility to atherosclerosis.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Diseases of endocrine pancreas including Diabetes mellitus types 1 and 2, the effect of Diabetes mellitus on body system, metabolic syndrome, obesity and the risk of developing Diabetes mellitus. This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>OSUR320</td>
<td>Pain Control I</td>
<td>Importance of Diabetes mellitus as etiology of loss of consciousness, seizure, hypoglycemia and syncope.</td>
</tr>
<tr>
<td>D2</td>
<td>OSUR323</td>
<td>Introduction to Oral and Maxillofacial Surgery</td>
<td>Carbohydrate metabolism, insulin, type 1 and type 2 Diabetes mellitus, ketoacidosis, dehydration, small vessel disease, infection, diet, medical management and dental treatment modification.</td>
</tr>
<tr>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Oral manifestations of Diabetes mellitus types 1 and 2. This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>D2</td>
<td>PCOL331</td>
<td>Pharmacology</td>
<td>Insulin and oral anti-diabetic drugs.</td>
</tr>
<tr>
<td>D2</td>
<td>PEDD334</td>
<td>Introduction to Pediatric Dentistry</td>
<td>Oral manifestations of diabetes in children.</td>
</tr>
<tr>
<td>D3</td>
<td>DADM321</td>
<td>Comprehensive Care IIIc</td>
<td>Systemic effects and implant care.</td>
</tr>
<tr>
<td>D3</td>
<td>DADM341</td>
<td>Dental Therapeutics</td>
<td>Pathophysiology and oral implications, oral anti-diabetic drugs (insulin secretagogues and sensitzers, alpha-glucosidase inhibitors) and insulin therapy.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS334</td>
<td>Clinical Oral Pathology</td>
<td>Oral manifestations of Diabetes mellitus including but not limited to infections, sialosis, xerostomia.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS336</td>
<td>Introduction to Geriatrics</td>
<td>Impact of diabetes on the oral health of the geriatric patient.</td>
</tr>
<tr>
<td>D3</td>
<td>OSUR334</td>
<td>Internal Medicine</td>
<td>Laboratory findings, blood sugar levels, metabolic pathways, pancreatic function and islets of Langerhans, diet and exercise, small vessel disease, infections, organ complications (ocular, vascular, cardiac, neurological), medical management and dental treatment modifications.</td>
</tr>
<tr>
<td>D3</td>
<td>PEDD337</td>
<td>Hospital Dentistry</td>
<td>Diabetes mellitus within the context of medical emergencies.</td>
</tr>
<tr>
<td>D3</td>
<td>PEDD338</td>
<td>Pediatric Dentistry Clinic I</td>
<td>Special needs of the diabetic pediatric patient such as the impact of scheduling appointments based on the eating schedule of the diabetic patients.</td>
</tr>
</tbody>
</table>
### Diabetes Mellitus continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D4</td>
<td>DBSC345</td>
<td>Special Patient Care</td>
<td>Diabetes mellitus within the context of the geriatric patient care.</td>
</tr>
<tr>
<td>D4</td>
<td>OSUR342</td>
<td>Advanced Oral and Maxillofacial Surgery</td>
<td>Insulin and its metabolism, beta cells, epinephrine, diet and exercise, small vessel disease, infections, medical management and dental treatment modifications.</td>
</tr>
<tr>
<td>D4</td>
<td>OSUR343</td>
<td>Medical Emergencies</td>
<td>Insulin reaction, glucose sources, differential diagnosis of loss of consciousness and seizure.</td>
</tr>
</tbody>
</table>

### Curriculum Integration Example 6

<table>
<thead>
<tr>
<th>TMD</th>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMD</td>
<td>D1</td>
<td>ANAT315</td>
<td>Anatomy I</td>
<td>TMJ disc disorders and clinical significance, observations of TMJ discs in the anatomy laboratory.</td>
</tr>
<tr>
<td>TMD</td>
<td>D1</td>
<td>HSTL451</td>
<td>Histology I</td>
<td>Histology of the displaced TMJ disc.</td>
</tr>
<tr>
<td>TMD</td>
<td>D1</td>
<td>REST310</td>
<td>Occlusion</td>
<td>Etiology of TMD as it relates to dental occlusion.</td>
</tr>
<tr>
<td>TMD</td>
<td>D2</td>
<td>DADM318</td>
<td>Comprehensive Care IIc [Occlusal Appliance Therapy component]</td>
<td>The role of inter-occlusal appliance in management of intra- and extra-capsular TMDs.</td>
</tr>
<tr>
<td>TMD</td>
<td>D2</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Bone and joint pathology: osteoarthritis, rheumatoid arthritis with special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td>TMD</td>
<td>D4</td>
<td>DBSC321</td>
<td>Dental Ethics</td>
<td>Patients being compromised by pain and fear.</td>
</tr>
<tr>
<td>TMD</td>
<td>D4</td>
<td>OMD5345</td>
<td>TMJ Disorders</td>
<td>Review of anatomy and neurophysiology related to TMD, neurophysiology of pain, pathophysiology of TMD, conservative management of TMD.</td>
</tr>
</tbody>
</table>
## Curriculum Integration Example 7

<table>
<thead>
<tr>
<th>HIV/AIDS</th>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D1</td>
<td>PATH421</td>
<td>Pathology I</td>
<td>Infectious diseases with emphasis on HIV-AIDS-related infections; malignancies related to HIV-AIDS; diseases of the immune system; HIV-AIDS and its manifestations in multiple organ systems. This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of diseases that are part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>PATH422</td>
<td>Pathology II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>DADM317</td>
<td>Comprehensive Care Iib [Periodontology component]</td>
<td>Relationship between HIV and periodontal disease.</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>OMDS424</td>
<td>Oral Pathology</td>
<td>Oral manifestations and clinical symptoms of HIV. This includes a special emphasis on the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of these diseases, which are all part of the practice of comprehensive dental medicine.</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>DADM320</td>
<td>Comprehensive Care IIIb, IIIc, IVb, IVc</td>
<td>Taped role-playing by students obtaining sensitive information, including HIV status, during patient interviews.</td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>DADM321</td>
<td>Special Patient Care</td>
<td>Ethical issues concerning HIV patients.</td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>DADM333</td>
<td>Dental Ethics</td>
<td>Ethical issues concerning HIV patients.</td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>DADM334</td>
<td>Spang Clinic Rotation</td>
<td>Initial exposure of students to HIV patients, and surveying for pre- and post-exposure knowledge of HIV/AIDS (epidemiology, modes of transmission, relationships to other disorders) and attitudes toward HIV patients; student interaction with patients in various stages of disease, pathology related to HIV, biopsy of selected lesions, experience with disorders resulting from anti-retroviral drug treatment such as ulcerations, cervical tooth cavities, impaired salivation, periodontal disease, viral and fungal infections and other disorders common to HIV patients.</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>Spang Clinic Rotation</td>
<td>Further experiences providing clinical care for HIV patients.</td>
<td></td>
</tr>
</tbody>
</table>

The clinical disorders listed above are examples of relating the systemic disease/disorder to their orofacial signs and symptoms with major impact on oral health care. Once the students are involved in patient care, the etiology, epidemiology, differential diagnosis, and pathogenesis of oral and oral-related diseases are integrated when the students take medical histories, document information in AxiUm and write their portfolios. This part of the curriculum is critical for the students to attain their
clinical competence. Educational systems are therefore in place to ensure compliance with Standard 2-13.

The assessment of the students' knowledge and understanding of the subject matter in all the courses is by means of audience response clicker, standard testing methods, such as multiple choice, extended matching questions, short open-ended questions, mix and match, station-to-station and/or by short answers to an image projected on the screen or printed on the exam paper. There are weekly quizzes that serve as formative assessments, and two final exams that serve as summative assessments: a Fact Exam and a Clinical Case exam. Remediation to those students who fail any of the components of the module is offered in the form of the written and/or oral re-examination(s).

Supportive Documentation
Appendix A-3a: Table 3-A Schedule of Courses-DDS
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-18: National Dental Board Scores
Appendix C-19: D4 Exit Survey (Class of 2013)
Appendix C-20: D4 Exit Survey Summary
Appendix C-21: Competency Statements 2010

Available On Site
Course Syllabi
Graduates must be competent in the application of biomedical science knowledge in the delivery of patient care.

Conclusion: The UIC College of Dentistry complies with Standard 2-14.

**DDS Program**

(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)

**Description**

The biomedical sciences in the DDS curriculum were taught in the context of providing the foundational knowledge relevant and applicable to the patient dental care. The knowledge information presented emphasized the importance of staying current with advances in science and technology by providing the didactic foundation that supports life-long learning.

Most of the faculty who participate(d) in teaching the biomedical science courses (both from the College of Dentistry and from the College of Medicine) are active in research and aware of the latest advances in their fields. This ensures that the most current information is presented to the students with the understanding of the biomedical sciences as being fundamental to successful clinical practice. An example is the subject of Biochemistry (BCMG411) where a presentation on eicosanoids incorporated the latest available information on COX-2 inhibitors at the same time as the stories regarding these medications were appearing in the media. In addition, specific fields of genomics and proteomics, where many new advances related to the clinical practice are made, have already been added to the relevant parts of the curriculum.

The curriculum not only provides the students with the most recent and relevant knowledge of the biomedical sciences as it relates to clinical practice and oral health care, but also with the process of its application. During the process of initiating this educational approach, all the Course Directors were surveyed to determine if their courses included the content and exercises specifically aimed at providing experiences that would improve students’ abilities to assess and implement new knowledge and therapies into their practice.
1. Describe the mechanism for incorporating and integrating new medical and biologic knowledge into the provisions of dental care.

The table below provides examples of exercises for developing the skills required to apply advances in biology and to integrate new medical knowledge and therapies. Some courses, particularly Comprehensive Care I-IV, place an emphasis on application of knowledge through case presentations, literature searches and paper presentations, all applying principles of evidence-based dentistry.

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>D2</td>
<td>D3</td>
<td>D4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>PATH421 OMDS424</td>
<td>Oral Pathology</td>
<td>Exploration of the molecular, cellular, clinical, therapeutic, and prevention aspects of neoplasia, (especially oral cancer), led by the instructors who are active in laboratory research of molecular aspects of oral cancer, clinical trials of cancer screening technologies, and tobacco research. All have peer-reviewed publications in these fields.</td>
</tr>
<tr>
<td>D1</td>
<td>BCMG411</td>
<td>Biochemistry</td>
<td>Genetic engineering and recombinant DNA technology, and their use in diagnosis and gene therapy.</td>
</tr>
<tr>
<td>D2</td>
<td>PATH422</td>
<td>Pathology II</td>
<td>Critical examination of the literature that attempts to establish “cause and effect” between periodontitis and cardiovascular disease, with an instructor who has peer-reviewed publication on the topic.</td>
</tr>
<tr>
<td>D2</td>
<td>REST323</td>
<td>Treatment Planning</td>
<td>Literature search and EBD presentations related to implant therapy and periodontal disease.</td>
</tr>
<tr>
<td>D2</td>
<td>ENDO221</td>
<td>Pre-Patient Care in Endodontics</td>
<td>Calcium Hydroxide/MTA, canal irrigation, apexogenesis, apexification, pulp regeneration, microbiology in endodontics, pulp and periapical pathology, and healing and repair all based on the evidence-based biomedical research.</td>
</tr>
<tr>
<td>D2</td>
<td>ENDO352</td>
<td>Endodontic Clinic I</td>
<td>Students use their diagnostic skills to present a clinical case and defend their pulpal and periapical diagnosis along with an endodontic treatment plan. Students are required to incorporate EBD in discussion of all aspects of the case.</td>
</tr>
<tr>
<td>D2</td>
<td>ENDO331</td>
<td>Plenary sessions - Clinical Endodontics</td>
<td>Interactive didactic sessions focusing on the clinical classification of pulpal and periapical diseases including; Van Hassel’s theory of pulpal death, anesthesia problems/techniques and anesthetic mode of action at the molecular level, vital pulp therapy, and apexogenesis/regeneration/apexification,</td>
</tr>
</tbody>
</table>

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Continued from previous page.

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2</td>
<td>DADM317</td>
<td>Comprehensive Care IIb</td>
<td>Specific gene defects and their mode of inheritance (where known) for syndromes associated with severe periodontitis (e.g., Papillon Lefèvre syndrome, Hypophosphatasia and the Langerhans cell granulomatosis). Association between gene polymorphisms at the IL-1 locus and an increased susceptibility to periodontitis.</td>
</tr>
<tr>
<td>D3</td>
<td>REST351-353</td>
<td>Restorative Junior and Senior Clinics</td>
<td>EBD component in which students formulate a PICO question and support their conclusions with a search of peer-reviewed literature.</td>
</tr>
<tr>
<td>D4</td>
<td>REST351-353</td>
<td>Restorative Junior and Senior Clinics</td>
<td>Oral case presentations where students present and defend a case they have completed (students are required to incorporate EBD on all aspect of the case).</td>
</tr>
<tr>
<td>D3</td>
<td>ENDO353</td>
<td>Endodontic Clinic II</td>
<td>Review of the anatomy, pathophysiology and neurophysiology related to TMD, and conservative management of TMD. Emphasis is on future learning skills regarding diagnosis, management and referral process of chronic orofacial pain patients.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS345</td>
<td>TMJ Disorders</td>
<td>Genetic basis of autoimmune and innate immunity/disease, influence of genetic variation in protein expression and cell signaling, genomics and proteomics and use of assay technology in drug development.</td>
</tr>
<tr>
<td>D3</td>
<td>OMDS334</td>
<td>Clinical Oral Pathology</td>
<td>Written case presentation following the American Board of Endodontics format where students must use EBD model to generate PICO question and literature search to formulate particular aspect of management of the clinical case they are presenting.</td>
</tr>
<tr>
<td>D4</td>
<td>ENDO363</td>
<td>Endodontic Clinic III</td>
<td>Advances in dental materials, focusing on emerging technologies and materials.</td>
</tr>
</tbody>
</table>

One essential goal of the biomedical science curriculum is to prepare the students with the skills to master the process of staying current in advances of biomedical sciences throughout their life and to ensure that they are able to apply those to their clinical knowledge and skills. The general format of the Comprehensive Care courses and the extensive use of portfolios ensure that the material taught is current as well as that the application of the fundamentals is reinforced in authentic pre-patient care scenarios and during the patient care as well.

2. Describe how students are assessed in the application of biomedical knowledge in the treatment of patients.

The assessment of the students’ knowledge and understanding of the subject matter in all the modules is by the standard testing methods, such as multiple choice, short open written questions, mix and match, oral examinations/presentations, station-to-station and/or with the short answers to an image projected on the screen (such as a radiograph, or a photograph of a lesion) or printed on
the exam paper. There are weekly quizzes that serve as formative assessments, and two final exams that serve as summative assessments: a Fact Exam and a Clinical Case exam. In these courses, there is also formative assessment of student understanding during interactive didactic sessions by means of clicker responses. Remediation to those students who fail any of the components of the module is offered in the form of written and/or oral re-examination. The students are also required to achieve a passing score on the electronic Case-Based Examination given each spring.

**Supportive Documentation**

- Appendix A-3a: Table 3-A Schedule of Courses-DDS
- Appendix C-2: COD Predoctoral Graduate Competencies 2012
- Appendix C-18: National Dental Board Scores
- Appendix C-19: D4 Exit Survey (Class of 2013)
- Appendix C-20: D4 Exit Survey Summary
- Appendix C-21: Competency Statements 2010

Available On Site
Course Syllabi
Curriculum Development Team meeting minutes
Student Clinical Assessment Forms
2-15 Graduates must be competent in the application of the fundamental principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health.

Conclusion: The UIC College of Dentistry complies with Standard 2-15.

**DDS Program**

(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)

Description

The DDS curriculum addresses behavioral science in a series of 6 modules (from D2 to D4 year) that advance in complexity and complement students’ clinical training experiences. The modules address the following learning outcomes: 1) applying the fundamental principles of the behavioral sciences as they relate to patient-centered approaches for promoting, improving and maintaining oral health, 2) employing the interpersonal and communication skills necessary to provide oral health care to a diverse patient population, and 3) practicing continual learning and self-assessment in maintaining competence.

1. Summarize the curriculum in behavioral sciences, especially the area of patient-centered approaches for promoting, improving and maintaining oral health. Describe the patient-centered approaches that are presented to the students.

The curriculum in behavioral sciences is sequenced as follows:

Modules 1 and 2: Student introduction to communication skills in the dental setting:

- making initial appointments,
- assessing past treatment experiences,
- setting realistic treatment expectations and boundaries,
- working with different personality styles,
- developing cultural sensitivity in communication and
- effectively managing more challenging aspects of the clinical interview.

Module 3: Experiences are designed to develop student understanding and refinement of clinical communication style. Students audiotape themselves talking to an actual clinic patient. Based on self, peer and instructor review of audiotapes of actual clinical encounters, the students evaluate their use of open and closed ended questions, their non-verbal behavior, their speech patterns, and their ability to explain oral health concepts in a clear and concise manner.
Module 4: Students learn to provide constructive communication feedback to junior colleagues.

Module 5 and 6: The study of advanced behavioral skills as they relate to oral health, including 1) motivating patients for smoking cessation, oral hygiene and treatment compliance, 2) chronic pain management, 3) managing interpersonally challenging clinical situations and patients, 4) managing the communication aspects of bad news and adverse events.

The students learn that effective patient communication is patient-centered rather than dentist-centered. They learn to tailor communication techniques to a patient’s particular cultural background, anxiety level, stage of change and personality style. Students establish clinical rapport with individual patients by taking these characteristics into account. The instructional approach is shaped by motivational interviewing, starting with the use of OARS (asking Open ended questions, giving Affirmations, and using Reflective Listening and Summary statements) to elicit a patient’s values and encourage a patient’s intrinsic motivation to health. This philosophy emphasizes discovering the patient’s goals for change and working with them, as well as supporting the patient to find ways to change that work for the patient. This approach has been supported in the health behavior change literature, including in oral health studies. In addition, students are engaged in the philosophy of full disclosure of adverse events in order to maintain trusting relationships with patients.

See the table below for a summary of the following descriptions. Competency Assessment is based on:

1. completion of in-class thought exercises where students must apply the material presented to simulated clinical scenarios,
2. self-assessment of communication skills based on a behaviorally anchored checklist,
3. peer, self and instructor assessment of audiotapes of actual clinical interviews (based on a behaviorally anchored checklist),
4. clinical case presentations (all students provide written feedback to classmates based on the material discussed in the modules) and
5. assessment by faculty in clinic.

Faculty assign DDS and IDDP students a daily global grade which includes:
- “produces well documented medical/dental histories,”
- “shares information with, interacts with and provides assistance to others,”
- “provides effective patient education,”
- “provides clear information on treatment choices to enable patients to make decisions evidenced by patients’ or guardians’ ability to understand proposed treatment alternatives, and
- “puts patient care ahead of personal convenience and demands of training, treats all patients equitably and without bias.”
Clinical evaluation of communication skills is also provided by preceptors at the extramural sites. Preceptors evaluate students on patient management skills on a three point scale (Excellent, Acceptable, and Standard Not Met).

**Learning Activities for Behavior in the DDS Curriculum and their Corresponding Assessments**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
</tr>
</thead>
</table>
| **D2 - DADM317 (CC IIB): Introduction to communication skills with patients.** | Plenary session, in-class role play (with structured feedback using behaviorally-anchored checklist) and class discussion of video examples. | 1. Faculty observation and critique of in class role-plays  
2. Completion of written in-class thought exercises where students must apply the material presented to clinical scenarios  
3. Self-assessment and reflection on communication skills based on a behaviorally anchored checklist and class discussion. |
| Student will be able to:  
1. Define reflective listening, empathy, rapport and cultural competence.  
2. Make appropriate introductions.  
3. Elicit accurate information with reflective listening.  
4. Establish rapport with appropriate interpretation of verbal and non-verbal skills.  
5. Set realistic treatment expectations and boundaries using the Patient Policy brochure.  
6. List behavioral strategies that can be used to manage anxious dental patients.  
7. Understand how the CORAH anxiety scale can be used with anxious patients.  
8. Understand how culture, family history, and personal history can influence treatment planning and engagement in dental care. |  

### D2 - DADM318 (CC IIIC): Application of Communication Skills to Health History Taking and Patient Care

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student will be able to: 1. Elicit and document patient’s reasons for seeking care. 2. Perform, evaluate and document a comprehensive systems based medical history using appropriate open-ended and follow up questions. 3. Perform and document an oral health history using appropriate open-ended and follow-up questions. 4. Perform and document a family and social history using appropriate open-ended and follow-up questions.</td>
<td>Students audiotape themselves with actual patient in the clinic. Audiotapes can include taking a health history, or providing brushing and flossing instructions, or smoking cessation counseling. Audiotapes are reviewed in small groups and common themes are discussed.</td>
<td>1. Self, senior peer and instructor feedback on audiotapes. 2. Self-reflection on communication skills demonstrated in audiotape, based on the themes generated during small group discussion.</td>
</tr>
</tbody>
</table>

### D3 DADM 319 (CC IIIA): Advance Behavioral Topics-Part 1

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student will be able to: 1. Identify the key components of Motivational Interviewing. 2. Define the Stages of Change. 3. Understand the oral health applications of Motivational Interviewing. 4. Generate behavioral strategies to work with patients who are in acute and chronic dental and orofacial pain.</td>
<td>Plenary sessions, student clinical case presentations</td>
<td>1. Students provide written feedback to classmates who present cases, based on the material discussed in the plenary and in class discussion</td>
</tr>
</tbody>
</table>

### D3 - DADM321 (CC IIII): Learning to give peer-based feedback on communication skills

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students will give constructive communication feedback to junior peers.</td>
<td>Senior students review the audiotape of a junior student’s health history and give them feedback based on a structured checklist.</td>
<td>1. Self-reflection on the ability to give feedback.</td>
</tr>
</tbody>
</table>
### D4 - DAOB332 (CC IVA): Advanced Behavioral Topics in Dentistry – Part 2

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student will be able to:</td>
<td>Plenary sessions, review and critique of videotapes student clinical case presentations (in groups of 3-4).</td>
<td>1. Students present clinical cases and respond to structured questions based on the information presented in the plenary. (Offsite students must turn in a written response to one student presentation).</td>
</tr>
<tr>
<td>1. Define the concept of full disclosure as it relates to adverse events in dental practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Use empathic communication skills in relation to breaking bad news in dental practice.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Supportive Documentation**

Appendix A-6a: Table 6-A Behavioral Science Courses-DDS

Available On Site
Course Syllabi
Student clinical assessment forms
2-11 Biomedical science instruction in dental education must ensure an in-depth understanding of basic biological principles, consisting of a core of information on the fundamental structures, functions and interrelationships of the body systems.

Conclusion: The UIC College of Dentistry complies with Standard 2-11.

DMD Program
(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)

Description
The foundational biomedical/basic science DMD curriculum is presented during the D1 year and the summer and fall terms of the D2 year. The DMD curriculum replaces traditional discipline-based courses with the integrated system-based modules presented primarily through small group learning activities. This curricular change assures vertical and horizontal integrations of all the biomedical, behavioral and clinical sciences. The didactic biomedical sciences and pre-patient and patient care aspects of the curriculum are therefore integrated throughout the dental curriculum. Material is presented through small group problem-based learning, interactive didactic session and laboratory experiences. The D3 and D4 curricula continue small group learning sessions that review each of the systems and their relationship to patient care through the use of patient scenarios in our electronic patient record AxiUm Ed.

1. Summarize the core information presented to students on fundamental biologic structures, functions and interrelationships of the body systems.

To introduce students to the faculty and to provide the students information about the required texts well in advance of the D1 fall semester, a website was designed using Google Sites. Students are asked to complete 15 online assignments prior to the student D1 orientation session in August. Though completion of the assignments is strongly encouraged and not required, in general, most of the members of each matriculating class participate. The assignments require students to go through online content related to specific topics and, in some cases, complete a series of questions testing knowledge and retention. Topics covered include review of the basic biomedical sciences such as DNA, genes and chromosomes, transcription and translation, proteins, heredity and traits, chromosomes, levels of cell organization, cell to cell communication, mitosis and meiosis, diffusion, osmosis, organs and organ systems, as well as clinical and ethics assignments. Faculty members are able to examine student responses to these questions in order to identify areas of weakness and to target topics that will require additional review.

Throughout the DMD curriculum, lectures in which students are presented with large amounts of new information have been largely replaced by small group learning (SGL). Shorter interactive didactic plenary sessions are also scheduled. Function and format of the plenary sessions vary as needed,
ranging from short lectures, question and answer sessions to interactive activities involving partner or group work. This provides significant flexibility to discuss different topics effectively and allows faculty members to respond to the learning needs of the class in real time. This format also allows for opportunities to invite guest speakers to address timely topics, such as emerging health issues, recent research, or new treatments/management. Facilitated small group learning predominates in both didactic (DBCS) and pre-patient portions (DAOB) of the curriculum. The first four terms of the DMD curriculum are designed in the form of a loop with two or three spirals, depending on the system. The initial focus of learning is on the specific healthy organ system(s). After the end of the fall term of D2 year, students are prepared to take the National Board Dental Examination, Part I.

The following table is a summary of the Biomedical and Clinical Sciences in Dentistry (DBCS) modules and the content covering the fundamental biomedical knowledge of all disciplines organized by system:

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Title/System</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall D1</td>
<td>DBCS311 Musculoskeletal system</td>
<td>This module addresses the knowledge and skills related to bones and joints with emphasis on the orofacial region. It also includes the detailed development, morphology, histology, biochemistry and physiology of muscle, and of PDL fibers, collagen turnover, cementum, gingival tissues, including epithelium and the alveolar bone.</td>
</tr>
<tr>
<td>Fall D1</td>
<td>DBCS312 Central and peripheral nervous systems</td>
<td>This module addresses the knowledge and skills related to the nervous system within the context of general dental practice, including orofacial pain and the neurophysiology of mastication. TMJ is also discussed with a focus on biomechanics and TMJ disc disorders.</td>
</tr>
<tr>
<td>Fall D1</td>
<td>DBCS313 Integument, immune and hemopoietic systems</td>
<td>This module emphasizes the knowledge and skills related to the integument, the immune system and the hemopoietic system within the context of general dental practice.</td>
</tr>
<tr>
<td>Spring D1</td>
<td>DBCS314 Cardiovascular and pulmonary systems</td>
<td>This module addresses the knowledge and skills related to cardiovascular and pulmonary systems within the context of general dental practice. The focus within cardiovascular system is on growth and development, anatomy, histology, biochemistry (e.g., serine proteases, activation of the coagulation reactions, thrombin generation and inhibition, fibrin generation), physiology (role of platelets) and pharmacology with emphasis on basic mechanisms and actions of anti-coagulation (heparin, coumadin, aspirin and cyclooxygenase inhibition, and vitamin K), fibrinolytic and anti-atherosclerotic medications.</td>
</tr>
<tr>
<td>Spring D1</td>
<td>DBCS315 Digestive, endocrine, urinary and reproductive systems</td>
<td>This module emphasizes the knowledge and skills related to the digestive, endocrine systems, urinary and reproductive systems within the context of a general dental practice. The main focus is on growth and development, anatomy, histology, biochemistry (e.g., biochemical basis of type 1 and type 2 diabetes) and physiology (metabolic pathways such as regulation of glycolysis, gluconeogenesis of lipids and ketone bodies; glycogen, glucagon and insulin secretion and mechanism of their actions).</td>
</tr>
</tbody>
</table>
The majority of the biomedical science content that is provided to the students is in the form of the interactive didactic sessions (described above), laboratory sessions (histology and anatomy), and small group learning sessions, facilitated by the faculty of the College of Dentistry. The content is directed by faculty who are experts in corresponding disciplines.

The above described biomedical science content of the modules clearly demonstrates how their horizontal integration is assured. The curriculum therefore ensures that the College is in compliance with Standard 2-11.

Each system is revisited in the D2 Summer and Fall terms where the focus shifts from system health to pathology. Beginning in the D3 Summer term and continuing through to graduation, the DOST and DOSI courses again use patient scenarios to require students to relate the systems with patient care and how that care may be altered by problems with various systems.

2. How does the school ensure that students have an in-depth understanding of basic biological principles?

The assessment of the student knowledge and understanding of the subject matter in all the modules employs our Competency Model and is by student self-evaluation (self-generated feedback on personal performance), performance examination (quality of the independent effort), faculty/peer observation (external feedback on student practices) and varied experiences utilizing qualitative and quantitative measures in an in-depth assessment of formative understanding of anatomy, histology, general and oral pathology. In addition, summative assessments are designed to create a balance between a focus on basic biological principles and concepts (breadth) while still requiring student in-depth understanding (depth). Summative assessment of the students’ knowledge and understanding of the material in all the modules covered in Standard 2-11 through 2-14 is by standard testing methods, such as multiple choice, short answer questions, identification of tagged structures (such as in the anatomy laboratory), or extended-choice matching questions. In the pathology modules, there is a strong emphasis on virtual cases imbedded in the weekly online quizzes and in the final examinations. These cases may include clinical, microscopic, or radiographic images printed in the exam or displayed within the online quizzes. Remediation of those students who fail any of the components of the module is offered in the form of written and/or oral re-examination after instructional intervention by either the course director or content expert.

The effectiveness of the DMD curriculum in providing an in-depth understanding of basic biological principles is demonstrated in several ways. The Annual e-CBE (electronic case-based exam) is a multiple-choice exam that tests the D1 through D4 student knowledge of fundamental structures, functions and interrelationships of the body systems and their relationship to clinical dentistry. The results of the scores has shown marked improvement in understanding and application of basic sciences and all areas of clinical dentistry as the students progress through the program.

Comparing the most recent National Dental Board Examination, Part I results with those of the previous years’ attest to the significantly increased effectiveness of the new biomedical science curriculum at the College. Between 2005 and 2011 the class average and pass rate was lower or equal to the national average. In 2012-13, when the first DMD class challenged the National Boards Part I, the class initial pass rate was 100% with the average score significantly higher than the national average.
Supportive Documentation
Appendix A-4b: Table 4-B Biomedical Sciences-DMD
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-3: Competency Statement Diagram
Appendix C-4: COD Predoctoral Competency Model
Appendix C-6: SGL Case Content
Appendix C-7: Sample SGL Case
Appendix C-15: End of Course Report
Appendix C-18: National Dental Board Scores

Available On Site
Course Syllabi
2-12 The biomedical knowledge base must emphasize that the oro-facial complex is an important anatomical area existing in a complex biological interrelationship with the entire body.

**Conclusion:** The UIC College of Dentistry complies with Standard 2-12.

**DMD Program**

*Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15."

**Description**

The DMD curriculum replaces traditional discipline-based courses with a fully integrated system-based module delivery. This curricular change assures vertical and horizontal integrations of all the biomedical, behavioral and clinical sciences. The didactic biomedical sciences and pre-patient and patient aspects of the curriculum are therefore integrated throughout the dental curriculum.

1. Describe how the oro-facial complex is integrated and emphasized in the instruction of biomedical sciences.

As mentioned above, the major objective of the DMD curriculum design and implementation has been horizontal integration of the biomedical, clinical and behavioral sciences. The component of the DMD curriculum that demonstrates this integration most effectively is the virtual patient case scenarios that are discussed by the students in small groups (SGL). Each case scenario provides a vehicle for integrating the biomedical, clinical (orofacial), community and behavioral sciences learning objectives. In the early part of the curriculum the patient-based cases are the artificial constructs providing appropriate biomedical and clinical learning objectives, but later in the curriculum (D3 and D4) the cases are presented as the actual patient records that have been de-identified of the personal information. All these cases are part of the existing “live” or the “educational” (AxiUm and/or AxiUm Ed) database. In order to understand each scenario and its learning objectives, the students seek information, independently and in groups, and thus developing their information-gathering and evidence-based decision-making (EBD) skills.
The following tables provide the content summary of the biomedical and orofacial science modules of the D1 curriculum followed by the content summary of the concurrent SGL cases. These demonstrate the horizontal and vertical integration of the curricular content.

**Integration of biomedical and orofacial curricular content - Fall D1**

<table>
<thead>
<tr>
<th>Biomedical Content Summary</th>
<th>Orofacial Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DBCS311:</strong> This module addresses knowledge and skills related to bones and joints with emphasis on the orofacial region. It also includes the detailed development, morphology, histology, biochemistry and physiology of PDL fibers, collagen turnover, cementum, gingival tissues, including epithelium and the alveolar bone. Temporomandibular joint (TMJ) is also discussed with focus on biomechanics and TMJ disc disorders.</td>
<td><strong>DAOB311:</strong> This module provides students with the opportunity to acquire skills, knowledge and attitudes needed for essentials of general dentistry by integrating biomedical, social and behavioral science knowledge with clinical skills. The focus of this course is primary prevention: recognition and maintenance of health and disease prevention. Major components of the course are Biology of the Human Dentition, Restorative Dentistry, Cariology, Pediatric Dentistry, Endodontics, Periodontology, and Professionalism. For patients of all ages, students learn general dentistry terminology, detailed oral and dental morphology, the properties of enamel, dentin, cementum, pulp and PDL, growth and eruption of teeth, alterations to tooth morphology, and replicating essential tooth morphology in wax. Clinically the students are introduced to basic cariology, caries risk assessment, chair-side radiographic and clinical examination, diagnosis and treatment planning, and clinical use of dental materials. Most of the course is dedicated to primary prevention, such as fluoride application, and to prevention of physical injuries, such as sports injuries by introducing the students to the athletic mouth guard. These clinical activities also introduce the student to professionalism aspects of dentistry such as HIPAA and patient care issues, infection control, ethics, emergency preparedness, AxiUm documentation, creating reference searches and accessing information, evaluating levels of evidence and communicating with patients.</td>
</tr>
</tbody>
</table>

| **DBCS312:** This module addresses knowledge and skills related to neuromuscular system within the context of general dental practice, including orofacial pain and the neurophysiology of mastication. | |

| **DBCS313:** This module emphasizes knowledge and skills related to the integument, the immune system and the hemopoietic system within the context of general dental practice. | |
## SGL Cases Fall D1

<table>
<thead>
<tr>
<th>SGL Case Numbers and Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cases 1, 2 and 3:</strong></td>
</tr>
<tr>
<td>- effective patient communication: initial patient interview, review of medical history and eliciting the chief complaint</td>
</tr>
<tr>
<td>- organized, sequential clinical exam of primary and permanent teeth including their detailed anatomy/morphology and their supporting tissues</td>
</tr>
<tr>
<td>- radiation safety</td>
</tr>
<tr>
<td>- dental caries, its risk factors and prevention</td>
</tr>
<tr>
<td>- development of teeth, including the sequence of tooth eruption/exfoliation</td>
</tr>
<tr>
<td>- structure and function of teeth and supporting structures</td>
</tr>
<tr>
<td>- structural and functional properties of dentin, enamel, cementum and tooth supporting tissues at different levels of tissue organization (anatomy, histology, physiology)</td>
</tr>
<tr>
<td>- normal oral flora and oral ecosystem</td>
</tr>
<tr>
<td>- dental plaque as a bacterial biofilm, formation of extracellular dextran and the microbial content of plaque</td>
</tr>
<tr>
<td>- classification of five common oral bacteria and their co-existence and interaction within oral biofilms</td>
</tr>
<tr>
<td>- primary defense of the oral cavity against infection, including major components of saliva</td>
</tr>
<tr>
<td>- methods for proper oral hygiene including flossing and brushing</td>
</tr>
<tr>
<td>- individual components of the human skull</td>
</tr>
<tr>
<td>- process and timing of the face and orofacial development</td>
</tr>
<tr>
<td>- anatomy and physiology of the TMJ</td>
</tr>
<tr>
<td>- basic structure and function of three types of cartilage</td>
</tr>
<tr>
<td>- growth and development of craniofacial system with emphasis on endochondral and intramembranous ossification</td>
</tr>
<tr>
<td>- role of calcium, vitamin D, parathyroid hormone, calcitonin and growth hormone in development of bones and teeth</td>
</tr>
<tr>
<td>- periosteum and endosteum and their role in modeling/remodeling of bone</td>
</tr>
</tbody>
</table>

Continued on next page.
Cases 4 and 5:
- anatomy, histology and physiology of dental pulp
- endodontic examination
- anatomy, histology, and physiology of healthy periodontal tissue
- crevicular fluid, its composition and function in health
- periodontal examination
- anatomy and neurophysiology of major salivary glands (parotid, submandibular, sublingual)
- Clostridium botulinum, Clostridium difficile, Clostridium perfringens and Clostridium tetani
- major ascending and descending nervous pathways
- histology of the sensory receptor with emphasis on periodontal receptor
- morphology and function of neuron and glial cells
- cranial nerves and their clinical examination
- trigeminal nerve and its function
- facial nerve and its function
- etiology, epidemiology and pathophysiology of Bell’s palsy
- anatomy and function of parasympathetic and sympathetic pathways of the autonomic nervous system with emphasis on orofacial system
- neurophysiology of pain perception, including endorphins and its central processing
- hyperalgesia, allodynia and referred pain
- Botox and neuromuscular junction, and its use in clinical dentistry
- histology, biochemistry and physiology of a typical skeletal muscle cell and muscle with emphasis on muscles of mastication and facial expression
- biomechanics of masticatory muscles
- muscles of the neck, their function and innervation

Cases 6 and 7:
- anatomy and histology of the nasal cavity and paranasal sinuses, including their innervations and blood supply
- neurophysiology of olfaction
- the immune system and its role in preventing infection and disease
- lymph and lymphatic vessels of the head and neck
- immune system and its interaction with the commensal flora of oral cavity in maintaining health
- inflammatory response and healing from a minor skin and mucosal injury
- histology and function of oral mucosa
- Candida albicans
- classification, structure and replication cycle of Herpes Simplex virus (HSV1, HSV2) as related to oral mucosa
- histology and properties of different blood cell types
- hematopoiesis
- Rh factor, its epidemiology and pathophysiology of erythroblastosis fetalis

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<tr>
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</tr>
</tbody>
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### Integration of biomedical and orofacial curricular content - Spring D1

<table>
<thead>
<tr>
<th>Biomedical Content Summary</th>
<th>Orofacial Content Summary</th>
</tr>
</thead>
</table>
| **DBCS314:** SGL Cases 8, 9  
This module addresses the knowledge and skills related to cardiovascular and pulmonary systems within the context of general dental practice. The focus within cardiovascular system is on growth and development, anatomy, histology, biochemistry (serine proteases, activation of the coagulation reactions, thrombin generation and inhibition, fibrin generation), physiology (role of platelets) and pharmacology with emphasis on basic mechanisms and actions of anti-coagulation (heparin, coumadin, aspirin and cyclooxygenase inhibition, and vitamin K), fibrinolytic and anti-atherosclerotic medications. | **DAOB312:** The components of this course are behavioral aspects of team building, professionalism, ethics, group learning, and general dentistry. The restorative dentistry component of the course introduces cavity preparations and their restorations using dental amalgam as a model for introducing restorative dentistry concepts, terminology, and instrumentation. There is a strong emphasis on understanding self-evaluation process and its criteria for assessment of restorative clinical procedures. In addition, the course incorporates treatment of carious infections and incipient lesions, their risk assessment, and dental bio-materials topics, all based on evidence-based principles. Restorative dental materials are introduced as treatment considerations for various lesion types using G.V. Black’s classification.  
The students are also introduced to the concepts and methods of primary and secondary prevention of early periodontal disease. The emphasis is on student understanding of periodontal evaluation criteria and accuracy of self-assessment, the techniques of prevention and control of periodontal disease, including assessment of plaque biofilm, oral hygiene instruction, comprehensive periodontal exam, risk assessment, scaling, and prophylaxis. The occlusion component includes physiology of mandibular movement and intra and inter-arch relationships of teeth. As part of the manual skill exercises, the students wax using both the drop wax and carve down techniques. The students are also exposed to the concept of an ideal occlusal relationship and patient’s homeostasis. |
| **DBCS315:** SGL Cases: 10, 11, 12  
This module emphasizes the knowledge and skills related to the digestive, endocrine, urinary and reproductive systems within the context of a general dental practice. The main focus includes roles of alpha and beta cells of the pancreas; metabolic pathways such as regulation of glycolysis, gluconeogenesis of lipids and ketone bodies; glycogen, glucagon and insulin secretion and mechanism of their actions; and biochemical basis of type 1 and type 2 diabetes. |  |
| **DBCS316**  
This module introduces the students to pathology and pathophysiology of cells, tissues, organs and systems. The emphasis is on understanding the theoretical foundation of pathology, including the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of the diseases that are part of the practice of comprehensive dental medicine. The discussions include the process of differentiating normal from pathologic tissues and how tissues react to injury. The students review genetics and learn about developmental diseases and syndromes, with special emphasis on those that affect the orofacial complex. In addition, the students are introduced to the molecular aspects of carcinogenesis and metabolic and environmental diseases with focus on those that are clinically significant in dentistry, and to the Coombs and Gell classification of hypersensitivity disorders. As part of the treatment/management process, both pharmacokinetics and metabolism of relevant medications for a specific system are introduced. This includes basic genomics and proteomics and possible uses of assay technology and drug development. |  |
### SGL Cases Spring D1

#### SGL Case Numbers and Content Summary

**Cases 8 and 9:**
- Respiratory distress syndrome
- development, anatomy, histology and physiology of arteries, veins, arterioles, venules, and capillaries
- measurement of blood pressure
- electrocardiogram and its interpretation
- high blood pressure and vasovagal syncope and their effect on dental treatment
- anticoagulants (Warfarin and Baby Aspirin) and their effect on dental treatment
- physiological effects of epinephrine

**Cases 10, 11 and 12:**
- physiology of mastication and swallowing
- anatomy, histology and physiology of the tongue
- somatosensory and special sensory (taste) innervation to the tongue
- development, anatomy, histology and physiology of the major organs (including salivary glands) of the gastrointestinal system
- autonomic nervous system (ANS) and its innervation of the digestive system, including oral cavity
- insulin and the effect of diabetes mellitus on dental treatment
- presence and role of bacteria in the normal physiology of the oral cavity and the digestive tract
- immunology and the oral cavity and the digestive tract
- examination of the thyroid as part of a head and neck examination
- signs and symptoms of hyperthyroidism and hypothyroidism that a dentist should be able to recognize
- concept of feedback loops with examples of positive and negative feedback loops
- Punnett squares in their prediction of inheritance of genetic traits
- epidemiology, etiology and pathophysiology of Tay-Sachs disease (including genetic transmission)
- epidemiology, etiology and pathophysiology of the common cold
- improper uses of antibiotics and their potential negative effects on the patient and society
- penicillin (Pen VK) and Ortho Tri-Cyclen

**Cases 13 and 14**
- the student respectfully and empathically communicates with a diverse group of patients so as to 1) facilitate patient questions, 2) provide responses understandable to the patient, 3) show the patient how the information is important to oral treatment, oral health, or general health, and 4) explain the alternatives and the dentist’s recommendations.
- state the CDC or Dietary Guidelines for Americans recommendations for alcohol use.
- define alcoholic abuse and alcohol dependence.
- discuss the ethics of dentists evaluating a patient’s alcohol use from the point of view of the Central Values of Dentistry.
- describe how alcohol use may interfere with the body’s metabolism of B vitamins and how it may create a nutritional deficiency syndrome.
- describe the health effects of acute and chronic liver disease.
- describe the normal levels of the test results presented in the case (CBC, folate, Vitamin B12) and describe how to interpret the tests.
- contrast the differences between acute (reversible) and chronic (irreversible) alcohol-related liver changes.
- describe the mechanisms and processes for cellular damage and repair from alcohol intake.
- Understand and describe the gross (macroscopic) changes and microscopic changes to the liver associated with exposure to a toxin (alcohol).
- discuss the etiology, epidemiology, and pathophysiology of cirrhosis.
- define specificity and sensitivity and apply it to use of the RAPS4 for a dental patient.
- define the RAPS4 and describe its purpose.
- describe the glandular contribution to stimulated and unstimulated whole saliva.
- describe the criteria for the diagnosis of primary and secondary Sjogren’s syndrome.
- describe the clinical manifestations of primary and secondary Sjogren’s syndrome (include the clinical signs of hyposalivation).
- describe the etiology, epidemiology, pathophysiology of Sjogren’s syndrome.
- describe how to conduct and interpret the results of a saliva flow test: materials, clinical methods, and flow values.
- describe the relationship of secondary Sjogren’s syndrome with associated connective tissue diseases.
- describe the relationship between hyposalivation, microbial overgrowth and increased risk for oral disease.
- compare and contrast Type 1, Type 2, Type 3, and Type 4 immunological hypersensitivity reactions.
- describe the etiology, epidemiology, and pathophysiology of Rheumatoid Arthritis.
- describe the abnormal immune response that plays a role initiating an autoimmune response in RA.
- explain the relationship of Magdeline’s Medical Tests with the pathogenesis of Rheumatoid Arthritis.
- describe how these tests characterize changes in synovial joints.
- compare and contrast Rheumatoid Arthritis and Osteoarthritis, including their signs and symptoms.
- describe the mechanism of action of local anesthetics with regards to the molecular structure consisting of a lipophilic base and the hydrophilic cation and how this affects diffusion through soft tissue, permeability of the neural membrane and interruption of the propagation of the nerve action potential.
- discuss the implications for local anesthetic and acetaminophen use in patients with poor liver function.
- describe Tylenol according to the headings of the pharmacology template.
- describe Methotrexate according to the domains of the pharmacology template.
- describe Pilocarpine according to the domains of the pharmacology template.
- describe Prednisone according to the domains of the pharmacology template.
- - describe the composition & reaction, properties, and uses of Ketac-Nano (Resin Modified Glass Ionomer) restorative material and its use in high risk patients.
- - describe the specific elements of a written Dry Mouth Regimen instruction for patient use and how it would be presented to the patient.
- describe evidence for the effectiveness of topical therapy for relieving the symptoms of dry mouth or stimulating salivary flow.
- describe the etiology, epidemiology, and pathophysiology of angular cheilitis and glossitis.
The assessment of the student knowledge and understanding of the subject matter in all the modules is by student self-evaluation (self-generated feedback on personal performance), performance examination (quality of the independent effort), faculty/peer observation (external feedback on student practices) and varied experiences (practice in high fidelity context) utilizing qualitative and quantitative measures. Remediation of those students who fail any of the components of the module is offered in the form of written and/or oral re-examination.

Comparing the most recent National Dental Board Examination, Part I results with those of the previous years’ attest to the significantly increased effectiveness of the new biomedical science curriculum at the College. Between 2005 and 2011 the class average and pass rate was lower or equal to the national average. In 2012, when the first DMD class challenged the National Boards Part I, the class pass rate increased to 100% with the average score significantly higher than the national average.

Supportive Documentation
Appendix A-3b: Table 3-B Schedule of Courses-DMD
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-6: SGL Case Content
Appendix C-7: Sample SGL Case
Appendix C-18: National Dental Board Scores

Available On Site
Course Syllabi
2-13 In-depth information on abnormal biological conditions must be provided to support a high level of understanding of the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis for oral and oral-related diseases.


DMD Program
(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)

Description

The purpose of the spiral structure of the DMD curriculum is to provide the students with the knowledge of the biomedical sciences, predominantly and traditionally only taught during the first two years of dental curriculum, throughout the four years of dental education by integrating them horizontally and vertically with the pre-patient and clinical curriculum. The content is presented in the context of patient care and revisited throughout the curriculum. Through its structure of health, restoration of health and modifying care in relation to existing pathologies presented by the patient, the DMD curriculum thus emphasizes the expected goals of the graduating oral health professionals to maintain attain and maintain competencies in health promotion and disease prevention, diagnosis, evidence-based practice, communication, professionalism, collaboration, and community engagement.

Though the foundation skills and knowledge of the abnormal biologic conditions are first introduced during the D2 year of the DMD curriculum, they are integrated and subsequently reinforced and expanded through horizontal and vertical curricular integration. Before students challenge Part I of the National Dental Boards, the students are able to revisit each body system and its selected diseases/disorders at least twice. In order for students to appreciate the impact on oral health and clinical practice, emphasis is given to the etiology, epidemiology, pathogenesis, differential diagnosis, treatment/management and prognosis of the disease/disorder under consideration.
1. Summarize the in-depth information presented to students on abnormal biologic conditions, including etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis for oral and oral-related diseases.

The following is a brief summary of the Biomedical and Clinical Sciences in Dentistry (DBCS) modules that focus on abnormal biologic conditions offered during the second year of the DMD curriculum when the diseases/disorders are first introduced in their detail.

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Title</th>
<th>Content Summary</th>
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<tbody>
<tr>
<td>Spring D1</td>
<td>DBCS316</td>
<td>This module introduces the students to pathology and pathophysiology of cells, tissues, organs and systems. The emphasis is on understanding the theoretical foundation of pathology, including the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of the diseases that are part of the practice of comprehensive dental medicine. The discussions include the process of differentiating normal from pathologic tissues and how tissues react to injury. The students review genetics and learn about developmental diseases and syndromes, with special emphasis on those that affect the orofacial complex. In addition, the students are introduced to the molecular aspects of carcinogenesis and metabolic and environmental diseases with focus on those that are clinically significant in dentistry, and to the Coombs and Gell classification of hypersensitivity disorders. As part of the treatment/management process, both pharmacokinetics and metabolism of relevant medications for a specific system are introduced. This includes basic genomics and proteomics and possible uses of assay technology and drug development.</td>
</tr>
<tr>
<td>Summer D2</td>
<td>DBCS321</td>
<td>This module concludes the discussion of general pathology as the students learn about the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of immune and autoimmune diseases, and infections, with a special emphasis on those that are part of the practice of comprehensive dental medicine. The students begin to generate an evidence-based “disease portfolio” of selected diseases that include brief notes on pathogenesis, clinical, laboratory, imaging and histopathologic features, differential diagnosis, treatment and prognosis. This student project continues throughout the remaining DBCS modules. As part of the treatment/management the module’s focus is on the pharmacokinetics and metabolism of medications that are relevant to the immune system.</td>
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### Rubric

<table>
<thead>
<tr>
<th>Summer D2 DBCS322</th>
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<tr>
<td></td>
<td>Blood vessel diseases</td>
<td>In this module students are introduced to systemic pathology and the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment, dental management, and prognosis of the diseases of blood vessels, blood cells, heart, and lungs. The discussions are focused on those diseases that are commonly seen in a comprehensive dental medicine practice. The module also includes the pharmacokinetics and metabolism of those medications that are relevant to cardiovascular (e.g., anti-platelet and anticoagulant medications) and respiratory systems (e.g., bronchodilators).</td>
</tr>
</tbody>
</table>

| Summer D2 DBCS323 | Hepatobiliary disease | This module focuses on etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment, dental management, and prognosis of the diseases of liver, gallbladder, pancreas, endocrine system, kidneys, bladder, and GI tract. Management/treatment of these systems is discussed from a palliative and pharmacokinetic point of view. As a small group exercise, the students use the DAMIEN method to establish a differential diagnosis and management plan for a patient who presents to the general dentist with an undiagnosed thyroid disease. |

| Fall D2 DBCS324 | Musculoskeletal system | This module continues with the detailed discussions about the most common diseases of the musculo-skeletal and nervous systems, odontogenic cysts and tumors, and the diseases of the male and female genital systems and breasts. The discussions are again focused on the disease etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment, dental management, and prognosis. This module also addresses pharmacology, more specifically psychopharmacology, pharmaco-dynamics and pharmacokinetics of the medications that affect the autonomic nervous system (e.g., neuro-transmitters, local anesthetic agents) and hormones of homeostasis (e.g., adrenocorticosteroids), cardiovascular system (e.g., anticoagulants, vasoconstrictors), peripheral and central nervous systems (e.g., non-narcotic analgesics, opioid analgesics and their antagonists), and antibiotics. |
As is evident from the table above, the diseases/disorders are discussed by the system and thus follow the curricular structure of the remaining biomedical (DBCS) modules.

The combination of formative and summative assessments of the student knowledge and understanding of the subject matter, as outlined by the module learning objectives, is achieved by utilizing qualitative and quantitative measures. Formative assessments include weekly quizzes, audience response clicker questions during plenary sessions, puzzles and flashcards posted on dedicated module Blackboard sites, assessments of the student participation in small group case discussions with associated study questions discussed in the Pathology Study Club. Summative assessments include two final examinations in each DBCS module, which are closely aligned with the specific learning objectives submitted to the students in advance. While one examination assesses student knowledge of the diseases/disorders discussed in the module by using standard testing methods such as multiple choice, extended matching and short answer questions, the Clinical Case Examination ensures the students apply this information to the clinical dental practice. It includes clinical cases/caselets including clinical photos, radiographs and/or microscopic photos. Remediation of students who fail any of the component of the module is offered in the form of customized remedial instruction and a written re-examination.

Comparing the most recent National Dental Board Examination, Part I results with those of the previous years’ attest to the significantly increased effectiveness of the DMD biomedical science curriculum at the College. Between 2005 and 2011 the class average and pass rate was lower or equal to the national average. In 2012, when the first DMD class challenged the National Boards Part I, the class pass rate increased to 100% with the average score significantly higher than the national average.

Supportive Documentation
Appendix A-3b: Table 3-B Schedule of Courses-DMD
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-6: SGL Case Content
Appendix C-7: Sample SGL Case
Appendix C-18: National Dental Board Scores

Available On Site
Course Syllabi
End of Course Reports
2-14 Graduates must be competent in the application of biomedical science knowledge in the delivery of patient care.

Conclusion: The UIC College of Dentistry complies with Standard 2-14.

**DMD Program**

(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)

**Description**

In the early modules of the DMD curriculum, the biomedical science content is selected for its relevance to the practice of dentistry. As the students progress through the curriculum, pre-patient and patient care experiences are supplemented in the DOST and DOSI courses with the virtual patient scenarios that emphasize the relationship between the systemic and oral diseases/disorders, their diagnoses and prevention both within the family and community contexts. The foundational biomedical science knowledge, predominantly and traditionally taught in the first two years of dental education, is thus horizontally and vertically integrated with the pre-patient and clinical curriculum throughout the four-year DMD curriculum. The purpose of this integration is to emphasize the expected goals of the graduating oral health professionals to maintain their strong competencies in health promotion and disease prevention, diagnosis, evidence-based practice, communication, professionalism, collaboration, and community engagement.

1. Describe the mechanism for incorporating and integrating new medical and biologic knowledge into the provisions of dental care.

Examples of the above-described curricular integration are present in Dental Oral Sciences Topics (DOST) modules scheduled during the Summer, Fall and Spring semesters of D3 DMD curriculum. The central objective of these modules is the application of biomedical sciences and their advances in providing and promoting oral and systemic health using virtual case-based clinical scenarios. In the small group learning settings the students discuss twelve patients archived in the AxiUmEd database. These virtual patients present with a variety of complex diseases and disorders, similar to the patients in the “live” AxiUm database. The diseases and disorders include all three domains of the DMD curriculum, namely the systems (biomedical), orofacial and professionalism domains. Content of the AxiUmEd database is carefully created to satisfy the learning objectives of the DOST modules. Each of the patients are “assigned” an organ system, common disease(s) of that system, current medications and complex orofacial disease(s) as well as dental findings. Consultations with practicing medical doctors are often made to ensure realistic simulation of the patient scenarios and to ensure discussion of the relevant information of current clinical best practices. Some of the patient cases have assigned professionalism issue(s) and others are described as having a medical emergency/urgency in the dental office. The objective for the students is to carefully study each clinical aspect of the patient, discuss the relevant clinical issues during their small group discussions and to apply their knowledge and understanding of biomedical sciences to the management/treatment
of the patients in a clinical setting with the competency of an entry level dental practitioner. The application of this process of patient management is continuously reinforced throughout the remaining DMD curriculum both simulated and live patient care.

A content summary of the DOST cases during the D3 DMD curriculum has been developed and provides an example of developing skills that are required to apply advances in biomedical sciences and to integrate them into the clinical practice (prevention, diagnosis, disease and management). The D4 DOSI course designs are currently under development.

The primary objective of the DOST modules is for the students to gain experience in integrating the relevant biomedical sciences into the clinical decision-making in the context of simulated patient care that is reinforced in actual patient care. As mentioned above, the major goal of the biomedical science curriculum is to prepare the students with the skills to master the process of staying current in advances of biomedical sciences throughout their life and to ensure that they are able to apply those to their clinical knowledge and skills. The general format of the DOST (and soon the DOSI) modules is presented with the cases that are discussed within small groups. There is extensive use of student clinical portfolios, as part of their clinical experiences, which help to ensure that the material presented is current. The pedagogy also is designed so that the application of the fundamental knowledge is reinforced in the authentic pre-patient care scenarios and later during patient care. This learning process is augmented by participation of the faculty who are active in biomedical and/or clinical research, and are current with the latest advances in their disciplines. The faculty role in the DMD curriculum therefore provides students with an ideal opportunity to develop their expertise with the experts during discussions related to the clinical practice.

In summary, all the curricular activities, including the case-based small group learning discussions in DOST modules, focus on the outcomes that are evidence-based with the goal to provide the students the depth and breadth of variety of clinical experiences necessary to develop the knowledge, skills, and values for competent clinical practice. The DMD curriculum thus ensures the integration of the evidence-based biomedical and clinical sciences throughout the four-year dental education.

2. Describe how students are assessed in the application of biomedical knowledge in the treatment of patients.

The assessment of the student knowledge and understanding of the subject matter in all the modules is by student self-evaluation (self-generated feedback on personal performance), performance examination (quality of the independent effort), faculty/peer observation (external feedback on student practices) and varied experiences (practice in high fidelity context) utilizing qualitative and quantitative measures.

An example of the performance assessment of students’ knowledge and understanding of the subject matter discussed during the small group sessions in all of the DOST modules is in the form of: 1) an essay on faculty generated questions, 2) student active participation in small group learning and 3) student performance in multiple choice examination. Three to five essay questions relevant to the case are given to the students at the beginning of each case. It is expected that students, working collaboratively or independently, will generate answers to the essay questions as they work through the scenarios. The students receive an outstanding grade in essay if they describe and elaborate on all the learning objectives established by the content experts. Essay topics are purposely chosen to evaluate students’ abilities to integrate the biomedical and clinical sciences. The students are
awarded an outstanding grade in small group discussion sessions when they actively participate in terms of professionalism and team work, learning process, communication, reasoning process, assessment skills and thinking process. The specific assessment criteria are published and are the same for all of the College small group discussion sessions. Finally, the student knowledge and understanding of the relevant knowledge is further assessed in the form of multiple-choice questions that are part of the final examination. All three types of the assessment therefore give the faculty an opportunity to assess the students’ knowledge as it applies to their pre-patient and clinical patient care that are scheduled concurrently.

Students who do not satisfy the criteria for an outstanding or satisfactory grade receive a failing grade. Remediation of those students who fail part(s) of or the entire module is offered in the form of a written and/or oral re-examination after structured study as set forth in a remediation plan appropriate to the section(s) failed.

The assessments described in the DDS curriculum related to the integration of biomedical, behavioral and clinical sciences are being reviewed for inclusion and/or modification in the DMD curriculum.

Supportive Documentation
Appendix A-3b: Table 3-B Schedule of Courses-DMD
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-22: Summary of DOST SGL Cases

Available On Site
Course Syllabi
End of Course Reports
DMD Curriculum Team meeting minutes
2-15 Graduates must be competent in the application of the fundamental principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health.

Conclusion: The UIC College of Dentistry complies with Standard 2-15.

**DMD Program**

(Standards 2-11 through 2-15 include separate reports for the DDS and DMD programs. The DDS Program 2-11 through 2-15 will be presented first, followed by the DMD Program 2-11 through 2-15.)

**Description**

The DMD curriculum addresses behavioral science in a series of 6 modules (from D1 to D3 year) that advance in complexity and complement students' clinical training experiences. Students learn to apply the fundamental principles of behavioral science as they pertain to patient-centered approaches to promoting, improving and maintaining oral health. The student must ensure that patients’ preferences and their social, economic, emotional, physical, and cognitive circumstances are sensitively considered in the context of oral health care.

1. Summarize the curriculum in behavioral sciences, especially the area of patient-centered approaches for promoting, improving and maintaining oral health. Describe the patient-centered approaches that are presented to the students.

The curriculum in behavioral sciences is sequenced as follows:

Module 1: Introduction to history taking and communication.
Students learn to make appropriate introductions, elicit accurate information with reflective listening, establish rapport by appropriate interpretation of verbal and non-verbal skills, and understand basic cultural issues involved in communication and approaches to oral health.

Module 2: Introduction to motivational interviewing.
Students learn the trans-theoretical model to evaluate the patient’s stage of change, and how to use motivational interviewing (MI) techniques to help patients improve their oral health. Students practice the OARS skills of MI, which is a patient-centered framework of asking Open-ended questions, Affirmations, Reflective statements and Summary statements to elicit health behavior change.

Modules 3: Working with Challenging Patients and Behavioral Issues in Dental Practice.
Students learn how to develop appropriate treatment plans for dentally anxious patients, and how to assess and evaluate sensitive information in the context of oral health treatment (e.g., mental health history, HIV status, abuse history, finances).
Module 4: Behavioral Science Principles in Oral Health:
Students understand the basic behavioral science principles (e.g., classical and operant conditioning) and health behavior change models (e.g., health beliefs model) as they apply to oral health.

Module 5: Understanding and refinement of clinical communication style and application of behavioral science.
Students audiotape themselves talking to an actual clinic patient. Based on self, peer and instructor review of audiotapes of actual clinical encounters, the students evaluate their use of open and closed ended questions, their non-verbal behavior, their speech patterns, and their ability to explain oral health concepts in a clear and concise manner. Students also focus on their ability to apply motivational interviewing techniques to promotion of oral health.

Module 6: Advanced Behavioral Topics in Dentistry.
Students learn how to tailor oral health treatment plans for patients who are depressed or have other serious psychological diagnoses (e.g., substance abuse or eating disorders). Students practice behavioral approaches to acute and chronic pain in dentistry.

The students learn that effective patient communication is patient-centered rather than dentist-centered. They are challenged to tailor communication techniques to a patient’s particular cultural background, anxiety level, stage of change and personality style. Students establish clinical rapport with individual patients by taking these characteristics into account. Our approach is informed by motivational interviewing, starting with the use of OARS (asking Open ended questions, giving Affirmations, and using Reflective Listening and Summary statements) to elicit a patient’s values and encourage a patient’s intrinsic motivation to health. This philosophy emphasizes discovering the patient’s goals for change and working with them, as well as supporting the patient to find ways to change that work for the patient. This approach has been supported in the health behavior change literature, including in oral health studies. In addition, students are taught the philosophy of full disclosure of adverse events in order to maintain trusting relationships with patients.

2. Describe how students are assessed in the application of the fundamental principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health, including the ways by which students demonstrate effective interpersonal communication skills during patient interactions.

Competency Assessment is based on:
1. completion of in-class thought exercises where students must apply the material presented to clinical scenarios,
2. in-class role plays with peer and instructor feedback (using a structured checklist),
3. viewing and written critique of video examples,
4. self-assessment of communication skills based on a behaviorally anchored checklist,
5. peer, self and instructor assessment of audiotapes of actual clinical interviews (based on a behaviorally anchored checklist),
6. clinical case presentations and
7. students are assessed in clinic on behavioral skills.
The clinical assessment of behavioral skills in the College Group Practices is through a tool in the AxiUm data system. Faculty assess an E (exceptional) or I (improvement needed) if the student’s performance is out of the ordinary either way. The criteria for determining the daily assessment include:

1. Professionalism, including cultural sensitivity and appreciation of patient need, and
2. Dialogue, including communication skills with patients, staff and colleagues, appropriate data collection from patient interview, and patient rapport.

Clinical evaluation of communication skills is also provided by preceptors in the extramural sites. Preceptors evaluate students on patient management skills on a three point scale (Excellent, Acceptable and Standard Not Met). See the following table which integrates the learning activities with the assessment activity.
## Summary of Behavioral Sciences Didactic Learning and Assessment in the DMD Curriculum

### D1 - DAOB311
Module: 1 Introduction to history taking and communication.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
<th>Varied Experiences</th>
<th>Faculty Observation</th>
<th>Performance Exams</th>
<th>Self-Evaluation</th>
<th>D4 Professionalism</th>
<th>OSCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Define and describe the elements of reflective listening, empathy, rapport, non-verbal communication and cultural competence.</td>
<td>- Lecture</td>
<td>1. MC exam</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Make appropriate introductions.</td>
<td>- role play with BAC*</td>
<td>1. Self-assessment based on checklist and class discussion; 2. Faculty observation and critique of in class role-plays</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Elicit accurate information with reflective listening.</td>
<td>- role play with BAC*</td>
<td>1. Self-assessment based on checklist and class discussion; 2. Faculty observation and critique of in class role-plays 3. Written in-class thought exercise applying to clinical scenario</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Establish rapport with appropriate interpretation of verbal and non-verbal communication.</td>
<td>- role play with BAC* - Case 11 (interpretation issues )in d1 spring</td>
<td>1. Self-assessment based on checklist and class discussion; 2. Faculty observation and critique of in class role-plays 3. Written in-class thought exercise applying to clinical scenario 4. Case 11 assessed by self-assessment and MCQs.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BAC - behaviorally anchored checklist  
SP - standardized patient
# Module 2: Introduction to Motivational Interviewing Concepts

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
<th>Varied Experiences</th>
<th>Faculty Observation</th>
<th>Performance Exams</th>
<th>Self Evaluation</th>
<th>D4 Professionalism</th>
<th>OSCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify the key components of Motivational Interviewing.</td>
<td>- Lecture - Video</td>
<td>MC questions on exam in DAOB311</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Define the Stages of Change.</td>
<td>- Lecture</td>
<td>MC questions on exam in DAOB311</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Understand the oral health applications of Motivational Interviewing.</td>
<td>- Role play with BAC* - Video critique.</td>
<td>1. Self-assessment based on checklist and class discussion; 2. Faculty observation and critique of in class role-plays 3. Written in-class thought exercise applying to clinical scenario</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. Use Open Ended Questions, Affirmations, Reflective Listening and Summary Statements in health-behavior change conversations</td>
<td>- Role play with BAC* - Video critique. - Case 13 (Alcohol Abuse) d2 spring - Case 17 Brief advice model D3 summer - Case 18 d2 summer - Case 3 Caries risk D3 summer</td>
<td>1. Self-assessment based on checklist and class discussion; 2. Faculty observation and critique of in class role-plays 3. Written in-class thought exercise applying to clinical scenario 4. Cases 13 &amp; 18 assessed by self-assessment and MCQs.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

BAC - behaviorally anchored checklist
SP - standardized patient
### D2 - DAOB321
Module 3: Working with Challenging Patients and Behavioral Issues in Dental Practice (e.g., abuse history, HIV status, anxiety, anger)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
<th>Varied Experiences</th>
<th>Faculty Observation</th>
<th>Performance Exams</th>
<th>Self Evaluation</th>
<th>D4 Professionalism</th>
<th>OSCE</th>
</tr>
</thead>
</table>
| 1. Understand how the CORAH anxiety scale can be used with anxious patients. | - Lecture  
- Video examples | MC questions on exam in DAOB 3121 | X | | | | | |
| 2. List behavioral strategies that can be used to manage anxious dental patients. | - Lecture  
- Video examples  
- Role play with BAC*  
- Role play with SP* | MC questions on exam in DAOB 311 | X | X | X | | | |
| 3. List behavioral strategies that can be used to manage conflict in clinical situations. | - Lecture  
- Video Examples  
- Role Play with BAC* | 1. Self-assessment based on checklist and class discussion;  
2. Faculty observation and critique of in class role-plays  
3. Written in-class thought exercise applying to clinical scenario | X | X | X | | | |
| 4. Understand how culture, family history, and personal history can influence treatment planning and engagement in dental care. | - Role play with BAC*  
- Role play with SP*  
- Case 11 (Interpretation Issues) d1 spring | 1. Self-assessment based on checklist and class discussion;  
2. Faculty observation and critique of in class role-plays  
3. Written in-class thought exercise applying to clinical scenario  
4. Case 11 assessed by self-assessment and MCQs. | X | X | X | | | |

BAC - behaviorally anchored checklist  
SP - standardized patient
<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
</tr>
</thead>
</table>
| 1. Define classical and operant conditioning. | - Lecture  
- Case vignettes with class discussion. | MC questions on exam in DAOB 322 | X |
| 2. Describe the Health Beliefs Model. | - Lecture  
- Case vignettes with class discussion | MC questions on exam in DAOB 312 | X |
<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
<th>Varied Experiences</th>
<th>Faculty Observation</th>
<th>Performance Exams</th>
<th>Self Evaluation</th>
<th>D4 Professionalism</th>
<th>OSCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Elicit and document patient's reasons for seeking care</td>
<td>- Students audiotape clinic appointment. - Audiotapes reviewed in small group sessions.</td>
<td>1. Self-assessment based on structured checklist and class discussion. 2. Faculty feedback on class audiotapes.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. Perform, evaluate and document a comprehensive systems based medical history using appropriate open-ended and follow up questions.</td>
<td>- Students audiotape clinic appointment. - Audiotapes reviewed in small group sessions.</td>
<td>1. Self-assessment based on structured checklist and class discussion. 2. Faculty feedback on class audiotapes.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Perform and document an oral health history using appropriate open-ended and follow-up questions.</td>
<td>- Students audiotape clinic appointment. - Audiotapes reviewed in small group sessions.</td>
<td>1. Self-assessment based on structured checklist and class discussion. 2. Faculty feedback on class audiotapes.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perform and document a family and social history using appropriate open-ended and follow-up questions.</td>
<td>- Students audiotape clinic appointment. - Audiotapes reviewed in small group sessions.</td>
<td>1. Self-assessment based on structured checklist and class discussion. 2. Faculty feedback on class audiotapes.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### D3 - DAOB333

#### Module 6: Advanced Behavioral Topics in Dentistry

**Behavioral Pain Management, Bad News/Adverse Events**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Activity</th>
<th>Assessment Method</th>
<th>Varied Experiences</th>
</tr>
</thead>
</table>
| 1. Generate behavioral strategies to work with patients who are in acute and chronic dental and orofacial pain. | - Role play with BAC*  
- Role play with SP* | MC questions on exam in DAOB311 | X  
X |
| 2. Define the concept of full disclosure as it relates to adverse events in dental practice. | - Lecture  
- Case 1 d3 summer | 1. MC questions on exam in DAOB333  
2. Case 1 assessed by self-assessment and MCQs. | X  
X  
X |
| 3. Use empathic communication skills in relation to breaking bad news in dental practice. | - Role play with RAC  
- Role play with SP*  
- Case 1, d3 summer | 1. Self-assessment based on checklist and class discussion;  
2. Faculty observation and critique of in class role-plays  
3. Written in-class thought exercise applying to clinical scenario.  
4. Case 1 assessed by self-assessment and MCQs. | X  
X  
X  
X |
| 4. Demonstrate application of behavioral principles to a clinical case presentation. | - Class presentations and discussion | 1. Completion of a clinical case presentation highlighting behavioral and ethical issues involved in patient care. | X  
X  
X |

**Supportive Documentation**

- **Appendix A-6b**: Table 6-B Behavioral Science Courses-DMD
- **Appendix C-2**: COD Predoctoral Graduate Competencies 2012

**Available On Site**
- Course Syllabi
- Student Clinical Assessment Forms
2-16 Graduates must be competent in managing a diverse patient population and have the interpersonal and communications skills to function successfully in a multicultural work environment.

Conclusion: The UIC College of Dentistry complies with Standard 2-16.

Description

The College is located in the City of Chicago which has a vibrant and diverse population. Our patient base reflects this cultural, racial, and social diversity giving our students excellent experiences to meet our competency. Additionally our student body brings a richness of diversity that contributes positively to our learning environment and gives all the opportunity to work in a culturally rewarding place. As mentioned elsewhere in this document we also enjoy diversity among our faculty and staff.

1. Describe the patient population student’s encounter in dental school clinics and extramural sites. How does the dental school ensure that students have experiences functioning in a multicultural work environment?

In both the DDS and the DMD curriculum, the College ensures students have experiences functioning in a multicultural work environment through their clinical experiences in the College and at extramural sites. The patient population seen in the College predoctoral clinics is about ¼ Hispanic and about 1/3 African American as shown in the following table. In addition, students see smaller numbers of patients from numerous nationalities, including Eastern European, Middle Eastern, and Asian.

<table>
<thead>
<tr>
<th></th>
<th>African American</th>
<th>Asian</th>
<th>Caucasian</th>
<th>Hispanic/ Latino</th>
<th>Unknown/ other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>34%</td>
<td>3%</td>
<td>26%</td>
<td>25%</td>
<td>12%</td>
<td>100%</td>
</tr>
<tr>
<td>Visits</td>
<td>29%</td>
<td>3%</td>
<td>27%</td>
<td>23%</td>
<td>18%</td>
<td>100%</td>
</tr>
</tbody>
</table>

About 9% of patients seen in the College have a primary language other than English. Patients are diverse in age, medical and dental needs, and in employment status as well, as demonstrated elsewhere in this document. In addition, all fourth year students rotate through two to three of the 19 community partner extramural sites. These clinics are community based, and serve diverse and vulnerable populations such as the homeless, the elderly, indigent children and adults, migrant workers and persons with special needs, including HIV positive patients.

The College is committed to multiculturalism and inclusion. Students are trained in the necessary interpersonal skills to work in our multicultural environment both through DADM 325, which explores multiculturalism directly, and through the behavioral science modules, which focus on developing patient-centered interpersonal skills.

As is described in Standard 2-15-DDS and 2-15-DMD, the behavioral science modules train students to evaluate each patient to understand the patient’s values and motives, and assist the patient to reach his or her goals by helping them find means that will work best for them. This includes using open-
ended questions and listening skills in order to understand each patient better. In this way, students can bridge cultural differences with patients and begin to understand each patient’s point of view. In addition, for the DMD curriculum only, culturally sensitive communication skills exercises appear in several cases, wherein students practice communication skills in a multicultural context. Topics covered include working with an interpreter, use of family members as interpreters, difficulties of access to care in rural environments, and the ethics of multiculturalism (tolerance, compassion).

Training related to multiculturalism occurs in both the DDS and the DMD curriculum through the DADM325 course, which is also the vehicle through which DMD and DDS students participate in the extramural rotations. The purpose of the course is to raise the students’ knowledge and sensitivity to the oral health needs of the underserved and special needs patients. DADM325 acquaints students with the social, cultural, community, economic, health service system and political issues involved in meeting those needs. The community-based service-learning clinical rotations are the vehicles to allow the students the opportunity to provide dental services to diverse and vulnerable patient populations including the homeless, the elderly, indigent children and adults, migrant workers and persons with special needs under the guidance of community-based faculty. The extramural rotations as well expand access to care opportunities to underserved populations. The students are also exposed to various healthcare delivery models seeking to serve these populations. Students experience health disparities in the DMD curriculum through exercises in epidemiology during the cases in small group learning in the D1, D2 and IDP1 years. In the DDS curriculum, the Dental Ethics course (DBSC321) presented the Alaskan dental therapist issue for discussion regarding ways of addressing oral health disparities.

| 2. Describe how student interpersonal skills and communication skills are assessed in a multicultural work environment. |

Didactically, students’ interpersonal skills are assessed as described in 2-15-DDS and 2-15-DMD. In addition, communication in a multicultural environment is assessed clinically at the College as described in Standard 2-15.

Similarly, for DADM325 in the D4 year, site preceptors (who are adjunct faculty members of the College) assess the students three times. Each assessment involves interpersonal/communication skills as well as clinical skills. The first two weeks the preceptors provide informal feedback while observing the students at the site. During the third week the preceptors and students have a formal one-on-one assessment of the progress made thus far, and during the last week the preceptors complete an online assessment form on the student. The assessment includes patient management and ethical behavior. Between the diverse college clinic environment and the diverse extramural rotation environment, the students’ experiences are by definition multicultural, so assessment of their communications in these environments assesses their multicultural skills. In addition, the staff and student body at the College are diverse, so the student who functions effectively in the College has developed some skills in multiculturalism.

Overall, patients were satisfied with the communication skills of their student providers as shown by the results of the patient survey published in the College newsletter of 2012, in which patients rated as at least average, “I felt my individual needs were considered...”; and rated as excellent, “The people at the College were polite and professional.”
Supportive Documentation
Appendix A-6a: Table 6-A Behavioral Science Courses-DDS
Appendix A-6b: Table 6-B Behavioral Science Courses-DMD

Available On Site
Course Syllabi
Student Assessment Forms
Patient Survey Results
2-17 Graduates must be competent in applying legal and regulatory concepts related to the provision and/or support of oral health care services.

Conclusion: The UIC College of Dentistry complies with Standard 2-17.

Description

Legal and regulatory concepts are first introduced to students during orientation, with a strong focus on HIPAA (confidentiality, maintaining the integrity of computer use, etc.). Risk Management (emergency and evacuation procedures), and OSHA are similarly introduced. At this time, students also become CPR certified as is required by the Dental Practice Act of Illinois (recertification occurs in the third year). Additionally, students complete yearly online training focused on HIPAA and OSHA regulations. Compliance with this training is required.

1. Describe student experiences in applying legal and regulatory concepts related to the provision and/or support of oral health care services.

**DDS Curriculum**

The table below question 2 summarizes the training students receive in applying regulatory and legal concepts as well as the assessment measures used to determine competence. To elaborate on the table information regarding the third and fourth years:

In the D3 year, DADM319 and DADM320, students are focused on professional options after graduation, which included descriptions of regulatory requirements for different career paths, e.g. private practice, specialization, education, research, consulting, etc. Students were introduced to requirements such as licensure and insurance, and a basic distinction between associateships, independent contractors, sole-proprietorships, and corporations as well as the fiscal and risk management implications for each. During the Fall term, students were also introduced to financial management with a focus on how individual's finances, including debt management, impact future professional plans. Also, risk management practices were presented to them by industry experts, with an emphasis on informed consent and refusal. At the end of the term, students also produced an AxiUm-based Practice Management report and self-assessment which is discussed with their Managing Partner (see syllabus for project details).

During the D3 year in DADM320, students gained a deeper understanding of a dental office organization and function, with a clear exploration on staffing issues and the legal aspects of employment. Essential practice positions, job descriptions, and recruitment processes were presented by external industry experts. At the end of this term students completed an assignment requiring them to summarize laws that affect employment practices (Equal Pay Act of 1963, Title VII of the Civil Rights Act, Age Discrimination in Employment Act of 1967, Pregnancy Discrimination Act of 1978, Americans with Disabilities Act of 1990), including the legal applicability to dental offices. Then students were required to review sample resumes for individuals interested in a dental assisting position under their leadership, and to justify their selection or rejection. Students also identified examples of unlawful interview questions, along with sample interview questions.

In the D4 year, as found in courses DADM332, DADM333 and DADM334, students were further introduced to insurance regulations for dentists. The courses expanded on information related to
private practice models, and purchasing a practice. At the end of this course, students prepared a business plan for purchasing a private office. The business plan included a demographic analysis for selecting a practice, developing a mission statement, and financial calculations. At the end of the term, students created capstone project report on practice management. The reports were reviewed by their Managing Partner.

During DADM333, students engaged on topics related to running a private practice. Students attended lectures with industry experts. Topics covered included assessing risk when evaluating job opportunities, types of compensation according to associate contracts, qualities and characteristics needed of the dentist to function as the leader of the dental team, useful reports that help manage a practice, and importantly considerations for personal financial planning.

**DMD Curriculum**

The DMD curriculum is summarized in the table below. D1 fall term (DMD rubric DAOB311) covers regulatory concepts through didactic presentations followed by small group activities to expand the topic coverage. Issues addressed in small groups are varied, including core infection control concepts, MSDS sheets, standard precautions, and recommended CDC protocols. Students discuss scenarios involving infection control violations, and then determine the appropriate regulatory recommendation to address them. Students also discuss potential practice management changes to correct and prevent future violations in their own practice. Students are encouraged to find appropriate responses directly from government agencies, and other appropriate sources (e.g. ADA.org).

In the same term, students conduct hands-on exercises in one of the pre-patient care clinics, where they learn, apply and practice standard precautions, appropriate use of Personal Protective Equipment, effective barriers, and disinfection of the dental unit.

Through interactive plenary sessions, students are introduced to the role of dentists and dental hygienists as emergency responders in accordance to the 2006 Illinois Public Act 94-409: Dental Emergency Responder, the 2011 US House of Representatives H.R. 570 Dental Emergency Responder, and the US House of Representative H.R. 307: Pandemic and All Hazards Preparedness ACT of 2013. The State of Illinois Dental Practice Act endorses this certification and the College in the national center for DMERT under the leadership of Dr. Michael Colvard.

In the spring D1 term, included in the DAOB322 course, students gain a deeper understanding of HIPAA requirements, and their applicability to dental offices. Following a didactic presentation, students work on cases involving HIPAA compliance in small groups, where they determine the appropriate course of action based on the law, and write a script for their peers on how that action should be communicated to the employee or patient. At a subsequent session, each group presents their case, conclusions, response based in law, and acts out their script to their peers.

In the D2 year spring term, through the DBCS318 course, students are introduced to risk management concepts and clinic regulations, which are fundaments to College clinic policies. Weekly lectures with required attendance serve as the learning vehicle. At the end of this course, students complete two full audits of charts of newly assigned patients.

As students increase their clinical activities, the D3 summer term (DAOB331) focuses on introducing clinically relevant practice management topics such as legal aspects and risk management as they
relate to treatment planning and patient care, strategies to develop an efficient practice, including chair utilization, presentation of treatment plans, effective use of materials, etc. In the fall term, the DAOB332 course introduces regulatory concepts with a focus on everyday functions of a dental office. Students learn about essential positions (clinical and administrative) and duties of each. Students will also learn about staff recruitment and retention, and laws that affect these practices. Finally, students attend an interactive didactic session on Risk Management with a focus on the employee-employer relationship. At the end of this term, students submit an assignment summarizing this content (the assignment is defined below).

During the D3 spring term, the DAOB333 course introduces topics of licensure requirements and professional opportunities after graduation, including private practice, academia, research, etc. Finally, with a guest speaker from the UIC Student Services office, students learn about resume writing. The final assignment for students consists in submitting their resume following the recommended guidelines of content, formatting, sequence, etc.

The D4 year, currently under development, focuses further on topics related to private practice. The summer term brings industry experts and active practitioners to explore the issues related to opening a private office. Elements of a business plan, the necessary team of experts, defining office manuals and marketing, and finally, principles of the financing process are addressed. The fall shifts focus towards associateships. Students learn about contracts in general, parts of the contract, and the description of potential impact on compensation. Students also discuss with faculty, qualities of an ideal associate, as well as ideal practice opportunities. Finally, students learn effective interviewing techniques from the UIC Student Services office. At the end of the term, students evaluate four associateship contracts and determine the best compensation. The spring term introduces types of insurance necessary for a practicing dentist, risk management concepts with a focus on clinical procedures, and finally, provides a framework of the dentist as the leader of the dental team. This presentation from experts in the industry offers strategies to increase production, effective office management, and dentist relationships with staff and students to create a productive environment.

In both the DDS and DMD curricula, students also benefit from attending the ADA's success seminars in each year of their program as well as attending workshops at the Chicago Dental Society's Midwinter Meeting. These seminars present topics with relevance to the successful business practices of dentistry and the well-being of the practitioner. For example, D1 students receive information related to organization and time management skills, student loans and level of debt, postdoctoral training. Second year students receive seminars on critical thinking, communication skills, and ergonomics in dentistry. The program then introduces third year students to assessing personal career philosophy, employment opportunities, skill development to conduct professional interviews, and prepare a curriculum vitae. The seminar for fourth year students is a full-day program that focuses on strategies to achieve and maintain a successful practice such as recruiting and leading a dental team, financial management, dental insurance plans, patient expectations and dentist responsibilities, and ethical aspects of practicing dentistry.

2. Describe how students are assessed in applying legal and regulatory concepts related to the provision and/or support of oral health care services (e.g., HIPPA, immunization, Basic Life Support, MSDS, licensure requirements).

The student assessment methods related to legal and regulatory concepts is summarized in the following table. In addition, from the D2 year to graduation, concepts in infection control and
regulatory compliance are included in some Small Group Learning scenarios and assessed through multiple choice tests as well as active daily assessment in the clinic by attending faculty.

**Assessment of Legal and Regulatory Content Taught in the DDS and DMD Curricula.**

<table>
<thead>
<tr>
<th>Term</th>
<th>Topic</th>
<th>Activity</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1, I Orientation</td>
<td>- Risk Management Protocols</td>
<td>Lecture</td>
<td>None</td>
</tr>
<tr>
<td>D1, D3</td>
<td>- Basic Life Support, CPR</td>
<td>Certificate course</td>
<td>Certification Exams</td>
</tr>
<tr>
<td>D1 DBSC321/DAOB312</td>
<td>- Licensure Requirements</td>
<td>Reading assignment of the Illinois Dental Practice Act</td>
<td>Online quiz on the Illinois Dental Practice Act</td>
</tr>
<tr>
<td>D1 Fall DADM314/DAOB311</td>
<td>- Principles of Infection Control</td>
<td>Small Group Scenarios</td>
<td>Faculty observation and review; Quizzes</td>
</tr>
<tr>
<td></td>
<td>- CDC: Guidelines for Dental Practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- OSHA – Workplace Safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Intranet Site, location of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinic Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infection Control Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Material Safety Data Sheets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Hands-on unit setup &amp; demonstrate proper use of barriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1 Spring DADM315/DAOB312</td>
<td>- HIPAA Regulations</td>
<td>Small Group Exercise, research of requirements by law and development of script</td>
<td>Faculty review/observation</td>
</tr>
<tr>
<td>D2 Summer/DBCS318/DADM316</td>
<td>- Appropriate Documentation in Dental Records</td>
<td>Complete chart audits</td>
<td>Faculty review</td>
</tr>
<tr>
<td></td>
<td>- Principles of Practice Management</td>
<td>- Practice Management Reports</td>
<td>Self-evaluation; faculty review</td>
</tr>
<tr>
<td></td>
<td>- Practice Management, chair utilization, production, collections.</td>
<td>- AxiUm Practice Management report</td>
<td>- Self-evaluation; - faculty review</td>
</tr>
</tbody>
</table>
Continued from previous page.

<table>
<thead>
<tr>
<th>Term</th>
<th>DDS Rubric / DMD Rubric</th>
<th>Topic</th>
<th>Activity</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3 Summer</td>
<td>DADM319/DAOB321</td>
<td>- Risk Management in Treatment Planning</td>
<td>- Lectures</td>
<td>- Quizzes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Organizational Efficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Personal Financial Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3 Fall</td>
<td>DADM320/DAOB322</td>
<td>- Employment Laws affecting recruitment and retention</td>
<td>- Paper: summarize 4 employment laws affecting dental offices. Select a candidate for a Dental Assistant position, define interview questions. - AxiUm Practice Management report</td>
<td>- Faculty review - Self-evaluation; faculty review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Practice Management, chair utilization, production, collections.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3 Spring</td>
<td>DADM321/DAOB323</td>
<td>- Principles of appropriate Resume and Curriculum Vitae Writing</td>
<td>- Create a resume</td>
<td>- Self-evaluation; faculty review</td>
</tr>
<tr>
<td>D4 Fall</td>
<td>DADM333/DAOB342</td>
<td>- Associateships</td>
<td>- Evaluate contracts</td>
<td>- Faculty Review</td>
</tr>
<tr>
<td>All years</td>
<td></td>
<td>- HIPAA-OSHA Online Training</td>
<td>- On line course</td>
<td>- Quiz</td>
</tr>
</tbody>
</table>

**Supportive Documentation**

Available On Site
Course Syllabi
Student clinical assessment forms
CPR, HIPAA, OSHA certification data
HIPAA-OSHA Yearly online training (compliance database onsite)
2-18  Graduates must be competent in applying the basic principles and philosophies of practice management, models of oral health care delivery, and how to function successfully as the leader of the oral health care team.

Conclusion: The UIC College of Dentistry complies with Standard 2-18.

Description

In addition to collaborating with dental specialists through the College’s comprehensive care clinics, students rotate through the various specialty clinics. In this way, students interact with specialists, learn about the roles of specialists and general dentists in relation to each other, and learn how to recognize the need for referral to a specialist. These rotations occur during the D3/IDDP2 years. Rotations include experiences in Oral Medicine, Oral Surgery, Endodontics, Periodontics Pediatric Dentistry, Prosthodontics and Orthodontics. In selected instances students also engage in externships related to pre-specialty training.

The other experience through which DDS and DMD students learn to interact with dental professionals and function as the leader of the team is through the community rotations, in their fourth year. Many of the community sites involve engagement in alternative healthcare delivery models which include combined medical/dental clinics.

1. Describe how dental students interact and collaborate with other dental care providers, including:
   a. dental specialists
   b. dental hygienists
   c. dental assistants, and
   d. dental laboratory technologists.

In both the DDS and DMD curriculum, students at the College interact with periodontists in preparing treatment plans for all patients, and they interact with endodontists, oral surgeons, oral medicine specialists, prosthodontists and orthodontists as needed to form each patient’s treatment plan. If the case is skill appropriate, they perform the care under the supervision of the predoctoral specialist faculty. If the patient care need is more complex, the patient is referred to the post-graduate clinic, which entails communication between the dental student and the graduate student for the specialist’s care and for return to comprehensive care. All students have the opportunity to interact with receptionists and dental assistants in the comprehensive care clinics. When students are assigned to extramural rotations (and all fourth year students are assigned), there is an assistant assigned by the community clinic site to each student.

When providing prosthodontic, orthodontic, and/or pediatric patient care requiring laboratory services, students interact with lab technicians via prescription forms, under the supervision of the clinical faculty. When the work is received from the lab, the student evaluates the work according to criteria, again under supervision, and returns the work to the lab if it doesn’t meet standards. On occasion, students contact the laboratory technician by phone to clarify a prescription or answer a question regarding the prescription.

Clinical rotations through the specialty clinics (Radiology, Orthodontics, Oral Surgery, Pediatric Dentistry, Periodontics, Endodontics) begin in the D2 fall term, and continue throughout the D3 year.
One of the expected outcomes of these rotations is to introduce students to the concept and application of interdisciplinary practice. Students not only benefit from assisting postgraduate students during complex treatments, but are also introduced to the appropriate referring flow between a general dentist and a specialist. During their clinical practice at the College, students are required to use “Referral Codes” in AxiUm to document the appropriate specialty referral. In turn, specialty clinics use referral codes as a mechanism to track assignment of residents to the referred patient, and completion of referral.

The following table describes the different dental professionals who work with the students on each rotation. In all the extramural rotations, students have the experience of working with a dedicated chairside dental assistant. These settings also expose our students to HQFC, philanthropic, faith-based and other forms of organization and funding methods.

### Dental Professionals Working with Dental Students at Extramural Sites

<table>
<thead>
<tr>
<th>Extramural Site</th>
<th>Dental Assistant</th>
<th>Dental Hygienist</th>
<th>Specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocate Illinois Masonic Medical Center</td>
<td>Yes</td>
<td>Yes</td>
<td>Physicians</td>
</tr>
<tr>
<td>Children’s Clinic</td>
<td>Yes</td>
<td>Yes</td>
<td>Pediatric dentist</td>
</tr>
<tr>
<td>Crusader Clinic</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Erie Family Health Center</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Heartland Outreach</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Infant Welfare Society of Chicago</td>
<td>Yes</td>
<td>Yes</td>
<td>Pediatric dentist</td>
</tr>
<tr>
<td>Lake County Health Department</td>
<td>Yes</td>
<td>Yes</td>
<td>Physicians</td>
</tr>
<tr>
<td>Lawndale Christian Health Center</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Milestone Inc., Dental Clinic</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Peoria County Health Department</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Salud Family Health Center</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>St. Bernard Hospital</td>
<td>Yes</td>
<td>Yes</td>
<td>Pediatric dentist</td>
</tr>
<tr>
<td>Whiteside County Health Department</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

2. **Summarize the practice management curriculum.**

Students’ learning regarding legal and regulatory issues is described in Standard 2-.17. What follows here is a description of the Practice Management Curriculum as it relates to models of health care delivery and leadership of the oral health team. The curriculum has remained similar as the transition has occurred from the DDS to the DMD curriculum. In the first year, students work on cases that address Infection Control concepts in a private office setting (DDS-DADM314; DMD-DAOB311). During these activities, students design strategies to correct violations, address staff and create protocols to prevent future violations. During the spring term, first year students are assigned cases in small groups involving HIPAA compliance, where they determine the appropriate action and write a script on how the dentist should professionally communicate with employees, patient or member of the public (DDS-DADM315; DMD-DAOB322). Each group presents the regulatory issues involved and the script to
the whole group at the subsequent session, thereby practicing and modeling how to appropriately address HIPAA issues with employees.

In the D2 year, DDS and DMD students are introduced to the College clinic model of practice with the clinic policies and regulations. In addition, they learn the purpose, procedures and skills of quality assurance and chart audits, which are essential components of leading an oral health team.

As students transition to the D3 year, they define roles and responsibilities of the dental team in a private office environment. (DDS-DADM319, DADM320, DADM321; DMD-DAOB331, DAOB332, DAOB333) Students discuss “essential” positions, and learn about differences in functions and licensure requirements. At the end of this year, students complete an assignment that requires them to review employment laws related to hiring practices. Students also review ten sample resumes, select a candidate and justify their selection, and finally they create sample interview questions. Later, when the course introduces professional options after graduation, students learn about regulatory requirements for different career paths, e.g. private practice, specialization, education, research, consulting, etc. students are introduced to requirements such as licensure and insurance, and learn basic distinctions among associateships, independent contractors, and sole-proprietorships, and their fiscal and risk management implications. Students are also introduced to financial concepts with a focus on individual finances’ impact on future professional plans. Risk management concepts are presented to them by industry experts, with a focus on informed consent and refusal, appropriate specialty referrals, documentation, etc.

The D4 year further explores insurance regulations for dentists, and expands on comparing private practice models in light of purchasing a practice (DDS-DADM332, DADM333, DADM334; DMD-DAOB341, DAOB342, DAOB343). At the end of these courses, students prepare a business plan for purchasing a private office. The business plan includes a demographic analysis for selecting a practice, developing a mission statement, and financial calculations. At the end of the term, students create practice management reports which are reviewed by their Managing Partner. At the end of each semester, students produce an AxiUm-based Clinical Progress and Patient Management Report which is reviewed and discussed with their Managing Partner. This required report consists of a variety of categories related to patient care, including practice and risk management. Reports must be generated by the student via the AxiUm electronic patient to complete the assignment:

AxiUm Feedback: Students are required to review the daily evaluations and feedback provided by the faculty and summarize the outcomes, as well as reflect upon their own performance.

Attendance: Students state whether they were absent for any days during the semester, and comment on how they have or will make up the missed session.

Clinical Course Requirements: Students review their completion of required independent performance exams, and must comment if any are incomplete at the end of the semester.

Clinic Utilization: Students must maintain a log of patient care for a given time frame and keep a record of each clinical session, including whether there was a patient scheduled and treated, as well as a record cancellations and failures. They must comment on their percentage of utilization of clinic opportunity as well as failures and cancellations. Students reflect upon clinic utilization and identify ways to improve this percentage. They must also describe approaches that can be used to minimize the number of lost clinic opportunities.
Varied Patient Experiences: Students run a report for a given time frame and compare their clinical production/progress to the class average. They are asked to reflect upon this information as it relates to efficient use of clinic opportunities, and comment on how they may use strategies to increase their clinical activity and experience. Students also are asked to identify areas that they have recognized as requiring more experience (ie Periodontal therapy, endodontic therapy, direct or indirect restorations, etc.).

Practice Management: Students must review the number of unapproved items that are dated more than two weeks in the past. They must explain the circumstances and measures they are taking to rectify the problem.

- Students must run an “In Process Report” on Active and Recall Patients and must explain why any “In Process” procedures beyond one month are not completed.
- Students must run an “Aged Balance” report for each semester and to identify the specific reason for each uncollected balance and discuss how this could have been avoided, and how it will be resolved.

Review of patient list: Students must run a “Patient List” Report and identify (with chart number) the active patients who have not been seen in 60 days. These are overdue patients. Students must identify the specific reason for the lack of timely care, and discuss how this will be rectified. Students must also identify (with chart number) the recall patients who have not been seen for an exam or prophylaxis for over 6 months (complete denture cases are seen within 12 months). These are overdue patients. Students must identify the specific reason for the lack of timely care, and discuss how this will be rectified.

During the D4 year, students, rotate to community clinics (DDS-DADM325; DMD-DCLE341-343). As part of that experience students write a paper describing the model of practice used at the community site, including source of funding.

3. Describe any student interactions with local or state government officials in relation to oral health care issues.

Our chapter of the American Student Dental Association meets with government officials regularly. On National Lobby Day in 2013, they met with congressional representatives in Washington DC to support HR 1666, Breaking Barriers to Oral Health Care Act, which would increase financial appropriations for charities and public-private partnerships to provide free dental services. They also held an annual drive February 11-14 to support the American Dental Association political action committee which featured four lunch and learn presentations about the political issues facing dentistry. Nearly 70 students joined ADPAC to support organized dentistry and strengthen dentistry’s voice in state and national legislation. In April of each year a student delegation joins the Illinois State Dental Society dentists in the State legislative advocacy visits to the State Capital.
4. Describe how students are assessed in applying the basic principles and philosophies of practice management, models of oral health care delivery, and how to function successfully as the leader of the oral health care team.

Assessment of the practice management curriculum is described in detail in Standard 2-17. Further, during the D2, D3 and D4 years, students run quarterly practice reports and benchmark their chair utilization, production and collection compared to peers. Students write a reflective paper describing opportunities for improvement, which is discussed with their managing partner.

The Extramural Rotation Student Skill Assessment form assesses students on leadership qualities such as providing staff with feedback, accepting responsibility, treating everyone fairly, and working well with others. This form is used by preceptors in environments where students are working with dental assistants, and so is an effective evaluation of the student’s ability to function as team leader.

In clinic during the third and fourth year, dental school clinical staff informally report to the managing partners about students’ skills and behaviors regarding patient management, infection control, ethical practice, and dialogue with patients, staff and peers.

Supportive Documentation
Appendix C-23: Incisal Edge, May 2013

Available On Site
Course Syllabi
Student assessment forms
2-19 Graduates must be competent in communicating and collaborating with other members of the health care team to facilitate the provision of health care.

Conclusion: The UIC College of Dentistry complies with Standard 2-19.

Description

At the College, students collaborate clinically to coordinate patient care with dental professionals, public clinic care providers and medical professionals in the college clinic and on extramural rotations. This collaboration is primarily related to making referrals and seeking consultation when indicated. While participating in the extramural sites students have the opportunity to interact with medical professionals, social workers, and nurses informally, outside of patient care. However, while providing patient care they most frequently interact with other health professionals through referrals and consultations. Students interact with medical, nursing, pharmacy and allied health care student health professionals in a simulated patient care setting during an annual inter-professional education experience in the third year. Finally, the DMD students explore the roles and training of other health care professionals through the small group learning scenarios. Students often treat nursing home residents at the College, and often coordinate treatment with them.

1. Describe how students interact and collaborate with other health care providers, including but not limited to:
   a. primary care physicians, nurses, and medical students
   b. public health care providers
   c. nursing home care providers
   d. pharmacists and other allied health personnel, and/or
   e. social workers.

Clinically, all DDS and DMD students interact and collaborate with other health care providers both in the College clinic and on extramural rotations (IDDP students do not rotate extramurally). As students assess patients as part of the initial comprehensive examination they frequently work with physicians to clear patients for dental treatment. In addition, they refer patients for medical care when the need arises. For example if a patient is found to have a high blood pressure or blood glucose reading, the student formally refers the patient to their physician. Medical consultation and referral occur by writing a letter to the patient’s physician, attending to the response, and modifying the treatment plan accordingly. Students are trained and supervised in writing these referrals in a collaborative manner to assure receipt of the needed information and to achieve the most appropriate patient care outcomes. Students receive information and examples of proper referral text and format and then complete an exercise filling out referrals on a simulated patient (DDS-DADM319; DMD-DAOB331). In small group learning, DMD and IDDP1 students complete medical referral forms on several virtual cases.

On external rotations, students work with medical professionals in the same way as in the College. They communicate via referrals with physicians to clear patients for dental care and to alert medical professionals to health issues in patients. There are several external rotations where students may have exchanges with health care professionals or other health care students, due to the proximity of the dental clinic to other patient care venues. These experiences occur at Advocate Illinois Masonic Medical Center, Crusader Clinic, St. Bernard Hospital, Lawndale Christian Health Center, Erie Family
Health, Lake County Health Department, Peoria County Health Department, Children’s Clinic, Infant Welfare Society of Chicago, Heartland Alliance, Salud Family Health Center and Whiteside County Health Department.

In addition to the above, students collaborate with other health professional students through the University’s Inter-Professional Educational and Collaborative Practice Program. This year, the program consisted of a day long seminar which provided simulated experiences of teams working in small groups caring for a patient. The College had sixty-six students and twenty faculty members participate in the event. Students and faculty from medicine, nursing, allied health and pharmacy participated. The scenario used included dentally related issues. Dr. Phillip Marucha and more recently Dr. Sara Gordon serve on the planning committee for the event. Planning is currently underway for the spring 2014 session. As this program is expanded, dental students will continue to be a part of it.

Students at the College work with other health professions students through the UIC Health Professions Student Council (HPSC), which is an interdisciplinary liaison organization between the individual health professions students, student groups, the health professions colleges and the university at large. HPSC appoints students to university and campus-wide committees to represent the interest of the health professional student body. Also, HPSC funds the individual health professional student councils, including the College Student Council. Additionally, HPSC provides funding to students for interdisciplinary projects. HPSC provides a forum for interdisciplinary discourse through a Collaborative Healthcare Series and Leadership Series. Through the Series, students gain a better understanding of the health care system as a whole and a better appreciation for the other healthcare disciplines within the system. Student members plan programs that occur at each of the participating colleges.

The University of Illinois Urban Health Program provides College students with opportunities to participate in interdisciplinary educational programming and outreach and networking activities. UHP is a university-wide underrepresented minority student (URM) recruitment and retention program for the university’s health sciences training programs. All six UIC health science colleges and the Graduate College participate in the interdisciplinary program including the College.

2. Describe any clinical experiences students have outside of dental school clinics, where medical care or long-term care is the primary focus.

Almost all DDS or DMD dental students rotate to community settings (excepting the international students). Students minimally spend 50 days in offsite community partner clinic settings. Nearly all community settings are in dental clinics affiliated with hospital or medical outpatient clinics, thus providing opportunity for interaction with other health care providers and health care provider students.
3. Describe how the student is assessed, including any assessment mechanism made by non-dental school faculty, for:
   a. communication, and/or
   b. collaboration.

Students are assessed in external rotations by supervisors who are adjunct dental faculty who participate in student evaluations that contribute to clinical grades. Extramural sites evaluate students for clinical competence, patient management and ethical behavior, and the sites are encouraged to comment on other aspects of the students’ performance, including the ability to communicate and collaborate with the team.

Clinically, students’ ability to communicate and collaborate is assessed in the College clinics via the daily clinical faculty. As the managing partners and attending faculty determine a student’s grade for the clinical course, their ability to work with the dental assistants and the receptionists is taken into account. Staff report to the managing partners on issues related to patient management, infection control, ethical practice, and dialogue with patients, staff and peers.

Assessment for team communication and collaboration skills is summarized in the tables below. Assessment of other kinds of communication skills is described in 2-15.

**DDS Assessment of team communication and collaboration skills in a multicultural environment, not including the specifically behavioral assessments which are presented in 2-15.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Assessment Type and Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>DADM325 - external rotations (excluding IDDP)</td>
<td>Self-assessment, Performance assessment, Varied Experiences, Faculty observation, Patient management</td>
</tr>
<tr>
<td>Urgent Care Clinic</td>
<td>Determination of need for medical consult, Supervision</td>
</tr>
<tr>
<td>Clinic supervision in Group Practices</td>
<td>Supervision in College Clinics, Supervision in College Clinics</td>
</tr>
<tr>
<td>Clinic supervision in Oral Medicine Rotation</td>
<td>Self assesses referral to other health care professionals, Determination of need for medical consult, Supervising dentist also assesses</td>
</tr>
</tbody>
</table>
DMD Assessment of team communication and collaboration skills in a multicultural environment, not including the specifically behavioral assessments which are presented in 2-15.

<table>
<thead>
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<tr>
<td>DADM325 - external rotations (excluding IDDP)</td>
<td>Self-assessment Performance assessment</td>
</tr>
<tr>
<td></td>
<td>Varied Experiences Faculty observation</td>
</tr>
<tr>
<td></td>
<td>Non-faculty (external preceptor) assessment</td>
</tr>
<tr>
<td>Urgent Care Clinic</td>
<td>Determination of need for medical consult</td>
</tr>
<tr>
<td></td>
<td>Supervision in College Clinics</td>
</tr>
<tr>
<td>Small group assessment: DBCS311-329</td>
<td>Students self-assess their small group performance, including collaboration, at each session</td>
</tr>
<tr>
<td>DAOB311-323</td>
<td>Faculty grade students on collaboration skills in small group.</td>
</tr>
<tr>
<td>DOST331, 332</td>
<td>Some small group facilitators are not faculty, and they grade students on collaboration skills in small group.</td>
</tr>
<tr>
<td>Clinic supervision in group practice</td>
<td>Supervision in College Clinics</td>
</tr>
<tr>
<td></td>
<td>Supervision in College Clinics</td>
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<tr>
<td>Clinic supervision in Oral Medicine Rotation</td>
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<td>Determination of need for medical consult</td>
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<tr>
<td></td>
<td>Supervising dentist also assesses</td>
</tr>
</tbody>
</table>

**Supportive Documentation**

Available On Site
Course Syllabi
Student assessment forms
Graduates must be competent in the application of the principles of ethical decision making and professional responsibility.

Conclusion: The UIC College of Dentistry complies with Standard 2-20.

Description

The College, in both the DDS and DMD Programs, enjoys a robust curriculum and commitment to ethics and professionalism throughout the four years. We have had the great good fortune to collaborate with Dr. David Ozar and his doctoral students for our DDS curriculum. Their wisdom still informs the DMD curriculum. Dr. Ozar supports our Student Professionalism and Ethics Association Chapter, and has spoken at a recent meeting. Ethics and professionalism are also embedded in our electronic Case-Based examination which is challenged by every student every year. Our students at the first year White Coat Ceremony and at Commencement recite the Dentist's Pledge. Professionalism and Ethics are central to our Competencies.

1. Summarize the curriculum in ethics and professionalism. Address the areas of academic environment, patient care, practice management and research.

**DDS Curriculum**

In the DDS curriculum students were given an introduction to ethics during orientation week of their D1 year, which was immediately continued in the fall of their first year as a module of the DADM 314 course. This module trained them in the College Policy on Academic Professionalism, which has to do with the ethics of dental student behavior (academic environment). Groups of students applied the Academic Professionalism Policy to simulated cases, and then presented the cases to each other, using a version of David Ozar's five step ethical decision-making model.

The ethics of patient care was addressed in the summer of the D3/I2 term as students were entering clinic, in DBSC321. In this course, the students reviewed the content of basic ethical documents, and applied the documents to clinical cases. This was done in small group discussions which followed brief lectures. The small groups were co-lead by dental faculty and ethics graduate students from the Loyola University. The topics covered included patient participation in treatment planning, models of care (care dictated by patient or doctor, care negotiated with patient, or care directed by the commercial model), dealing with patients with impaired capacity to consent, advertising, substance abuse, conflict of interest, insurance ethics, scope of practice, and social justice. A modification of Ozar's five step model of ethical decision making was taught to give students a method of ethical decision-making for novel or complex situations. The students and the faculty were trained to see that many situations are ethically arguable, but that it is important to think through what the best action would be. Students were encouraged to use the documents and the norms of dentistry to defend the actions they determined to be best ethically in situations that were arguable. One case covered the issue of Alaskan dental therapists and solutions to problems of access to care.

Research ethics is addressed for students doing human subjects or animal research by taking the courses required by our institutional human subjects review board. In addition, D4 students received a lecture on research ethics in the fall.
DMD Curriculum

In the summer prior to matriculation, the students challenge three on-line courses offered by the American College of Dentists. Course 1 familiarizes them with the Ethics Handbook for Dentists, which defines ethics and professionalism. Course 6 discusses the various ways that ethics can be taught and how it is learned. Course 7 explores the different models of dental practice and proposes the Service Model (patient care). During the first year orientation and the fall term, as part of DAOB311, students study the College’s Academic Professionalism for Students. This module trains them in the College Policy on Academic Professionalism, which has to do with the ethics of dental student behavior (academic environment). Groups of students apply the Academic Professionalism Policy to simulated cases, and then present the cases to the class, using a version of David Ozar’s five step ethical decision-making model.

Starting in the spring of the D1 year, ethical issues are introduced into the Small Group Learning format. The ethical content in the cases is focused on the ethical practice of patient care. Documents are provided on the Blackboard site, and students are assigned in group to apply the documents to the case. These cases are introduced to the students beginning in spring of the D1 year and continuing through the spring of the D2 year. The first year international students join the regular students at the beginning of the D2 year. Topics covered are: discussing alcohol abuse with a patient, general dentists screening and referring for systemic disease, refusal to treat HIV+ patients or otherwise discriminating, insurance ethics, working beyond capability, consent and language difficulties, confidentiality issues, dentists discussing other dentists’ work, the commercial practice of dentistry, dentists providing botox treatment, advertising, child abuse, and responding to drug abuse in a professional.

In the spring of the D1 year, students review ethics documents delineating the norms and values of dentistry (patient care) and pass a Blackboard-based quiz on each of those documents (the Illinois Dental Practice Act, the ADA Principles of Ethics and Code of Professional Conduct, and the Ethics Handbook of the American College of Dentists). The incoming international students do the same during their orientation in the spring.

In the spring of the D2 year the students write a first draft of a paper explicating the ethical issues of a self-selected case, which is evaluated by a peer according to a rubric. The instructor then grades the peer evaluation, and provides feedback to both the author and the peer evaluator concerning the application of ethical principles and norms to the case. Finally, the students rewrite the paper with the suggested improvements and submit it for a grade. In this way, they learn the process of ethical reasoning. For this paper, students choose a wide range of patient care ethical issues to address, including abuse, substance abuse, parents choosing inadequate or no treatment for children, clinically unacceptable care, discussing other dentists’ treatments, and relations with specialists.

In the D3 and D4 years, ethics are again addressed through the DOST and DOSI courses. The ethical issues covered are patient care ethics: consent to care in a minor and in a person with cognitive issues, insurance ethics, treatment plan negotiation, dealing with one’s own bad work or bad outcome, dealing with another dentist’s clinically unacceptable care, relationships with specialists, and inappropriate personal relationships with patients. Students as a group work on exercises and post them for feedback. In addition, for DAOB333 each student prepares a portfolio of their work, which must include a paper writing up a case where ethics, communications and/or practice management was important.

STANDARD 2-20

- 204 -

A Proud Past
Students doing human subjects research receive more extensive ethics training by taking the courses required by our institutional human subjects review board. In addition, research ethics is covered in DOST332.

Practice management segments for both curricula addressing regulatory issues and best practices associated with employee-employer relationships are addressed in Standards 2-17 and 2-18.

2. Describe the role of students in the school’s disciplinary board.

Students have full involvement in the University’s (through the Senate Committee on Student Discipline) and the College’s disciplinary procedures. As found in the Faculty Bylaws Subcommittee on Student Discipline.

is defined as:

1. Membership
   a. The committee shall consist of:
      1) six faculty members elected by the faculty to serve 3-year terms with no limit on consecutive terms,
      2) six student members (four DDS/DMD students and two IDDP students), elected by their respective classes; and
      3) the Associate Dean for Student and Diversity Affairs.
   b. The names of the committee members shall be forwarded to the Senate Committee on Student Discipline.

2. Structure
   a. The Associate Dean for Student and Diversity Affairs shall serve as Chair.
   b. A quorum shall be a simple majority consisting of at least four faculty members.

3. Function
   a. The committee shall act in such manner as described in the Statutes. Article XI. Section 2a., and in the Student Disciplinary Procedures, UIC developed by the Senate Committee on Student Discipline.

3. Describe how students are assessed in the application of the principles of ethical decision making and professional responsibility.

**DDS Curriculum**

DDS students were assessed didactically in the application of principles and decision making:

1. graded group presentations of ethical cases and resolutions in the D1 year,
2. weekly discussion grades in the D3 year, and
3. a graded written essay examination (using a modification of Ozar’s 5 step model of ethical decision-making) explicating an ethical case as the culmination of their D3 ethics course.

DDS students are assessed clinically in ethics and professional responsibility in the clinic through their daily clinical evaluation which specifically addresses professionalism and rates student performance as exceeds expectations, clinically acceptable or standard not met on ethics in clinic.

**DMD Curriculum**

The College teaches students a modification of Ozar’s five step decision-making model which helps them apply the norms of dentistry and the regulatory issues to a case and decide the best way of handling the situation. DMD students are assessed in application and decision making via

1. graded group presentations of ethical cases and resolutions in the D1 year,
2. multiple-choice questions on examinations and quizzes over the material covered in small group sessions,
3. an essay in the d2 year, and
4. an ethics component of the portfolio in the D3 year.

Students are assessed in responsible behavior and ethical decision making in clinic as well. All students receive a daily clinical Professionalism grade on:

1. Ethical patient treatment;
2. Cultural Sensitivity and
3. Appreciation of Patient need.

Faculty can assess an E (exceptional), S (Satisfactory) or I (improvement needed). E or I require a written comment from the faculty supervisor explaining the assessment. Similarly, students are assessed clinically for ethics and responsibility at the extramural rotations in DADM325.

4. Describe the resources students are exposed/referred to in considering ethical decision-making.

- School policy documents (especially Academic Professionalism for Students.)
- The ADA Principles of Ethics and Code of Professional Conduct
- The Ethics Handbook of the American College of Dentists
- The Illinois Dental Practice Act
- Ozar & Sokol’s Dental Ethics at Chairside,
Supportive Documentation
Appendix C-1: Academic Professionalism for Students
Appendix D-3: COD Faculty Bylaws – Disciplinary Committee

Available On Site
Course Syllabi
Student assessment forms
2-21 Graduates must be competent to access, critically appraise, apply, and communicate scientific and lay literature as it relates to providing evidence-based patient care.

Conclusion: The UIC College of Dentistry complies with Standard 2-21.

Description

Evidence based dentistry interactive didactic sessions and EBD skill development activities are scheduled during D1 fall, spring and D2 summer semesters. However, EBD principles are part of each course of the DMD curriculum. Each course has components which engage the students in clinical and translational research exploration and reporting. Examples include reviewing resources for small group learning, hands-on translational and clinical research lab methodology, written papers, case reports, and case presentations.

1. Summarize the portion of the curriculum concerning the basic principles of clinical and translational research.

See table below.

2. Describe how students are assessed in their ability to access critically appraise, apply, and communicate scientific and lay literature as it relates to providing evidence-based patient care.

See table below.
### Description and Assessment DDS Class of 2013:

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Summary</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1 DADM314 DADM315</td>
<td>D1 DDS Lectures and Case Presentations  - Formulate PICO Questions  - Medical Subject Headings (MeSH)  - PubMed  - Clinical Queries  - Hierarchy of evidence used to assess relevant evidence  - Critically appraise classic literature to support current dental practices</td>
<td>- In class participation/ faculty observation</td>
</tr>
<tr>
<td>D2 DADM316 DADM317 DADM318 REST323</td>
<td>DDS D2 Comprehensive Care Components in Restorative Dentistry, Periodontics, Endodontics and Implantology  - Critically appraise classic literature in courses to support current dental practices  - Evaluate and assess ADA Clinical Recommendations  - EBD projects focused on creating PICO questions, performing literature searches, assessing evidence and application to clinical decision making  - Presentations in small groups to communicate findings</td>
<td>- In class participation  - faculty observation  - Written Report</td>
</tr>
</tbody>
</table>

DADM 314 2009  
- Evidence Based Practice  
- Quiz 1  
- Quiz 2  
- Individual Project  
- Group Project 40%

DADM 315 2010  
- Evaluation of C&R Poster  
- Hypothesis tested  
- Level of evidence  
- Methods and Matls  
- Results  
- Conclusions

REST323  
- Treatment planning written assignment  
- Criteria used  
- PICO question  
- Level of evidence  
- Applicability  
- Answer to question

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<thead>
<tr>
<th>Rubric</th>
<th>Summary</th>
<th>Assessment</th>
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</thead>
</table>
| D3     | DDS D3 Comprehensive Care Components in Pediatric Dentistry, Treatment Planning, and Clinic  
- Critically appraise emerging literature in courses to support current dental practices  
- EBD projects focused on formulating a hypothesis, creating PICO questions, performing literature searches, assessing evidence and application to clinical decision making  
- Periodontics Re-Evaluation Portfolio  
- Written reports to communicate search process and relevant findings  
- Students create treatment plans and can justify treatment approaches based on relevant evidence  
- Evaluation of posters at Clinic and Research Day and Midwinter Meeting Report | - In class participation/faculty observation  
- Written Report  
- Portfolio  
- Critique 2 articles  
- Submitted treatment plans with evidence-based rationale  
- Presentation to peers and faculty |
|        | DADM319 DADM321 REST351 REST352 REST353 | DADM 321  
- Portfolio on Medically Compromised patient |
| D4     | DDS D4 Comprehensive Care Components in Clinic  
- Multi-disciplinary Clinical Case Presentations  
- Student formulates a hypothesis relevant to patient, creates PICO questions, performs literature searches, assesses evidence, applies to clinical decision making  
- Presents to a group of faculty and peers to communicate findings  
- Evaluation of posters at Clinic and Research Day and Midwinter Meeting Report | DADM341-3 REST361-3  
- Case Presentation to peers and faculty with literature justification  
ENDO363  
- EBD report on a patient treatment case experience |
|        | DADM341 DADM342 DADM343 REST361 REST362 REST363 ENDO363 | REST 351, 352, 353  
- EBP Papers |
### Description and Assessment DMD Class of 2015

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Summary</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| D1 Fall DAOB311 | Students participate in activities where they are introduced to generating searchable clinical questions using the PICO format, accessing information from professional and lay sources, determine applicability of information to a given patient, apply the information to patient care by creating and communicating an evidence-based prevention plan for their classmate. Specifically, students: - Define EBD  
- Define and describe the EBD Process  
- Define PICO  
- Demonstrate PICO Process  
- Identify Boolean Operators  
- Access information from professional and lay sources  
- Demonstrate PubMed Search Techniques  
- Define MeSH  
- Identify Limits in Pubmed  
- Demonstrate Advanced PubMed Search Techniques  
- Compare and Contrast Search Methodologies of Various Databases  
- Identify Resources in Specific FQHC supported Communities  
- Identify Barriers to the access of Health Resources  
- Demonstrate searching community data  
- Demonstrate searching city, state, federal resources  
- Identify relevant resources to partner-patient regarding primary prevention  
- Appraise quality of resource and apply outcomes to primary prevention plan for partner-patient  
- Determine plan for evaluation of primary prevention for partner-patient | - Faculty observation  
- Peer presentation  
- Demonstration to peers  
- Small group learning assessment  
- Case Report (see assignment and grading criteria below)  
- MCQ examinations |

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### Rubric

<table>
<thead>
<tr>
<th>Course</th>
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</table>
| D1 Spring DAOB312 | Students learn about biomaterial laboratory testing, study design, levels of evidence, a various components of a research article, study bias, and evaluating the quality of information. Students critically appraise clinical research in small group learning and interactive didactic sessions to support current dental practices. Students perform a literature review on a topic of their choice and evaluate the quality of information, determine applicability of information, apply the information to patient care, and describe methods to evaluate the outcomes of their clinical decisions. Specifically, students:  
- Define Levels of Evidence  
- Define Various Types of Study Design  
- Apply Levels of Evidence to PICO process to assess relevant evidence  
- Describe various components of a research article  
- Describe various types of study bias  
- Critically appraise classic literature in small group learning and interactive didactic sessions to support current dental practices  
- Determine applicability of information to a given patient  
- Apply relevant information to patient care  
- Describe methods to evaluate outcomes  
- Written semester report to communicate search process and relevant findings in regards to evidence-based prevention plan | - In class participation/faculty observation  
- Demonstration to peers  
- Small group learning assessment  
- Literature Review Paper (see assignment and grading criteria below)  
- MCQ examinations |
| D2 Summer DAOB321 | Students continue to learn biomaterial concepts and are exposed to relevant clinical and translational readings and resources. After performing in-depth literature review, students will apply basic research methods to test a clinical hypothesis they generate based on a knowledge gap. Students submit a research proposal containing the following:  
- Identify research gaps in current literature  
- Create a hypothesis with specific aims  
- Perform literature review  
- Describes materials and methods to test hypothesis  
- Describe methods to evaluate outcomes | - In class participation/faculty observation  
- Small Group Learning assessment  
- Research Proposal - MCQ examinations |
<table>
<thead>
<tr>
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</table>
| D2 Fall     | Students continue applying the principles of Evidence-Based Dentistry and Clinical and Translational Science in Small Group Learning, and discuss and appraise scientific literature during Interactive Didactic Sessions.  
- Integrated in clinical cases created by faculty  
- Reinforce biomedical/behavioral sciences  
- Students cued to toward EBD investigations in case | - In class participation/faculty observation  
- Small Group Learning assessment  
- MCQ examinations |
| DAOB322     |                                                                                                                                                                                                                   |
| D2 Spring   | Students continue applying the principles of Evidence-Based Dentistry and Clinical and Translational Science in Small Group Learning. Students are assigned simulated patients in both the small group sections and the diagnosis and treatment sections with problems to solve. Both of these learning activities require access, assessment, evaluation and application of scientific readings. Students are given treatment planning case scenarios and must apply the Evidence Based Process to support a clinical recommendation or treatment.  
- Treatment Planning Cases  
- Treatment Planning Evidence Based written assignment | - In class participation/faculty observation  
- Small Group Learning assessment  
- Treatment planning written assignment  
- Criteria used  
  - PICO question  
  - Level of evidence  
  - Applicability  
  - Answer to question  
- MCQ examinations |
| DAOB323     |                                                                                                                                                                                                                   |
| DBCS327     |                                                                                                                                                                                                                   |
| DBCS328     |                                                                                                                                                                                                                   |
| DBCS329     |                                                                                                                                                                                                                   |
| D3 Summer   | DAOB requires review of 2 papers related to the caries risk assessment plus an evidenced based report on a topic related to a patient care issue in the student’s practice.  
DOST continues the small group discussion of systemic disease and its relationship to patient care. Using the SGL model students must find the best supporting evidence for resolving a patient care issue. | Written papers on caries risk management and a patient based report  
Instructor evaluation of participation in SGL |
**Elective Activities for All Students**

**Case CAT (Critically Appraised Topic)**
- Student formulates a hypothesis relevant to patient, creates PICO questions, performs literature searches, assesses evidence, applies to clinical decision making
- Poster Presentation
- Presents to a school-wide group of faculty, staff and peers to communicate findings, relevance, and application to patient treatment
- Student can show intellectual breadth during question and answer session

**Clinic and Research Day**
- Summer Research Program
- Student formulates a hypothesis relevant to patient, creates PICO questions, performs literature searches, tests emerging hypotheses against evidence, criteria, and standards
- Poster Presentation
- Presents to a school-wide group of faculty, staff, alumni and peers to communicate findings, relevance, and application to patient treatment
- Student can show intellectual breadth during question and answer session

**Supportive Documentation**

Available On Site
Course Syllabi
Student Assessment Forms
Graduates must be competent in providing oral health care within the scope of general dentistry to patients in all stages of life.

Conclusion: The UIC College of Dentistry complies with Standard 2-22.

Description

The College categorizes stages of life as child (0-12), adolescent (13-18), adult (19-54), and older adult (55+). Because of the volume of patients assigned to students over the course of their clinical experience, each student provides oral health care to patients in all stages of life.

1. Describe the dental school’s definition/parameters of the scope of general dentistry.

The practice of general dentistry identifies the dentist as the primary oral health care provider, supported by dental specialists, allied dental professionals, and other health care providers. The graduates of the College have a broad biomedical and clinical education and are able to demonstrate professional and ethical behavior as well as effective communication and interpersonal skills. In addition, s/he must have the ability to evaluate and utilize emerging technologies, practice management models, continuing professional development opportunities, and problem-solving and critical thinking skills to effectively address current and future issues in health care.

General Dentistry includes the management of the oral health care of the infant, child, adolescent, and adult, geriatric, and special needs patients. The provision of patient care includes assessment, diagnosis, determining prognosis, treatment planning, and the establishment and maintenance of oral health within the individual's skills and knowledge. The graduates must competent to provide care using standard infection control practices, HIPAA standards and manage patient pain and anxiety. The graduate formulates diagnosis consistent with assessment, articulate prognosis, prevent disease, manage dental and medical emergencies, treat oral diseases and evaluate the outcome of therapy.

The College has seven competency statements, and all courses, learning objectives and associated evaluations relate back to these. As required in Standards 2-4 and 2-5 the Competencies are described in more detail along with the evaluation methods.

2. Discuss the school’s definition/categorization of the stages of life and how treatment is modified to reflect the stages of life.

The categories of life stages and the descriptions are listed above. The following are examples of courses where treatment is modified to reflect the stages of life. Behavior development and modification skills are presented as part of pre-patient D2 course (DDS-PEDD334; DMD-DAOB311, DAOB321). The students are presented different methods of behavior management associated with pain and anxiety management. Lectures are geared to familiarize the student with Behavior Modification techniques such as Tell-Show-Do, modeling, desensitization, protective stabilization, behavioral scoring. Child focused general concepts on conscious sedation and nitrous oxide use are also part of the pre-patient care D2 varied experiences. In D3 year, the students encounter experiences on clinical demonstration of the above experience including nitrous oxide on patients recognized as benefitting from its use are obtained.
Major developmental milestones (motor, cognitive, language and social milestones) of infants, preschoolers, school age children, and adolescents are part of Communication experiences in D1 (DDS-DADM314, DADM315; DMD-DAOB311, DAOB312) and D2 (DDS-DADM316; DMD-DAOB321). The students review the development theories of Piaget, Bowlby and Ainsworth and discuss how to tailor communication and behavioral dental interventions (e.g., brushing & flossing instructions, explanation of a dental procedure) to the appropriate developmental level of the child. As part of the above discussion, students learn how caregiver and cultural factors influence healthcare communication.

In the D3 year (DDS-OSUR337; DMD-DOST331) course, students learn about patient evaluation and treatment modifications for elderly or medically compromised patients. These skills are taught in Medicine for Dentists as well during UG-OS clinic rotation experiences (DDS-OSUR334; DMD-DAOB331) for example: an elderly or medically compromised patient often may require a medical consult for medical status and medication questions and/or lab data. Modifications may be: short, morning appointments with limited goals; an upright position; Use of low dose oxygen by nasal cannula; No or limited use of a vasoconstrictor in the local anesthetic; reduced drug dosages; antibiotic pre-medication; antibiotic post-medication; Current Pro Time INR; current serum glucose level.

Geriatric Dentistry (DDS-OMDS336; DMD-DOST332, DOST333) lecture course in the D3 discusses comprehensive treatment planning and appropriate dental treatment of elderly patients in private practice, long term care facilities and hospital settings. In this course the students further learn the dynamics and development of dental caries, patient caries risk assessment and restorative management in the older patient. Understanding the changes that age presents in the periodontium is a key feature of the course including mechanisms of plaque formation and disease control and surgical considerations. The discussion on Pharmacology in the Older Patient provides students' knowledge on alterations in the metabolism of medications and the potential complications associated with prescribing medications for the elderly patient. Oral Surgery and the Older Patient presentation discusses pre and post-operative concerns in older patients, indications of anesthetic, sedation and surgery and the response of the elderly patient to surgical stress. The students also learn about sleep apnea and various oral appliances that are used to help this condition.

3. Describe how students are assessed in providing oral health care based on the school’s definition of scope of general dentistry and the school’s definition/categorization of the stages of life.

Student competency is the predictive judgment of future performance and is based on faculty decisions related to assessments in four domains: Varied Experiences with practice in high fidelity contexts, Faculty observation of student practices with feedback Performance Examinations demonstrating students independent efforts and students Self-Evaluation which is systematic, consistent and accurate.

Varied Experiences

Pre-patient clinical care experiences begin early in the D1 curriculum (DDS-DADM314, DADM315, DADM316, DADM317; DMD-DAOB311, DAOB312, DAOB321, DAOB322). Students begin with assessments on each other, medical and dental histories, and risk assessments, odontogram charting.
and periodontal assessments. The students also practice treatment therapies on both adult (fully dentate and partially dentate) and pediatric manikins.

In addition to the above, the DMD curriculum further engages the D1, D2 and D3 students in the case based small group learning discussions through SGL and DOST modules. The focus is on the outcomes that are evidence-based with the goal to provide the students with variety of clinical experiences necessary to develop the knowledge, skills, and values for competent clinical practice. The DMD curriculum thus ensures the integration of the evidence-based biomedical and clinical sciences throughout the four-year dental education.

These early pre-patient experiences are followed by the assignment of patients for periodontal therapy and periodic oral evaluations in (DDS-DADM317; DMD-DAOB322). The patients assigned have been patients of record that have had their initial treatment plans completed and now are in recall. These experiences afford the students the opportunity to assess or reassess patients who have been under continuous care. Faculty give written and verbal feedback to the students as they perform prophylaxis and periodontal maintenance procedures.

During the final term of the D2 year and beginning of D3 and D4 years students are engaged in the clinical comprehensive care program (DDS-DADM319, DADM320, DADM321, DADM332, DADM333, DADM334; DMD-DAOB323, DAOB331). In the general clinics patients of all ages receive care (except for children generally less than fifteen years of age who are seen in the predoctoral Pediatric Dentistry Clinic. Because of the broad age range of patients the students are exposed to many types of dentate, partially edentulous, and edentulous patients. The resulting comprehensive care plans are most often multidisciplinary in nature. Our patient population is very diverse not only with respect to age but also with respect to medical, physical, ethnic, racial and socioeconomic status. The experience gained through this various types of patients results in an excellent comprehensive care experience over the course of seven plus terms the student has in the clinic. It would be typical for a student to have a mature roster of 50-60 active and recall patients at any one time.

In addition to the above, students in the D4 year also participate in the Community Based Dental Education program (DDS-DADM325; DCLE341-343). The focus of this extramural program is not only to expand clinical experiences but equally important to raise the student’s knowledge and sensitivity of the oral health needs of the underserved populations and to directly observe and experience the business models employed by the various community sites toward address oral health needs in the state of Illinois. The extramural experiences also provide the students the opportunity to see how oral health interacts with the overall health care system in the state. Students gain experience in providing dental services to diverse and vulnerable patient population including the homeless, the elderly, indigent children/adults, migrant workers and persons with special needs. The community based experience also provides an opportunity to expand access to care for the underserved populations.

Faculty Observation

All of the pre-patient care courses and patient care experiences (DDS-DADM319, DADM320, DADM321, DADM332, DADM333, DADM334; DMD-DAOB331) and include faculty observation in which the mode of student daily evaluations is twofold. One is faculty and student verbal interactions in which details of clinical procedures, patient histories and treatments and treatment modifications that are necessary due to patient age or health status issues are discussed resulting in action plans for students to follow in the course of simulated or actual treatment. The second observation opportunity is via an end of session “Skills Assessment Form” used in the DDS program that appears when procedures are
approved by the faculty as either “in process” or “completed” on the AxilUm patient electronic records system. On this evaluation form faculty indicate a level of performance as excellent, clinically acceptable, or standard not met for six areas of performance:

1. Pre Treatment Presentation
2. Clinical Competence
3. Clinical Judgment/Learning
4. Patient Management
5. Ethical Behavior and
6. Infection Control.

For the DMD clinical faculty observation the following criteria are used:

1. Professionalism and Ethical Behavior
2. Dialogue
3. Assessment of State of health
4. Differential Diagnoses
5. Plan of Action
6. Intervention
7. Student Evaluation of Outcome

Final Grade (A, B, C, F must be indicated)

Along with the above, a comment must accompany the above evaluations to provide feedback to the student.

There is also a section where faculty can add comments to support the evaluation. This is formative evaluation so that students receive immediate feedback on daily activities. Students have access to these evaluations at any time through the electronic system.

The end of semester evaluation and grade in the course is based on the semester long accumulative interactions between students and faculty. Individual faculty evaluations are solicited from the interdisciplinary clinic team in determining the final grade in the clinical setting. In the pre-patient care setting, the individual faculty who has supervised the student (usually one or two) submit a term evaluation.

For the Comprehensive Care course an additional practice management grade is based on overall clinic activity and usage, attendance, patient interactions and management, compliance with clinic policies, professionalism, and participation.

**Performance Examinations**

The performance exams are demonstrations of students’ independent efforts. These are represented by written exams including the e-CBE, product exams in the form of procedures performed on
Typodonts and patients, portfolios and reports in the comprehensive care courses, and patient case presentations. The goal is to eventually have all performance exams in the DMD curriculum in electronic format so that data is date stamped and easily retrievable.

In pre-patient care courses (DDS-DADM314, DADM315, DADM316, DADM317, DADM318; DMD-DAOB311, DAOB312, DAOB321, DAOB322, DAOB323) the students’ complete case reports, simulated clinical typodont and written multiple choice exams that include age and health related considerations that may require treatment modification. For example, the e-CBE is an electronic exam administered via computer in which patient scenarios are presented and students answer questions regarding diagnosing, treatment planning and treatment with consideration for the medical, dental, and behavioral status of the patients. The goals of the test are to verify that the curriculum adds value to the learners’ knowledge base and to provide feedback on the students’ strengths and weaknesses. All D4, D3, students must pass the exam as part of the comprehensive care course. D1, D2, and students take the exam as a preparatory and formative practice exercise, but do not receive a grade.

As part of Restorative (D3 REST351, REST352, REST353, D4 REST361, REST362, REST363) Periodontics (D3 PERI351, PERI352, PERI353, D4 PERI361, PERI362, PERI363) Endodontics (D3 ENDO352, ENDO353, D4 ENDO362) (All disciplines: DMD-DAOB331, DAOB332, DAOB333, DAOB341, DAOB342, DAOB343) courses, students must take and pass various procedural exams some on patients and others on typodonts. The exams on patients are diagnosis and assessment, treatment planning, scaling and root planing and several direct restorations including those on mock board exams, the ones on typodonts are single unit and bridge abutment preparations and provisional restorations.

Throughout the D2 (DDS-DADM316, DADM317, DADM318; DMD-DAOB321, DAOB322, DAOB323) D3 (DDS-REST351, REST353; DMD-DAOB331), and D4 (DDS-REST361, REST362, REST363; DAOB341-343) years, students must compose various portfolios or papers including, among other topics, assignments related to medically compromised patient, disciplined based patient care, ethical dilemmas and implant patients that must include evidence based support for the report.

To help demonstrate understanding and synthesis of diagnoses and treatment planning concepts each student must select one of his/her comprehensive care patients and do a case presentation in the D3 (DDS-REST353; DMD-DAOB333) and D4 (DDS-REST362; DMD-DAOB342) year to his/her fellow students that documents patient care from the comprehensive oral evaluation and treatment plan through completed treatment. The presentation is via Power Point and includes the aspects of: comprehensive examination findings, diagnosis/problem list, mounted casts/images/radiographs, treatment plan & alternatives including modifications due to age or health status, rationale for final treatment plan, prognosis statement, treatment outcomes, ability to answer questions, quality of discussion led by the student, quality of the overall presentation. Odontogram chartings, photographs, and radiographs are used in the presentation. Qualifying cases must include at least three disciplines of dentistry of which two must be periodontics and prosthodontics. Evaluations of the presentations follow a rubric format which is filled out by faculty and students in attendance. The student presenter must also do a self-evaluation which is posted on the Restorative Dentistry course Blackboard site. Also, each year the fourth year students must challenge a Mock Clinical Board examination which includes both patient care and simulated care.

**Student Self-Evaluation**

The College places high value on the ability of students to consistently, systematically, and accurately apply relevant criteria to their personal performance. We believe that the ability to self-evaluation is a
skill that must be mastered by a professional. Beginning in the first term course (DDS-DADM314; DMD-DAOB311), the student begins the development of self-evaluation skills. One of the final projects of the course is the preparation of a Class I preparation for amalgam restoration which is only graded based upon the accuracy of the students ability to accurately evaluate the quality of the production. In the second term course (DDS-DADM315; DMD-DAOB312) the students demonstrate knowledge and basic periodontal clinical skills by taking the periodontal clinical performance exam I. In this performance exam the students’ self-assess their knowledge and skills on patient/operator chair positioning, probing technique, oral hygiene techniques (brushing/flossing) and identification/use of hand instruments. The student’s only grade for the clinical project is related to faculty evaluation and student’s ability to once again accurately self-evaluate. In nearly all of the pre-patient care courses, the independent performance examinations are given two grades; first a grade for the quality of the project and, second, a grade for the accuracy of their student self-evaluation. The student’s final grade is determined by combining the two scores according to a weighted value for each. However, in order to pass the performance examination, the student must receive a passing score in both components. In patient care the independent examinations have the same requirement of passing both the performance project and the self-evaluation. As the student progresses from D1 to D4, the requirement to pass both portions of the performance examinations remains, but the weighted percentage of each component changes (the weighted percentage for the quality of the product increases while the evaluation component decreases).

In the clinical years students do self-assessment of their performances. On a daily basis the students interact with faculty to discuss treatments and to assess the quality of service delivered and ways to adjust or improve upon that quality. At the end of clinical sessions the student and supervising instructor “huddle” to review electronic entries for approval and to electronically fill out the skill assessment form that appears after faculty have swiped in process and completed procedures. This end of session get together affords opportunity for student and faculty interaction and reflection upon the session’s progress and management of the patient.

When students do the various performance exams they fill out the same evaluation forms that the faculty use in assessing their abilities. They do this independently prior to faculty assessment. After the faculty have filled out their evaluations, they discuss the performance with the student prior to submitting the forms for entry into the grading modules.

The following table describes brief synopsis of courses in the DDS curriculum on how students are assessed (Varied Experiences, Faculty Observations, Performance Exams, and student self-Evaluation) in providing oral health care based on the school’s definition of scope of general dentistry and the school’s Definition/categorization of the stages of life.
### DDS - Class of 2013

<table>
<thead>
<tr>
<th>Year/Course</th>
<th>Varied Experiences</th>
<th>Faculty Observations</th>
<th>Performance Exams (Assessments)</th>
<th>Student Self-Evaluation</th>
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<tbody>
<tr>
<td><strong>D1 Fall</strong></td>
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<tr>
<td><strong>DADM314</strong></td>
<td>The focus of the first year first semester sequence is recognizing health. This is accomplished through didactic presentations followed immediately by clinical experiences</td>
<td><strong>Self and peer, extraoral and intraoral soft tissue examinations (head, neck and intraoral examinations)</strong>&lt;br&gt;&lt;br&gt;<strong>Administration of the health questionnaire, obtaining vital signs (including blood pressure, pulse rate and blood glucose) and the taking of medical, dental, and social history.</strong></td>
<td><strong>Faculty and student verbal interactions</strong>&lt;br&gt;&lt;br&gt;<strong>Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization,</strong></td>
<td><strong>Students are assessed by MCQ written examinations and must receive a passing score.</strong>&lt;br&gt;&lt;br&gt;<strong>Summative case reports must be deemed passing to pass the course.</strong>&lt;br&gt;&lt;br&gt;<strong>As part of each report is the requirement to present a detailed assessment and diagnosis written summary. These reports are evaluated by faculty and must be judged acceptable to pass the course.</strong></td>
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<tr>
<td><strong>D1 Spring</strong></td>
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<tr>
<td><strong>DADM315</strong></td>
<td>This course is followed by expansion of the dental, periodontal and radiographic examinations in the spring semester.</td>
<td><strong>The beginning principles of restorative dentistry, periodontology and dental imaging are presented in conjunction with the discipline treatment modalities.</strong></td>
<td><strong>Faculty and student verbal interactions</strong>&lt;br&gt;&lt;br&gt;<strong>Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization,</strong></td>
<td><strong>The cognitive understanding of assessment and diagnosis are assessed through written quizzes and tests.</strong>&lt;br&gt;&lt;br&gt;<strong>Performance examinations, MCQ written exam</strong></td>
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<tr>
<td>D2 Summer DADM316 Pre-clinical technique is continued</td>
<td>Focus is on esthetic restorations and advanced operative procedures. Pre-clinical periodontal procedures focus on secondary prevention, instrumentation, initial periodontal assessment, diagnosis, treatment planning and treatment of periodontal diseases.</td>
<td>Faculty and student verbal interactions Instructer observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization,</td>
<td>Performance examinations, MCQ written exam</td>
<td>Student self-assessment forms</td>
</tr>
<tr>
<td>D2 Fall DADM317 Pre-clinical technique is continued with recall patient activity</td>
<td>Focus is on patient scenarios clinical patient activities</td>
<td>Faculty and student verbal interactions Instructer observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization,</td>
<td>Performance examinations, online quizzes MCQ written exam</td>
<td>Student self-assessment forms</td>
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<tr>
<td>D2 Fall ENDO321</td>
<td>Focus on proper access for all teeth, coronal preflaring, working length determination, guide-path preparation, crown-down step-back canal enlargement, canal disinfection, obturation and restoration of endodontically treated teeth.</td>
<td>Faculty and student verbal interactions</td>
<td>Performance examinations, quizzes, MCQ written exam</td>
<td>Student self-assessment forms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization)</td>
<td></td>
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</tr>
<tr>
<td>D2 Fall PEDD334</td>
<td>Prepare to provide comprehensive dental care for the Pediatric patients</td>
<td>Faculty and student verbal interactions</td>
<td>quizzes, MCQ written exam</td>
<td>Student self-assessment forms</td>
</tr>
<tr>
<td>REST321 Pre-clinical technique course in Pediatric Dentistry</td>
<td></td>
<td>Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2 Fall/Spring REST321 Pre-clinical technique course in Complete Dentistry</td>
<td>Clinical and laboratory concepts necessary for the evaluation, diagnosis, planning and management of fully edentulous patients</td>
<td>Faculty and student verbal interactions</td>
<td>Lab projects, quizzes, MCQ written exam</td>
<td>Student self-assessment forms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation</td>
<td>Station to station performance exam</td>
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<tr>
<td>D2 Fall</td>
<td>Clinical and laboratory concepts necessary for the evaluation, diagnosis, planning and treatment with Fixed Prosthesis</td>
<td>Faculty and student verbal interactions</td>
<td>Lab projects quizzes MCQ written exam OSCE exam performance exam</td>
<td>Student self-assessment forms</td>
</tr>
<tr>
<td>REST322 Pre-clinical technique course in Fixed Prosthodontics</td>
<td></td>
<td>Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation)</td>
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</table>

| D2 Fall     | Knowledge of the principles, terminology, materials and techniques used for removable partial prosthodontics | Faculty and student verbal interactions                                                   | Lab projects quizzes MCQ written exam performance exams station exam | Student self-assessment forms |
| REST324 Pre-clinical technique course in Removable Partial Prosthodontics |                                                                                      | Instructor observation, and student self-assessment daily participation |                                                                                                      |                         |

| D2 Spring   | The focus is on correlation of biologic and technical principles underlying sound endodontic therapy | Faculty and student verbal interactions                                                   | MCQ written exams Quizzes                          |                         |
| ENDO331 Clinical lectures |                                                                                      |                                                                                                      |                                                                                                      |                         |

| D2 Fall     | Clinical and laboratory concepts necessary for the evaluation, diagnosis, planning and treatment with Fixed Prosthesis | Faculty and student verbal interactions                                                   | Lab projects quizzes MCQ written exam OSCE exam performance exam | Student self-assessment forms |
| REST322 Pre-clinical technique course in Fixed Prosthodontics |                                                                                      | Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation) |                                                                                                      |                         |

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<tr>
<td>D2 Spring OSUR320 Introduction to pain control in dentistry with emphasis on mechanism of pain and use of regional anesthesia</td>
<td>Knowledge of Pharmacology of the anesthetics and vasoconstrictors, local anesthesia complications and their management</td>
<td>Faculty and student verbal interactions, Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization, participation</td>
<td>MCQ written exam, Quizzes, Simulated peer pre-patient clinical activity</td>
<td></td>
</tr>
<tr>
<td>D2 Spring DADM318 Clinical patient care experiences</td>
<td>Develop skills, knowledge, and attitude with regards to assessments, diagnosis, prevention and treatment planning</td>
<td>Faculty and student verbal interactions, Instructor observation, and student self-assessment daily participation (preparation, organization,</td>
<td>MCQ written exam, Portfolio, Clinical progress and patient management report, Communication project, Clinical rotations, Clinical and research day, eCBE exam, Chart Audits</td>
<td>Student self-assessment</td>
</tr>
<tr>
<td>D2 Spring OSUR323 Clinical lectures</td>
<td>Introduction to oral and maxillofacial surgery basic principle and techniques</td>
<td>Faculty and student verbal interactions</td>
<td>MCQ written exams</td>
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<tr>
<td>D2 Spring REST323 Treatment</td>
<td>Concepts focus on the principles required for diagnosis of oral and systemic</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-</td>
<td>Quizzes Clinical simulation small group projects MCQ</td>
<td>Student self-assessment and peer</td>
</tr>
<tr>
<td>Planning</td>
<td>and systemic conditions as a basis for formulating a comprehensive dental treatment</td>
<td>assessment daily participation (preparation, organization)</td>
<td>written exams Evidence based dentistry paper Treatment</td>
<td>evaluation</td>
</tr>
<tr>
<td></td>
<td>plan</td>
<td></td>
<td>planning exam</td>
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<tr>
<td>D2 Spring ORTD323 Preclinical</td>
<td>Focus on the principles and methods used in orthodontic diagnosis and treatment.</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-</td>
<td>Quizzes MCQ written exams Lab product exam Patient</td>
<td>Student self-assessment</td>
</tr>
<tr>
<td>course in Orthodontics</td>
<td>Identify orthodontic problems that need referral</td>
<td>assessment daily participation (preparation, organization)</td>
<td>case presentations Portfolio</td>
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<td></td>
<td>Fabricate common removable appliances.</td>
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<td></td>
<td>Invisalign certification</td>
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<tr>
<td>D2 Spring REST326 Preclinical</td>
<td>Didactic lectures, preclinical exercises, lab concepts necessary for the evaluation,</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-</td>
<td>Quizzes MCQ written exams Clinical Performance exams</td>
<td>Student self-assessment</td>
</tr>
<tr>
<td>course in Fixed Prosthodontics</td>
<td>diagnosis, planning with fixed prosthesis</td>
<td>assessment daily participation (preparation, organization)</td>
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<tr>
<td>D3 Summer DADM319 Comp Care Illa</td>
<td>Focus is on patient management, assessment of state of health of the patient. Establish goals and expectations of the patients. Formulate differential diagnosis, comprehensive treatment plan and deliver interventions and evaluations of the outcome of intervention.</td>
<td>Faculty and student verbal interactions. Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Portfolio Faculty Evaluations. Production report. Practice management assignment.</td>
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</tr>
<tr>
<td>D3 Summer OSUR333 Pain Control II</td>
<td>Focus on advance management of fear, anxiety and pain in dental procedures. Develop and understand referral possibilities. Laboratory exercise experience on Nitrous Oxide administration and venipuncture technique.</td>
<td>Faculty and student verbal interactions. Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Lab exercise. MCQ written exam.</td>
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<tr>
<td>D3 Summer DBSC310 Dental Public Health</td>
<td>Understanding basic terms used in Public health Role of dental public health at the local, state and national level Assess the need of the community and understand occupational health hazard in dentistry</td>
<td>Faculty and student verbal interactions</td>
<td>Class assignments Problem based exercise/communication assessment MCQ written exam Fluoridation assignment</td>
<td></td>
</tr>
<tr>
<td>D3 Summer ENDO352 Endodontic Clinic I</td>
<td>Providing endodontic treatment on teeth which have been assigned a level of minimal difficulty</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation</td>
<td>Daily Clinical evaluations Treatment plan presentations OSCE exam Clinical Performance exam</td>
<td></td>
</tr>
<tr>
<td>D3 Summer/Fall and Spring PERI351 PERI352 PERI353 Periodontic Clinics</td>
<td>Provide learning experience that will enable the students to be competent to manage patients with periodontal disease in the context of general dental practice</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation,</td>
<td>Daily Clinical evaluations Treatment plan presentations OSCE exam Clinical Performance exam</td>
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<tr>
<td>D3</td>
<td>Developing diagnostic and clinical skills Utilizing sound professional ethical judgment Analyzing treatment outcomes</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation, ______)</td>
<td>Daily Clinical evaluations Treatment plan presentations OSCE exam Clinical Performance exam</td>
<td>Student self-assessment</td>
</tr>
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<td>Summer/Fall</td>
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<tr>
<td>Dentistry</td>
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<tr>
<td>D3 Fall</td>
<td>Focus is on patient management, assessment of state of health of the patient Establish goals &amp; expectations of the patients Formulate differential diagnosis, comprehensive treatment plan and deliver interventions and evaluations of the outcome of intervention</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Portfolio Faculty Evaluations Production report Practice management assignment Quiz</td>
<td>Student self-assessment</td>
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<tr>
<td>DADM320</td>
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<td>Comp Care</td>
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<td>IIIb</td>
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<tr>
<td>D3 Fall</td>
<td>Familiarize the students in the science and clinical practice of medicine. Strong emphasis on diseases that dentist would expect to encounter in a dental practice.</td>
<td>Faculty and student verbal interactions</td>
<td>MCQ written exam</td>
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<tr>
<td>OSUR334</td>
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<td>Medicine for Dentist</td>
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<tr>
<th>Year/Course</th>
<th>Varied Experiences</th>
<th>Faculty Observations</th>
<th>Performance Exams (Assessments)</th>
<th>Student Self-Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3 Fall DBSC345 Special Patient Care</td>
<td>A broad background on special needs patients that will be encountered in general practice.</td>
<td>Faculty and student verbal interactions</td>
<td>Quizzes</td>
<td></td>
</tr>
<tr>
<td>D3 Fall OMDS345 Temporomandibular Disorders</td>
<td>Introduce student to the anatomical, physiological, pathological, psychological basis for temporomandibular disorders, as well as to discuss differential diagnosis, imaging evaluations, &amp; management of TMJ disorders</td>
<td>Faculty and student verbal interactions</td>
<td>MCQ written exam</td>
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</tr>
<tr>
<td>D3 Spring PEDD337 Orientation to Hospital Dentistry</td>
<td>Focus on basic understanding of hospital procedures and practices and the integral part of that dentistry plays in the structure of hospital emergency and trauma centers</td>
<td>Faculty and student verbal interactions</td>
<td>Written exam</td>
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<tr>
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<th>Student Self-Evaluation</th>
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</thead>
<tbody>
<tr>
<td>D3 Spring DADM321</td>
<td>Integrating biomechanical sciences, contemporary technology in the practice of general dentistry. Evaluation of various models of oral health, care management. Provide and manage patient centered care. Also integrate principles of evidence based practice in patient care.</td>
<td>Faculty and student verbal interactions instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Resume writing assignment eCBE exam Written assignments Implant portfolio Communication project</td>
<td>Student self-assessment</td>
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<tr>
<td>Comp Care IIIc</td>
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<td>Faculty and student verbal interactions instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Resume writing assignment eCBE exam Written assignments Implant portfolio Communication project</td>
<td>Student self-assessment</td>
</tr>
<tr>
<td>D3 Spring OSUR337</td>
<td>Focus on the clinical evaluation and selection and management of the surgical patients. Also develop surgical skills by performing minor alveolar procedures. The students become familiar with the post-op complications and their management.</td>
<td>Faculty and student verbal interactions instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Clinical evaluation performance exam</td>
<td>Student self-assessment form</td>
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<tr>
<td>Oral Maxillofacial</td>
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<td>Surgery Clinic</td>
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<th>Performance Exams (Assessments)</th>
<th>Student Self-Evaluation</th>
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</thead>
<tbody>
<tr>
<td>D3 Spring REST342 Advance Dental Materials</td>
<td>Discussion is on recent advances made in the science of dental materials</td>
<td>Faculty and student verbal interactions</td>
<td>Quizzes Reflection Essay Online Assignments</td>
<td></td>
</tr>
<tr>
<td>D3 Spring REST332 Restorative Dentistry II</td>
<td>Clinical Decision Making</td>
<td>Faculty and student verbal interactions</td>
<td>MCQ written exam</td>
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<tr>
<td>D3 Spring OMDS337 Radiology Clinic</td>
<td>Focus on radiology technique in the production of quality films</td>
<td>Faculty and student verbal interactions</td>
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<tr>
<td>D3 Spring OMDS334 Clinical Oral Pathology/Oral Medicine</td>
<td>Focus on differential diagnosis, definitive diagnosis, management of oral lesions and oral manifestations of systemic disease and conditions affecting dental medicine</td>
<td>Faculty and student verbal interactions</td>
<td>Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>MCQ written exam Quizzes</td>
</tr>
<tr>
<td>Year/Course</td>
<td>Varied Experiences</td>
<td>Faculty Observations</td>
<td>Performance Exams (Assessments)</td>
<td>Student Self-Evaluation</td>
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<tr>
<td>D4 Summer DADM332 Comp Care IVa</td>
<td>The focus of the course is to foster clinical reasoning, problem solving skills and practice management skills. Also to develop self-directed learning, critical evaluation of literature</td>
<td>Faculty and student verbal interactions, Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Clinical Reports, Quizzes</td>
<td>Student self-assessment and peer assessment</td>
</tr>
<tr>
<td>D4 Summer ENDO353 Endodontics Clinic II</td>
<td>The goals of this course are to integrate the gained knowledge and techniques into the clinical practice of Endodontics. Also for students to become competent in the use of AAE assessment form and to determine the ability to treat or refer</td>
<td>Faculty and student verbal interactions, Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Clinical Performance exams, Case presentations</td>
<td>Student self-assessment</td>
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### Year/Course | Varied Experiences | Faculty Observations | Performance Exams (Assessments) | Student Self-Evaluation
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D4 Summer/Fall/Spring PERI361- PERI362 PERI363 Periodontic Clinic IV | Provide learning experience that will enable the students to be competent to manage patients with periodontal disease in the context of general dental practice | Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation, | Daily Clinical evaluations Treatment plan presentations OSCE exam Clinical Performance exam | Student self-assessment

D4 Summer/Fall and Spring REST361 REST362 REST363 Restorative Clinical Dentistry | Developing diagnostic and clinical skills Utilizing sound professional ethical judgment Analyzing treatment outcomes | Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation, | Daily Clinical evaluations Treatment plan presentations OSCE exam Clinical Performance exam | Student self-assessment

D4 Summer, Fall, Spring DADM325 Community Based Dental Education | Raise the student’s knowledge and sensitivity of the oral health needs of the underserved in the state of Illinois Students gain experience in Clinical community based rotations diverse patient populations | Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation | Assignments

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### Year/Course | Varied Experiences | Faculty Observations | Performance Exams (Assessments) | Student Self-Evaluation
---|---|---|---|---
**D4 Fall**  
**DADM333 Comp Care IVb**  
*The focus of the course is to foster clinical reasoning, problem solving skills and practice management skills. Also to develop self-directed learning, critical evaluation of literature.*  
Faculty and student verbal interactions  
Instructor observation, and student self-assessment daily participation (preparation, organization)  
Reports Portfolio  
Student self-assessment  
Familiarize dental students with commonly used orthodontic appliances and techniques. Also to diagnose and treatment plan and perform treatment on limited tooth movement cases  
Faculty and student verbal interactions  
Instructor observation, and student self-assessment daily participation (preparation, organization)  
Presentations  
Quality of documentation

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<tr>
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<th>Performance Exams (Assessments)</th>
<th>Student Self-Evaluation</th>
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<tbody>
<tr>
<td>D4 Spring</td>
<td>The goals of this course are to integrate the gained knowledge and techniques into the clinical practice of Endodontics. Also for students to become competent in the use of AAE assessment form and to determine the ability to treat or refer</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>Clinical Performance exams</td>
<td>Student self-assessment</td>
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<tr>
<td>ENDO363 Endodontics Clinic, IV</td>
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<tr>
<td>D4 Spring</td>
<td>The focus of the course is to foster clinical reasoning, problem solving skills and practice management skills. Also to develop self-directed learning, critical evaluation of literature</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment daily participation (preparation, organization)</td>
<td>OSCE Impant patient portfolio Reports</td>
<td>Student self-assessment</td>
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<tr>
<td>DADM334 Comp Care IVc</td>
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STANDARD 2-22
The following table describes brief synopsis of courses in the DMD curriculum on how students are assessed (Varied Experiences, Faculty Observations, Performance Exams, and student self-Evaluation) in providing oral health care based on the school’s definition of scope of general dentistry and the school’s Definition/categorization of the stages of life.

**DMD – Class of 2015**

<table>
<thead>
<tr>
<th>Year/Course</th>
<th>Varied Experiences</th>
<th>Faculty Observations</th>
<th>Performance Exams (Assessments)</th>
<th>Student Self-Evaluation</th>
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<tbody>
<tr>
<td>D1 Fall DAOB311</td>
<td>The focus of this course is the recognition and maintenance of health and disease prevention.</td>
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<tr>
<td>Varied experiences are obtained Biology of human dentition, Restorative Dentistry, Pediatric Dentistry, Periodontics, &amp; Endodontics. The students also acquire basic clinical skills and knowledge to identify and describe the condition of health and develop plans to maintain health and prevent disease. Student experiences include ethics, communication, EBD, &amp; community based dentistry and SGL.</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment are used (Daily huddle assignments), daily participation preparation, organization</td>
<td>MD written Exams(MCQ) Station exams Performance exam Summative case portfolio Quizzes</td>
<td>Student self-assessment forms</td>
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<tr>
<th>Year/Course</th>
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<th>Student Self-Evaluation</th>
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</thead>
<tbody>
<tr>
<td>D1 Spring DAOB312</td>
<td>Varied experiences are obtained in concepts, terminology and clinical instrumentation skills in Restorative Dentistry, Periodontics, and Occlusion. Further student experience include ethics, communication, EBD, and community based dentistry and SGL</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization,</td>
<td>MD written Exams(MCQ) Performance exams Projects Student self-assessment forms</td>
<td></td>
</tr>
<tr>
<td>D2 Summer DAOB321</td>
<td>Varied experiences and concepts are obtained in Restorative Dentistry, Periodontics, Pediatric Dentistry, Pain Control. Further student experience include ethics, communication, EBD, and community based dentistry and Small group learning</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization,</td>
<td>MD written Exams(MCQ) Performance exams Student self-assessment forms</td>
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Year/Course | Varied Experiences | Faculty Observations | Performance Exams (Assessments) | Student Self-Evaluation
--- | --- | --- | --- | ---
D2 Fall DAOB322 | Varied experiences and concepts are obtained in Restorative Dentistry, Fixed Prosthodontics, Removable Prosthodontics, Complete Denture Prosthodontics Endodontics, Periodontics and Clinical Rotations | Faculty and student verbal interactions, Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization, MD written Exams (MCQ), Station exams Performance exams Quizzes | Student self-assessment forms

Continued on previous page.

Further student experience include ethics, communication, EBD, and community based dentistry and Small group learning.
Dental Education - Accreditation Self Study
November, 2013

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<tr>
<th>Year/Course</th>
<th>Varied Experiences</th>
<th>Faculty Observations</th>
<th>Performance Exams (Assessments)</th>
<th>Student Self-Evaluation</th>
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<tbody>
<tr>
<td>D2 Spring</td>
<td>Varied experiences and concepts are obtained in Diagnosis, Treatment Planning, Implants, Orthodontics Fixed Prosthodontics, Complete Denture, Periodontics and Clinical Rotations Further student experience include Ethics, Communication, EBD, and community based dentistry and Small group learning</td>
<td>Faculty and student verbal interactions Instructor observation, and student self-assessment are used (Daily huddle assignments, daily participation (preparation, organization,</td>
<td>MD written Exams(MCQ) Station exams Performance exams Projects EBD reports</td>
<td>Student self-assessment forms</td>
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<tr>
<th>Year/Course</th>
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<th>Performance Exams (Assessments)</th>
<th>Student Self-Evaluation</th>
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<tbody>
<tr>
<td>D3 Summer DOST331</td>
<td>Present patient case scenarios with orofacial, systemic and/or behavioral diseases and issues. The students apply relevant biomedical concepts in the management and/or provision of oral health care as entry level general practitioners.</td>
<td>Varied experiences and concepts are discussed in Systems (eg. Cardiovascular, Pulmonary, Endocrine, GI liver); Disease/conditions; Medications; Major Orofacial domain Issues; oral Medicine Conditions; Emergency and Professionalism Issues</td>
<td>Written examination MCQ Essay Student participation in small group learning</td>
<td>Student self-and peer assessment forms</td>
</tr>
<tr>
<td>D3 Summer DAOB331</td>
<td>This course provides clinical patient care experiences necessary to develop skills, knowledge, attitudes needed for the practice of 21st century dentistry by integrating biomedical, behavioral, and clinical knowledge through patient care.</td>
<td>Varied experiences and concepts should be demonstrated in the Restorative, Endodontic, Oral Surgery, Periodontics, Pediatric, Dental Implants, Orthodontics, Oral Medicine, Urgent Care, Imaging technology and interpretation, practice management</td>
<td>Faculty and student verbal interactions Instructor observation and daily assessment, and student self-assessment are use</td>
<td>MD written Exams(MCQ) Performance exams Case Presentations EBD Papers Portfolios</td>
</tr>
</tbody>
</table>

**Supportive Documentation**

Available On Site  
Course Syllabi  
Student assessment forms
2-23 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

a. patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent;

b. screening and risk assessment for head and neck cancer;

c. recognizing the complexity of patient treatment and identifying when referral is indicated;

d. health promotion and disease prevention;

e. local anesthesia, and pain and anxiety control;

f. restoration of teeth;

g. communicating and managing dental laboratory procedures in support of patient care;

h. replacement of teeth including fixed, removable and dental implant prosthodontic therapies;

i. periodontal therapy;

j. pulpal therapy;

k. oral mucosal and osseous disorders;

l. hard and soft tissue surgery;

m. dental emergencies;

n. malocclusion and space management; and

o. evaluation of the outcomes of treatment, recall strategies, and prognosis.

Conclusion: The UIC College of Dentistry complies with Standard 2-23.

Description

Competency of students is a faculty decision. The decision for each student is based upon the College’s Competency Model first described in Standard 2-1. Information on student performance over time is gathered from the four domains (Varied Experiences, Faculty Observation, Performance Examinations and Self-Evaluation).

Student experiences in pre-patient care and patient care are designed to assure broad, diverse and meaningful exposure to equip our learners in the full scope of general practice as defined by the College. Evidence of varied, patient centered, comprehensive care experiences are required of our students. There are no numerical requirements, and breadth of clinical experience for each student is monitored by the Managing Partners (MPs) in consultation with the Clinic Managers from Periodontics, Endodontics, Oral Medicine, Oral Surgery, Orthodontics and Pediatrics. Faculty continually observe the students as they progress through the curriculum and provide formative feedback. Students are challenged frequently to demonstrate their independent skill and to demonstrate as well their ability to consistently, systematically and accurately self-assess. They are also given ample opportunity to demonstrate their ability to access, evaluate and apply the best available evidence in delivering patient care.

The College defines general dentistry practice through its Competency Statements comprising its seven competencies as described in Standards 2-4, 2-5, and 2-22. Competency assessment includes
evidence of student experiences in the oral health care of the infant, child, adolescent, and adult, as well as the unique needs of geriatric, and medically compromised patients.

In addition, our graduate must demonstrate competence in providing care using standard privacy protocols, infection control practices, and manage patient pain and anxiety. Our graduate must diagnose, treat and prevent caries, periodontal disease, pulpal and periapical disorders, occlusal abnormalities, missing teeth, dental and medical emergencies, oral mucosal and osseous diseases, and diagnose and manage oral surgical needs.

A wide variety of learning environments and varied experiences in the patient population are enjoyed by all of our students. The data show that all students have repeated experiences with (a-o) for DDS class of 2013 and DMD class of 2015.

1. For each of the areas (a. through o.) provide a description of student experiences. Relate these experiences to the school’s defined scope of general practice.

   a) patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent;

   Beginning with pre-patient care courses (DDS-DADM314; DMD-DAOB311) offered in the fall semester of the D1 year and concluding with DADM334 (DMD-DAOB343) completed in the spring semester of the D4 year, significant emphasis is placed on assessment, diagnosis, sequenced treatment planning, prognosis and the assurance of providing informed consent.

   The focus of the first year sequence is recognizing health. This is accomplished through interactive plenary session presentations followed immediately by clinical experiences of peer partner head, neck and intraoral examinations. Activities include the administration of the health questionnaire, obtaining vital signs (including blood pressure, pulse rate and blood glucose) and the obtaining of medical, dental, and social history. Also presented are the visual, auditory and bi-manual techniques used in head and neck examinations, i.e., extraoral and intraoral soft tissue examinations. These techniques are paired with discussions and dissections in the human anatomy course (DDS-ANAT315, ANAT316; DMD-DBCS311, DBCS312, DBCS313, DBCS314, and DBCS315). The patient care experiences in these course experiences must be completed, are observed by attending faculty, but no written or performance examinations are administered separately from the DBCS examinations.

   This course is followed by expansion of the dental, periodontal and radiographic examinations in the spring semester (DDS-DADM315, DMD-DAOB312). The beginning principles of restorative dentistry, periodontology and dental imaging are presented in conjunction with the discipline treatment modalities. The cognitive understanding of assessment and diagnosis are assessed through faculty observed peer examinations, written quizzes and examinations.

   As the inter-disciplinary pre-patient care experiences are presented in the DAOB series, each discipline segment assures that examples of the specific disease processes are presented along with the treatment modalities. Included are the assessment and diagnosis techniques in Endodontics, Pediatric Dentistry, Orthodontics and Prosthodontics. Oral and Maxillofacial Surgery present similar training experiences in didactic offerings and in the introductory seminars in the third year clinical rotations (DDS-OSUR334, OSUR337; DMD-DBCS327, DBCS328, DBCS329).
Comprehensive treatment planning is offered in the spring semester of the second year in the DBCS327, DBCS328, and DBCS329 courses as a capstone experience as students are making the transition from simulation to patient care. This course segment provides didactic presentations related to patient assessment and diagnosis as well as electronic presentations of simulated patients. Students working in small groups gather the necessary information and generate diagnoses on these patients. Again working in small groups the students then propose alternate treatment plans that address each diagnosis. Student assessment is based on written examinations, and group EBD projects as well as on assessment and diagnosis of an electronically simulated patient. The students are concomitantly beginning their clinic care so are able to apply their skills in actual patient care.

Comprehensive treatment planning is the hallmark of the predoctoral patient care program. Each patient accepted for care, with the exception of urgent care patients (who receive a problem focused examination), receives a phase sequenced comprehensive treatment plan. The accepted plan, along with each of the alternative care plans, is recorded in the electronic patient record; once approved by attending faculty, the plan cannot be altered. The treatment plans are reviewed annually for progress and revision. Students are challenged to present and defend their plans in clinic conferences and patient presentation seminars.

As students begin patient care in earnest in the Group Practice clinics, they assess and diagnosis each patient in their care family. Beyond the initial assessment and diagnosis experience, students are required to complete re-assessments at the completion of each phase of care and minimally once a year on each patient assigned to them. There is a criterion referenced assessment and diagnosis performance examination as part of the patient care oral presentation in DAOB331 (formerly Restorative Courses - REST351, REST353, REST361, REST363). Each DAOB course (formerly Comprehensive Care course) requires the presentation of a patient care portfolio. As part of each portfolio is the requirement to present a detailed assessment and diagnosis written summary. These portfolios are evaluated by faculty and must be judged acceptable to pass the course.

A performance examination in assessment and diagnosis is one of the assessment measures in the fall semester D3 year Restorative Clinic II (REST352). Similarly, Periodontics Clinic (PERI351, PERI352) and Endodontics Clinic I (ENDO352) have patient presentations that demonstrate a student’s skill in assessment and diagnosis. Clinical Orthodontics (ORTD338) requires students to complete examinations and assessments of patient conditions. As part of student performance examinations, Oral Surgery requires students to accurately diagnose patient conditions. Students are also challenged during the spring semester of both the D3 and D4 years with an OSCE examination as part of Comprehensive Care IIc (DADM321) and Comprehensive Care IVc (DADM324). The examination is multi-disciplinary in nature and samples student’s diagnostic skills. The newly planned DAOB332 through DAOB343 courses will continue to assess student learning through performance examinations, written examinations, e-CBE and portfolio and patient presentations.

Pediatric Dentistry conforms to the same criteria as do the general clinics. The methods of data gathering common to both adult and child patient and those unique to the child and adolescent patient are presented in the lecture series of the Introduction to Pediatric Dentistry course (PEDD334). The issues of assessment and diagnosis are discussed and demonstrated as the students matriculate into their Pediatric Dentistry Clinical Experience courses (PEDD338, PEDD348) and reinforced during each case review, case presentation and during their pediatric portfolio presentations.

Each patient treated by the predoctoral program signs an informed consent document as they register at the College. Students also obtain informed consent at the time the treatment plan is agreed upon.
with the patient. The student is required to show evidence of informed consent to the attending faculty. The Department of Oral and Maxillofacial Surgery requires students to obtain procedural informed consent wherever patient care is rendered on their service.

The principles of informed consent are presented in the first semester course DAOB311 and are also reviewed as each discipline based therapy segments are introduced. The Treatment Planning course segment presents the principles in more depth in both lecture (presented by an attorney) as well as in the case based simulated patient examples. In the clinic and working in groups of four, students are videotaped interacting with their patients as part of a patient communication section. One of the required group projects is the filming and critiquing of obtaining informed consent. The students are also evaluated on obtaining informed consent in conjunction with their treatment planning examination in REST338. Each of the specialty clinic rotations emphasize and review student compliance with obtaining informed consent. The electronic patient record is most valuable in assuring each patient is presented options to care. Each treatment plan and its alternatives is locked (becoming immutable) when patient approval with informed consent is obtained.

b) screening and risk assessment for head and neck cancer;

Beginning with the first semester of the first year program, students are introduced to the principles and techniques of the head and neck examination (DDS-DADM314; DMD-DAOB311). After receiving an introductory didactic presentation and a filmed demonstration, students participate in clinical experiences wherein they perform head and neck and soft tissue intraoral examinations on one another. A similar experience occurs in the first year spring semester in (DDS-DADM315; DMD-DAOB312 with the emphasis on mucogingival periodontal assessments.

The curricular and clinical emphasis on comprehensive oral examinations and periodic oral examinations affords our students repeated to perform risk analyses and assessments for head and neck pathology. In the implemented DMD curriculum there are also patient scenarios that explore risk behaviors and past histories that focus learners on this issue (DBCS316, DBCS321, DBCS322, DBCS323, DBCS324, DBCS325, DAOB327, DAOB328, DAOB329 and DOST331).

As mentioned above, students begin developing skill in assessing oral health in the first semester in DAOB311. As the academic program progresses, the simulated cases and the interactive plenary sessions introduce aberrations to health and ultimately bring the focus to pathology (systemic and oral) DBCS316, DBCS321, DBCS322, DBCS323, DBCS324, DBCS325, DAOB327, DAOB328, DAOB329 and DOST331.

There is significant time devoted as well to smoking cessation and sexually transmitted diseases as mentioned in the behavioral sciences standards. Beyond the regular patient care in the third and fourth year’s clinical programs where pathology is noted as part of the comprehensive facial-oral examination, our students have three one-day-per-week rotations of four week duration each (Clinical Oral Pathology OMDS334). Working in pairs with an attending faculty member, referred patients, with existing or suspected pathologies, are seen. Students must describe their findings and present differential diagnoses. They must also self-evaluate their performance according to published criteria for head and neck assessment and diagnosis.
c) recognizing the complexity of patient treatment and identifying when referral is indicated;

The College’s emphasis on consistent and accurate self-evaluation by students applies not only to what they do, but in assessing whether they should provide treatment or refer the patient. Each discipline spends group time (plenary or small group) discussing factors to be considered before providing care.

Beginning with the patient health and social histories (and to some extent prior dental history) students evaluate whether management of disease risk factors are within their range of competence to provide care the needed patient care. The departments of Orthodontics, Periodontics, Restorative Dentistry, Endodontics have patient evaluation forms that students use when presenting to faculty for patient care authorization. Students also gain experience in patient referral through our electronic patient record. There exists a tab that students can use to describe the need for referral to specialty clinics.

In the practice management curriculum, students hear from risk managers, attorneys, and malpractice insurers about the importance of assessing their ability to provide clinically acceptable care for patients. They are also acquainted with documentation appropriate referrals.

d) health promotion and disease prevention;

The DMD curriculum includes in four loops for learning and revisiting information. The first loop is designed for and devoted to recognizing and understanding and maintaining health and normal structure and function of the body systems including the oro-facial complex. Beginning with the first (DDS-DADM314, DADM315; DMD-DBSC311, DBCS312) courses, students are introduced to the concepts of health recognition and health promotion. Specifically, they are made aware of diet, exercise, tobacco and alcohol issues. They are given instruction in and opportunities to role-play counseling, especially in tobacco cessation techniques. The concepts are reinforced in the clinical experiences during comprehensive treatment planning activities and patient re-evaluation examinations. As part of these early DBCS courses the students participate in providing health maintenance programs for children in community elementary schools. Working in small groups they design and deliver these presentations in elementary schools in the greater Chicago area.

With our emphasis on assessment and diagnosis and comprehensive treatment planning, students are led to address all patient related issues. They are well trained to identify and address patient risk factors. Assessment measures include discussion of risk factors and treatment plans in the DAOB and DADM courses of the D2 through D4 years through portfolio and patient care (case) presentations. Additionally, health promotion and disease prevention is assessed in the third year restorative clinical course clinical examination on treatment planning and the D3 and D4 electronic Case Based Examination (e-CBE).

Pediatric Dentistry conforms to the same criteria as the general clinics. Included in these are risk assessment and anticipatory guidance in direct conformance with recommendation from the American Academy of Pediatric Dentistry. Pediatric Dentistry Clinical Experience courses (DDS-PEDD338, PEDD335; DMD-DAOB331, DAOB332, DAOB333) require active plans for caries prevention.
e) local anesthesia, and pain and anxiety control;

Students receive the principles, pharmacology and techniques of pain and anxiety control beginning in the summer of the D2 year. They begin with local anesthesia, first in a didactic and then in a clinical environment (DDS-USUR320; DMD-DAOB321). They continue their development of skill and competency in administering local anesthesia throughout the rest of the curriculum. Most patient-centered examinations of skill have, as part of the evaluation, patient control and comfort assessments.

Students are exposed to techniques and strategies of behavioral management in the D2 year. (DDS-DADM316, DADM317; DMD-DAOB32, DAOB322). The students are evaluated on their ability to use communication and non-pharmacologic techniques such as Tell-Show-Do to alleviate anxiety.

During the pediatric experiences, students are trained in behavioral modification techniques and local anesthesia techniques appropriate for the child and adolescent patient (DDS-PEDD334; DMD-DAOB323). The pediatric curriculum also prepares the students to administer nitrous oxide. The State of Illinois does not require special certification for administration of nitrous oxide. Therefore, it is incumbent on the College to assure its graduates are well prepared to use this modality safely and effectively.

Through the use of lecture and reading in the pediatric dentistry course sequences, the necessary information is transmitted. Students then administer nitrous oxide to peers for certification purposes. Once this training is accomplished the students are able to use nitrous oxide for patient care in the College. This process has met certification requirements of sister states who do require formal certification and licensure for nitrous oxide administration.

f) restoration of teeth;

The restoration of single teeth begins with emphasis on maintenance of health and the prevention of disease and trauma in the first semester of study in Comprehensive Care Ia (DDS-DADM314; DMD-DAOB311). The program continues in a logical sequence using interactive didactic session, small group huddles simulated patient care, and intra- and extramural patient care for the child, adolescent, adult and compromised patient. Assessment methods include written examination, independent demonstration of skill on simulated and live patients, case-based scenarios in an OCSE format, direct faculty observation, self-evaluation and portfolio and patient treatment (case) presentations.

Students learn direct restoration care in high fidelity prepatient and patient care environments for both the child and the adult patient. The diagnosis, treatment planning and treatment are presented through the use of electronic patient records. Materials include amalgam, resin composites and glass ionomer, porcelain inlays and veneers, as well as single cast and veneer crowns. Training is also provided for sealants, fluoride varnishes and trays, and cosmetic whitening techniques. Information presentations are electronic, rely on current literature (frequently student generated) and group discussions.

Assessment relies upon student performance and self-evaluation. In each instance of skill assessment, the student accuracy of performance assessment is part of the final grade achieved. Examples of independence testing occur in two patient-based performance examinations in each of the third and fourth years restorative courses. The fourth year mock licensing board examination is another forum for demonstration of skill. Faculty observation and discussion are essential components of student evaluation in each of the clinical courses.
Consistent with national trends the use of silver amalgam has been declining with a concomitant increase in the use of resin composite for posterior restorations. The same trend is noted in direct restorations placed on the regional licensing examinations. However the College has not reduced the time in training in the pre-patient care curriculum.

Pediatric Dentistry conforms to the same criteria as does the general clinics. Variations in technique due to anatomical and histological differences between the primary and permanent dentition and dental material options are discussed in lecture and pre-patient care exercises (PEDD334). There is close collaboration between the predoctoral pediatric pre-patient care courses and the restorative courses. Pediatric Dentistry clinical experience courses (PEDD338, PEDD348) provide the varied patient experiences and opportunities for faculty evaluation. This will be covered in the DAOB third year fall and spring courses.

**g) communicating and managing dental laboratory procedures in support of patient care;**

The College has eliminated nearly all student generated laboratory procedures save some repair services. Instead, the students focus on the quality of materials and instructions sent to commercial laboratories and in the evaluation of products returned prior to delivery to patients.

In the prepatient prosthodontic, restorative, and orthodontic courses students learn and practice the component parts of generating a laboratory prescription in accordance with the State of Illinois Dental Practice Act Section 48.

Specifically the Act requires:

Any dentist who employs or engages the services of any dental laboratory to construct or repair, extraorally, prosthetic dentures, bridges, or other replacements for a part of a tooth, a tooth, or teeth, or who directs a dental laboratory to participate in shade selection for a prosthetic appliance, shall furnish such dental laboratory with a written prescription on forms prescribed by the Department which shall contain:

1. The name and address of the dental laboratory to which the prescription is directed.
2. The patient’s name or identification number. If a number is used, the patient’s name shall be written upon the duplicate copy of the prescription retained by the dentist.
3. The date on which the prescription was written.
4. A description of the work to be done, including diagrams if necessary.
5. A specification of the type and quality of materials to be used.
6. The signature of the dentist and the number of his or her license to practice dentistry.

Throughout the patient care curriculum students generate laboratory prescriptions through our electronic patient record. They not infrequently communicate verbally with the laboratories when clarifications are indicated.
In the fourth year students spend considerable time at extramural clinics. Because of this commitment, students gain experience in close scheduling of laboratory procedures to maintain timely patient care.

h) replacement of teeth including fixed, removable and dental implant prosthodontic therapies

The students’ first exposure to replacement of missing teeth occurs in the summer semester of the second year. In a live patient Complete Denture clinical course (DDS-REST321; DMD-DAOB322, DAOB323) and working in small groups students learn assessment, diagnosis, treatment planning and treatment while fabricating a maxillary and mandibular denture for the patient. The patients are carefully selected. Using electronic presentations (Blackboard), interactive plenary sessions and group “talks,” students learn the principles and techniques of denture therapy. Instructors, working with groups of four to five students, employ demonstration and modeling strategies for the clinical experience. Rotating in delivering actual administration of care, the students perform and/or observe other group members perform each of the steps in denture procedure. Students continue the practice of skill development throughout the clinical experience. Assessments are based on instructor evaluation of clinical care, a tooth set up performance examination and a portfolio presentation in a third year DAOB clinical course. In later courses, students must present a portfolio based upon restoration of an edentulous arch(es). Each student or student pair plans, fabricate and delivers an implant supported mandibular complete denture.

In the fall semester of the second year, students participate in a Removable Partial Denture course segment (DDS-REST324; DMD-DAOB322) that emphasizes assessment and treatment planning. Particularly stressed is the knowledge and skill of removable partial denture theory and framework design, both of which are tested. The clinic patient care in the third and fourth years provide many opportunities for planning and delivery of removable partial dentures.

The curriculum in the Fixed Partial Denture course segments (DDS-REST322, REST326; DAOB322 and DAOB323) care begins in the second semester of the second year and stresses assessment, diagnosis and treatment planning through its didactic portion. The prepatient care clinical segment emphasizes preparations and provisional restorations. Also included is a simulated posterior single tooth implant experience which occurs in the spring term. In both the prepatient and patient care arenas, tests of independence utilize written and simulated patient care examination formats. The quantity and quality of the College's patient pool related to fixed partial denture experiences preclude a patient based demonstration of independence, although there is a patient based performance examination in which the student prepares and restores a single tooth for a cast restoration. With the significant increase in single tooth implant therapy being performed in our predoctoral clinics, the numbers of patients treated with FPD prostheses have diminished, a phenomenon being seen in the private sector as well. Therefore, to assure our students competence in performing FPD therapy we have relied more on simulated patient care.

As mentioned above, students are well experienced in implant therapy. Implant supported prostheses are part of every students’ clinical care program. All students have experience restoring implants with both overdentures and single tooth restorations. Beginning in 2011 selected students also received training and actually placed implants in live patients. This program has continued and has grown to 10-12 students per year being selected.
Replacement of missing teeth is a key feature of the e-CBE (DDS-DADM321 and DADM324; DMD-DAOB333, DAOB343). To assess student understanding, questions related to partial and complete edentulism are always part of the e-CBE. The assessment of students’ comprehension of restoration of partially and completely edentulous patients also includes station to station examinations.

i) periodontal therapy

Students begin their study of Periodontics in the first semester of the first year (DDS-DADM314; DMD-DAOB311). The emphasis is on the assessment and diagnosis of health and includes probing skills and gingival description on peer partners. In the D1 year (DDS-DADM315; DMD-DAOB312), working in groups of three (operator, patient, evaluator), students begin the knowledge and skill development of instrumentation, accretion identification and removal and continue skill development in prevention and health maintenance. Assessments of knowledge and skill are primarily through written examination and faculty evaluation of clinical performance. Didactically, students are presented with the foundation knowledge related to health and pathology as well as the current non-surgical and surgical care modalities. Student learning is assured through written examinations.

Limited patient care activities begin in the summer term of the second year and continue to be expanded through the rest of the clinical curriculum. The third year experiences are carefully tracked by the predoctoral Periodontic faculty manager and evaluated primarily by Periodontists and Dental Hygienists. Tests of independent demonstration of skills include six clinical examinations:

1. Preventive and risk factor assessment;
2. Periodontal clinical evaluation (includes periodontal probing, measurement of tooth mobility, measurement of keratinized gingiva);
3. Radiographic interpretation;
4. Scaling and root planning;
5. Treatment planning; and
6. Case Presentation.

Each examination is self-evaluated and evaluated by a faculty member in the Department of Periodontics. There is also the requirement of a portfolio project as part of a third year Comprehensive Care course related to the assessment, diagnosis, treatment planning, and Phase I care and re-evaluation. Once again, faculty observation plays a key role in predicting student competence.

In the fourth year program, there is more latitude given to the students as they successfully demonstrate knowledge and skill. Patient care responsibilities are frequently delegated to dental hygiene students for the prophylactic and maintenance care while the dental student provides the diagnosis and treatment plan needs. Students also deliver care in our extramural partner clinics. Care is supervised primarily by generalists in these settings.

There are four performance examinations for the D4 student in a format similar to the D3:

- Scaling and root planing (fall semester);
- Periodontal reevaluation (fall semester);
- Periodontal maintenance (spring semester); and
- Case Presentation (spring semester).
There are three other assessments involving periodontal knowledge and skill in the fourth year (DDS-DADM334; DMD-DAOB343). These are the portfolio, the Restorative case presentation and the mock licensing board examination.

Pediatric Dentistry conforms to the same criteria as the general clinics. Hard and soft tissue evaluation is taught as part of diagnosis and treatment planning and, when appropriate, guidelines are discussed related to when and how to refer patients for specialist care.

j) pulpal therapy

The Endodontics curriculum begins in the D2 year (DDS-ENDO321, ENDO331; DMD-DAOB321, DAOB322, DAOB323) course where the principles of isolation and pulpal assessment are introduced. Students are provided didactic and clinical experiences in both aspects with the clinical portion being performed on each other. This experience is followed in the D2 fall semester with the prepatient care Endodontics course segment (DAOB322). It is in this course that students acquire the foundation knowledge and develop skill in performing endodontics procedures on natural teeth in patient-operator position using both hand and rotary technique for canal. Beyond developing the psychomotor skills, a great deal of emphasis is placed on assuring competency in recognition skills through self-evaluation. Student assessment is accomplished through the use of written quizzes and final examinations as well as through product and procedure practical examinations, self-evaluation examinations, and simulations in Blackboard. Further development of cognitive skill occurs in the spring semester Endodontics Clinical Lecture series (DDS-ENDO331; DMD-DBCS327, DBCS328, DBSC329) and the case based treatment planning segment of the same courses. Concurrently, students receive information on pulpal considerations in the Restorative Dentistry and Periodontal prepatient and patient care treatment planning presentations.

Students receive didactic training in pulpal therapy for primary teeth in the introductory Pediatric Dentistry simulated patient care sessions in the second year. There is also sufficient opportunity to demonstrate these skills in the Pediatric Clinic and at the community-based service sites which are predominantly child care clinics.

Clinically, endodontic procedures are tracked through our patient information system. Each of the predoctoral clinics has assigned endodontics liaisons (departmental faculty) who are responsible for assuring adequate patient experiences for the students. Students use the AAE Case Assessment criteria to determine the suitability for student care or for referral. Student assessment for the clinical experiences include student and faculty evaluation of direct patient care, portfolio reports related to endodontics therapy performed, e-CBE specific to endodontics questions, and mock licensing board examinations. The department of Endodontics also has a series of patient-based performance examinations as part of restructuring the clinical program. In the third year, students are required to pass a performance examination on a patient related to an anterior tooth and a posterior tooth in the fourth year.

Student performance on both internal and external assessment measures indicates success in achieving competency. Recently, due to the elimination of adult Medicaid coverage in the State of Illinois and perhaps the significant increase of grant subsidized implant therapy, there has been a notable decrease in patients selecting and seeking endodontic therapy. To meet this challenge the College has reduced the endodontic fees and the department has allowed students to challenge performance examinations on extracted teeth.
Pediatric Dentistry conforms to the same criteria as the general clinics. The methods of evaluating pulpal pathology, both in the primary and immature permanent dentition, and subsequent treatment are discussed in the Pediatric Dentistry prepatient care setting. Further pediatric pulp therapy is reviewed and reinforced during the Pediatric Dentistry Clinical experiences. Variations in technique due to the pulpal anatomy in primary teeth are reviewed. Case scenarios are presented in the DOST series for discussion, and used to reinforce concepts during the clinical phase of the student’s education.

**k) oral mucosal and osseous disorders**

Beginning with the first semester of the first year program, students are introduced to the principles and techniques of the head and neck examination (DDS-DADM314; DMD-DAOB311). After receiving an introductory didactic presentation and a filmed demonstration, students participate in clinical experiences wherein they perform head and neck soft tissue intraoral examinations on one another. A similar experience occurs in the first year spring semester in (DDS-DADM315; DMD-DAOB312 with the emphasis on mucogingival periodontal assessments.

Students are presented the knowledge base for general and oral pathology throughout the first year (DDS-PATH421, PATH422; DMD-DBCS311, DBCS312, DBCS313, DBCS314, DBCS315, DBCS316 in the D2 DBCS321, DBCS322, DBCS323, DBCS324, DBCS325). While the curriculum focuses on health, it does so through the use of pathology as a clinically engaging and relevant “hook.” The courses feature the usual slide and text images of oral and head and neck pathology, but utilize small group strategies that include case-based scenarios. There is a requirement for each student to present an evidence-based report to the peer group. Students are assessed using written examinations.

Continuing through the clinical years, each student performs many head and neck exams as evidenced by the numbers of 0120, 0140, 0170 and 0150 examinations. To enhance student learning in this area, there is a requirement for a portfolio project to be completed in the third year. This project requires students to identify a patient with an oral lesion and describe the lesion, the etiology, therapy, impact on dental care, and prognosis. Students are required to collect specimen, process and interpret the results of a cytology specimen from one of their clinical patients. There is also a Blackboard accessed “Case of the Week” in an e-CBE assessment that uses many questions related to pathology and oral medicine.

The Clinical Oral Pathology rotation in the third year along with a companion plenary session provides real life review of clinically relevant material. The most common oral lesions are reviewed in the plenaries along with the most common related therapies. The students are evaluated via written examinations.

Students are given clinical opportunities in recognizing and diagnosing normal soft tissue. We conclude, based on faculty clinical observation, student experiences, National Board Part II results and simulated examinations that students do recognize normal and its variations and can recognize tissue abnormalities. No definitive outcome measure for competency in this area has been identified therefore, the College committed to surrogate measures. Students can recognize abnormalities and be comfortable in managing the patient through observation, cytology, simple biopsy and referral.

Pediatric Dentistry conforms to the same criteria as the general clinics. Oral manifestations of systemic diseases common to the pediatric patient are reviewed during the introductory courses and reinforced when performing hard and soft tissue examinations in the Pediatric Dentistry clinical experience.
Students are presented with the didactic portion of oral and maxillofacial surgery (OMFS) in the second and third year of the curriculum (DDS-OSUR323, OSUR337; DMD-DBCS327, DBCS328, DBCS329, DOST331, DAOB331). The principles of periodontal surgery are also presented during this time as well in the oral surgery clinical rotation that encompasses four week long half day sessions in each term of the third year DAOB courses. (DDS-DADM317; DMD-DAOB322, DAOB323, DAOB333)

Major revisions have been made to the Maxillofacial Surgery Clinic rotation. Third year students enroll in the course and participate in the rotations. Key elements to the rotation are:

- The addition of an evaluated performance examination for each student for procedure D7140 (uncomplicated extraction).
- An oral examination on some aspect of a surgical complication, exodontia or infection.
- Simulated patient emergencies
- A practical examination demonstrating student skill in handling mock medical/surgical emergencies.

The attending faculty evaluate each student’s daily performance during each of the rotations. The student must achieve acceptable performance on each of the key evaluation items. Remediation of unsatisfactory performance requires the student to repeat the evaluation component after a faculty defined plan of practice.

During the second and third years students also assist Periodontic post graduate students in performing various surgical procedures most frequently on patients referred by the assisting predoctoral student. The most common procedures are crown-lengthening, mucogingival procedures and flap for access.

Students are also required to attend all surgical sessions related to their patients receiving implant therapy. These procedures are performed by post graduate students in the Departments of Prosthodontics, Oral and Maxillofacial Surgery and Periodontics. Students assist in the bone grafting (if necessary) implant placement, and uncovering surgeries. As mentioned above, selected students also directly place implants.

**m) dental emergencies**

With the creation of the Group Practices and the commitment to comprehensive care, came the inclusion of urgent care service into the fabric of the Group Practice. As part of the third year rotation each student completes several formal assignments for urgent care coverage in his/her practice. Additionally, in the event of patient cancellation or failed appointment, and because of the attendance policy, students seek patient care opportunities by volunteering service to urgent care. This service is supervised by a dedicated attending faculty who completes a student performance evaluation of each clinic experience.

Because of the patient base served by the College, and exaggerated by the economic state of the city, and most recently exacerbated by the elimination of adult Medicaid coverage, the daily
opportunity to provide urgent care is abundant. The College routinely serves thirty or more patients daily in the adult comprehensive care clinics and 18-20 patients daily in the pediatric care clinic.

Students are evaluated on their daily performance by attending faculty and also in the third and fourth year through the comprehensive e-CBE. Students in the D2 year are required to complete a portfolio of their Urgent Care and Screening experiences.

Recently, a performance examination was developed and implemented for the third and fourth year students as part of their assignment to urgent care coverage in the individual clinics. Attending faculty assign a patient to a student deemed prepared to challenge the examination. Using written criteria students self-evaluate their performance and compare their evaluation with the attending faculty review.

Pediatric Dentistry conforms to the same criteria as does the general clinics. Common pediatric dental emergencies, including trauma management are presented in lecture series (DDS-PEDD334, PEDD337; DMD-DAOB331, DAOB322 and DAOB333).

n) malocclusion and space management

Students are provided with the didactic and prepatient care components of diagnosis and treatment planning in the Preclinical Orthodontics segment of (DDS-ORTD323 DAOB323.) Students are also provided experiences to design the appropriate active treatment devices in this course. The concepts are also presented and reinforced in the Pediatric Dentistry course segment which includes a simulated care. Coordination between the courses is close and ongoing. The primary method of assessment is through written examination. Clinically, in the pediatric patient care clinic, the students are provided the opportunity to actively treat a space maintenance problem. In the Clinical Orthodontic course (DDS-ORTD338, DMD-DAOB341, DAOB342, DAOB343) students must observe and write a journal report of two active treatment patients of a resident.

As part of the Orthodontics curriculum (DDS-ORTD323; DMD-DAOB323) all predoctoral students enroll in and are certified through the Invisalign certification process in the third year.

o) evaluation of the outcomes of treatment, recall strategies, and prognosis

Portfolios are required of each student in each of the clinical courses as well as the portfolios in Endodontics and Pediatric Dentistry (DDS-DADM318, DADM319, DADM320, DADM321, DADM322, DADM323, DADM324; ENDO353 PEDD338), DMD-DAOB323, DAOB331, DAOB332, DAOB333). Each portfolio requires the student to reflect on the observed care outcome and the patient reaction to the care provided. The student is then asked to describe, given the outcome, what they would do differently and to explain why and how the outcome would have been improved. In the DMD program these assessments are being continued.

Each treatment plan and alternative treatment plan is required to have a prognosis statement. Faculty are tasked with assuring the student engages with the patient to explain what the outcomes of treatment are expected to be. The student explains the pre-treatment prognosis and later if necessary an enroute prognosis.

In the milieu of patient care, treatment plans are sequenced through the use of phased care. At the conclusion of each phase, students are required to complete the appropriate “post phase evaluation”
before proceeding to the next phase of planned care. The student is challenged to identify the outcome of the particular phase of treatment and to explain how the outcome will or will not affect the care planned for next phase. The College’s philosophy of patient care precludes the typical “case completion” evaluation, but requires continual patient re-evaluation through the use of the 0120 and 4910 examinations at each patient maintenance phase appointment.

The recall strategies that are currently in use by the students include the AxiUm recall module. An active patient can start prophy recall/maintenance interval immediately after the completion of Phase I periodontal therapy. When an Active patient has completed treatment, the student requests that their AxiUm status be changed from Active to Recall. This change in status is completed by the clinic manager or dental clerks. The student then utilizes the AxiUm recall module to indicate the type of recall needed, and the appropriate time frame for the future appointment. The AxiUm system will generate a message to the student 30 days prior to the patient’s recall due date, so that the patient can be scheduled. Additionally, an Overdue patient message is generated automatically by AxiUm to the student if the patient has not been seen within the appropriate time frame.

The method of evaluating the student’s recall strategy is twofold. The Managing Partners are provided an “Overdue Conditions” Report monthly by the Office of Clinical Affairs, which indicates both student and patient information. The Managing Partners review the report and follow up with students regarding the overdue patients. An additional strategy that addresses recall patient care is the semester review of patients that is performed by the Managing Partners and the Clinic Managers. Each student must provide a patient list which is reviewed to ensure that all patients are seen on a timely basis, including recall status patients.

It is clearly demonstrated through both internal and external measures that students are competent in evaluating treatment outcomes. Passing the internal patient care examinations (that have the self-evaluation component) and the ability to successfully challenge external reviews are clear and relevant indicators of this skill.

2. Describe how the school ensures that comprehensive care experiences provided for patients by students are adequate to ensure competency in all components of general dentistry practice.

In the College, patient care is comprehensive and provided with faculty and patient approval of phased and sequenced plans. The only exception to this approach is limited to urgent care therapy, which only addresses the immediate patient need.

Comprehensive care patients are initially screened for provisional acceptance to the undergraduate clinics, and at this appointment, a general prediction is made by the faculty supervisors regarding the type of dental treatment the patient will most likely require. The patient has a prescribed panoramic radiograph completed, and is informed that he/she will be assigned to a student within sixty days. The Managing Partner (MP) subsequently reviews the panoramic radiograph and the screening intake form, in order to confirm acceptance to the undergraduate clinic. A student is identified and assigned to the patient based on the perceived patient care needs and the student’s educational need for treatment experience. In determining patient assignment, a variety of approaches are utilized in identifying student need for experience. First, numerous AxiUm reports are reviewed by the MP, including student current experience in the various components of general dentistry. Additionally, the liaisons in the disciplines of Endodontics and Periodontics provide input to the MP on a regular basis.
ensuring that student educational needs are met by appropriate patient assignment. Also considered are student skill level, proximity to graduation, and need for completion of required independent performance exams. Lastly, MPs meet on a regular basis with students to review their clinical progress as well as the ongoing treatment plans that are in place. These methods provide a systematic approach to patient assignment, so that comprehensive care experiences provided for patients by students are adequate to ensure competency in all components of general dentistry practice. Student progress is also monitored closely through the Subcommittee of Student Promotions (SSP).

Once the student is assigned to the patient, the initial assessments and diagnoses are completed, and an instructor approved phased treatment plan is offered to the patient. Upon acceptance of a phased plan, treatment proceeds following the appropriate sequence by the assigned student. There are situations where a MP may co-assign or reassign a patient to another student who may require additional experience in a particular component of general dentistry. When this occurs, continuity of care is ensured by consistency of faculty supervision of the patient.

Adhering to the College’s Competency Model requiring sampling of data from Varied Experiences, Faculty Observation, Independent Performance, and Self-Evaluation, the Competency Assessment Map for DDS Class of 2013 and DMD Class of 2015 summarizes didactic, pre-patient care and clinical activities at the College.

3. Describe how students are assessed in each of the areas (a. through o.) Describe how students overall competency is assessed to determine the graduate’s readiness to enter the practice of general dentistry.

The faculty of the College rely on many types of observations and evaluations to determine student attainment of competence. In determining competence, the faculty sample evidence from each of the four domains of our Competency Model. Assessments range from direct fact recall to the higher-order-thinking skills of analysis, problem-solving, case reports, portfolios, multidisciplinary patient case presentations and self-evaluation that are used in the classroom, pre-patient care and patient care. Learning environments that require group activity have been created as well. These, too, through faculty and peer evaluation techniques are part of the evaluation system.

The determination of competency at the College is made by the faculty, specifically the faculty designated by the various departments to be responsible for pre-patient care and patient care in the context of didactic, simulated and clinical teaching.

As seen in the outline below, the College uses the Competency Model in determining the readiness of students for comprehensive care experiences in the context of general practice dentistry. The faculty use four central measurements when determining student competence. The four measurements are:

- Varied experiences (simulated and real);
- Direct faculty observations of student performance;
- Faculty evaluation of independent performance; and
- Evidence of self-evaluation.
Please view the Competency Map DDS and DMD tables that further illustrates examples of Varied experiences, Faculty observations, Faculty evaluation of independent performance and Student self-evaluation in the DDS and DMD curriculum.

4. Describe how competency for each of the areas (a. through o.) is met and ensured for all graduates.

The College has adopted a concept and method for determining student competence which is captured in the Competency Model. We believe that when stating that a student is competent, in fact we are making a prediction of future performance. Specifically we are predicting that the next time a student is presented with a clinical situation, that student will perform the task in an independent and clinically acceptable manner.

In order to confidently make this prediction, the faculty regularly sample evidence from four domains; Varied Experiences; Faculty Observation; Performance Examinations; and Student Self-Evaluation.

Supportive Documentation

Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-3: Competency Statement Diagram
Appendix C-4: COD Predoctoral Competency Model
Appendix C-11a: Competency Map – DDS
Appendix C-11b: Competency Map – DMD
Appendix C-24a: Student Clinical Experiences – Class of 2013
Appendix C-24b: Student Clinical Experiences – Class of 2015
Appendix E-3: Attendance Policy

Available On Site
Course Syllabi
Student assessment forms
2-24 Graduates must be competent in assessing the treatment needs of patients with special needs.

Conclusion: The UIC College of Dentistry complies with Standard 2-24.

Description

According the definitions found in the Self-Study Guide of Commission on Dental Accreditation, patients with special needs are patients “whose medical, physical, psychological, or social situations make it necessary to consider a wide range of assessment and care options in order to provide dental treatment. These individuals include, but are not limited to, people with developmental disabilities, cognitive impairment, complex medical problems, significant physical limitations, and the vulnerable elderly”. The 2000 U.S. Census found that almost 50 million citizens have a long-term disability that challenges them on a daily basis. In 2000, the first U.S. Surgeon General’s report on oral health pointed out that persons with special health care needs suffer from both relatively poor oral health and problems accessing oral health care services. Dentists who received didactic seminars and clinic-based education in treating patients with special needs during their predoctoral dental training are more likely to be comfortable caring for this patient population and were thus more likely to provide this care. The College views “special care” broadly. The definition includes each of the categories identified in the CODA intent statement.

1. Describe student experiences in assessing the treatment of patients with special needs.

Beginning in the D2 year (DDS-REST323; DMD-DBCS327, DAOB332, and DAOB333) students develop treatment plans and alternative treatment plans through the use of simulated patient case scenarios in the Diagnosis and Treatment Planning track. As the experiences evolve throughout the year the scenarios become more complex and add layers of patient issues that require critical thinking and problem-solving. The scenarios include patients with varying complexities of medical problems and/or social issues that require treatment modifications to meet the needs of the patients while addressing the diagnoses.

Cognitive Impairment/Inability to Understand

The second year also includes rotations for all students in our well infant clinical experience. The children seen are under the age of three and the experiences include lap to lap examinations, tooth brush prophylaxis and fluoride varnish application. Students also experience working with the care providers to help the care provider understand diet, disease prevention and home care procedures. Students gain experience in knowing what questions to ask parents/legal guardians to better assess the patient’s needs. In addition, dental students learn what anticipatory guidance topics they need to discuss that are appropriate for that age population. The students also participate in a simulated patient care session before treating their first infant patient. It has been documented that dental students who treat infants during dental school are more likely to treat them after graduation. These infant care sessions provide our students with meaningful experience in both the assessment and care for this population.

Vulnerable Elderly

In the D3 year, the students also build on knowledge of treatment planning for the elderly (DDS-OMDS336; DMD-DOST332). Each course covers ethics and delivery of treatment as applied to the older patient. Lecture/discussion sessions focus on aging, general dentistry case studies, the palliative
care patient, geriatric pharmacology, endodontics and oral surgery and signs of elder abuse. The lecture presentations are based on case studies in which students are asked to respond to various questions posed by the faculty in the lecture session. An oral review in which the students are asked to respond to questions as a group is used for another exercise of class discussion. The students through patient scenarios, role playing and small discussion groups learn various communication techniques to use when working with patients with special needs.

**Complex Medical Problems/Significant Physical Limitations**

In the fall of the D3 year, Special Patient Care (DDS-DBSC345; DMD-DOST332) provides students with a broad background to special needs patients that are encountered in a general practice environment where students understand the condition, the dental needs of special needs patients and dental management. Topics include Cerebral Palsy, Down Syndrome, Autism, seizures, ADHD, coagulation disorders, drug and alcohol abuse, eating disorder, HIV patients, oncology patients and hearing impaired. At the completion of the course, a written exam is given. Assessment of student’s performance and competency is carried out through class participation, case based and written examination.

During the D3 and D4 year’s clinical programs our students provide care for a diverse range of patients. This diversity requires our students to interact with patients who face economic limitations, ethnic preferences for care, issues of mobility, understanding, medical infirmities, as well as patients who are morbidly obese and have significant physical limitations. In the Spring Term of the third year (DDS DADM321; DOAB 333) each student prepares a patient based portfolio related to a medically compromised patient. Students must select one of the patients in their care group who has a medically significant disease and who is also taking three or more pharmacologically significant medications. They must describe the plan for dealing with the medical and pharmacological issues, the modifications necessary in the treatment plan, coping with such care delivery issues that are modified by the disease or the medications.

**Extramural Special Needs Experiences**

Each fourth year student participates in the extramural course (DDS-DADM325; DMD-DCLE341, DCLE342, DCLE343). The course involves extramural rotations to one or more of seventeen of our partner sites. The purpose of the course is to raise the students’ knowledge and sensitivity to the oral health needs of the underserved and patients with special needs. The experiences also serve to acquaint students with the social, cultural, community, economic, health service system and political issues involved in meeting those needs. The community-based service-learning rotations allow the students the opportunity to provide dental services to diverse and vulnerable patient populations including the homeless, the elderly, indigent children and adults, migrant workers and persons with special needs under the guidance of community-based faculty, as well as expanding access to care opportunities to underserved populations.

We currently have 21 community sites that partner with us in this endeavor. Of these 21 sites, three offer experiences in treating patients with physical, mental and cognitive disabilities namely Milestone Inc. Dental Clinic in Rockford, Little City which is part of the Northwest Community Healthcare experience and the Advocate Illinois Masonic site. The students work and provide clinical care to people with special needs and provide oral health education to the caregivers where feasible. A total of 28 D4 students (42% of the class) are able to gain this valuable experience. The students at the site are supervised and assessed by adjunct faculty member of the College who complete an evaluation on the student. The students evaluate the experience and share it with the other D4 students at a reflective seminar once they return to the College.
As a result of the College’s awareness that students were lacking in the opportunity to provide direct treatment for individuals with cognitive and developmental disabilities, the Division of Prevention and Public Health Sciences developed and now coordinates a program directed to providing oral health education and preventive care techniques for individual’s with special needs. The College was awarded a special needs grant from the Illinois Children’s Healthcare Foundation. The goal of the grant is to expose our dental students to the special needs population. The grant activities are open to the D2s, D3s, D4s and I2s. The initial introduction of the grant to the student body was overwhelming positive and 50 students signed up for the activities. This is currently being offered to D3, D4 and I2 students. The optional program includes three didactic sessions. An introductory session and two special interactive sessions with all interested dental students on the oral health needs of the special needs population, manifestation of oral disease, behavior management and communication techniques. These sessions serve to prepare the students to conduct oral health education with this unique population, the caregivers and their families.

The College has also partnered with two sites, La Rabida Children’s Hospital and Illinois Center for Rehabilitation and Education (ICRE), to provide the dental students with opportunities to work with children with special needs, their families and care givers. Most patients at ICRE are in wheelchairs and have cerebral palsy. La Rabida Children’s Hospital is the only hospital of its kind in Chicago and specializes in treatment of chronic illnesses, developmental disabilities, abuse and trauma.

Through the grant, the dental students will also be trained by Dr. Michael Tadin, dental director of Milestone Clinic and an adjunct faculty member of the College. Milestone dental clinic is a private, non for profit clinic located in Rockford, Illinois. It provides oral health care exclusively to people with developmental disabilities. Dental students will receive both didactic and a practical session at Milestone.

Following completion, students then have the opportunity to provide dental treatment, using portable equipment, within the various facilities. Clinical experiences are currently held at LaRabida Children’s Hospital, The Illinois Center for Rehabilitation and Education, and the Milestone Clinic. At these locations students have the opportunity to interact with people with developmental disabilities, cognitive impairments and significant physical challenges.

2. Describe how students are assessed in assessing the treatment needs of patients with special needs.

The Competency Model describes four domains of evidence for determining student progress toward and achievement of competence. Those domains include Varied Experiences, Faculty and Peer Observation, Performance Examinations (Independent Demonstration of Skill) and Self-Evaluation. All four domains are used by the faculty in assessing the students.

Varied Experiences
In the pre-patient care treatment planning offerings students are presented with several patient scenarios in the treatment planning sessions and the communication sessions to allow the application of skill and knowledge in many settings.

Similarly in patient care interactions with College’s and Community Partner’s wide diversity of patients expand the experience our students have to apply the skills and knowledge attained in pre-patient care. In spite of the State of Illinois’ decision to eliminate adult Medicaid, the College has managed
to maintain a meaningful patient base that affords significant exposure to patients with special needs (elderly, physically disabled, and ethnically diverse).

The extramural program contributes mightily to student experiences with special care needs patients. While the experiences are largely with children our students not only treat special care patients, but they also see first-hand how issues of transportation, finances and language can and do affect access to care.

**Faculty Observation**

In the pre-patient care treatment planning sessions, faculty members acting as facilitators, work with small groups of 4-5 students to observe and assess the group process as well as individual performance. There is regular formative feedback provided by the faculty member during each clinic session as well as a summative evaluation at the conclusion of each simulated patient case by the Course Director. The Course Director evaluates each student’s written work sheets and treatment plans and for each of the simulated patient cases.

In the communications sessions the faculty mentor provides feedback during the role playing. There is also feedback given to the individual student by both peers and faculty when they present a taped interview with a patient. Peers offer suggestions on where interaction could be improved and provide comments on particularly effective use of communication skills. The faculty member provides both formative and summative assessment to the student.

Part of the assessment is done by site preceptors who are adjunct faculty members of the College. Assessment occurs at three levels by site preceptors. The first two weeks the preceptors provide informal feedback while observing the students at the site. During the third week the preceptors and students have a formal one on one assessment of the progress made thus far and during the last week the preceptors complete an online assessment form on the student.

**Performance Examinations**

The treatment planning course is capped by the presentation of a patient scenario under examination conditions wherein students are presented with the medical and dental histories, the patient’s chief concern, diagnostic charting, radiographs, and photographs. Students are expected to demonstrate skill in assessing, analyzing findings, identifying problems, generating diagnoses, developing optimal and alternative treatment plans and providing the rationale and prognosis for the decisions.

Students are also assessed through written examinations (DDS-REST323; DMD-DAOB323). The Diagnosis and Treatment Planning examination provides assessment through multiple choice questions included on periodic quizzes, a midterm, and a final examination.

As part of the communication in the DDS curriculum competency assessment is based on:

1. completion of in-class thought exercises where students must apply the material presented to clinical scenarios,
2. self-assessment of communication skills based on a behaviorally anchored checklist,
3. senior peer, self and instructor assessment of audiotapes of actual clinical interviews (based on a behaviorally anchored checklist),
4. clinical case presentations (all students provide written feedback to classmates based on the material discussed in the modules).
In the DMD Curriculum (DAOB courses), competency assessment is based on:

1. completion of in-class thought exercises where students must apply the material presented to clinical scenarios,
2. in-class role plays with peer and instructor feedback (using a structured checklist),
3. peer, self and instructor assessment of audiotapes of actual clinical interviews (based on a behaviorally anchored checklist),
4. case portfolio that includes behavioral and ethical aspects of care.

During clinical experiences students are required to challenge performance examinations. There is a specific performance examination that students challenge in Assessment and Treatment Planning (DDS-PERI353; DMD-DAOB333). In this exam, the third year students challenge a case based periodontal treatment planning exam where a prepared PowerPoint is presented to the class. The PowerPoint provides the students with details of the patient histories including risk factors, clinical and radiographic examinations. This performance exam evaluates the student's ability to independently treatment plan a patient with periodontitis. The students are expected to assign diagnosis, give short term and overall prognosis for individual teeth, and provide evidence that they understand the various aspects of the treatment planning process and the evaluation of outcomes of therapy.

**Student Self Evaluation**

As part of the Diagnosis and Treatment Planning course, at the conclusion of each simulated patient case, students bring a copy of their completed treatment plan to a large group presentation of the Course Director’s completed treatment plan for the simulated patient case. Students are able to assess their performance on all aspects of the treatment planning process for the case as well as interact with the Course Director and other students to ask questions and/or make suggestions for alternative ideas as to how the case should be managed and planned.

Also as part of the Diagnosis and Treatment Planning course, students are required to complete a small group assessment form to assess themselves as well as the other members of the small group as to their performance on small group projects. These small group projects include the small group patient simulation treatment planning sessions as well as the development of and Evidence Based Dentistry paper in which the principles of EBD are applied to specific clinical topic that is assigned to each small group.

Additionally the course faculty meets with all the students who participated in the extramural rotation during a lunch time meeting called “reflective seminar”. During the seminars the students share their experiences on the rotation and are assessed using the four questions:

1. How have you changed as result of this experience?
2. What did you learn about the community, people, social justice, or other value systems?
3. What did you learn about the health care system and health policy?
4. What did you learn about how oral health fits within the health care system?
Supportive Documentation
Appendix C-4: COD Predoctoral Competency Model

Available On Site
Course Syllabi
Student assessment forms:
Illinois Children's Healthcare Foundation Grant
Dental education programs must make available opportunities and encourage students to engage in service learning experiences and/or community-based learning experiences.

Conclusion: The UIC College of Dentistry complies with Standard 2-25.

Description

The community-based service-learning clinical rotations enable students to provide dental services to diverse and vulnerable patient populations including the homeless, the elderly, indigent children and adults, migrant workers and persons with special needs under the guidance of community-based adjunct faculty. Participation in the course also expands access to care opportunities to underserved populations. In order to participate in these robust and vigorous service-learning programs, a student must be deemed able to function in relatively independent fashion, in terms of their clinical preparation, by his/her managing partner. While all D4s enter the didactic elements of the course curriculum, the Managing Partners (MPs) determine when students enter into the extra-mural service-learning component of the course. Consequently the range of rotation times varies from 4-17 weeks per student.

1. Describe the available service-learning and/or community-based learning experiences, including the types of patient interactions commonly encountered and any requirements/prerequisites for students to participate. What are the criteria used to determine whether the experiences aid in the development of a culturally competent oral healthcare provider?

The fourth year DDS service learning curriculum is described in the course DADM325. The course is 12 credits, graded pass/fail and is a transcripted required course for senior (D4) students. The purpose of the course is to expose the students to and increase their understanding and sensitivity toward the oral health needs of the underserved in the state of Illinois and elsewhere. It is also intended to acquaint students with the social, cultural, community, economic, health service system and political issues involved in meeting those needs.

Dependent on when the MPs approve students to enter into the clinical aspect of the service-learning course, students will have varying experiences in terms of the number of sites through which they rotate. Most students enter the clinical aspects of DADM325 at the beginning of their summer term of the fourth year and nearly all are deemed prepared for the program by the beginning of the fall term. For those who enter early into the service-learning component of the course it is possible to experience as many as four different community sites. Students entering the clinical component of the course later could experience up to three different sites. The vast majority of D4s experience three or four sites. For the Class of 2013 our students spent over 4500 days in community sites for an average of almost 70 days per student, with a minimum of nearly 50 days.

Site Selection Process

The extramural experience is a mandatory experience for all of our students. It is also a factor in that the site preceptors contribute to our students’ clinical grading structure. There is a great amount of oversight for the extramural that includes site selection, adjunct faculty endorsement, periodic site visits and an annual one day conference that includes the site faculty and the College’s MPs and
extramural administrative faculty. The general criteria for selecting community-based clinical sites for extramural rotations are presented below:

1. Support from administration and staff.
2. Full- or part-time dentists willing to preceptor.
3. Dentists with regular weekly schedule.
4. Four-to five day operational schedule.
5. At least one chair designated for student use.
6. Preference for scope of service to be broader than preventive and emergency services.
7. Preference for dental assistant support for students.
8. Instruments and materials provided to students.
9. Staffing for proper infection control and appointment scheduling.
10. Must meet OSHA standards for blood borne pathogens, employ universal precautions, and provide regular OSHA training to staff.

Each community site is unique in its organization, administration, and reimbursement structure; each provides unique sets and ranges of services to specifically defined underserved population groups. Sites are dedicated to their own particular service and operational objectives that emphasize varying aspects of social justice, issues of access to care, and health disparities. Part of the desired outcome is to assure student exposure to a broad range of health systems, underserved communities, and related health issues as critical aspects of the course. For example, the sites include federally qualified health centers (FQHCs) as stand-alone entities, FQHCs within local health department structures, hospital-based sites, philanthropically supported health centers, a site providing care for the developmentally disabled only, a union-run facility, sites that operate from mobile facilities, a site emphasizing care to migrant farm workers (in Colorado), and a site providing care to Mayan populations in rural Guatemala. A complete list of the rotation sites can be found in Standard 1-9.

None of the rotation sites are owned or operated by the College. Because of this, the process of assessing sites for their potential as rotation locations includes assurance of a standard of procedure and care compatible with the college’s curriculum and patient care philosophies. However, calibration of techniques is not pursued. It is not the intent of the course or the College to build “mini-UICs” in the community. If there are differences in treatment approaches, those differences are recognized and serve as illustrative alternatives. Students are expected to inquire about the strength of evidence supporting different approaches to care. In this manner, students have, for instance, the opportunity to become exposed to the use of papoose boards for restraint and nitrous oxide sedation, as examples of clinical applications for which their exposure at the dental college would be limited or nonexistent. The DADM325 course is not graded on dental techniques, service skills or modalities, or provision of dental care. Clinical experiences in dentistry and the myriad of specific services entailed in providing dental care are taken as a given across all rotations.

From a geographic perspective, some of the sites are close to the college - one is in easy walking distance - and others are farther away but most frequently are accessible via public transportation and still others a more distant. Consequently, there is a near and a far set of sites. Students select at least one rotation at a near site and another at a far site. This approach ensures equity for all students.
Ad Hoc Sites
The course syllabus also presents an option for students to propose an ad hoc rotation as an alternative to the ones that the faculty has developed. Students must present the ad hoc site proposal to the course director by a specified date early in the academic year in order to obtain permission to pursue the option. It is expected of the student that he or she make the contacts and obtain the necessary information and agreement from the site regarding the feasibility of the rotation. The student needs to demonstrate that the rotation satisfies the course objectives and expectations as outlined in the syllabus. Tentative agreement by the site and the proposed preceptor must be presented. Any travel, maintenance, or lodging expense would be the responsibility of the student, the site, or some other acceptable intermediary. These types of rotations are typically only scheduled for late in the academic year due to the additional work entailed in developing the experience. The ad hoc rotation option has enabled students to complete rotations in Tanzania, Africa, in collaboration with dental students from New York University; in Los Angeles at the Union Rescue Mission in collaboration with the University of Southern California School of Dentistry; at a site in Boston through the Henry M. Goldman School of Dental Medicine at Boston University; and at the White Earth Indian Reservation and sites in Alaska through agreement with the Indian Health Service (IHS).

Adjunct Faculty/Preceptor Selection Process
Selection of community-based adjunct faculty begins with a recommendation by the dental director at a given partner site. The recommended potential preceptor then begins the credentialing process leading towards adjunct faculty appointment. Procedures and protocols were developed to standardize the process for preceptor selection. The college adopted the credentialing system used by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) to verify and assess the qualifications of health care practitioners. This is a familiar process used at most hospitals, FQHCs, Department of Veterans Affairs hospitals, and community health centers with a hospital affiliation in Illinois.

All candidates for adjunct faculty or preceptor roles must complete a credentialing form that includes information on their professional and clinical histories. In addition, they provide copies of their state dental license, controlled substance license, CPR certificate, curriculum vitae, and a short paragraph explaining why they would like to precept and mentor students. Their licenses are verified with the Illinois Department of Financial and Profession Regulation or similar appropriate agency for sites outside of Illinois. An interview is conducted, and the packet then passed on to the college's credentialing committee. Once approved by the committee, the candidate is then recommended for a non-salaried adjunct faculty appointment.

The formal appointment of preceptors as university adjunct faculty extends university indemnification to the preceptors and to the students under their supervision while on rotation. The process and essential criteria established for credentialing adjunct faculty at community sites were ultimately used as the process guidelines for all adjunct faculty positions throughout the college.

Assignments
The clinically-based service-learning rotations occur throughout the senior year. In addition, over the year-long duration of the course, students attend four reflective seminars and each semester students are required to complete an academic assignment; three assignments in all. The first assignment consists of a paper on the student's expectation of the rotations; the second paper requires the students to prepare a comprehensive review of the practice model of one of their assigned sites. The essence of the paper is to develop and demonstrate a deeper understanding of the service delivery system that the site represents. The last assignment is a reflective essay intended to enable students
to look back at their entire community-based service-learning experience and reflect using the following four questions:

1) How have you changed as result of these experiences?
2) What did you learn about communities, population, other value or decision-making systems and/or social justice?
3) What did you learn about the health care system and health policy?
4) What did you learn about how oral health fits within the health care system?

The essays are enlightening and revealing of the transformation that occurs in the students as they experience dentistry in the community settings unfiltered by the College environment.

Adjunct faculty evaluates students regarding their demonstration of cultural competency while on rotation. The evaluations are submitted to the Course Director and are shared with the students’ managing partners. The MPs continue to evaluate the students regarding cultural competency when the students are in the College.

Curriculum Innovations Earn College Gies Award
The UIC College of Dentistry was selected to receive the 2012 William J. Gies Award by the American Dental Education Association for its innovative clinical curriculum. Over the past ten years, the College has implemented a sequence of improvements in clinical education to prepare students to provide oral health care to traditionally underserved patients, and to advocate for universal oral health care for all Americans.

As mentioned previously, the service-learning curriculum is encompassed in the required DADM325 course for fourth year dental students. Early in the D3 year, a mandatory seminar is organized for the D3 class to provide a brief overview of the course and the rotation sites so that they can use the D3 year to full advantage in positioning themselves for the service-learning experiences and related opportunities that would be available to them in the D4 year. Additionally other events have been organized in the past like “Meet the Preceptors” where adjunct faculty members from extramural sites have been invited to the College to introduce and talk about the uniqueness of their respective community sites, clinics and services. Student panels have been arranged, where participating fourth year students who have experienced service-learning rotations talk about their experiences with the third year students, creating an opportunity for conversations and questions to be answered.

In the past six years, 98% of senior students have participated in service learning projects. All students are enrolled in classes that teach communication and cultural competency skills. Those who are not deemed prepared for this experience by their managing partner are allowed to put to practice what they have learned at the College clinics, as the patient pool at the College is very diverse.
including those with special needs. In the past, when a student has not been approved ready for a full block of rotation by the MP, the student is allowed, at minimum, 2 weeks at the end of his/her senior year to participate in service learning opportunities at the extramural sites.

**Additional Service Learning Experiences for College of Dentistry students**

**Goldie’s Place**

The College has the unique honor of being one of the first dental college in the nation to have a completely student run dental clinic. Students from the AAPHD student chapter at the College collaborated with Goldie’s Place to provide free dental care to the homeless community of Chicago. Goldie’s Place has been in operation for many years and provides employment preparation services and skills for homeless adults. During the weekdays, volunteer dentists provide care at the Goldie’s Place clinic. The students become involved on the weekends. The program started by providing care on Saturday mornings twice a month. The student-run clinic has recently expanded to three days a month; on alternate Saturdays and a Sunday, from 8:30AM to 1:00PM. The clinic has four functional operatories equipped with digital radiology.

Goldie’s Place Student Run Dental Clinic is unique because it is the first fully student-run dental clinic in the country. All clinic operations including scheduling, reception, radiology, sterilization, lab technician support, supply coordination, chair-side assisting, record keeping clean-up and sanitation, and provision of care are performed by students. Students participated in designing the clinic and soliciting equipment and supplies to make it fully operational. If there is a problem with the clinic operations, the students take responsibility for fixing the problem.

**Programs Objectives:**

The student-run dental clinic was created for a variety of reasons. The primary objective of the effort was to provide oral health care to a vulnerable population: the homeless. The goal of the program is to educate patients about oral health, address existing diseases processes, restore health, and repair damage and the patient’s smile. For homeless adults seeking employment, being able to eat, their oral appearance, smile and the self-confidence that accompanies improved appearance are fundamental to any success they are attempting to achieve. The program was also intended to provide students with opportunity to experience the full spectrum of roles and responsibilities in a dental clinic or private office; such opportunities are not available in the College setting. The initiative was also intended to build relationships among students across all four years of dental school.

**Results and Conclusions/Expansion/Student Achievements:**

The objective of providing care to an underserved population can be measured directly by the amount of service we have provided. As of December 2012, Goldie’s Place Student-Run Dental Clinic has provided $253,902 in kind services to the homeless community. These services have included examinations, radiographs, extractions, amalgam and composite restorations, dentures, prophylaxis, scaling and root planning, and root canal treatments, to name just of few. All data collection is the responsibility of the student leaders.

Another measure of success is the success of our patients. The goal of Goldie’s Place is to create self-sufficiency, help the participant get a job, and eventually provide the means for that individual to extricate themselves from their situation of homelessness.

Equally important is the sustainability and growth of student effort and organization. When the clinic was first opened in 2008, the students were only able to provide oral hygiene instructions, extractions, direct restorations, and prophylaxes. The students recognized that while the clinic was providing a
great service, improvements had to be made. They were alleviating the pain and disease, often through extractions; however, the students had no way of replacing teeth. They realized that sending a participant to an employment interview missing their front teeth was an immediate impediment, putting them at a disadvantage. Consequently, the student leaders took it upon themselves to expand the services of the program. They began to actively recruit support in an effort to get dental laboratories to donate supplies and denture cases. The efforts were rewarded by five laboratories agreeing to donate both partial and full denture cases with no charge to the patient or the clinic. The denture program has been a huge success and the program now has a waiting list of over 25 patients. The evolution of that aspect of the service program was a direct result of student initiative and determination.

An unforeseen benefit of the effort to solicit support was the large amount of supply donations. Through donations, students were also able to expand the clinic to be able to provide root canal treatment. Currently, the clinic is able to provide oral hygiene instruction, digital radiographs, prophylaxes, extractions (simple and surgical), direct restorations, root canal treatment, “flippers”, denture repair, partial dentures, and full dentures.

To help organize this massive project the students created a website for the student organization. The website includes organization and clinic information, team rosters and schedules, as well as photos of clinic sessions.

Community Based Service Learning Experience in D1 year
The goal of the community-based service learning experience in the D1 year is for students to expound upon their understanding of oral health education as an integral component within an interdisciplinary approach to patient care, particularly in regards to working with underserved populations. In class students discuss importance of effective communication and related issues with regards to implications on oral health status. They provide educational programs for young people of varying ages in local schools. Each presentation lasts approximately 30-45 minutes and covers oral hygiene, healthy life styles, smoking, nutrition, careers in dentistry etc. Take-home materials for the children are provided by the College which include a toothbrush, tooth paste, floss and sticker. After the presentations the students gather to reflect on their experience and to improve the experience. Students are also responsible for completing an individual reflection paper. The students are evaluated by the school teacher and the class lecturer.

The class of 2016 went to three schools and interacted with a total of 1500 students. The 3 schools visited are:
- Mark Twain Elementary School
- Columbia Explorers Elementary Academy
- Richard Edwards Elementary

Supportive Documentation
Appendix C-25: Preceptor Credentialing Form
Available On Site
Course Syllabi
3-1 The number and distribution of faculty and staff must be sufficient to meet the dental school’s stated purpose/mission, goals and objectives.

Conclusion: The UIC College of Dentistry complies with Standard 3-1.

Description

The faculty compliment of the College of Dentistry has been purposefully recruited and distributed to fulfill the missions of teaching, service and research scholarship. As of this submission there are active searches in Periodontics, Pediatric Dentistry and Oral Biology. These searches will augment an already outstanding faculty in both the predoctoral and post-graduate programs. Similarly, our staff levels contribute positively to the College’s Mission and are sufficient in number to assure research, learning and patient care activities.

1. Describe the distribution and balance of academic titles and experience within each department of the dental school.

At the time of preparation of this response, August 1, 2013, the following represents the distribution of faculty by department and academic rank:

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<th>Assistant Professor</th>
<th>Clinical Professor</th>
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<td>Total</td>
<td>20</td>
<td>20</td>
<td>15</td>
<td>11</td>
<td>20</td>
<td>117</td>
</tr>
</tbody>
</table>

2. List and describe the criteria used to assign job responsibilities and workload.

The Dean has set general guidelines for expected workload responsibility related to teaching, research and service for each category of academic appointment. The Department Heads are expected to make assignments based upon educational, research, service and individualized circumstances.
While not mandated, the general expectations for faculty are:

**Part Time Clinical Faculty**

Teaching Time (student contact)
- clinical/classroom teaching to full appointment
- no private practice during appointment commitment

Release Time
- no prep time for one or two hour lecture course
- no release time for private practice
- one half day per week for lec/lab course directorship

Practice Time
- practice may be extramural but not part of university contract
- practice in Faculty Dental Practice by permission of committee but may not be on contract time
- practice may be contractual (e.g. GADP)

**Full Time Clinical Assistant, Clinical Associate and Clinical Professor**

Teaching Time (student contact)
- clinical/classroom teaching to full appointment except as noted below

Release Time (Course Director, MP, Program Director, UG Pediatrics, Implant Director, etc.)
- no prep time for one or two hour lecture course
- one day per week for private practice (with approval of Dept Head)
- two days per week for administrative work (with a functioning program)
- one half day per week for lec/lab course directorship

Research Release Time
- one day per week (with active project and approval each semester by Dept Head)

**Full Time Tenured or Tenure Track (not funded by sponsored program or bridge funded)**

Teaching Time (student contact)
- clinical/classroom teaching to full appointment except as noted below

Research Release Time
- two days per week (with approval each semester by Dept Head) Course Director, Program Director Release Time
- no prep time for one or two hour lecture course
- one day per week for private practice (with approval of Dept Head)
- two days per week for managing partner, program director (with a program)
one half day per week for lec/lab course directorship

Full Time Tenured or Tenure Track (funded by sponsored program with salary relief)
Research Release Time
• research time to full appointment
Teaching Time (student contact)
• clinical/classroom teaching abated (teaching assignments to others)

Full Time Tenured or Tenure Track (funded by sponsored program with no salary relief)
Research Release Time
• research time to full appointment except as noted below
Teaching Time (student contact)
• clinical/classroom teaching at 10% per term

3. Specify the number of full-time equivalent faculty positions allocated to the dental program. Comment on the percentage of full-time equivalent positions assigned to the school that are filled by part-time faculty.

Excluding Research Associate and Assistant positions, there are currently 129.5 full-time equivalent positions. There are 96 full time faculty positions, seven of whom are in administrative roles, and 118 part-time faculty positions which account for 33.5 full-time equivalents. The mix of positions obviously relates to a fairly even balance in the numbers of people in each category. Using full-time equivalents there are 22.6% part-time and 77.4% full time faculty. This blend of faculty appointments allows us to rely almost exclusively on full time faculty to lead the educational program as Course Directors. The balance also provides continuity of leadership, easy student access to Course Directors and availability of key faculty for decision making needs related to the predoctoral program.

4. List all vacant full-time faculty positions along with current disposition of the vacant positions.

At the time of preparation of this document, August 1, 2013 there are budgeted but unfilled positions in the College. There are open and active searches in the following departments and administration:

- Administration: dean, dean for administration
- Oral Biology: histologist (1); anatomist (1)
- Pediatrics: assistant/associate professor (2)
- Periodontics: assistant/associate professor (2)
- Restorative: assistant/associate professor, prosthodontist (1)
5. In the context of the dental school’s stated purpose/mission, goals and objectives, describe how the number and distribution of the full-time faculty ensures time for:
   a. course preparation and teaching,
   b. mentoring of fellow faculty,
   c. student advising and counseling,
   d. research/scholarly activities,
   e. faculty development,
   f. participation in faculty clinical practice,
   g. participation in dental school and university committees,
   h. professional presentations (continuing education), and
   i. contributions to professional organizations.

a. course preparation and teaching

The College’s predoctoral program teaching assignments as described above provide designated time for course administration including preparation, office hours and delivery of instruction.

b. mentoring of fellow faculty

The College created the position of Associate Dean for Faculty Affairs to augment the efforts of the Department Heads who are ultimately responsible for faculty mentoring and development. The Associate Dean collaborates with Department Heads, is part of the University faculty development team and frequently meets with individual faculty members on career planning. However, it is the Department Head who has ultimate responsibility for faculty in his/her department. The College places high value on the development of all faculty regardless of FTE assignment.

c. student advising and counseling

Student advising and counseling is primarily the function of the Office of Student and Diversity Affairs and occasionally the Office of Academic Affairs. Students not infrequently seek out individual faculty members to engage in career and educational discussions. Faculty research advisors and mentors work closely with students who are either participating or have a strong interest in research activities. For select students, who have interest in advanced specialty education, faculty members serve as mentors/advisors and working with the Managing Partners can arrange clinic schedules to allow these students opportunity to observe and work in the specialty clinics.

d. research/scholarly activities

The College currently has 96 full time faculty and 118 part-time faculty that assist in fulfilling the college goals of being leader in a patient-centered, evidence-based, clinical care, integrated educational programs, and centers of research excellence that are interdisciplinary and translational. Part-time faculty spend the majority of their time engaged in clinical educational activities. The role of full-time faculty is generally either 1) research intensive (approximately 30% of the full-time faculty), or 2) education-intensive (approximately 70% of the full-time faculty), although a handful of faculty split their time between these two roles fairly evenly. This balance of faculty allows our College to support both our research and educational missions.
e. faculty development

All junior level research intensive faculty receive significant protected time during the period in which they are establishing their independent research program. For research intensive faculty at levels of associate professor and above, release time for research is generally concordant with their level of extramural research funding. These faculty take on educational and teaching activities in inverse proportion to their activity in sponsored research. For education-intensive faculty, time for research and scholarly activity is available during periods that they are not assigned to educational roles. For education intensive faculty, assigned teaching activity takes up approximately 60 percent of the customary work week. Faculty may be provided with additional release time for research and scholarly needs in accordance with their role at the College. For example, the educational assignments may be reduced for faculty who are pursuing advanced degrees such as Masters in Education or a Masters in Clinical and Translational Science.

f. participation in faculty clinical practice

Full time licensed practitioners (dentist and other licensed professionals) are afforded one day per week to engage in patient care either the College’s intramural faculty practice or in the private sector. The time for this practice is arranged, by College policy, through mutual agreement with the Department Head.

g. participation in dental school and university committees

Full time faculty, particularly in the Clinical Tenure and Non-tenure Clinical Tracks are encouraged to participate in service to the College and/or the University. Service in these capacities is requisite for tenure/promotion consideration as stated in our Promotion and Tenure document. Depending on the nature of the committee service, time may be afforded to the faculty member. However, in most instances the time for committee service is not in lieu of teaching activities.

h. professional presentations (continuing education)

Engagement of faculty in professional presentation activity is highly valued by the College. To the extent possible, these activities are supported with time and such funds as may be available through the College, departmental or grant sources. Time away is considered as College assigned time and is therefore not charged against vacation accrual time.

i. contributions to professional organizations

Full and part time faculty are encouraged to participate in appointment appropriate organizations. Service to the professions is a requisite part of a faculty position at the College and is necessary for promotion and/or tenure. Such activity is arranged by the faculty member in consultation with the department head and is not accomplished in lieu of teaching commitments (with the exception of necessary travel days). Time away from the College for these activities is generally not taken as vacation time, but rather as service time to the College.
6. Describe how the current faculty/student instructional ratios during laboratory, preclinical, and clinical sessions are adequate to provide individualized instruction, guidance, and evaluative supervision.

The strived for and most frequently attained faculty to student ratios are:
- Pre-patient Care 1:8/9
- Small Group Learning 1:7/8
- Patient Care 1:6/7

These ratios are consistent with effective and efficient learning and patient safety standards across dental education.

7. In the context of the dental school’s stated purpose/mission, goals and objectives describe the adequacy of staff resources, including:
   a. administrative assistants,
   b. secretaries,
   c. student services personnel,
   d. teaching assistants,
   e. dental laboratory technicians,
   f. dental assistants, and
   g. information technology personnel.

   a. administrative assistants and secretaries

Every department, administrative office, and patient care clinic has the support of at least one administrative assistant and/or secretary. We find that given our resources the current staffing is suitable to sustain the mission of the College and provide efficient patient care.

   b. student services personnel

The assignments of personnel in the Office of Student and Diversity Affairs are distributed across the working day to assure student access to needed services. As reported by students in Town Hall meetings and Student Officer meetings there are no identified problems in securing necessary time and services. Similarly, the Office of Academic Affairs is equally held in good regard by the students needing assistance.

   c. teaching assistants

As previously stated, the College is very interested in giving selected and interested predoctoral students the opportunity to engage in teaching activities in the small groups and pre-patient care
clinics. Each year we are able to accommodate these students in pursuing the experience. The College does not hire teaching assistants although we do hire research and administrative assistants.

d. dental laboratory technicians

The College does not have an in-house dental laboratory. All laboratory procedures are provided by private commercial laboratories. While we do have two full dental laboratory technicians they serve in administrative positions managing the interactions between the College and the commercial laboratories as well monitoring quality control measures.

e. dental assistants

Within our budget plan and resource allocation priorities, there are adequate dental assistants to assure safe and effective patient care in the predoctoral program clinics. The post graduate program clinics are more robustly staffed most obviously in pediatric dentistry and oral and maxillofacial surgery.

f. information technology personnel

The College has one person dedicated for our electronic patient record system, one person dedicated to hardware support, one for our server support and software and two people for logistical support for teaching needs. We also have an educational software person who works with faculty and administration in evaluating, purchasing and training personnel on our various educational support software. The College also enjoys substantial support from the University through the Academic Computing and Communication Center (ACCC).

8. Indicate those individuals who have additional teaching and/or administrative responsibilities within the institution and describe the extent of these responsibilities.

The following faculty, while not an exhaustive list, are engaged with the University level activities that range from weekly to monthly responsibilities.

Bruce Graham, Dean's Council
Darryl Pendleton, Student Disciplinary Committee
Philip Patston, Faculty Senate
Luisa DiPietro, Associate Vice Chancellor for Research
Christine Wu, Chancellors Committee on Diversity
William Knight, Graduate College Programs
Herve Sroussi, Graduate College Programs
Blase Brown Inter-Professional Education Committee
Sara Gordon, Inter-Professional Education Committee
Linda Kaste, School of Public Health

The College has many senior faculty who hold joint appointments with the Graduate College. In these roles the faculty serve as Thesis and Dissertation Chairs or Committee for our Certificate/MS,
DMD/PhD and PhD programs. We also have thirteen faculty members who serve on the UIC Faculty Senate. We also have three faculty members engaged in instruction in biomedical sciences courses.

Supportive Documentation
Appendix A-8: Table 8 Listing of Fulltime Faculty
Appendix A-9: Table 9 Listing of Part time Faculty
Appendix A-10: Table 10 Listing of all Faculty time allocation
Appendix A-11: Table 11 Basic Science Faculty
Appendix A-12: Table 12 Clinical Science Faculty
Appendix A-13: Table 13 Behavioral Science Faculty
Appendix A-14: Table 14 Committee Membership
3-2 The dental school must show evidence of an ongoing faculty development process.

Conclusion: The UIC College of Dentistry complies with Standard 3-2.

Description

The College maintains a vibrant and ongoing faculty development program. The activities within this program are led by the Associate Dean for Faculty Affairs and organized around 1) the Office of Faculty Affairs, 2) the Office of Dental Education, and 3) the Continuing Education Committee. These three entities work together to develop programs that meet faculty needs in the area of teaching/education, professional development, and mentoring.

1. Describe the faculty development program sponsored by the dental school, including any procedures faculty must follow to participate. In particular, give a brief description of the policy, procedures and criteria used to select faculty development programs.

The faculty development program is supported by the Office of Faculty Affairs, the Office of Dental Education, and the Dean’s Office. Total expenditures toward faculty development from each of these sources is approximately $250,000.

College of Dentistry Programs

Office of Faculty Affairs

The Office of Faculty Affairs (OFA) develops, implements and evaluates the effectiveness of programs that are responsive to the professional development needs of the faculty for professional growth, retention, promotion, and tenure. Program development and evaluation occurs in consultation with the Faculty Affairs Advisory Committee (FAAC), a committee that includes broad representation from all faculty ranks and tracks. Specific programs offered by the OFA include an organized mentoring program and a variety of professional development workshops and programs (such as promotion & tenure workshops and CV workshops). The OFA also works with the college leadership to organize biannual faculty conferences that are attended by all faculty. These conferences include workshops and programs that support faculty efforts as educators.

Office of Dental Education

The Office of Dental Education (ODE) regularly offers programs to assist faculty in their role as educators. Topics include technology training (e.g. effective use of Blackboard, utilizing clickers/audience response systems, educational software training, etc.), training of small group facilitators, and training in student assessment. The Office also provides ongoing information dissemination related to University instructional technology additions and updates to existing technology.

COD Mentoring Program

The general approach to mentoring in the College acknowledges that 1) all faculty should have access to mentoring, 2) multiple effective mentoring methods exist, and 3) faculty may have unique mentoring needs. Therefore, our program is designed to present a mentoring “menu” that all faculty may access. Our currently available programs include One-on-One mentoring, Peer Mentoring, and Mentor-
Mentee Training workshops. The availability of mentoring activities is regularly announced to all faculty and to Department Heads and outlined within the “Faculty” section of the College website.

Programs at UIC

Beyond the college-based activities, the University of Illinois at Chicago supports faculty development by offering a broad array of both attendance workshops and on-line programs in areas such as leadership essentials, management of staff, and strategies for resolving conflict. UIC also supports faculty development by providing a tuition waiver program for faculty with appointments of greater than 25%. Faculty may enroll in courses and may complete advanced degrees such as a Masters in Health Professions Education or a Masters in Clinical and Translational Sciences.

UIC offers several non-degree certificate programs which are also available to faculty including

- The Scholars for Teaching Excellence Faculty Fellowship program (STEFF): Fellows meet for 25 sessions throughout the year to learn about essential issues in health career education; fellows also complete an individual project.
- The certificate program in Clinical and Translational Sciences is structured to provide clinicians with the tools they need to carry out clinical and translational research. This certificate program is offered entirely online, consists of five courses for a total of 17 credit hours, and takes one year on a part-time basis to complete. The topic areas included are study design; ethical treatment of human subjects and regulatory requirements; epidemiology, univariate, bivariate and multivariate statistical methods; statistical computing data management and primary data collection.

Faculty may also advance their educational skills via participation in the UIC Council for Excellence in Teaching and Learning (CETL). CETL provides a mechanism by which faculty, staff, and administrators work collaboratively toward the improvement of instruction and the advancement of learning at UIC. CETL offers resources and grants to support faculty initiatives designed to enhance the quality of teaching and learning.

Programs outside of the University

As appropriate to their role in the college, faculty are encouraged and supported in their attendance at external leadership and faculty development programs. Faculty have participated in the Executive Leadership in Academic Medicine Program (Drexel University), the ADEA Leadership Institute, the ADEA/AAL Chairs & Academic Administrators Management Program (CAAMP), and the ADEA Summer Program for Emerging Academic Leaders. For example, in 2013, three faculty were supported and participated in CAAMP.

Selection of Faculty for Programs

Most programs are open to all faculty. However, for programs that require a competitive application or substantial resources, faculty may either self-identify or be identified by their Department Head. When resource limitations require candidate selection, selection is performed by the Dean. The Dean makes such selections following consultation with the relevant Associate Dean and Advisory Committee as well as the Department Head. Selections are based upon the relevance of the program to the faculty’s role within the college; faculty performance and their needs for development are also considered.
Each year faculty with greater than 50% appointments meet with the Department Head to review performance in the previous year and to set goals for the upcoming year. As part of this review process, faculty are asked to identify professional development needs and also to identify resources needed and school, university or national programs of interest.

Faculty are expected to be active participants in relevant professional organizations. Release time from educational duties is provided to faculty for participation in regional and national meetings. Due to limited resources, priority for attendance at meetings is given to faculty who are providing programmatic content such as workshops, seminars, or other presentations. Faculty are encouraged to attend meetings of the professional organizations that are most relevant to their professional and academic interests especially ADEA and AADR.

The College maintains an active continuing education program that includes on-site programs that are open to both the dental community and the college faculty. Examples of on-site programs include “Craniofacial, Cosmetic, and Head and Neck Surgery Considerations,” “3-D Imaging: Enhancing the diagnostic accuracy of your practice with CBCT”, “The Envelope of Emergence: Maximizing Soft Tissue Response Without Hygiene Compromise for Implant Restorations, Bars, and Pontics” and “Moderate (Conscious) Sedation For The Dental Practitioner.” These programs are either free or offered at a reduced fee to College faculty.

A second component of the College CE program is the regular offering of free one-hour CE programs for faculty at convenient times that accommodate the normal faculty schedule. Examples of topics included in the ongoing series are “Microbial Biofilms and Periodontal Disease: Life in the Pocket”, “Caries Risk Assessment”, and “Ethics and Dual Relationships”. CPR training is also regularly offered at no cost to faculty and staff. In the area of research, the College sponsors the annual Clinic and Research Day, an event that features research of our dental students, graduate students, staff, and faculty. The event provides CE credit for attendance and participation. Clinics are closed on the day of this event so that all faculty, students and staff of the College can attend and participate.

There are also several, often mandatory, online training programs. Each year clinical faculty are required to review HIPAA and OSHA policies as well as mandatory State of Illinois Ethics training. Similarly, faculty engaged in research are regularly required to update their knowledge of human subjects issues, animal subjects issues and research ethics.

Continuing Education is also broadly available in the Chicago area from both academic and commercial sources. The Chicago Dental Society holds its annual Midwinter meeting, one of the largest dental education conventions in the nation, for three days each February in Chicago. To encourage faculty, student, and staff attendance at the Midwinter meeting, the college clinics are closed for one day. The ten chapters of the Chicago Dental Society also frequently offer continuing education. The American Dental Association, based in Chicago, is another venue for CE programs. For faculty who are licensed dentists in the state, the Illinois Department of Financial and Professional Regulation requires forty-eight hours of continuing education for each three-year renewal period.
4. How does faculty maintain and improve their clinical skills? What does the institution do to encourage clinical skills improvement?

To insure maintenance of clinical skills, faculty who are engaged in clinical instruction are generally provided with at least 1 day per week to participate in private practice activities. Faculty private practice activity may occur within the College’s Faculty Practice site or in the private sector. Faculty, in collaboration with the Department Head and with the approval of the Dean, select the day of the week for such activity so as to accommodate the practice without compromising the teaching mission.

Improvement and advancement of clinical skills is encouraged by onsite CE, described above, and by the provision of discipline specific CE by outside providers. This CE is generally arranged by individual departments including Orthodontics, Periodontics, and Restorative Dentistry. Faculty also widely participate in self-organized study clubs. The Chicago area has a long history of dental study clubs; most meet on a monthly basis.

Supportive Documentation
Appendix D-1: COD Faculty Mentoring Program
Appendix D-6: Meetings/seminars/courses attended by faculty
Appendix D-7: CE Courses Given By Faculty in 2012
Appendix D-8: College CE courses for last five years
Appendix D-14: Faculty Development – Teaching/Education
Appendix D-15: Internal Basic Science Offerings
Appendix D-16: Faculty Development Programs

Available On Site
Faculty participation in CE offerings
3-3  Faculty must be ensured a form of governance that allows participation in the school's decision-making processes.

Conclusion: The UIC College of Dentistry complies with Standard 3-3.

Description

The College is governed by the Statutes of the University of Illinois, the Constitution and Bylaws of the UIC Senate, and the Faculty Bylaws of the College of Dentistry.

1. Describe how faculty governance process allows for effective faculty input in organizational decision-making.

At the University level, the UIC Senate is charged with legislative functions in matters of educational policy, such as requirements for admission to colleges and schools, requirements for degrees and certificates, and the academic calendar. The Senate also recommends candidates for honorary degrees, and may propose amendments to the Statutes through the University Senates Conference to the President and the Board of Trustees. The Senate is composed of faculty from all UIC colleges and includes fourteen elected representatives from the College. These members regularly attend monthly Senate meetings to represent the concerns of the faculty; representatives serve three year terms. As required by Senate Bylaws, the Executive Committee of the Senate also includes a member of the College. The current Secretary of the Senate & Chair of the Executive Committee of the Faculty Senate, Dr. Philip Patston, is also a member of the College faculty.

At the College level, the College Faculty Bylaws is the instrument that establishes the governance system within the college and conveys certain powers and duties to the faculty. The Bylaws may be amended as needed by faculty vote, and were last revised in 2013. The Bylaws of the College mandate the structure and function of five college committees and five subcommittees. Non-voting members are also included on selected committees; students and staff are included as voting members of selected committees. The composition of the Executive Committee (EC), which is the principal advisory committee to the Dean, is defined by the Bylaws to ensure broad representation among the faculty. The Executive Committee has specific statutory responsibilities that include advising the Dean on the formulation and execution of College policies, transacting such business as may be delegated to it by its Faculty, advising the Vice Chancellor for Academic Affairs on the annual appointment of the Dean, and acting as the consulting body to the Dean in the matter of preparing the budget of the College. As provided in the Bylaws, the EC is also assigned by the faculty to review and make recommendations to the faculty on all proposals for the creation, termination, or alteration in organization of the academic units of the College, or alteration of mission of any academic unit of the College. The EC acts as a consulting body to the Dean regarding the appointment of associate and assistant deans as well as directors of any units and centers and of any other programs that are not under the jurisdiction of a single academic unit. Minutes of EC meetings are available on the College intranet.

The Bylaws provide that at least three regular meetings of the faculty be held each year in September, January and April, with additional meetings called as deemed necessary by the Dean or Executive Committee. Dean Graham has added three additional meetings per year. Faculty members may also call for a special meeting by written petition of at least twenty faculty members to the Faculty Secretary. Agenda items for faculty meetings may be generated by the Dean, by members of the...
the EC, or by a group of ten or more members of the faculty. Any faculty member may introduce a motion, resolution, or discussion item during the call for new business. The Bylaws specifically indicate that all members of the faculty have voting rights. In summary, the College maintains an active governance system that provides for broad faculty input in organizational decision making.

2. Describe and assess the roles of faculty, department chairs, and administrators in the decision-making process.

According to the University statutes, the College is governed in its internal administration by its faculty. The faculty consists of the Dean and all those in the College with academic rank or title who are tenured, receiving probationary credit toward tenure, or who hold clinical appointments. In other words all faculty members.

Faculty participate in the decision making process within the college in four manners. First, faculty who are members of Bylaws mandated committees vote and decide upon matters as required for their function by the Bylaws. Including members of the UIC Senate, more than 60 faculty members from the College participate as voting members in decision making committees. The involvement of a large percentage of the faculty in these committees provides for broad and effective input into decision making. Secondly, faculty participate within faculty meetings when the faculty discuss and vote on specific resolutions, motions, and amendments to the Bylaws. Thirdly, all faculty are invited to vote in the election of committee members as mandated by the Bylaws. Lastly, all departments are required to maintain an Advisory Committee to the Department Head. In addition to these formal mechanisms, faculty participate in many additional advisory capacities within departmental or ad hoc college committees.

Department Heads participate in the decision making within their own units as outlined within the University Statutes and the Departmental Bylaws. Department Heads are appointed by the Dean and serve a five year renewable term. Department Heads participate in decision making at the College level both as faculty and through monthly meetings with the Leadership Team. The current serving Department Heads are:

- Christopher Wenckus: Endodontics
- Thomas Diekwisch: Oral Biology
- Richard Monahan: Oral Medicine and Diagnostic Sciences
- Carlotta Evans: Orthodontics
- Michael Miloro: Oral and Maxillofacial Surgery
- Marcio da Fonseca: Pediatric Dentistry
- Salvadore Nares: Periodontics
- Stephen Campbell: Restorative Dentistry
The Leadership Team of the College consists of all Associate and Assistant Deans. Those individuals include:

- Bruce Graham, Dean
- G. William Knight, Executive Associate Dean for Academic Affairs
- Susan Rowan, Interim Associate Dean for Clinical Affairs
- Caswell Evans, Associate Dean for Prevention and Public Health Sciences
- (Vacant), Associate Dean for Administration
- Darryl Pendleton, Associate Dean for Student and Diversity Affairs
- David Crowe, Interim Associate Dean for Research
- Luisa DiPietro, Associate Dean for Faculty Affairs
- Mark Valentino, Assistant Dean for Advancement and Alumni Affairs

Supportive Documentation:

- Appendix A-7: Table 7 Department Chairs
- Appendix A-14: Committee Membership
- Appendix B-9: COD Organizational Chart
- Appendix D-3: COD Faculty Bylaws
- Appendix D-9: College Decision Making Process

Available On Site
Minutes of faculty meetings
3-4 A defined process must exist that ensures objective measurement of the performance of each faculty member in teaching, patient care, scholarship and service.

Conclusion: The UIC College of Dentistry complies with Standard 3-4.

Description

The College, through its Department Heads, annually evaluates each faculty member with an appointment of greater than 50%. Those faculty who have appointments less than 50% receive evaluations by Course Directors, Managing Partners or administration.

1. Describe the criteria used in evaluating full-time and part-time faculty. Who determines the criteria? What input does faculty have in the process?

The criteria listed in the annual evaluation are derived from specific documents and include an assessment of 1) how faculty activity supports the College Vision and Mission statement and 2) each faculty’s progress towards their goals in the area of teaching, research, scholarship and service. The criteria used to evaluate faculty derive from:

- The Criteria and Guidelines for Appointment, Promotion, and/or Tenure of Faculty - developed with broad input from Department Heads, the elected Promotion Committees, and the Executive Committee, and was revised and ratified by faculty vote in July 2013.
- The College Vision and Mission - was similarly developed and ratified.

2. How often and by whom are faculty evaluated and how are the evaluative data used? Does the evaluation include clinical as well as didactic teaching evaluation criteria?

All faculty with appointments greater than 50% are evaluated each spring by their Department Head. Faculty evaluations involve the completion of an Annual Self-Assessment and Review form and preparation of an updated CV. The Self-Assessment and Review asks faculty to evaluate their progress toward previously stated goals in the areas of teaching, research, scholarship and service, and to list goals for the upcoming year. The evaluation includes an assessment of progress toward goals for clinical and/or didactic teaching and educational activities for each faculty. Department Heads use evaluative information from teaching and educational activities to assist in helping faculty set their goals. The Annual Self-Assessment form includes a section entitled “Faculty Professional Development Needs Assessment”. In this section of the annual review, faculty are asked to specifically assess their professional development needs. Faculty may identify particular needs for training or other activities to support their professional development. Faculty may also assess their progress toward the criteria for promotion, may request consideration for promotion, and may also identify needs for additional mentoring.

Once the faculty member has completed the self-assessment form and updated CV, these items are submitted to the Department Head. Both items are carefully reviewed by faculty with their Department Heads during scheduled individual meetings. Goals for the next year are discussed and agreed upon, as are Professional Development needs. Following this review, the document is signed by both parties. All personal and evaluative aspects of the self-review are held confidentially and maintained in the
departmental files. In large departments, the evaluation of some faculty is designated to their immediate supervisor rather than the Department Head. Faculty educational activities, both clinical and didactic, are evaluated by regular course and instructor evaluations by students, and by peer evaluation initiated by the Department Head.

3. If the criteria used to evaluate administrators is different than that used to evaluate faculty members, please explain.

Administrators who also hold faculty positions will meet with the appropriate Department Head especially related to the issues of promotion and/or tenure. They are evaluated by the Dean and the Executive Committee using individual criteria as relevant to their job description, duties, and roles.

4. How often and by whom are administrators evaluated? How is the evaluation used?

Department Heads are evaluated on an ongoing basis via monthly meetings with the Dean. As directed by the University of Illinois Statutes, Department Heads are comprehensively evaluated every five years by a specific departmental ad hoc evaluation committee. The process includes input from all departmental personnel and faculty as well as other Department Heads, committee members and current and former post graduate students from the department. A document is prepared and given to the Department Head who is under evaluation and to the Dean.

Assistant and Associate Deans are evaluated annually by the Executive Committee as a regular agenda item. The evaluation involves a conversation with the Dean at a regular meeting of the EC. The Dean undergoes an annual evaluation by the Provost each summer. For this evaluation, the Dean prepares a document of three pages or less that encapsulates the college’s progress under his or her leadership during the past year. The report must take into consideration the twelve points outlined in the “Activities of a Dean”. As mandated by the University of Illinois Statutes, the Dean is evaluated every five years in a method to be determined solely by the faculty. This process is initiated by an ad hoc committee appointed by the Provost. The last Dean’s Evaluation was concluded and reported to the Provost in October 2010.

For all administrators, evaluations are used to assist administrators in improving performance; evaluations are also used in making decisions regarding reappointment.

5. How are results of the evaluations communicated to the faculty members?

The faculty receive feedback from the respective Department Head. The results of evaluations of Department Heads and Assistant and Associate Deans are communicated directly by the Dean.

Supportive Documentation
Appendix B-1: UIC College of Dentistry Vision and Mission Statements
Appendix B-3: Activities of a Dean
Appendix D-10: College Criteria and Guidelines for Promotion and Tenure
Appendix D-11: Faculty Annual Self-Assessment and Review form
3-5 The dental school must have a stated process for promotion and/or tenure (where tenure exists), that is clearly communicated to the faculty.

Conclusion: The UIC College of Dentistry complies with Standard 3-5.

Description

The College, over the past 18 months, completed a review of its internal processes and documents related to promotion and/or tenure. Considerable consolidation of documents resulted in the current document and process. Administration, Department Heads, the Promotion and Tenure Committee, the Executive Committee and various faculty were involved in the process. The final document was approved by the Faculty at its meeting of July 17, 2013.

1. Describe the schools' tenure and/or promotion policy and process and how it is communicated to the faculty.

The College's tenure and promotion policies are guided both by the University Policies as well as by the College Bylaws and Guidelines that are approved by the faculty. The basic process proceeds each year as follows:

- **Mar-June**: During the annual review, Department Heads identify faculty who will be nominated for promotion. (Tenure Track Faculty who are in probationary year five must be nominated.)
- **Summer**: Nomination packages constructed according to University Guidelines
- **Summer**: Departmental Review and Vote
- **October**: Completed packages submitted to College
- **November**: College Committee Review and Vote (The College maintains two committees, one that considers promotions of faculty within the tenure track, and a second that considers promotions within the non-tenure track. The composition of the committees is defined by the College Bylaws with voting rights established at the University level)
- **December**: Dean's Review and Endorsement
- **January**: Finalized packages submitted to UIC Office of Faculty Affairs
- **February**: UIC Promotion and Tenure Committee meets and votes
- **Feb-Mar**: Faculty notified of UIC committee vote
- **May**: Provost/Chancellor decision announced

The promotion process is communicated to the faculty in several ways. First, beginning in 2012, all new faculty meet with the Associate Dean for Faculty Affairs who reviews the promotion process as relevant to their appointment. Secondly, the College offers Promotion Workshops specific to either tenure or non-tenure track faculty at least twice per year. These workshops are recorded and available to all faculty on the Office of Faculty Affairs (OFA) website. Additional more general workshops on promotion are also offered at the campus level. Thirdly, the OFA is available to all faculty to answer questions regarding the process at any time. Finally, Department Heads are charged with communicating with their individual faculty regarding the promotion process as it applies to each individual faculty member.
2. Provide non-tenure and tenure track promotion policies, guidelines and norms.

The guidelines and norms for both non-tenure and tenure track promotions are provided in the Criteria and Guidelines for Appointment Promotion and/or Tenure of Faculty document. A revised version of this document was approved in July 2013, and is available to faculty on the College’s website. The College’s tenure and promotion policies are guided both by the aforementioned document and by UIC policies.

The College maintains three faculty tracks: Academic (Tenure), Clinical Educational (Non-tenure) and Research (Non-tenure). The Academic Track is further subdivided into Research and Clinical Educational Sub-tracks. The norms for each rank are briefly described below.

**Academic Track – Sub-track Research**

*Assistant Professor (Academic Track – Research)*

Norms include:

- A record of peer-reviewed publications;
- The potential for, or the possession of, research funding; and
- Some evidence of or potential for educating students and/or activities directed at student learning.

*Associate Professor (Academic Track – Research) with tenure*

Norms include:

- Continued growth in peer reviewed publications, which may include reviews and book chapters;
- A quality and quantity of published work that would be deemed adequate when reviewed by reasonable peers;
- Evidence of independent research funding, preferably from federal but also including non-federal sources, to support a nationally recognized research program; and
- Demonstrated evidence of excellence in educating students and/or activities directed at student learning.

*Professor (Academic Track – Research)*

Norms include:

- Additional achievement in each of the above-listed areas as described for Associate Professors (Academic Track – Research), above.
- Continued excellence in research and significant innovation in his/her work.
- Recognition as a leader in his/her field with national and/or international peer recognition.
- Potential for continued growth.

**Academic Track – Sub-track Clinical/Educational**

*Assistant Professor (Academic Track - Clinical/Educational)*

Norms include:

- Clinical excellence;
- Evidence of becoming a successful educator; and
- Potential for scholarly activities, including publications in peer-reviewed journals.
Associate Professor (Academic Track - Clinical/Educational)
Norms include:
- Demonstrated evidence of excellence in educational, learner-centered activities;
- Development of educational materials and application of best education practices within the College curricula;
- Demonstrated excellence in the candidate’s field and promise of becoming a regional or national leader;
- A record of publication in peer reviewed journals, which may include reviews and book chapters;
- Evidence of a quality and quantity of published work that would be deemed adequate when reviewed by reasonable peers;
- Participation in faculty governance through membership on clinical/hospital/college and/or University committees;
- Participation in local, national and international professional meetings; and
- Participation in service activities consistent with Departmental, College and University missions.

Professor (Academic Track - Clinical/Educational)
Norms include:
- Additional achievement in each of the above-listed areas as described for Associate Professors (Academic Track – Clinical/Educational), above.
- Continued excellence and significant innovation in his/her work.
- Recognition as a leader in his/her field with national and/or international peer recognition.
- Potential for continued growth.

Non Tenure - Clinical/Educational Track
Clinical Instructor (Non-Tenured Clinical/Educational Track)
Norms include:
- Potential for excellence in dental education.

Clinical Assistant Professor (Non-Tenured Clinical/Educational Track)
Norms include:
- Demonstrated competence in educational activities;
- Demonstrated competence in patient care, when appropriate, or equivalent clinically-related activities;
- Demonstrated competence in department or college professional activities consistent with the College mission statement; and
- Eligibility for board certification (American or state specialty) when appropriate, or if a general dentist, documentation of exceptional performance related to the norms or acquisition of an additional degree (for example a Master’s degree in an academic discipline).

Clinical Associate Professor (Non-Tenured Clinical/Educational Track)
Norms include:
- Demonstrated excellence in educational activity;
- Demonstrated excellence in patient care, when appropriate or equivalent clinically-related activities if appropriate to the candidates assigned role;
- Demonstrated excellence in department, college, university and professional service activities consistent with college and university mission statements;
- Evidence of scholarly activity, as related to education, patient care/clinical activity and service although documented publications are not necessary; and
Eligibility for board certification (American or state specialty) when appropriate, or if a general dentist, documentation of exceptional performance related to the norms or acquisition of an additional degree (for example a Master's degree in an academic discipline)

Clinical Professor (Non-Tenured Clinical/Educational Track)
Norms include:
- Excellence at the highest level in 2 or more areas of educational activity, patient care/clinical activity, scholarship, and service;
- Evidence of scholarly publications, in peer-reviewed or non-peer reviewed journals;
- Achievement of recognition by peers at the college, university, and/or national/international level;
- Achievement of board certification (American or state specialty) when appropriate, or if a general dentist, documentation of exceptional performance related to the norms or acquisition of an additional degree (for example a Master's degree in an academic discipline)

Research Track – Non-tenured

Research Assistant Professor (Non-Tenured Research Track)
Norms include:
- Evidence of original research in the form of publications in refereed journals or in the awarding of grants
- Potential for excellence in research should be evident.

Research Associate Professor (Non-Tenured Research Track)
Norms include:
- Publication in peer reviewed or non-peer reviewed journals;
- Receipt of grant awards as principal investigator; and
- Participation in local and national scientific meetings.

Research Professor (Non-Tenured Research Track)
Norms include:
- Made major contributions to the development of a College research program;
- Demonstrated excellence in the research field;
- Achieved an international reputation for this expertise;
- Publications in peer reviewed journals;
- Mentored junior faculty;
- Participated in local, national, and international scientific meetings; and
- Participated in service activities consistent with Department, College, and University missions.

Supportive Documentation:
Appendix D-3: COD Faculty Bylaws
Appendix D-10: College Criteria and Guidelines for Promotion and Tenure
Appendix D-13: Academic Tracks and Ranks
Available On Site
UIC Tenure and Promotion Policies and Procedures
4-1 Specific written criteria, policies and procedures must be followed when admitting predoctoral students.

Conclusion: The UIC College of Dentistry complies with Standard 4-1.

Description

The Office of Student and Diversity Affairs (OSDA) is charged with recruitment, admission and retention of all predoctoral students. OSDA rigidly follows the College and University written policies and procedures related to student recruitment, enrollment and retention. The policies are consistent with all State of Illinois and Federal regulations.

1. List the admission criteria for the dental program. Are the criteria weighted? If so, explain.

The Admissions criteria for the Doctor of Dental Medicine (DMD) program include:

- A bachelor’s degree from an accredited United States college or university and completed no later than June of the matriculation year;
- Chemistry - a minimum of 14 term hours (or 21 quarter hours) with at least four term hours (or six quarter hours) of organic chemistry. Which include credit for laboratory work;
- Physics - a minimum of six term hours (or nine quarter hours). Which include credit for laboratory work;
- Biological Sciences - a minimum of six term hours (or nine quarter hours). Which include credit for laboratory work;
- English - a minimum of six term hours (or nine quarter hours);
- All required courses taken must be a grade of “C” or better;
- Strong preference is given to applicants who have completed course work in four of the following science courses;
  - biochemistry  
  - physiology  
  - histology
  - human anatomy
  - microbiology
  - immunology
  - genetics
  - molecular biology
  - cell biology
- Dental Admission Test (DAT) result;
- Shadowing: 100 hours plus of dental professional shadowing is strongly recommended;
- Candidates must hold United States citizenship, permanent residency or Asylee status;
- Applicants should have experiences in Community Service and Volunteer work;
- Three letters of recommendation including two science professors preferred and one dental professional whom the applicant has shadowed;
- Applicants must pay an $85.00 application fee after submitting a UIC online supplemental application;
- Results of an admissions interview by faculty of the Admissions Committee;
- Applicants must sign receipt of the College’s Safety and Technical Standards document.
The criteria are not weighted. However, grade point average (GPA), Dental Admissions Test (DAT) scores and the rigor of upper level science coursework is highly emphasized. The Admissions Committee utilizes a holistic review model as cited and encouraged by the American Dental Education Association (ADEA). This model emphasizes all candidate attributes and qualifications without singling out any one particular qualification. This provides a balanced consideration of all candidates.

2. Describe the process for selecting dental students. Indicate names and titles of individuals participating in the process.

The process for the selection of dental students is the responsibility of the College's Admissions Committee. The Associate Dean for Student and Diversity Affairs and the Assistant Directors of Admissions serve as support for the Admissions Committee.

Application/Admissions Process

1. Applicants send all requested application materials to the American Dental Education Association (ADEA) Associated American Dental Schools Application Service (AADSAS);
2. AADSAS makes all electronic applicant files available via Web Admit;
3. All communication with applicants concerning their admissions files is conducted through the College's admissions office including: acknowledgement receipt e-mails, missing credentials e-mails, and notification of interviews and admissions decisions;
4. Each candidate with a completed application deemed academically qualified has his/her electronic file reviewed by the admissions staff using the ADEA AADSAS Web Admit portal. Admissions staff assess a candidate’s file for additional desired academic qualifications and for their suitability for the profession;
5. Academically prepared candidates are invited for an interview;
6. The interview day lasts approximately 4 hours and includes the following sessions, an orientation, two 20 minute interview sessions with admissions committee members, a Question and Answer session with current students, a tour of the College and a wrap-up session.

The Admission’s Committee meets twice per month to discuss and select candidates. Candidates are discussed and a group vote is taken to determine an applicant’s status. The committee recommends a decision to either admit, waitlist, or deny an applicant. Candidates selected for admission are notified via email and are provided a deadline date based on the ADEA Traffic Rules. A non-refundable deposit is required to hold a seat if the candidate chooses to do so.

The Office of Student and Diversity Affairs staff who initially review applications include:
   Dr. Darryl Pendleton (Co-Chair), Associate Dean for Student and Diversity Affairs
   Ms. Braulia Espinosa, Assistant Director of Admissions
   Ms. Carolyn Feller, Assistant Director of Admissions
   Ms. Katherine Long, Assistant Director of Graduate and Research Education
   Ms. Angelica Alvarez, Program Coordinator
The Admissions Committee membership is currently:

- Dr. Chris Wenckus (Co-Chair), Endodontics
- Dr. Darryl Pendleton (Co-Chair), Associate Dean of Student and Diversity Affairs
- Dr. Sahar Alrayyes, Pediatric Dentistry
- Dr. Seema Ashrafi, Periodontics
- Dr. Ana Bedran-Russo, Restorative Dentistry
- Dr. Aljernon Bolden, Pediatric Dentistry
- Dr. Luisa DiPietro, Associate Dean for Faculty Affairs
- Dr. Rhonna Cohen, Center for Molecular Biology and Oral Diseases
- Dr. Michael Dunlap, Restorative Dentistry
- Dr. Robin Gay, Restorative Dentistry
- Dr. Laurence Golden, Orthodontics
- Dr. Pamela Jurgens-Toepke, Restorative Dentistry
- Dr. Nadia Kawar, Periodontics
- Dr. Xianghong Luan, Oral Biology
- Dr. Nuha Nakib, Periodontics
- Dr. Terry Parsons, Director, IDDP, Restorative Dentistry
- Dr. Adriana Semprun-Clavier, Co-Director, IDDP, Restorative Dentistry
- Dr. Larry Salzmann, Pediatric Dentistry
- Dr. Thomas Skiba, Oral Surgery
- Dr. Stephanie Ward, Oral Medicine and Diagnostics Sciences
- Dr. Stephen Weeks, Endodontics
- Dr. Christine Wu, Pediatric Dentistry

3. To what extent does the administration and faculty participate in the modification of admission criteria and procedures?

The administration and admissions committee members participate extensively in modification of Admissions criteria and procedures.

The success of our students is a key factor in evaluating and modifying our admissions process. The Co-Chairs of the Admissions Committee lead discussion as needed for modifications of Admissions criteria and procedures.

The Associate Dean of Student and Diversity Affairs (who is the current Co-Chair of the Admissions Committee) also works closely with the Office of Academic Affairs for updates of student success. This information is collected from Student Promotions meetings and shared at Admissions meetings for admissions policy discussions at Admissions Committee meetings.

Policy questions are raised, reviewed and discussed to modify policies including improved academic performance and dental school preparedness. Suggested changes to policies are proposed and voted on by faculty who sit on the Admissions Committee and ratified by the Faculty and Executive Committee. Additionally, following the introduction of Small Group Learning (SGL) as learning and teaching model, the faculty from the Admissions committee have recommended implementing screening components into the Interview process. As a result, questions have been added to the “Recommended interview questions’ guide sheet for Interviewers.

At the conclusion of the admissions cycle each year, the Admissions Committee convenes to discuss the screening and interview process, review the Admissions Policies and Procedures and make
recommendations for the subsequent cycle. In addition an anonymous and voluntary admissions survey is distributed to incoming D1 students at their orientation. This survey seeks feedback from D1 students on their perception of the admissions, interview and selection process as well as the factors that most influenced their decision to choose UIC for their dental education. Results of the survey are presented to the Admissions Committee and changes are implemented as necessary. A second anonymous and voluntary admissions survey is sent to students who were accepted for admissions to the College, but declined our offer. The survey seeks feedback from the students on their perception of the admissions, interview and selection process as well as the factors that most influenced their decision not to choose UIC for their dental education. Results of this survey are also presented to the Admission Committee for review and input.

By surveying students and receiving faculty and administration feedback, the College provides a comprehensive review of Admissions processes and makes adjustments where necessary.

4. How are applicants informed about the program’s criteria and procedures for admission and program goals?

Information for DMD Admission and a program overview can be found in the DMD brochure distributed by the Admissions Office. Information that mirrors the brochure is also posted on the College website and in the Official ADEA Guide to Dental Schools.

5. If students are admitted who do not meet the program’s admission criteria, what are the school’s policies and procedures for providing remediation to those students?

Students must meet the admissions requirements. However, students who meet the minimum requirements but are not admitted receive re-applicant advising and counseling. Advising is available through the Admissions office by email, phone or an in-person appointment.

6. Describe how the program monitors and evaluates both attrition rates and performance of students in relation to admission criteria. If applicable, explain adjustments that have been made in the admission criteria within the last three years as a result of the program’s evaluations and outcomes assessments.

The Office of Student and Diversity Affairs monitors and evaluates both attrition rates and performance of students in relation to admission criteria. The Associate Dean of Student and Diversity Affairs is informed of data collected by the College Academic Affairs and Student Services departments. Data including grades and National Board passage rates are discussed and information about current dental student performance is shared.

OSDA staff attend Student Promotions meetings and meet with staff from the Office of Academic Affairs. The Subcommittee on Student Promotions (SSP) communicates with the Associate Dean of Student and Diversity Affairs and the Director of Student Services. Following FERPA guidelines, selected information from the SSP meetings is shared with the Admissions Committee. Faculty from other college departments are invited to provide input to discuss admissions requirements as needed. As a result of discussion in the past three years, a bachelor’s degree is now required. Another
adjustment is that recommended courses in biochemistry and human anatomy are highly preferred in the candidate selection process.

7. How many applicants, i.e., individuals who have submitted required credentials:
   a. Were there for the most recently admitted class?
   b. Met the minimum admission criteria?
   c. Were offered admission?
   d. Were enrolled?
   e. Were enrolled with advanced standing?
   f. Were enrolled as a transfer student?

For the Fall DMD 2013 entering class, there are fifty-two students enrolled. 1631 applications have been received through AADSAS. 164 students were interviewed who met the minimum admissions criteria. So far, sixty-one students have been offered admissions. There were no students enrolled as either advanced standing or transfer status.

   a. Were there for the most recently admitted class?

52 students have been admitted for the Fall 2013 DMD entering class.

   b. Met the minimum admissions criteria?

164 interviews/applicants met the minimum admissions criteria (Interviewed candidates).

   c. Were offered admissions?

91 students were offered admissions

   d. Were enrolled?

52 students were enrolled

   e. Were enrolled with advanced standing?

None were enrolled with advanced standing

   f. Were enrolled as a transfer student?

None were enrolled as transfer student
Below is a summary of the enrollment and applicant demographic trends over the past five years follows.

**DMD Applicant Demographics**

<table>
<thead>
<tr>
<th>Total Applications</th>
<th>Class of 2011</th>
<th>Class of 2012</th>
<th>Class of 2013</th>
<th>Class of 2014</th>
<th>Class of 2015</th>
<th>Class of 2016</th>
<th>Class of 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Resident Applicants</td>
<td>399</td>
<td>414</td>
<td>406</td>
<td>462</td>
<td>428</td>
<td>459</td>
<td>446</td>
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<tr>
<td># of Nonresident Applicants</td>
<td>665</td>
<td>1256</td>
<td>1249</td>
<td>1241</td>
<td>1103</td>
<td>1181</td>
<td>1185</td>
</tr>
<tr>
<td>Total Number of Applicants</td>
<td>1064</td>
<td>1670</td>
<td>1655</td>
<td>1703</td>
<td>1531</td>
<td>1640</td>
<td>1631</td>
</tr>
<tr>
<td># of Nonresident Applicants Interviewed</td>
<td>22</td>
<td>20</td>
<td>44</td>
<td>25</td>
<td>33</td>
<td>31</td>
<td>23</td>
</tr>
<tr>
<td># of Nonresident Offers Extended</td>
<td>14</td>
<td>6</td>
<td>13</td>
<td>15</td>
<td>18</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td># of Nonresidents Enrolled</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td># of Resident Applicants Interviewed</td>
<td>126</td>
<td>117</td>
<td>162</td>
<td>189</td>
<td>174</td>
<td>173</td>
<td>141</td>
</tr>
<tr>
<td># of Resident Offers Extended</td>
<td>81</td>
<td>83</td>
<td>69</td>
<td>93</td>
<td>90</td>
<td>87</td>
<td>83</td>
</tr>
<tr>
<td># of Residents Enrolled</td>
<td>58</td>
<td>64</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>49</td>
</tr>
<tr>
<td>Total D1 Enrollment</td>
<td>64</td>
<td>69</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>52</td>
</tr>
</tbody>
</table>

**Supportive Documentation**

Appendix A-14: Table 14 Committee Membership
Appendix D-3: COD Faculty Bylaws
Appendix E-4: DMD Brochure
Appendix E-5: Admissions Screener Summary form
Appendix E-6: Admissions Survey - 1 (New Student)
Appendix E-7: Admissions Survey - 2 (Declined Admissions Offer)
Appendix E-8: DMD Interview Packet
Appendix E-9: AADSAS Pamphlet
Appendix E-11: Admissions Policies and Procedures
Appendix E-19: DMD Demographics

Available On Site
DMD Interview Packet - Interviewer
4-2 Admission of students with advanced standing must be based on the same standards of achievement required by students regularly enrolled in the program.

Conclusion: The UIC College of Dentistry complies with Standard 4-2.

Description

The College offers the International Dentist Degree Program (IDDP) for internationally trained dentists seeking a DMD degree from an accredited program in the United States. The program was approved by the University Of Illinois Board Of Trustees in January 2006. The program is twenty-four months in duration. The first class of students was enrolled in May 2006 and graduated in May 2008. The College also offers a DMD Advanced Standing Program for full time faculty who wish to earn a DMD degree from the College. Both programs hold students to the attainment of the same College Competencies as in the four year DDS/DMD program.

1. Describe the policies and procedures for awarding advanced standing credit. Indicate the type of courses for which advanced standing is granted and the maximum number of credits that can be awarded.

International Dentist Degree Program

Information on admission to the IDDP can be found in the IDDP brochure, the College Website, the American Dental Education Association (ADEA) Website, and by contacting the College’s Admissions Office. All sources include information on admissions requirements, the application process, criteria for candidate selection, and contact names and numbers of the College’s admissions staff. The University of Illinois at Chicago participates in the Centralized Application for Advanced Placement for International Dentists (CAAPID).

The admissions committee that oversees the four-year DMD program policies and procedures also oversees the IDDP admissions policies and procedures. The process followed for both programs is the same, for example, the same admissions committee members that interview four-year DMD prospective candidates also interview IDDP candidates. In addition, all admissions decisions, including acceptances, waitlist, and denials have to be approved by the Admissions Committee.

The process used in IDDP admissions is outlined in the IDDP Admission Policies and Procedures. This document was developed by the College’s Admissions Office, in consultation with members of the Admissions Committee. It outlines the steps taken with each application, from receipt of applications through candidate notification of final status. All communication with applicants concerning their admission file is conducted through the College’s Admissions Office.

The Assistant Director of Admissions and designated staff screen all completed CAAPID applications to identify those candidates that are academically qualified for admission to the College. The criteria used to establish academic preparedness are detailed in Section I: Academic Preparedness of the IDDP Admissions Policies and Procedures. These criteria include minimal results of qualifying examinations including National Board Dental Examinations Part I, Part II (preferred but not required), TOEFL, English translation of the candidate’s foreign transcripts and degree, and a course-by-course evaluation of the candidates’ credentials from a certified credential evaluating service. Each candidate deemed academically qualified has his/her file reviewed by the Assistant Director of Admissions. The Admissions Committee is responsible for all final decisions regarding applicants’ admission into the
IDDP program. For the IDDP program, coursework is not waived. Students must complete the program in its entirety.

At the conclusion of the admissions cycle each year, the Admissions Committee convenes to discuss the interview and selection process, review the IDDP Admissions Policies and Procedures and make recommendations for the upcoming cycle. In addition to an annual review of the policies and procedures, an anonymous and voluntary IDDP Admissions Survey is distributed to IDDP students at the beginning of their first semester. This survey seeks feedback related to their perception of the admissions, interview and selection process as well as the factors which most influenced their decision to choose UIC. Results of the survey are presented to the Admissions Committee. Similarly, a second anonymous and voluntary admissions survey is sent to students who were accepted for admission to the College, but declined the offer. The survey seeks feedback from the students on their perception of the admissions, interview and selection process as well as the factors that most influenced their decision not to choose UIC for their dental education. Results of the survey are also presented to the Admission Committee for review and input.

Each year the Admissions Office, in consultation with the Office of the Dean and the Admissions Committee, sets yearly academic and demographic enrollment goals. Evaluation of those goals is performed annually with an in-depth look at the applicant pool. A summary of the enrollment and applicant demographic trends over the past five years follows.

**IDDP Applicant Demographics for Entering Classes Of 2011 To Class Of 2015**

<table>
<thead>
<tr>
<th></th>
<th>Class of 2011</th>
<th>Class of 2012</th>
<th>Class of 2013</th>
<th>Class of 2014</th>
<th>Class of 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Applications</td>
<td>182</td>
<td>246</td>
<td>299</td>
<td>263</td>
<td>398</td>
</tr>
<tr>
<td>Illinois Residents</td>
<td>37</td>
<td>35</td>
<td>44</td>
<td>70</td>
<td>47</td>
</tr>
<tr>
<td>Nonresidents</td>
<td>145</td>
<td>211</td>
<td>255</td>
<td>193</td>
<td>351</td>
</tr>
<tr>
<td>Total Applicants Interviewed</td>
<td>59</td>
<td>91</td>
<td>85</td>
<td>100</td>
<td>106</td>
</tr>
<tr>
<td>Illinois Residents</td>
<td>12</td>
<td>8</td>
<td>17</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td>Nonresidents</td>
<td>47</td>
<td>84</td>
<td>68</td>
<td>78</td>
<td>82</td>
</tr>
<tr>
<td>Total Offers Extended</td>
<td>44</td>
<td>41</td>
<td>45</td>
<td>58</td>
<td>53</td>
</tr>
<tr>
<td>Illinois Residents</td>
<td>9</td>
<td>7</td>
<td>16</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Nonresidents</td>
<td>35</td>
<td>34</td>
<td>29</td>
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<tr>
<td>Total Enrollment</td>
<td>30</td>
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<tr>
<td>Illinois Residents</td>
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<td>7</td>
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<tr>
<td>Nonresidents</td>
<td>22</td>
<td>23</td>
<td>15</td>
<td>20</td>
<td>27</td>
</tr>
</tbody>
</table>
DMD Advanced Standing Program
The College offers a DMD Advanced Standing Program for full time faculty. The program was approved by the Curriculum Committee in March, 2013 to replace an existing DDS program for full time faculty.

Program Description

Purpose
The DMD Advanced Standing Program is designed to provide an opportunity for full time UIC faculty members who hold a specialty certificate or degree/certificate from ADA accredited program of two years or longer or who have held a full time teaching appointment in the College for a continuous period of at least two years, but do not have a DDS/DMD degree from an accredited United States/Canadian dental school to satisfy the competencies of the College necessary to grant the DMD degree.

Program Requirements
The candidate will:
- be admitted in the University and will register for courses.
- meet the specific expectations of the individual departments as stated in the appended course descriptions document; and
- have the requirements waived in the field of his/her specialty.

It is expected that all program requirements will be met within three (3) calendar years from the date of matriculation in the DMD Advanced Standing Program. Extensions to the program length must be endorsed by the Department Head/Dean and approved by the Subcommittee on Student Promotions (SSP). The candidate's progress will be monitored each term by the SSP. It is the responsibility of each department to certify the candidate's competency in writing to the Office of Academic Affairs.

The candidate must also discuss and arrange time requirement commitments with the candidate's Department Head/Dean. The decision of the Department Head/Dean is binding.

It is expected that requirements related to the candidate’s specialty or non-specialty certificate program may be waived by the Department. Such waivers will be approved by the SSP.

At a minimum the Department must show evidence of cognitive and psychomotor skill attainment equivalent to graduates of the predoctoral program that demonstrate attainment of the Competencies of the predoctoral program.

It is expected that each candidate will receive training and be required to participate in the predoctoral program as a Small Group Facilitator. Such service is expected in two modules per year of the participant’s enrollment in the program.
Supportive Documentation
Appendix A-14: Table 14 Committee Membership
Appendix C-2: COD Predoctoral Graduate Competencies 2012
Appendix C-21: Competency Statements 2010
Appendix E-10: IDDP Admissions Policies and Procedures
Appendix E-12: IDDP Program Brochure
Appendix E-13: IDDP Course Equivalency
Appendix E-14: IDDP Admissions Survey - 1 (New Student)
Appendix E-15: IDDP Admissions Survey - 2 (Declined Admissions Offer)
Appendix E-16: DMD Advanced Standing Program (full time faculty)
Appendix E-17: IDDP Demographics
4-3 Transfer students with advanced standing must receive an individualized assessment and an appropriate curriculum plan that results in the same standards of competence for graduation required by students regularly enrolled in the program.

Conclusion: The UIC College of Dentistry complies with Standard 4-3.

Description

Due to the structure and delivery of the DMD program and a very low attrition rate, the College rarely accepts transfer students. For the past six years, the College has received 23 transfer inquiries, 9 completed applications from prospective transfer applicants and 1 applicant accepted into the second year of the then DDS curriculum. Information on transferring to the DMD program can be found in the Transfer Admissions Policies and Procedures and by contacting the College’s admissions staff. Each year, the Admissions Committee evaluates the transfer processes prior to the beginning of the fall semester.

The process used in the transfer application process is outlined in the Transfer Admissions Policies and Procedures, a document developed by the College’s Admissions Office in consultation with members of the Admissions Committee and University Legal Counsel. This document outlines the process for application from receipt of applications through candidate notification of final determination. All communication with applicants concerning their admissions files is conducted through the College’s Admissions Office including acknowledgement of receipt of e-mails, missing credentials, notification of interviews and admissions decision.

Transfer students will only be considered for the beginning of each academic year. Initial consideration of a transfer student is contingent upon space available in the class to which the applicant is requesting a transfer. Dental Admissions Tests (DAT’s), Test of English as Foreign Language (TOEFL) where applicable and, National Board Part I scores are required for consideration of a transfer application. Additionally, undergraduate transcripts and current dental institution transcripts must be provided.

1. Describe the policies and procedures for awarding transfer credit.

The academic credentials of all competitive transfer candidates are subject to two levels of review. The first review is the responsibility of the Admissions Committee. The Admissions Committee conducts a holistic evaluation of the undergraduate and dental school credentials of the candidate. Any candidate considered for admission must possess the academic and professional credentials for the class profile to which he/she is seeking admission. The process to evaluate the credentials of candidates applying for traditional admission to the DMD D1 class is used to evaluate the pre-professional and professional academic credentials of transfer students. These criteria can be found in the Admissions Policies and Procedures.

If the Admissions Committee deems the candidate academically competitive with the class to which the candidate seeks transfer, the applicant’s credentials will then be reviewed by the College’s Subcommittee on Student Promotions (SSP) for a second level review. Members of the SSP conduct a curriculum comparison evaluation the findings of which determine whether the curricula at the current
dental school are similar enough to support a transfer. The College accepts very few transfers each year.

Once the student is notified of acceptance as a successful transfer, the Office of Admissions and Office of Academic Affairs work collaboratively to prepare and acclimate the successful transfer candidate to the College.

Supportive Documentation
Appendix A-14: Table 14 Committee Membership
Appendix E-11: Admissions Policies and Procedures
Appendix E-18: Transfer Admissions Policies and Procedures
4-4 Admission policies and procedures must be designed to include recruitment and admission of a diverse student population.

Conclusion: The UIC College of Dentistry complies with Standard 4-4.

Description

The College’s recruitment programs are effective in providing a pool of well qualified and diverse applicants. The College has been successful in recruiting and enrolling a student body that reflects racial, social economic, religious and geographic diversity. Programs such as the College’s Urban Health Program and International Dentist Degree Program along with the outreach activities of our diverse student organizations have contributed to providing a pool of well-qualified and diverse applicants.

The College uses the Under-represented Minority (URM) definition of the American Dental Education Association: those “who are underrepresented in (dentistry) relative to the number of individuals who are members of the population involved.” Using this definition, the primary diversity recruitment focus of the College is the recruitment and retention of African American, Hispanic, Native American and disadvantaged students. The UIC campus defines disadvantaged students as low income (within 200% of the poverty level) and educationally disadvantaged (first generation attending college or other educational obstacle such as living in rural isolated communities. The effectiveness of the program can be appreciated by the increase in the total number of applications received from URM students. Greater diversity of our students will assist the College in facing some of the challenges of our state, region, and city as well as fostering active engagement with the cultural, social, and economic richness of the region.

1. Describe the effectiveness of the dental school’s recruitment program in providing a pool of well-qualified and diverse applicants for the available positions, including the measures and outcomes used to determine whether diversity is being achieved.

As a result of having a well-qualified applicant pool the College has been successful in consistently enrolling fifteen percent (15%) to nineteen percent (23%) of its class with URM students in the last five years. It is also noted that within the same time period the College extended offers of admission to URM students at a rate of eighteen percent (18%) to twenty-six percent (26%).

One of the main reasons that the College has been able to increase and maintain its effectiveness in recruiting a well-qualified and diverse applicant pool is due to its Institutional Commitment to Diversity. The goal is to expand and diversify the future applicant pool by increasing the numbers of applicants from traditionally underrepresented populations. Toward that end, the College has expanded its Urban Health Program pipeline efforts to target middle school and high school-aged students who have expressed an early interest in the health care professions. These pipeline programs identify academically strong students and provide them with the academic counseling and professional experiences necessary to successfully compete in college and professional school.

UIC is committed to recruiting, enrolling and training a diverse student population. Having a diverse student body is an institutional priority and is clearly stated in goal six of the College’s Mission and Goals statement “to value and seek diversity in students, staff, faculty and patients”. Diversity is central to the College’s vision of itself as a major international resource. The recruitment and training
of a diverse student population is critical both to the excellence of our academic programs and to the advancement of world-class research.

The UIC Urban Health Program (UHP) is the University’s umbrella minority student recruitment and retention program for all of the Health Professions Colleges and Schools. The College participates in this university-wide initiative. The College’s UHP is housed in the Office of Student and Diversity Affairs. Information regarding the UHP can be found in the College Brochure, the College’s website, the UIC website and by contacting the College’s Urban Health Program Office.

The mission of the UIC UHP is to improve the quality of health care services for medically and dentally underserved urban populations. This is accomplished by expanding health professions education opportunities for students from population groups historically underrepresented in the field of dentistry: African-Americans, Hispanic-Americans, Native Americans and disadvantaged students interested in serving in health professions shortage areas of Illinois.

Among the desired outcomes of the UHP at the College are to assist URM students aspiring to become dentists in pre-matriculation activities and to increase the number of URM enrollees at the College. To enhance the College’s recruitment pipeline, the College collaborates with the UHP Early Outreach Program. This program serves as the pre-college program implementation unit for the UIC UHP. The goal of Early Outreach is to identify talented minority and underrepresented students early in their academic careers and then to design, implement, and coordinate programs that groom students for college and professional careers. Each year, Early Outreach coordinates academic enrichment programs for students in grades three through twelve. The program currently has partnerships with elementary schools, high schools, community colleges, and the Golden Apple Foundation.

The program provides extensive services for undergraduate URM students including advising for pre-dental course selection and planning, a Dental Admission Test (DAT) preparation course and UHP Open House information sessions on dental school admission requirements. In addition, the UHP Post-baccalaureate Program allows up to four prospective DMD candidates to participate in a yearlong program to strengthen basic biomedical knowledge. Students accepted into the College’s Post-baccalaureate program receive a one-year deferred acceptance to dental school. A spot is held in dental school for the following year, upon successful completion of the post-baccalaureate program. The College’s UHP covers all educational expenses for the post-baccalaureate year including tuition and textbooks. In addition, the College offers a renewable scholarship for a selected number of academically qualified URM students entering the D1 year.

The College has established a close relationship with UIC College Prep, a Chicago Public High School. UIC College Prep was established in 2008 as a response to low minority enrollment in UIC medical programs. UIC College Prep enrollment is 90% underrepresented minorities. The curriculum is designed to support minority students interested in pursuing a health care career. The College hosts students from UIC College Prep and provides them with lecture simulations and dental related hands-on-activities. Furthermore, College faculty, staff and students help students with their senior-year course, the Health Science Capstone. The course challenges students to conduct collaborative, but independent semester-long projects in the health sciences in order to create a culminating portfolio that highlights their research skills, professional collaboration, oral and written communication skills. The goal is that by tapping into resources at the College including faculty and graduate students, research labs, organizations, and clinics, students will take ownership over their learning, using curiosity and initiative to contribute meaningfully to health science discourse. In addition, admissions staff participates in reviewing mock college applications for UIC College Prep students.
### DDS/DMD Under Represented Minority (URM) Applications – Interviews – Enrolled

<table>
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2. How is the dental school’s recruitment program evaluated and refined based on the achievement of the established measures and outcomes related to diversity?

The College’s recruitment program is evaluated at the beginning of each cycle through a thorough review of the most recently completed admissions cycle. Based on the in-depth analysis of applicant data, the Admissions Committee decides which performance measures and outcome goals it employs for future cycles. Throughout the cycle, the diversity of the candidates applying to the program, invited for an interview, accepted or waitlisted is always being monitored by the Associate Dean of Student and Diversity Affairs and the Assistant Directors of Admissions. The Admissions Committee seeks to assemble a class that is academically, culturally, socio-economically, geographically and ethnically diverse. The College believes that diversity is essential for the future of the profession and for enhancing students’ educational experiences by promoting understanding, preparing students for an increasingly diverse workforce and society, improving access to health care for vulnerable populations, reducing racial and ethnic disparities in health care treatment and outcomes, and establishing a student body that will contribute to all areas of the oral health care profession including research, teaching, policy-making, and culturally sensitive general and specialty clinicians.
Performance Measures used to determine whether diversity is being achieved:

- Increase the percentage of URM pre-dental students receiving course selection and planning
- Increase the percentage of URM pre-dental students that complete a DAT preparation course.
- Increase the percentage of URM pre-dental students that acquire information on the dental school admission requirements.
- Increase the percentage of URM students that are academically prepared for dental school.

Outcomes

**Entering DDS/DMD Class of 2012-2016 Enrollment Demographics Race/Ethnicity**

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**Entering IDDP Class of 2011-2015 Enrollment Demographics**

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Supportive Documentation:

- Appendix B-1: UIC College of Dentistry Vision and Mission Statements
- Appendix E-1: Institutional Commitment to Diversity
- Appendix E-4: DMD Brochure
- Appendix E-11: Admissions Policies and Procedures
4-5 The dental school must provide adequate and appropriately maintained facilities and learning resources to support the purpose/mission of the dental school and which are in conformance with applicable regulations.

Conclusion: The UIC College of Dentistry complies with Standard 4-5.

Description

The College is in the process of renovating all didactic and clinical learning spaces. Beginning in 2009 updates were made in both major lecture halls (LHN and LHS) with seating and with projection equipment, lecture capture and wireless capability. The smaller lecture rooms have had similar upgrades. Every predoctoral patient care and pre-patient care operatory is either completely replaced or in the process.

The facilities for instruction fully accommodate our clinical and instructional needs. Beginning in the fall term, 2013, the College has decided to reduce the size of the matriculating four year predoctoral program from its current 66 students to 52. In 2014 there will be a further reduction to 50 four-year predoctoral students.

The College has finished a complete renovation of nearly 40,000 sq. ft. of research space on the fourth and fifth floors of the building. This $10 million project was funded by a grant from the NIH.

We are currently in the final design phase of a $20.8 million infrastructure grant from the State of Illinois for infrastructure enhancements. The HVAC system, lighting and ceilings for the entire building will be updated for efficiency and effectiveness.

1. Describe all facilities in which didactic and/or clinical teaching occurs and comment on the adequacy of facilities for the teaching, research and service activities of the dental school. Include in the description of facilities:
   a. the year the facility was constructed and a description of any renovations that have occurred in the last seven years; and
   b. the number of complete, functional treatment areas in the clinic used for preclinical and clinical instruction in patient care.

Clinical Teaching Facilities

The College, until recently, had three 40-year old 56-chair predoctoral patient care clinics (Group Practices). Renovations to the predoctoral Group Practices began on February 15, 2013 and will continue throughout 2013. All predoctoral pre-patient and patient care clinical operatories will be completely remodeled and upgraded including new dental operatories and imaging equipment. New receptions/front desk areas will be constructed in locations that are patient friendly, with more efficient amenities.

Every simulated and/or patient care operatory is equipped with computer support to access our electronic patient record system (AxUxm). Additionally every operatory computer work station has drug data bases as well as access to the internet to facilitate evidence-based patient care.
After renovations, the predoctoral clinical facilities will consist of two 50-chair Group Practices, one 16-chair advanced technology clinic, one 7 chair oral surgery suite, one 8 chair implant clinic, one 16 chair pediatric clinic, and one 52 chair pre-patient care facility. There will be:

- reception/front desk for patient registration, payment for treatment and scheduling of appointments,
- storage rooms for supplies etc.,
- administration office for consultation with students and/or patients,
- radiology facilities, including panoral and cbct capability
- common use area equipped with computers, printers and telephones for student communication with patients, and lockable lockers assigned individually to students,
- conference room for student learning activities and faculty/staff meetings. Each conference room is equipped with didactic supplies used in SGL activities, including Wi-Fi and large monitors for multimedia.

In 2012 the predoctoral Oral Surgery clinic was constructed with state of the art equipment including seven operatories, storage area, open consultation area, and reception/front desk area.

In 2012 the predoctoral Pediatric Dentistry Clinic was finished with remodeling and upgraded new equipment including radiology, a new water filtration system that eliminates the need for independent water reservoirs at each operatory and available nitrous oxide at each unit. There are currently 16-chairs being utilized by predoctoral students.

Similarly, the Implant and Innovations Center, a multi-specialty clinic consisting of eight operatories and four surgical suites was built. This facility is designed for and used by predoctoral students to care for implant patients. It became fully operational in 2012.

**Pre-patient Care (pre-clinical) Teaching Facilities**

The College currently has two main areas dedicated for this purpose.

- Room 319 – forty-two (42) chair simulation clinic utilizing both manikin practice and limited student treatment within their respective class. In the Fall of 2013, Room 319 is scheduled to be remodeled and upgraded including new dental equipment and upgraded computer service. Additional chairs will be added, increasing the total to fifty-two (52).
- Room 430b – twenty-three (23) chair manikin simulation clinic, with an adjacent support lab.

There is a 72 unit, clinic support laboratory on the fourth floor. Each unit is shared by four students from the various classes to perform the necessary patient support laboratory services. It should be noted that most of patient support laboratory services is performed offsite by contracted professional dental laboratories.

The predoctoral program also sees patients in seventeen extramural sites with a capacity of nearly forty operatories for our students use.

**STANDARD 4-5**

A Proud Past
The College had completed renovation of the post-graduate clinics in orthodontics (2010) and prosthodontics (2012). The post-graduate pediatric dentistry clinic was completed in June of 2013. It is anticipated that the post-graduate clinic in periodontics will be completed by November of 2013.

The radiology clinic equipment was fully replaced in 2013 and a clinical research facility was likewise completed in 2013.

Didactic Teaching Facilities
The College currently has two amphitheater style lecture halls that seat 100 (Lecture Hall North) and 192 (Lecture Hall South). Additionally there is a lecture room (230D) that accommodates 68 persons.

With the program change to the DMD curriculum there is a reliance on smaller rooms for small group learning and student driven presentations. We have identified and routinely use ten rooms throughout the College for these activities. Our commitment to and use of asynchronous scheduling has demonstrated this is an adequate number.

In 2010 the College applied for and was awarded a Provost’s Grant to construct a state of the art LearnLab. The facility features seating for four small groups of eight learners, white boards, three video displays and a high volume wireless internet hub. The LearnLab also utilizes sound deadening construction and outfitting technologies.

Beyond the computer capabilities (patient record access and internet service) in each predoctoral operatory, the fourth floor student commons area is similarly equipped with computers for student use.

The College uses the College of Medicine teaching facility for the cadavers used in our anatomy laboratory component. The laboratory is, however, fully taught by College faculty.

2. Describe the procedures that have been established for assessing program facilities and equipment in relation to current concepts of dental practice and dental education? Who is responsible for the assessment and how frequently is it made?

Clinical Facility Assessment
Monthly Clinical Department’s Meetings occur with Department Heads, Postgraduate Program Directors, Managing Partners of the Pre doctoral Group Practices, Director of Clinical Operations, Director of Clinics and Associate Dean for Clinical Affairs. Concepts of dental practice and education are discussed at these meetings. Clinical construction projects and needs are also assessed and discussed by the membership. Individual meetings also take place as needed with Department Heads and the Associate Dean for Clinical Affairs to discuss the aforementioned issues. The Associate Dean for Clinical Affairs is responsible for the assessment process.

The Associate Deans for Clinical and Academic Affairs, along with key office personnel meet weekly to address issues in common. Not infrequently facility issues are identified, solutions generated and strategic course of action determined.
Didactic Facility Assessment
The Curriculum Committee (CC) through its Curriculum Advisory Committee (CAC) has instituted an End of Course Report. Among the questions asked of the Course Director are whether there were facility or supply issues, and whether there were staffing issues. The reports are summarized by the CAC and presented to the CC which has among its options the charge to “Advise the Executive Associate Dean for Academic Affairs on curricular resource needs”.

The administration meets monthly with class officers of each class to discuss issues related to learning and patient care facilities. In addition, each term, the administration meets with all the members of each class in a town hall fashion to discuss issues.

3. What is the program’s long-range plan for maintaining, replacing and adding equipment?

The Office of Clinical Affairs has a budget that permits planning for maintaining, replacing and adding equipment as necessary. Projected longevity of equipment is assessed by the Office of Clinical Affairs through consultation with the Facilities Manager, Course Directors and Department Heads. The Dean is consulted and advised of the budgetary needs to sustain a high level of equipment efficiency at the College.

The Office of Academic Affairs has a budget line item for upgrades in and/or enhancement of educational software additions. As part of the annual budget process, requests for major improvements are presented to the Dean for consideration. Further, the University, through the Provost’s Office, attends to campus wide technology needs (e.g. software applications, Blackboard enhancements, etc.).

4. If the clinic is shared with other program(s), how many hours per week is it used by each program? How many treatment areas are used each session? What procedures have been established for scheduling utilization of the clinic?

The College does not share any of its clinical or didactic facilities with other programs.

Supportive Documentation
Appendix E-20: Building blueprint
4-6 Student services must include the following: (address separately)
a. personal, academic and career counseling of students;
b. assuring student participation on appropriate committees;
c. providing appropriate information about the availability of financial aid and health services;
d. developing and reviewing specific written procedures to ensure due process and the protection of the rights of students;
e. student advocacy; and
f. maintenance of the integrity of student performance and evaluation records.

Conclusion: The UIC College of Dentistry complies with Standard 4-6.

Description

The College is committed to and provides excellent support to students in all aspects of student life. While support comes primarily from the Office of Student and Diversity Affairs, the faculty, administration and staff provide comprehensive programs and services that support and encourage students. It is the intent to connect or provide students with the resources necessary to assure achievement of both academic and personal goals.

1. Describe each area of student services separately. Include specific description of the services provided. In particular, evaluate the efficacy of the program’s system for early identification of students in academic difficulty.

   a. personal, academic and career counseling of students

   Responsible Parties: Dr. Darryl Pendleton, Associate Dean for Student and Diversity Affairs, College of Dentistry; Millie Mendez, Director of Students Services, College of Dentistry; Mr. Jon Mann, Academic Skills Specialist, UIC Academic Center for Excellence; Dr. Karen Maddi, Counselor, UIC Counseling Center.

   The Associate Dean for Student and Diversity Affairs and the Director of Student Services participate in the College Subcommittee on Student Promotions (SSP). The SSP is a standing subcommittee of the College whose purpose is to address academic issues involving students in the DDS/DMD and International Dentist Degree Program (IDDP). The SSP is proactive in identifying and assisting students who appear to be having academic and/or health/safety issues. Course Directors report grades from written exams, performance exams and other assessments, as well as any other concerns about a particular student which might not necessarily be reflected in the grades. The SSP monitors progress of all students, approves remediation plans, and, when necessary, directs that the Associate Dean of Academic Affairs and the Associate Dean for Student Affairs meet with the students to ascertain additional information that may require the College to provide services or resources.

   In all four years of the DDS/DMD curricula there is significant faculty-student interaction and ongoing assessment of student performance. This is particularly important in the first year where vulnerable students are identified early and supported as soon as possible. Appropriate and individualized interventions at an early stage are prescribed and implemented. The scheduling of three exam
periods per semester in the curriculum, plus the continual observation of students in simulated and patient care clinics and small group sessions, allows for responsive and timely identification and action plan interventions for students in need.

Because of the ongoing assessment and observation of student progress, it is possible, and desirable, to identify students who are not performing as expected while the course is still taking place, so as to provide timely en-route interventions. What follows are descriptions of programs and interventions available to our students.

In some cases students underperform during their first semester because they need to adapt to the work load and life in a professional school environment. Early intervention, with appropriate input from the Office of Student and Diversity Affairs, is often enough to allow the student to adopt more effective study and time management habits and to proceed without further problems. The Office of Student and Diversity Affairs (OSDA) provides further direction to a student to determine whether counseling and/or supplemental education is needed.

Information regarding personal, academic and career counseling services for students can be found on the College and University websites, in the OSDA, and in the College’s Student Organizations Office. All dental students are eligible for a comprehensive array of support resources and services provided by the University through the UIC Office of Student Affairs.

UIC Student Support Resources

*Academic Center for Excellence* (ACE): serves the needs of students who are having academic difficulty or are interested in improving academic performance. ACE offers workshops addressing topics such as time management, note taking, test taking skills and stress management. Students can also request individual counseling with an Academic Skills Specialist.

*Campus Counseling Center:* provides professional psychological counseling for personal, academic, or vocational issues, as well as educational and consultative programs designed to meet specific needs of students. These services are offered to all UIC students at no charge. The Center is staffed by clinical and counseling psychologists and learning-skills specialists.

*Disability Resource Center* (DRC): facilitates access for students to obtain the provision of reasonable accommodations. The DRC consults with the Executive Associate Dean for Academic Affairs to establish reasonable accommodations. Typically such accommodations have minimal impact on the student’s progress through the curriculum and generally involve extra time for non-clinical test-taking and distraction free test-taking environments. The College does not grant extra time accommodations for simulated or actual patient care.
Urban Health Program (UHP): is a University-wide recruitment and retention program for underrepresented minority and disadvantaged students. The program provides resources and services to assist with supporting underrepresented groups (African Americans, Hispanic Americans, Mainland Puerto Ricans, and Native Americans).

College of Dentistry Student Support Resources

Supplemental Education Program: OSDA coordinates a formal tutoring program made available at no cost to students. Supplemental assistants (Peer Educators) are generally College students. OSDA matches qualified peer educators with students who request assistance or are recommended for tutoring by the SSP.

Resource Library: OSDA offers a wide variety of study materials to students in particular materials for the National Board Dental Examinations (NBDE). In addition, for students who fail the NBDE we provide appropriate study materials, the opportunity to participate in either an NBDE Part I or II webinar course offered by UMKC School of Dentistry, as well an online Kaplan Course.

Mentorship Program: introduces students to dental professionals who are members of organized dentistry. The program fosters relationships between practitioners and students during their training. The Mentorship Program introduces students to the concerns and ideas that will be important in their future careers. The mentorship program is a collaboration between the College and numerous local dental societies.

Big-Person program: The program is coordinated by the D2 and I2 classes and is implemented each fall. D1, as well as I1 students are assigned to a “big person” from the D2 or I2 classes who serve as a peer advisor in orienting the incoming student to dental school.

Career Services program: Information on employment and educational opportunities is disseminated to students via an electronic mailing list. Information is provided to the College by dental practices seeking to hire or educational programs recruiting students. During the spring semester, the OSDA coordinates “Career Week.” The week starts off with a Dental Career Fair which allows students to be exposed to the numerous and diverse opportunities available. Representatives from non-profit, government, private, and public health organizations are invited to present. During Career Week, the OSDA coordinates, in collaboration with the American Dental Association (ADA), a series of presentations and activities designed to assist students with transitioning into the profession and a career in dentistry. Students participate in the ADA Success Seminars that include “Success Smart Start for Freshmen”; “Success Professional Preview for Sophomores”; “Success Career Strategies for Juniors” and “Success Practice Management for Seniors.”

In collaboration with the American Association of Women Dentists (AAWD) student chapter, the OSDA coordinates “Specialty Night.” Students are encouraged to attend this event to meet with representatives from all the dental specialties to learn about practice styles, training required, and insights on the specialty.
b. assuring student participation on appropriate committees

Responsible parties: Dr. Darryl Pendleton, Associate Dean for Student and Diversity Affairs, College of Dentistry; Millie Mendez, Director of Student Services, College of Dentistry.

College and UIC Committees: Students are elected or appointed to serve on various College and University committees and councils. The elected student may represent their class or Group Practice clinic on formal College committees as designated in the College's Bylaws. In addition, students represent the College on University and professional committees which provide the student body with a mechanism to communicate and provide input into College and University operations. Information regarding committee participation is disseminated to each student during mandatory orientations or Town Hall meetings held for each class during each term as well as via an electronic mailing list as the opportunities become available.

Committees with student membership include:
- College Student–Faculty Relations Committee.
- College Curriculum Committee.
- College Diversity Advisory Committee.
- Subcommittee of the UIC Committee on Student Discipline.
- UIC Health Professions Council Committee

Student Organizations: The OSDA oversees and supports the activities of all College student organizations. Any student organization operating within the College is required to register annually as an official UIC Student Organization at the Campus Programs office. Information regarding the registration process is disseminated to each student during mandatory orientations or Town Hall as well as via an electronic mailing list. The College currently recognizes twenty student organizations. Students at the College are strongly encouraged to be active participants in these organizations. In addition to offering many social opportunities, student organizations aid in facilitating communication among the faculty, administration, and staff. Student organizations provide a valuable service to the University of Illinois at Chicago and the College community by promoting leadership development, philanthropic activities, community service, social interaction, and cultural interaction.

Town Hall meetings: each term, an open forum is held for each of the six predoctoral cohorts. These meeting provide an opportunity for students to meet with the deans and administrative department directors in an open forum environment. Town Hall meetings are for the students to communicate their needs, requests, and questions directly to those who have the responsibility and authority to address the issues and concerns that may arise.

Deans/Student Leaders luncheons: Each month the Class Officers from each cohort meet with the dean and associate deans in a problem identification and solution session. The class officers collect concerns and present them to in the meeting. Issues not resolved at the meeting are followed by the appropriate administer charged with resolution to the issue.
Student Organizations at the College include:
1. Dental Student Council
2. DMD Class of 2014
3. DMD Class of 2015
4. DMD Class of 2016
5. DMD Class of 2017
6. IDDP2 Class of 2014
7. IDDP1 Class of 2015
8. Alpha Omega
9. American Association of Public Health
10. American Association of Women Dentists
11. American Student Dental Association
12. Association of Muslim Dental Students
13. Health Professions Student Council
14. Hispanic Student Dental Association
15. Illinois Academy of General Dentistry
16. Indian Student Dental Association
17. Korean American Student Dental Association
18. Middle Eastern Dental Student Association
19. Student National Dental Association
20. Student Professionalism and Ethics Association in Dentistry
21. Student Research Group

c. providing appropriate information about the availability of financial aid and health services

Responsible parties: Dr. Darryl Pendleton, Associate Dean for Student and Diversity Affairs and Millie Mendez, Director of Student Services; Shirley Vega-Rodriguez, Associate Director, UIC Financial Aid Office.

Financial Aid
Both the UIC Office of Student Financial Aid and OSDA provide information about financial aid to students. Students receive information about financial aid during the admissions interview process, through the College and University websites, at mandatory orientations and Town Hall Meetings, and upon matriculation into the College. Additionally, UIC provides students with access to their financial portfolio through the Student Access System. The Student Access System is accessible by any student at any time through the UIC website.

Student Health Services
All students enrolled at the University of Illinois at Chicago are automatically enrolled in the CampusCare insurance program. CampusCare enables students to receive health care services on campus in the UIC Family Medicine Center located in the University of Illinois Medical Center’s Outpatient Care Center. CampusCare can also be used at clinics and hospitals throughout the US. Students receive information about CampusCare during the admissions application process, mandatory orientations and Town Hall meetings, upon matriculation into the College, through workshops, seminars, and emails, and on the College website. Students also receive information about the availability of dental services provided by the College.
d. developing and reviewing specific written procedures to ensure due process and the protection of the rights of students

Responsible parties: Dr. Darryl Pendleton, Associate Dean for Student and Diversity Affairs; William Rodriguez, Associate Dean, UIC Student Affairs.

The College has written policies and procedures that protect the rights of students and ensure due process. The College Offices of Student and Diversity Affairs and Academic Affairs oversee the implementation of these policies and procedures for academic and disciplinary concerns. Students can contact the offices for information and assistance. The Offices work in collaboration with the UIC Dean of Students Office and the College’s Committees on Student Discipline and Student Promotions (SSP). Together, the offices and committees implemented the UIC Code of Conduct, the College's Academic Professionalism for Students, and both the UIC and College disciplinary procedures.

Information regarding the rights of UIC students, due process; and the academic and disciplinary processes are available on the College and UIC websites and the Office of Academic Affairs Blackboard site. Copies are also available in the College Office of Student and Diversity Affairs.

This information is disseminated at mandatory orientations or Town Hall meetings. Additional information is also disseminated to students via an electronic mailing list and include information regarding the rights of students, due process, and academic and disciplinary processes. These are also available on the College and the University websites, in the College of Dentistry Faculty Bylaws, and the College of Dentistry Student Affairs Handbooks.

All procedures to ensure due process and the protection of the rights of students are reviewed annually by the College faculty and administration and the University.

e. student advocacy

Responsible parties: Dr. Darryl Pendleton, Associate Dean for Student and Diversity Affairs and Millie Mendez, Director of Student Services, Dr. Linda Deanna, UIC Dean of Students

The OSDA advocates for the interests of all students and provides individual students with advocates when necessary. The Director of Student Services or a designated faculty member act as student advocate whenever requested by a student or assigned by the Dean. The student advocate supports any student having difficulty and appears with the student at academic and disciplinary hearings.

The UIC Associate Dean for Student Affairs serves as the Ombudsperson for the College. The Ombudsperson is an advocate for fairness, who investigates student complaints, reports the findings and helps to achieve equitable settlements. If necessary, the Associate Dean for Student and Diversity Affairs may refer a student to the UIC Ombudsperson for additional services.

When a student receives a letter regarding an academic or disciplinary action, the letter instructs the student to contact the Associate Dean for Student and Diversity Affairs regarding the role of the Director of Student Services as an advocate for the student during the procedures.

College Students can also receive advocacy services at the University level through the UIC Office of the Dean of Students.
f. maintenance of the integrity of student performance and evaluation records

Responsible parties: Dr. G. William Knight, Executive Associate Dean for Academic Affairs, and Ms. Lea Alexander, Director of the Office of Academic Affairs

The Office of Academic Affairs is responsible for the maintenance of the student academic file. The Office collaborates with the University Registrar in maintaining the official academic record in the Banner reporting system employed by the University. Student records are available to the student or through any proper FERPA request.

2. Assess the effectiveness of the counseling system in place.

The strategies, resources and services utilized to provide early intervention and counseling have been very effective. The faculty and staff strive to be proactive in identifying and assisting students by intervening early for students who appear to be having academic or health/safety issues. All students are offered the personal/social, academic, and career skills necessary to reach their fullest potential. The College works closely with the UIC Academic Center for Excellence. The center has assigned a counselor who is specifically responsible for meeting the academic support needs of students pursuing careers in the health professions. The counselor works with colleges to plan and provide workshops and individual student consultations. The University Counseling Center provides diverse services to help students deal with stress, handle a crisis or trauma, cope with the transition to college, gain strength from gender and cultural identity, or manage serious mental illness and many other issues.

Supportive Documentation

Appendix C-1: Academic Professionalism for Students
Appendix D-3: COD Faculty Bylaws
Appendix E-2: COD Student Services Handbook
Appendix E-21: College Disciplinary Procedures
Appendix E-22: Committees to Which Students are Appointed

Available On Site

CampusCare Student Health Insurance
UIC Code of Conduct
UIC disciplinary procedures
UIC/College Policy on Student Records
4-7 At the time of acceptance, students must be advised of the total expected cost of their dental education.

Conclusion: The UIC College of Dentistry complies with Standard 4-7.

Description

The UIC Office of Student Financial Aid is responsible for overseeing the financial aid needs of all UIC students. This office collaborates with the College’s Office of Student and Diversity Affairs (OSDA) to provide students with a statement of the total expected cost of dental education, including estimates of living expenses and educational fees, an analysis of financial need, and the availability of financial aid based on a need analysis prior to enrollment.

1. Describe how the school informs potential students of the full cost of dental education and financial needs assessment prior to enrollment.

Information regarding the cost of education is available on the College and University websites. Information is also provided during the admissions interview for prospective students and annually for continuing students. Additional information regarding changes in tuition and fees is provided to prospective and current students as it becomes available. Upon admission to the College, students receive a statement of the total expected cost of dental education, including tuition, educational fees, books, supplies and living expenses.

Financial assistance is awarded on the basis of financial need as is determined by the Department of Education Federal Student Aid Program application Free Application for Federal Student Aid (FAFSA). The UIC Office of Student Financial Aid using, the FAFSA, determines student eligibility for scholarships, loans and grants. Students who wish to apply for financial aid are provided with a Student Guide to Financial Aid. The package contains the campus policy on financial aid and extensive information for obtaining financial assistance.

Student award packages generally consist of a combination of loans such as the Federal Stafford Loan, Health Professions Student Loan, Graduate Plus Loan. A copy of the Student Guide is given to students along with their Award Offer. This booklet contains campus policy on financial aid and extensive information on the financial aid process.

All students receive copies of the ADA’s “Financial Planning Issues for Dental Students” annually.

2. Describe how during each year of enrollment students receive a statement on the accumulated debt, future needs assessment and availability of future financial aid.

Each year continuing students applying for financial aid receive an updated analysis of their financial need and current information on the availability of financial aid based on the need analysis. This information is included in the student’s Student Aid Report (SAR). The SAR includes information regarding the students’ total loan indebtedness for Title IV Programs such as Federal Stafford Loans. Students also have the ability to access this information through the National Student Loan Database Service (NSLDS).
Students are also required to complete Student Loan Counseling every year. The UIC Office of Student Financial Services provides this web-based service. This is a tool used to inform our students on the loans borrowed and total loan indebtedness.

3. Describe separately how the school informs its students prior to graduation:
   a. repayment schedules and specific billing procedures;
   b. grace periods and their impact on repayment schedules;
   c. deferments and their implications
   d. cancellation provisions; and
   e. a description of available consolidation options and the time frame in which students would be eligible for them.

During the final year of dental school students are required to attend the Exit Meeting and participate in a financial management presentation. Staff members from the Office of Student Financial Aid (OSFA) conduct the presentations. At the session information regarding a-e above is provided. Prior to the Financial Aid Exit Interview, students who borrowed a Federal Direct Student Loan are required to complete an Exit Counseling session via the U.S. Department of Education Direct Loans website. The counseling details the student’s borrowing history, outlines the student’s rights and responsibilities as a borrower and covers payment options. In addition, students are provided with the “ADA Financial Planning Issues for Dental Student” brochure.

Supportive Documentation

Available On Site
Student Guide
Samples of accumulated debt reports provided to students
Student Financial Aid Handbook
4-8 The institution must be in compliance with all federal and state regulations relating to student financial aid and student privacy.

Conclusion: The UIC College of Dentistry complies with Standard 4-8.

Description

The UIC Office of Student Financial Aid provides a wide range of Financial Aid Services designed to help students and their families meet the costs of attending dental school. The office is responsible for developing and implementing policies and procedures that ensure that the University and College is in compliance with all federal and state regulations related to student financial aid and student privacy (FERPA).

The College has its own liaison, the Director of Student Services, who works closely with the Office of Financial Aid to ensure that the financial needs of students are met. Financial aid is awarded in the forms of loans, scholarship, and tuition waivers. The Office of Student Financial Aid coordinates and administers a variety of state, federal, private, and University programs of financial aid. The office seeks to build close working relationships with students receiving financial aid often continuing after graduation.

To ensure that state, federal and university regulations are being met, the College implements, in collaboration with the UIC Office of Financial Aid, Financial aid workshops during orientations and Town Hall meetings. Students are provided with the Student Loans Government web-link to access their current and pass loan information. This web-link assists students with monitoring their current and past loans and finances. Students are also provided current College tuition and fees fact sheet.

Each year continuing students applying for financial aid receive an updated analysis of their financial need and current information on the availability of financial aid based on the need analysis. This information is included in the student's Student Aid Report (SAR) and can be accessed via the University’s website. The SAR includes information regarding the students' total loan indebtedness for Title IV Programs such as Federal Stafford Loans. Students also have the ability to access this information through the National Student Loan Database Service (NSLDS).

Students are also required to complete Student Loan Counseling every year. The UIC Office of Student Financial Services provides this web-based service. This is a tool used to advise our students on the loans borrowed and total loan indebtedness.

The College maintains individual records and information about Students for the purpose of providing educational, vocational, and personal services to its Students. It is University policy to comply fully with federal statutes and regulations regarding the confidentiality of Student educational records as required by the Family Educational Rights and Privacy Act of 1974.
Supportive Documentation

Available On Site
Policy and procedures related to student privacy
Student authorization form for release of information
4-9 The dental school must advise prospective students of mandatory health standards that will ensure that prospective students are qualified to undertake dental studies.

Conclusion: The UIC College of Dentistry complies with Standard 4-9.

Description

The College advises in writing all prospective students of mandatory health standards that will ensure that prospective students are qualified to undertake dental studies at the College. The candidate is required to sign the document prior to matriculation.

1. Describe the school's pre-matriculation health standards.

The College utilizes Safety and Technical Standards to ensure that prospective students are qualified to undertake dental studies at the College. The standards are based upon the model developed by the American Association of Dental Schools Section on Dental School Admission Officers; in conjunction with the AADS General Counsel (J. of Dental Education 1998: 62:387-390). The Safety and Technical Standards are used to assess each candidate’s ability to successfully complete the curriculum and receive the full benefit of the educational program. The College’s Safety and Technical Standards are modified to reflect essential functions in our program. All Applicants to the College are required to review and sign the College's Safety and Technical Standards form.

Information regarding the College’s Safety and Technical Standards can be found on the College’s website. The College’s Safety and Technical Standards form is also available in the Office of Student and Diversity Affairs. In addition, the College’s Admissions Staff shares the information with prospective applicants during tours of the College, at Open houses and during the admissions process.

The College requires all students to comply with the current immunization guidelines published by the U.S. Department of Health and Human Services Public Health Service Centers for Disease Control and Prevention, the American Dental Association, and the Occupational Safety and Health Administration (OSHA). Information regarding the College’s immunization policy can be found on the College’s website. All prospective students are informed of the immunization requirements and must be able to provide documentation showing appropriate immunizations have been received. Also, during the application process, students receive information regarding the required immunizations necessary to participate in the dental curriculum.

Supportive Documentation:

Appendix E-23: Safety and Technical Standards for Students
Appendix E-24: Immunization form
4-10 There must be a mechanism for ready access to health care for students while they are enrolled in dental school.

Conclusion: The UIC College of Dentistry complies with Standard 4-10.

Description

Students are eligible for and enrolled in student health services through the University's CampusCare Insurance program. Services are provided by faculty of the UIC Family Medicine Center located in the University of Illinois Medical Center's Outpatient Care Center (only two blocks from the College). CampusCare covers services such as care for illness and injury as well as health counseling, health testing and examinations; vaccinations; gynecologic and contraceptive care; individual psychiatric care, and referral to the University of Illinois Hospital and Clinics for specialty consultation.

1. Describe the school’s health care service for its students, including education of students regarding bodily fluid exposure, needle-stick policies, and other infectious and environmental hazards associated with learning in a patient care setting.

All students are assessed a health service fee which makes them eligible for care through the University’s CampusCare insurance program. The program covers all examinations, laboratory tests, x-rays, and consultations conducted by the Health Services staff. Students are provided outpatient services at the Outpatient Care Center and inpatient and emergency room care at the University of Illinois Hospital. A student photo ID with proof of registration for the current semester is necessary to initiate services.

Information regarding CampusCare is found in the Student Affairs Handbook, the College’s website, the University’s Website for the Vice Chancellor for Student Affairs, in the College’s Office of Student and Diversity Affairs, and in the College’s Student Organizations Office.

The College provides for management of occurrences and accidental exposures in collaboration with University Health Services, or with the UI Hospital, as indicated. These procedures and protocol are provided to students through various means. During orientation, the Office for Clinical Affairs gives a presentation on topics of risk management, including management of occurrences. This information is also available on the College’s intranet site. During the D1 fall term, students participate in small group activities where these protocols are reviewed. Later, in the D2 fall and D3 summer terms, the Office for Clinical Affairs provides presentations of these protocols to reinforce the information. In the D4 summer term, students attend a presentation regarding safety in the extramural clinics, and the protocol for reporting off-site occurrences. Reminders of these policies and protocols are posted in each predoctoral clinic, and are sent periodically to faculty, students and staff as e-mail reminders.

Supportive Documentation:

Appendix E-2: COD Student Services Handbook
Appendix F-1: Clinic Manual

Available On Site
CampusCare Student Health Insurance
4-11 Students must be encouraged to be immunized against infectious diseases, such as, mumps, measles, rubella and hepatitis B, prior to contact with patients and/or infectious objects or materials, in an effort to minimize the risk of infection to patients and dental personnel.

Conclusion: The UIC College of Dentistry complies with Standard 4-11.

Description

All health care providers in the College are required to follow the practices that support clinic immunization requirements and standard precautions. These are detailed in the Clinic Manual and Infection Control Manual. In 2009, the College’s Immunization Policy was updated to require that all incoming student, faculty or staff provide proof of immunization via blood titers to the following diseases: Measles, Mumps, Rubella, Varicella Zoster, and Hepatitis B (Antibody and Antigen). Providers are also required to provide proof of immunization against Polio and Tetanus/Diphtheria, and provide proof of a recent negative TB test, via a two-step test, a quantiferon blood test, or a current chest radiograph. The College’s Immunization Form requires the signature of a healthcare provider as verification of the information.

The review of immunization requirements is initially accomplished through a third-party online system Certified Background Immunization Tracker. All students matriculating into the DMD and IDDP programs must submit an Immunization form which assures immunization against mumps, measles, and rubella. The form must be completed and signed by a health care provider and submitted to the ADEA /Certiphi Immunization Records contractor. Certiphi reviews the information and provides the College with certification for our compliance records.

Incoming students are required to satisfy immunization requirements no later than the end of their first term (with the exception of Hepatitis B immunity, where a grace period of 6 months is given to accommodate the three-dose immunization cycle).

College policy also requires all clinical providers to undergo yearly TB testing, which is administered by University Health Services onsite at the College. Compliance is monitored by the Director of Clinics.

All students must be vaccinated for protection against the hepatitis B virus prior to their first clinical experience. Students who do not comply are not permitted to participate in patient care activities.

Supportive Documentation

Appendix E-2: COD Student Services Handbook
Appendix E-25: Immunization form
Appendix F-1: Clinic Manual
Appendix F-17: Infection Control Manual

Available On Site
University Policy on Student Health and Immunizations
5-1 The dental school must have a published policy addressing the meaning of and commitment to patient-centered care and distribute the written policy to each student, faculty, staff, and patient.

Conclusion: The UIC College of Dentistry complies with Standard 5-1.

Description

The College’s Patient Rights and Responsibilities statement assures patients that they will receive care that is considerate, respectful and confidential, completed in a timely manner, they will have access to information about their condition, explanation of recommended treatment and treatment alternatives, have the option to refuse treatment, be informed of the risk of no treatment and the expected outcomes of various treatments, have advance knowledge about the costs of treatment, and treatment that meets the standard of care in dentistry. This information is available to students, faculty, staff, and patients in distributed handouts and on the College website. The Quality Assurance program works to make sure that these commitments are carried out and the treatment planning competency reinforces the value of providing patient care that meets this standard.

1. Describe how the statement of patients’ rights is distributed to students, faculty, staff and to each patient.

Patients are informed of their rights at their first visit through informational documents, provided to the patient at the point of registration and then again at the first visit with their assigned students. At this time, each student presents a handout to their newly assigned patient that identifies patient rights and responsibilities and applicable clinic policies including expectations regarding attendance, cancellation, and appointment times, payment policies. Once acknowledgment is obtained from the patient, the document agreement is signed electronically, and a copy is given to the patient. Patient rights are also listed on the College’s public website.

Each clinical faculty, dental student and appropriate clinical support staff are also informed of patient’s rights via the electronically posted Clinic Manual, through postings in the clinical areas, and periodic email reminders, which are sent if issues arise. Appropriate clinical staff are presented with this information at the Clinical Affair’s orientation session, and periodically at the Clinical Affair’s Monthly Front Desk Clerk meeting.

The faculty, students and staff of the College of Dentistry are committed to upholding the following patient rights and responsibilities:

Patient Rights

- Considerate and respectful treatment by students, faculty and staff.
- Quality dental care that is consistent with the standards for the dental profession.
- A thorough explanation of your dental health, the recommended treatment, the risks and benefits of treatment, and the potential consequences of non-treatment.
- Confidentiality of any information related to your treatment and access to information about your treatment.
• Completion of your treatment in a timely manner.
• Consideration of your overall health needs and appropriate referral or consultation with dental or medical specialists when needed.
• Knowledge of the names and roles of the individuals providing treatment.
• A full description of the itemized costs of proposed treatment and an explanation of payment policies.
• To receive our Notice of Privacy Practices Statement.

Patient Responsibilities
• At the point of registration, to
• Provide complete and accurate demographic data (a PO Box address is not satisfactory for proper correspondence)
• Provide a valid photo identification card
• Sign applicable electronic consents forms as a patient/parent/guardian prior to the beginning of treatment
• Comply with registration procedures including a picture taken for the electronic record.
• To provide complete and accurate information about your health and past dental care
• A promise to cooperate with the treatment plan, keep appointments, arrive on-time and notify us if you cannot make a scheduled appointment (a minimum 24 hour notice is required for cancellations or rescheduling appointments).
• To be available for care based on your treatment needs as assessed by the supervising faculty.
• To show consideration for and respect the needs of other patients, staff, students, faculty and visitors.
• Prompt payment for services provided.
• To provide insurance forms and information for reimbursement purposes or a current public aid identification card if applicable.
• To notify your dentist or the staff of any changes in your address, telephone number, medications or health status.

Patient Service Philosophy

The mission of the patient care clinics of the UIC College of Dentistry is to provide quality oral health care services to a diverse group of patients in a professional, caring, efficient, and safe environment. The students, faculty, and staff of the College achieve this mission by:

• striving to provide a high level of care to all patients in a manner which places priority on the needs of the patient;
• interacting with every individual, patient, and co-worker with respect at all times;
• dressing and acting in a manner which conveys caring, competence, and professionalism;
• being prepared, helpful, and friendly under appropriate circumstances;
• demonstrating a commitment to continually enhancing our knowledge, skill, and judgment;
• maintaining an environment which is neat, clean, efficient, and safe;
• maintaining a positive atmosphere of cooperation, sharing, and teamwork, with appreciation for the unique contributions of each member of the College community to the achievement of our goals.

Supportive Documentation
Appendix F-1: Clinic Manual
Appendix F-2: Patient Rights and Responsibilities
Appendix F-3a: New Patient Handout- English
Appendix F-3b: New Patient Handout- Spanish
Appendix F-4: Screening Brochure
Appendix F-5: Sample Patient Consent Form
Appendix F-6: Welcome to Group Practice Clinics
5-2 Patient care must be evidenced-based, integrating the best research evidence and patient values.

Conclusion: The UIC College of Dentistry complies with Standard 5-2.

Description

The College of Dentistry provides treatment that is comprehensive, based on the best available evidence, and in full consideration of patient's needs and values. This principle integrated it into all aspects of the provision of patient care. This model is best depicted by the ADA's philosophy on Evidence Based Dentistry. All aspects of the provision of patient care at the College integrate evidence-based dentistry. Specific academic information may be found in Standard 2. What follows here is a description of departmental protocols for integrating evidence in the provision of patient care.

All aspects of patient care at the College are based upon the best available clinical and scientific evidence and are applied according to the principles of evidence-based dentistry. Students are introduced to the EBD approach to patient care starting in the D1 year courses (DDS-DADM314; DMD-DAOB311). These principles are reinforced throughout the curriculum in D1 and D2 years, so that upon entry to clinical patient care, the students have a sound foundation in the value and utilization of this approach to decision making. The clinical supervisors reinforce the practice of EBD daily, and work with the students as they search the literature for relevant articles to provide valid and useful evidence that can be implemented in practice. The following is a description of the protocols established at the College for integrating evidence in the provision of patient care.

Diagnosis

Students learn to gather data and assess findings in order to formulate accurate and evidence based diagnoses beginning in the initial pre-patient courses (DDS-DADM315; DMD-DAOB321) where they perform examinations on each other. This process is begun by gathering information regarding the patient via interview and clinical examination, and creating a database in the AxiUm record which
documents findings that are essential for future decisions regarding diagnosis and treatment planning. Research evidence is used as a guide in the process, including the role of the dental explorer as simply an adjunct to visual caries diagnosis due to its low sensitivity, and the utilization of appropriately prescribed imaging to identify and confirm clinical pathology.

When patients are seen in the clinic, the data gathered during all assessment visits is placed in the electronic patient record and verified by an instructor. Appropriate assessment measures such as study casts, electric pulp testing, and selective additional radiographs are completed prior to determination of diagnoses. Students research relationships between findings in the medical history and dental assessments in order to formulate these diagnoses. An example might be a medication which causes gingival swelling, or xerostomia associated caries.

In order for a student to create a treatment plan, diagnoses must be added to the electronic patient record in the treatment planning module before the student is able to proceed with a plan for treatment. These diagnoses are reviewed and confirmed by faculty during the presentation of the initial plan for review.

**Diagnosis of Soft and Hard Tissue Pathology**

The diagnostic process for difficult pathology especially oral cancer which is learned by the students in the oral pathology portion of the curriculum (DDS-PATH421, PATH422; DMD-DBCS321, DBCS322, DBCS323, DBCS324, and DBCS325) is based on recognizing the type of disease process going on, through the DAMIEN system: developmental, allergic/immune, metabolic, infectious, environmental/traumatic, or neoplastic and fitting that together with the probable tissue of origin, and from there determining a differential diagnosis and working diagnosis. At that point, the clinician may wish to refer for or perform a biopsy. Associate Clinical Professor, Dr. Sarah Gordon, will have a published article detailing the DAMIEN method in a textbook chapter (Gordon SC, Fitzpatrick SG. Benign neoplasms of the head and neck, In: Head & Neck Cancer: Current Perspectives, Advances, and Challenges. James Radosevich ed. New York:Springer Scientific. in press 2012). It is derived from an approach originally proposed by Wood and Goaz in their textbook Differential Diagnosis of Oral and Maxillofacial Lesions.

When the students are learning about oral cancer screening, detection, and diagnosis, including adjunct technologies (toluidine blue, autofluorescence, tissue reflectance, brush test) the recommendations of the ADA Scientific Affairs Committee are followed.

**Oral Medicine and Diagnostic Sciences (OMDS)**

OMDS is involved in patient care disciplines that include Urgent Care, Oral Medicine/Pathology and Radiology. Clinical rotations in each of these areas provide active learning and healthcare delivery.

**Oral Medicine**

Students rotate through the Oral Medicine Clinic and provide care to patients with complex mucosal diseases. An Oral Medicine Patient Workup Sheet is provided to the students in order to guide them through the process. This clinical exercise consists in a structured procurement of medical history and a physical examination of the head and neck. This exercise and its guiding work-up sheet are based on the textbook “Essentials of Oral Medicine” (Silverman, Eversole, Truelove, BC Decker). This approach is evidence-based and relies on a well-established and structured examination and medical history taking process described in the above textbook.
Chair-side conferences between the faculty and the students are conducted with every patient. The clinical faculty applies evidence-based recommendations to help students formulate differential diagnosis, treatment plans, and prognosis. The students are strongly encouraged to consult with textbooks which are made available for them in the Oral Medicine Clinic. The faculty routinely references these textbooks as well as peer-reviewed publications in order to rationalize their assessments and recommendations. The students have access and are encouraged to utilize online tools to research peer-reviewed publications (i.e. pubmed/medline) in order to substantiate their clinical assessments. Conferences and consultations among the clinical faculty of the Oral Medicine Clinic occur frequently and as needed in order in-part to insure the evidence-based nature of the supervision and instruction provided.

**Urgent Care**

Urgent Care rotation students participate in the daily delivery of urgent care therapy, beginning with appropriate assessments and diagnoses, based on current evidence. Urgent care assessment includes patient history, clinical examination, appropriate radiology, necessary consultations, diagnosis in conjunction with faculty, and treatment planning and patient management follows. All aspects of patient care are delivered with evidence based support, often utilized in the clinic setting by searching relevant literature, guided and encouraged by faculty. Treatment management may include same day restorative, surgical, endodontic, or periodontal therapy. Identification of patients with considerations due to complex medical and/or dental therapy with appropriate referrals to specialty clinics and GPR programs is demonstrated. Clinical proficiency is demonstrated through case-presentation with every patient to reflect proper documentation relative to findings and demonstrate the knowledge to regarding evidenced-based treatment reflecting the patient’s current medical status and treatment considerations based on College guidelines. Clinical faculty aid in development of a differential diagnosis and synthesize findings to recommend ideal and alternative treatment plans reflecting critical thinking to recommend evidence-based patient management plans. Students are assessed daily for case presentations to include supporting self-evaluation. Competency in the urgent care process is assessed by way of a yearly performance examination.

**Radiology**

The need, acquisition, interpretation and integration of diagnostic imaging are governed by the Diagnostic Use of Ionizing Radiation: Patient Selection and Limiting Radiation Exposure and the ADA/FDA Guidelines. These documents are available for students and faculty on College intranet. Additionally, the intranet site houses direct links to the American Academy of Oral and Maxillofacial Radiology as well as positional statements from specialty associations related to evidenced-based imaging protocols and decision-making algorithms. The site acts as an evidenced-based educational platform that both faculty and students can access chairside to implement/incorporate updated reference material into patient specific situations.

Monthly Clinic Department Heads/Program Directors meetings, sponsored by the Office of the Associate Dean of Clinical Affairs, are used to disseminate updates to the College policies as well as discuss evidence-based, literature driven clinical issues which are then incorporated chairside in order to assure awareness and compliance. Bimonthly meetings of the Department of Oral Medicine and Diagnostic Sciences provides a forum for assuring appropriate clinical advances in diagnostic imaging are brought to the attention of the faculty who provide/supervise clinical care on a daily basis. The director of radiology is a full-time faculty member who is board-certified and available by pager during clinic hours for faculty and students to access when specific questions regarding state-of-the art digital radiology may prove beneficial to the patient and to infuse current evidence-based literature into the diagnostic process. Additionally, the journals, textbooks and online resources of the radiology director are available to all students and faculty through scheduled in-office consultations.
Treatment Planning
The pre-patient care Diagnosis and Treatment Planning course presents the concepts and principles required for diagnosis of oral and systemic conditions as a basis for formulating a comprehensive dental treatment plan.

The goals of the course are to:

1. Provide the foundational knowledge to allow students to formulate comprehensive and properly sequenced treatment plans that will fulfill her/his moral, legal, and ethical obligations to the patient.
2. Describe the rationale for, and the importance of, diagnosis and treatment planning as a prerequisite for providing appropriate patient care.
3. Include all clinical disciplines involved in adult patient care at UIC College of Dentistry in the presentation of this course.
4. Develop optimal and alternative treatment plans utilizing the concepts of evidence-based decision making to formulate treatment strategies using the best available research evidence.

Expected Outcomes for the Diagnosis and Treatment Planning course:
The student must display an understanding of the basic knowledge and skills related to diagnosis and treatment planning for clinical patients. The student must demonstrate an acceptable progression toward the development of competency, which is the level of knowledge, skills, and values required of the graduating dentist to practice independent, unsupervised dental practice. The following are the expected outcomes for this course:

1. Describe the rationale for, and the importance of, definitive treatment planning.
2. Review of the medical history to identify systemic disease(s) or other medical conditions that may affect delivery of care, identification of medications, dental history, and addressing the patient’s chief complaint (patient-centered care) is to be emphasized.
3. Consult with other health professionals when necessary, including the patient’s physician.
4. Complete the documentation for diagnostic data collection and treatment plan development.
5. Assess, organize and assimilate diagnostic information, significant findings, and patient information to determine a patient’s oral problems/conditions requiring dental treatment and the etiology of these problems, thereby formulating an accurate diagnosis.
6. Correlate and integrate concepts learned in periodontic, endodontic, orthodontic, oral surgery, restorative, and other pre-clinical courses in preparing a properly organized and sequenced treatment plan.
7. Students are expected to analyze diagnostic information, determine etiological and risk factors, and provide diagnosis(es) and prognosis.
8. Develop appropriate rationales for treatment procedures included in treatment plans.
9. Develop an acceptable, properly sequenced comprehensive treatment plan that will eliminate or at least control the identified etiological factors. List rationales and prognoses.
10. Develop alternative treatment options with rationales and prognoses.
11. Be able to present the diagnosis, recommended treatment plan, alternative treatment options, rationales for therapy, prognosis, benefits/risks of treatment, associated fees, and schedule of treatment to the patient.
12. Recognize that the patient is a partner in treatment planning; this is to be considered during all phases of treatment planning.

13. Understand the medico-legal implications regarding treatment planning.

14. Utilize the AxiUm dental information system in simulated clinical patient cases to familiarize students with the informational system currently in use in the dental clinics.

An assignment in the Diagnosis and Treatment Planning Course includes the concepts of Evidence Based Dentistry in diagnosis and treatment planning simulated patient cases. Students work in small groups for this Pass/Fail Assignment. Assignment Description:

1. Students review the diagnostic information and develop problem lists and then optimal as well as alternative treatment plans utilizing the best evidence to determine the diagnosis and etiology of the patient's dental and medical conditions. The use of EBD strategies are also used by students to assess and select among alternative treatment modalities, dental materials, etc. the best choices to be included in the patient's treatment plans.

2. In the wrap-up/ discussion (large group sessions) that follow the completion of each simulated patient case, (two sessions in the clinic followed by a large group wrap-up session), students are asked to put forth their ideas as to how they would manage the various aspects of the case, again referring to EBD to support their ideas and recommendations.

Restorative Treatment
Department faculty have developed and systematically review treatment philosophies, which are based on evidence. These philosophies are available on the College's intranet, and are shared with faculty periodically. Additionally, instrumentation, techniques, and restorative materials are researched at the Dental Materials Advisory Committee, which meets monthly as described above. Information is also distributed at various faculty meetings (e.g. Implant Committee Meeting, Managing Partners Meeting, etc.)

Caries Control
The Department of Restorative Dentistry created a philosophy document to provide guidelines for restorative topics at UIC College of Dentistry. This philosophy document was written using the best available evidence and is intended to work as a guideline to all preclinical and clinical faculty as well as students during pre-patient care and patient care activities. The document is disseminated in many different ways to achieve consistency with procedures taught in pre-patient care and patient care:

- It must be read and signed by all faculty teaching in pre-patient care and patient care to assure standardization of all restorative procedures.
- It is posted on the College's intranet to be accessed by all departments.
- It is discussed during faculty meetings as well as interactive didactic sessions with students. The document is also posted on Blackboard as study material and is used as a teaching aid for DAOB courses.
Portfolio Assignment
Caries Management principles utilizing Evidence Based Dentistry include a Portfolio Assignment (DDS-DADM319; DMD-DAOB331). The goal of this exercise is for the student to be able to demonstrate their ability to answer the following questions:

- How do you assess caries risk for your patient?
- How do we customize a caries management plan for your high risk patient?
- Select one high caries risk patients from your patient population. Please concentrate on caries risk, EPR and Prevention Plan portions of the patient’s history.
- Develop a Caries Management Plan and show rationale through evidence-based dentistry.
- Factors that influence plan
- Risk factors modification
- Chemotherapeutics
- Remineralization therapy
- Discuss and critique two articles. Please discuss the role caries risk classification plays in Tx. (Follow up times and caries risk re-assessment). Properly reference two articles applicable to your patient: (justification for recommended therapy) and include:
  - Study design and level of evidence
  - Discuss articles relevancy
  - Recall interval

Restorative Material and Dental Product Selection
The College ensures that patient care is evidence-based with the best patient values in the utilization of restorative materials and dental product selection by having an establish and active Dental Materials Advisory Committee.

Dental Materials Advisory Committee
The Dental Material Advisory committee was appointed by Dr. Stephen Campbell, Head of the Department of Restorative Dentistry. The mission of the committee is to propose guidelines to standardize restorative dental materials and instruments that are used in pre-doctoral pre-patient care courses and in clinics. The advisory committee members are pre-patient care and clinical course directors, clinic managing partners and invited representatives from administration. This committee is led by a resident expert in dental materials. Other disciplines are ad-hoc members of the committee.

The committee has identified the following deficiencies related to restorative dental materials in the College of Dentistry:

- The existing list of accepted dental materials is outdated. Although the intent is that this list would specify the specific materials to be used in College clinics, many of the items on the current list are no longer available or have been replaced by improved products.
- There is a disconnect between dental materials used in pre-patient care instruction and in clinic. This results in confusion for students as they transition to patient care clinics.
• Instructors and students are not aware of recommended dental materials options or instructions for proper use of recommended materials.

• Improper storage of specific materials, such as resin cements, may affect their performance and shelf life.

The following are recommendations made by the committee:

• An updated dental material list that incorporates all restorative materials that are to be used in pre-patient care instruction and in clinics will be submitted for review and approval by the Head of the Department of Restorative Dentistry and the Associate Dean for Clinical Affairs.

• There will be an annual review of the approved materials list by the advisory committee.

• All individuals involved in ordering materials will be instructed to limit orders to the specific materials listed. There should NOT be substitutions with generic alternatives unless approved by the advisory committee.

• A refrigerator should be purchased for storage of materials that are sensitive to temperature extremes or that require prolonged storage at controlled temperature.

• Simple instructions or reminders should be placed in bins to allow students and faculty to review materials and their proper use. Indications and contraindications for use of various materials should also be listed on the issue bins.

• Instructional seminars should be planned for both faculty and students periodically. During these sessions updates for the materials listing should be highlighted and important technique issues should be reviewed.

• The attached form will be implemented to facilitate requests for addition of materials or instruments that are not currently available. Issues that develop in practice related to the currently accepted materials should be reported to the advisory committee using the same form. The form allows a mechanism for feedback to the clinical or pre-patient care faculty regarding their concerns.

Criteria for selection of dental materials:
The committee considered current available research evidence, handling characteristics, infection control considerations such as availability of unit dose packaging, and cost when making decisions for this revision. For some assessments materials were evaluated in student clinics or by faculty in their practices.

Selection of an accepted material for use in pulp capping procedures is used as an example of the process that the committee employs. First a search was conducted to review the current literature for recommendations. Our members expressed some concern regarding the resins that are included in current light activated hard setting materials and after a careful review of the literature and in this case even communicating with experts in this area via e-mail we considered this to be enough of a concern to recommend against these materials. Both literature and practice suggest that a newer material MTA should be considered to replace traditional calcium hydroxide formulations. However, at this time the cost of the MTA is significantly greater than calcium hydroxide, the setting time for the MTA is long, and the student clinical experience with this material is very limited. Due to these concerns traditional calcium hydroxide (Dycal) was selected for the current list. The committee will continue to monitor reports in the literature and will consult with the Department of Endodontics and the Department of Pediatric Dentistry to determine when a shift to MTA would be appropriate.
The Accepted Dental Material List has been updated. Only the specific materials on this list, when approved, are to be used in the pre-doctoral dental clinics and in pre-patient care instructional sessions.

**Endodontic Treatment**
All of the information contained in Endodontic course is based on evidence and updated regularly. Pre-doctoral students also attend a plenary session on Evidence Based Dentistry as it applies to Endodontics. Endodontic faculty are continually updating the material that is presented in the pre-doctoral program to give them the best and latest available evidence. The use of systematic reviews is emphasized during courses whenever possible. Faculty meetings occur regularly, where the latest treatment modalities are discussed. Faculty also attend each other’s plenary sessions to evaluate and discuss the content of that session.

**Treatment of Periodontal Conditions**
Department of Periodontics faculty are continuously updating material for interactive didactic sessions and clinical techniques with best updated available evidence. Monthly departmental meetings allow the faculty to discuss latest information regarding treatment modalities. Students are evaluated on a daily basis for their patient care by their attending faculty member. Faculty and students participate in several didactic sessions involving classic and current and literature session and seminars as part of the curriculum. Faculty also attend meetings and continuing education courses that provide additional opportunity for enhancing their knowledge of available evidence.

**Treatment Outcomes**
Standard 5-4 explains the College’s comprehensive model in regards to the interaction between patients, students and faculty. In this model, the relationship between patients and faculty remains as the constant relationship, while the student-patient is a variable one. As such, faculty is primarily responsible for treatment provided by the student, under their supervision and license. As appropriate, faculty work with students to encourage a search of the literature to provide support for decision making in the determination of treatment outcomes.

Once a treatment plan has been approved in the electronic record and has been accepted by a patient, AxiUm will only allow treatment to occur in the specified hierarchy. That is, treatment in phase III cannot occur until treatment in phases I and II have been completed. At the finish of each phase of treatment, faculty conducts an evaluation to ensure treatment provided has been appropriate, and to detect any treatment deficiencies, before the next phase of treatment is started. This ensures that the actual provision of care follows a treatment plan that is evidence-based.

Under the College’s phased, comprehensive treatment model, faculty evaluates outcomes at various levels and intervals, including at the end of every clinical session ensuring that treatment has been provided with consideration of the best available evidence.

Adjustment reports are also used as a measure to evaluate outcomes of treatment and their satisfactory provision. Three measures are used in regards to this report:

- Failed treatment by procedure – AxiUm report
- Failed treatment by clinic – AxiUm report

**STANDARD 5-2**
A Proud Past
• Appropriate feedback is then given to the Managing Partners, Program Directors, and/or specific Department Heads for subsequent action.

The following are examples of graded evidence-based projects and presentations, all of which are based on active patient cases in the clinics. Students include EBD analysis and provide rationales of treatment and expectations of outcomes for the projects. The presentations are attended by clinical faculty and are described in detail in Standard 2.

**Patient case presentations by students**
Patient case presentations (reporting of findings and facts) must be on cases of which the student has completed during their time at UIC. Case presentations and/or portfolios are required in clinical courses at the College.

**Portfolios**
The focus of the portfolio is assessment, diagnosis, the interaction of systemic and oral health, prevention and future improvement. The portfolio is a written (narrative) analysis, not just a reporting of findings and facts (patient case presentation).

Portfolios that receive high marks demonstrate a careful consideration of the available information, a critique, application and synthesis of this information and a self-reflective component. All references must be fully cited using an acceptable format.

**Supportive Documentation**
- Appendix F-1: Clinic Manual
- Appendix F-7: Oral Medicine Patient Workup Sheet
- Appendix F-8: Policy for the Diagnostic Use of Ionizing Radiation
- Appendix F-9: Dental Materials Advisory Committee Recommendations
- Appendix F-10: Restorative Materials List

Available On Site
- Failed Treatment Report
- Dental Materials Advisory Committee Meeting Information
- Clinical Departments Meeting Minutes
- Restorative Department Treatment Philosophies
- Patient Case Presentation Criteria
- Portfolio Criteria
5-3 The dental school must conduct a formal system of continuous quality improvement for the patient care program that demonstrates evidence of:

a. standards of care that are patient-centered, focused on comprehensive care and written in a format that facilitates assessment with measurable criteria;
b. an ongoing review and analysis of compliance with the defined standards of care;
c. an ongoing review of a representative sample of patients and patient records to assess the appropriateness, necessity and quality of the care provided;
d. mechanisms to determine the cause(s) of treatment deficiencies; and
e. implementation of corrective measures as appropriate.

Conclusion: The UIC College of Dentistry complies with Standard 5-3.

Description

The College charges the Patient Care and Quality Assurance Committee with implementing a formal system of quality assurance. The Associate Dean for Clinical Affairs has the responsibility in this charge and serves as Chair of the Committee and administers quality assurance efforts through the Office of Clinical Affairs. The members of the Quality Assurance Committee represent the various departments of the College with particular emphasis on representation of the clinical faculty. Also included are the Director of Clinical Operations, Director of Clinics, Managing Partners and representatives of the post-graduate training programs.

The purpose of the College's Quality Assurance Program, as noted in the Clinic Manual, is to continually assess quality indicators defined by the College's Standards of Care to assure that deficiencies in patient care are corrected, that corrective measures will be made in the didactic or clinical curriculum as a result of these reviews, and that follow up assessments measure the results of these changes. Through this process, the College also meets indicators a. to e. above. The appropriateness, necessity and quality of care in relation to our Standards of Care are the basis of the audit systems.

1. Describe the school’s quality assurance plan.

The College's Quality Assurance Program operates by measuring quantifiable indicators, which derive from the Standards of Care, at varied periodicity and using different means of collecting and assessing data. An integral feature of the program is assigning levels of responsibilities as appropriate. Under the program, indicators may be measured daily, weekly, monthly, quarterly or yearly. Levels of responsibility include individual faculty, Managing Partners, Clinical Directors, Department Heads and Program Directors, and with the ultimate responsibility being the Associate Dean for Clinical Affairs.

2. Describe the development and implementation of the school's standards of care. Describe how these standards of care are used to review the quality of patient care.
Standards of Care describe the clinically acceptable care for the patient based on the care expected to be rendered by the preponderance of practitioners in a specific geographic area. These standards are reviewed periodically to incorporate emerging philosophies. Changes that have occurred include a transition from departmental documents describing appropriate treatments, by procedure, to universal statements that better reflect the College’s values and philosophies of treatment, that are patient-centered, and which can be applicable to all departments. The College recognizes the importance of Standards of Care (a legal term establishing minimal level of care) as defined above, but continually reviews best available evidence to establish our patient care practices to a higher level (i.e. to approach and/or attain the gold standard).

The Associate Dean for Clinical Affairs has the primary responsibility of reviewing and developing these standards, which are then presented for review to appropriate stakeholders including the College Dean, Academic Dean, Department Heads, Managing Partners, Director of Clinics and other members of Clinical Administration, and students, who provide feedback in content and format.

**Standards of Patient Care**

1. Patients are offered (when applicable) and, if they accept it, provided comprehensive patient care to meet their own oral health needs.
2. Patient Care is provided in a timely manner to ensure treatment progresses appropriately to the patient’s clinical needs.
3. Patients receive high quality care
4. Patients are satisfied with the care they receive
5. Confidentiality of patient records is maintained
6. Federal, state, local and institutional guidelines and policies are followed to insure the safety and rights of our patients

In accordance with these Standards of Care, comprehensive treatment provided at the College adheres to the following diagnosis and treatment planning philosophy:

- Diagnosis precedes treatment planning which precedes treatment
- Treatment plans are phased
- Each Phase requires a re-evaluation
- Treatment Plans expire every 12 months
- Phases are hierarchical

**Diagnosis and Treatment phases are organized as follows:**

Diagnostic Phase (generation of problem list/diagnoses)

- Medical/dental/social/anxiety histories
- Comprehensive examination (D0150)
  - Periodontal full mouth charting
  - Consultations medical/dental
- Radiographs (D0210-0350)
- Casts (D0470) mounted when indicated
• Photographs (D0471)
• Pulp vitality tests (D0460)
• Caries Risk Assessment (D0425)
• RPD survey and design
• Diagnostic waxings

Phase I (disease control/elimination/prevention/stabilization)
• Restorative
  - Direct restorations
  - Core build ups (with or without pins)
  - Interim restorations
• Endodontics
  - Pulp capping
  - Pulpotomy
  - Conventional therapy
  - Retreatment
  - Apexification
• Periodontics
  - OHI
  - Prophylaxis
  - Scaling and root planing with re-evaluation
  - Antimicrobial therapy
  - Minor occlusal adjustment
• Prevention
  - Dietary counseling
  - Tobacco cessation
  - Fluoride
  - PRR/sealants
• Prosthodontics
  - Interim prosthesis (fixed/removable)
  - Tissue conditioning
• Oral Surgery
  - Extractions (essential)
  - Biopsies
• Re-evaluation (D0010)

Phase II (surgical/orthodontic)
• Endodontics
  - Apical
  - Root amputation
  - Hemi-sections
  - Hemi-section of root
  - Implant (planned for PG endodontic residents)
• Periodontics
  - Flap for access
  - Mucogingival
  - Crown lengthening
  - Cosmetic
  - Implant

• Prosthodontics
  - Implant

• Oral Surgery
  - Elective procedures (e.g. 3rd molars, mucoceles)
  - Preprosthetic
  - Orthognathic
  - Implant

• Orthodontics
  - Comprehensive therapy
  - Forced eruption
  - Minor tooth movement

• Re-evaluation (D0020)

Phase III (reconstructive)
• Restorative
  - Esthetic restorations (e.g. Diastema closures, facial veneers)
  - Indirect restorations
  - Cast and prefab posts
  - Vital bleaching

• Endodontics
  - Non-vital bleaching

• Prosthodontics
  - Fixed partial dentures
  - Removable (RPD and FD)
  - Relines
  - Implant restoration

• Re-evaluation (D0030)

Phase IV (maintenance)
• Periodic Oral Examination
  - Restorative
  - Endodontic
  - Periodontic
  - Orthodontic

• Occlusal appliances
Quality Assurance Program

**Standard of Care 1**: Patients are offered (when applicable) and if they accept it, provided comprehensive patient care to meet their oral health needs.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>When Assessed</th>
<th>Who Collects Data</th>
<th>Who Assesses Data</th>
<th>Who Implements Change</th>
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<tbody>
<tr>
<td>Record Audit</td>
<td>Weekly/Monthly</td>
<td>GP Faculty</td>
<td>ADCA</td>
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<td>Phase 3 Exam Report</td>
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<td>ADCA, MP</td>
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<tr>
<td>Patient Status Report</td>
<td>Monthly</td>
<td>ADCA/AxiUm</td>
<td>MP</td>
<td>ADCA, MP</td>
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<td>After Hours Report</td>
<td>As indicated</td>
<td>Residents On-Call</td>
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<tr>
<td>Recall Patient Report</td>
<td>Monthly</td>
<td>ADCA/AxiUm</td>
<td>MP</td>
<td>ADCA, MP</td>
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</tbody>
</table>

ADCA = Associate Dean for Clinical Affairs
GP = Group Practice
MP = Managing Partner

Comprehensive Care Patients are to:

a. Receive information concerning the school, its policies and procedures.

b. Receive a comprehensive dental examination (including necessary supplemental tests and images) and treatment plan to address their oral health needs.

c. Consent to the planned treatment.

d. Receive the planned treatment or agreed upon modification.

e. Receive maintenance of their oral health during active treatment.

f. Have access to emergency care and after-hours emergency care.

g. Receive an examination at the completion of each treatment phase of comprehensive care.

h. Be placed on recall to maintain their oral health.

Emergency Care Only Patients are to:

a. Be seen in a timely manner for management of their emergency concern.

b. Receive information concerning the school and its policies and procedures for emergency patients.

c. Receive an examination to address their emergency concern.

d. Receive treatment and/or referral to manage their emergency concern.

e. Have access to our after-hours emergency clinic once they have been seen in our emergency clinic (having become an emergency patient of record).
Limited Care Patients are to:

a. Receive information concerning the school and its policies and procedures for limited care.

b. Receive a problem-focused dental examination.

c. Consent to limited care with the limitations clearly documented.

d. Have access to emergency care and after-hours emergency care.

Standard of Care 2: Patient care is provided in a timely manner to ensure treatment progresses appropriately to the patient’s clinical needs.

<table>
<thead>
<tr>
<th>Standard of Care 2</th>
<th>Measurement</th>
<th>When Assessed</th>
<th>Who Collects Data</th>
<th>Who Assesses Data</th>
<th>Who Implements Change</th>
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<td>ADCA/AxiUm</td>
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Patients seeking comprehensive care will receive notification of their disposition, i.e. whether or not they meet guidelines for care in the undergraduate or post-graduate clinics, and if accepted, will be assigned to a student or a patient-waiting bank within two months of the screening appointment. Patients will be informed during screening of the approximate date of assignment to a dental student.

a. Patients will be scheduled for a comprehensive clinical examination within 60 days of their assignment to a student.

b. Student developed treatment plans will be approved by a faculty member and the patient after completion of the comprehensive examination.

c. Patients will be seen in a timely manner as indicated by their treatment needs. During the active phase of treatment, the patient will have a scheduled appointment, depending on the academic calendar, at least once every 60 days.

d. Re-examination and treatment plan update will occur every twelve months.

e. Each patient will have an appropriate recall/maintenance schedule established to maintain optimal oral health.
Standard of Care 3: Patients receive high quality care.

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<th>Measurement</th>
<th>When Assessed</th>
<th>Who Collects Data</th>
<th>Who Assesses Data</th>
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a. The College comprehensive care model requires that faculty assess and verify each step in the process of providing patient care. This includes initial assessments, consultation requests and review, determination of diagnoses and prognoses, development and finalization of treatment plans, implementation of treatment and reevaluation. Treatment plans are phased and sequenced, assuring that each phase of treatment is evaluated for quality and outcome before the next phase can be initiated. At the completion of the active treatment phase for comprehensive care patients, students and faculty will verify that all necessary dental treatment has been satisfactorily completed and that active disease has been eliminated/controlled and definitive functional restorative treatment completed before placing the patient on an appropriate recall/maintenance schedule. (Additional criteria and guidelines for evaluating the quality of procedures in each area of dentistry are established and disseminated by the individual clinical departments.) Approval by the faculty via the patient electronic record documents that every aspect of care is evaluated and verified for quality. Failure to achieve faculty verification results in an unapproved report. This report is created, reviewed, and addressed on a weekly basis by the managing partners, and also monthly by the associate dean of clinical affairs.

b. At all stages in the active and recall phases of treatment, independent reviews of quality are built into the system. This includes:
   - Radiographic diagnostic reviews
   - Consultation/re-evaluation assessments
- Treatment planning assessments
- Treatment plan presentations
- Patient record audits
- Dental laboratory quality assurance reports
- Recall patients not seen reports

c. After-hours emergency visits by active patients of record are reviewed and analyzed for any trends or recurring problems by the Office for Clinical Affairs.

d. Patient grievances and concerns reported to the Office for Clinical Affairs are dealt with and reported to the Associate Dean for Clinical Affairs and/or the Director of Clinics to be analyzed for trends or recurring problems.

**Standard of Care 4:** Patients are satisfied with the care they receive.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>When Assessed</th>
<th>Who Collects Data</th>
<th>Who Assesses Data</th>
<th>Who Implements Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard of Care 4</td>
<td>Patient Satisfaction Surveys</td>
<td>Annually</td>
<td>Director of Clinical Operations</td>
<td>Director of Clinics, ADCA</td>
</tr>
<tr>
<td></td>
<td>Patient Grievances</td>
<td>Annually</td>
<td>Director of Clinics</td>
<td>ADCA</td>
</tr>
</tbody>
</table>

ADCA = Associate Dean for Clinical Affairs

a. Surveys of patient satisfaction are developed, distributed, analyzed and reported to the Office for Clinical Affairs at least once per year.

b. A summary of patient grievances received by the Office for Clinical Affairs and their resolution is prepared annually and presented to communities of interest, including Clinical Faculty, Managing Partners and Students.
**Standard of Care 5:** Confidentiality of patient records is maintained.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>When Assessed</th>
<th>Who Collects Data</th>
<th>Who Assesses Data</th>
<th>Who Implements Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swipe card access into Records Room</td>
<td>As Appropriate</td>
<td>Director of Clinical Operations</td>
<td>ADCA</td>
<td>ADCA</td>
</tr>
<tr>
<td>Defined access by user level</td>
<td>As Appropriate</td>
<td>Director of Clinics, Director of Clinical Operations</td>
<td>ADCA</td>
<td>ADCA</td>
</tr>
<tr>
<td>Monitor Displays Have Auto Shut-Off</td>
<td>Daily</td>
<td>Faculty</td>
<td>Faculty</td>
<td>ADCA</td>
</tr>
<tr>
<td>Students Only Have Access To Their Own Patients</td>
<td>Daily</td>
<td>MP</td>
<td>MP, Program Directors</td>
<td>ADCA</td>
</tr>
</tbody>
</table>

*ADCA = Associate Dean for Clinical Affairs*

*MP = Managing Partner*

---

a. Paper records are maintained in a secure area that is only available to authorized faculty, staff and students.

b. Electronic records and extent of user access within a record are protected by appropriate user levels, password security, and login PIN numbers to prevent unauthorized use.

c. Monitor displays of patient records have an auto shut-off to minimize unauthorized viewing of information.

d. Access to electronic patient records by students is limited by individual student-patient assignments as determined by Managing Partners.
Standard of Care 6: Federal, state, local and institutional guidelines and policies are followed to insure the safety and rights of our patients.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>When Assessed</th>
<th>Who Collects Data</th>
<th>Who Assesses Data</th>
<th>Who Implements Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Satisfaction Surveys</td>
<td>Annually</td>
<td>Director of Clinical Operations</td>
<td>Director of Clinics, ADCA</td>
<td>Director of Clinics</td>
</tr>
<tr>
<td>CPR Data Base</td>
<td>Bi-Annually</td>
<td>Director of Clinics</td>
<td>Director of Clinics, ADCA</td>
<td>Director of Clinics</td>
</tr>
<tr>
<td>OSHA Data Base</td>
<td>Annually</td>
<td>Director of Clinics</td>
<td>Director of Clinics, ADCA</td>
<td>Director of Clinics</td>
</tr>
<tr>
<td>HIPAA Data Base</td>
<td>Annually</td>
<td>Director of Clinics</td>
<td>Director of Clinics, ADCA</td>
<td>Director of Clinics</td>
</tr>
<tr>
<td>AED’s (Public), Oxygen, and “back-up” Crash Carts’ Inspection Records</td>
<td>Monthly</td>
<td>Director of Clinical Operations</td>
<td>Director of Clinics, ADCA</td>
<td>Director of Clinics</td>
</tr>
<tr>
<td>Crash Cart (Emergency Team Records)</td>
<td>Weekly</td>
<td>Nurse Manager OMFS</td>
<td>Nurse Manager OMFS</td>
<td>Department Head OMFS</td>
</tr>
</tbody>
</table>

a. All patients will be treated according to the posted Patient Rights and Responsibilities.
b. Infection control, biohazard, radiation safety, and waste management policies will be enforced.
c. All providers of care are prepared to recognize medical emergencies in the clinical setting and to activate emergency procedures.
d. All clinical faculty, students, and appropriate staff are certified in basic life support.
e. Appropriate, well-stocked current medical equipment and devices, drug kits, and first aid kits are available.
f. Patient records conform to legal and institutional standards.

3. Describe the school’s patient records review process. How often are records audited? Who performs the audits? Provide examples of deficiencies the school has found during these audits. What corrective actions has the school taken?

Record Audits
Weekly record audits are performed by Group Faculty. Information is summarized by the Associate Dean for Clinical Affairs and given to the appropriate Managing Partner.

The process begins with the Registration and Records area supervisor, who generates a list of random charts by using old chart pull lists, to ensure that charts being audited correspond to patients with an active status, and who have been assigned to a clinic for treatment. Charts must also be verified...
that they have not been audited before, by checking the chart tracking option in AxiUm. The audit charts are then distributed to the non-home clinic for review. For example, a DaVinci chart would either go to Monet or Rembrandt. Every week, one to three charts are audited per clinic. Variance in these numbers occur during break/reduced service weeks, but the numbers are then increased in following weeks to maintain an overall consistent number of audits.

When charts are delivered to each clinic for auditing, each arrives with a copy of the Record Audit form and protocol. This form guides clinical faculty through sixteen items found in either the electronic or paper components of the chart.

**Definition of the Health Record Content and Format**

During the 2001-2002 academic years, the College made the transition to an electronic record.

At the College a patient’s record consists of an electronic and paper (hardcopy) component. Starting in May 2008, some forms as indicated below, are electronically entered into AxiUm.

**Paper (hardcopy) Component**

- Informed consent form (started electronic form after May 2008)
- Notice of Privacy Practice (started electronic form after May 2008)
- Medical consults (if applicable)
- Treatment plan (if applicable – comp. care pt.)
- Radiographs (either hardcopy in paper component or digital in AxiUm)
- Specific informed consent (if applicable; either hardcopy in paper component or digital in AxiUm)
- OMFS surgical notes (if applicable; either hardcopy in paper component or digital in AxiUm)
- Vital signs and EKG strips (if applicable)

**Electronic Component**

- Registration form (demographics)
- Health History
- Medical Alerts (if applicable)
- Proper precautions documented for medically compromised patient
- Diagnostic data
- Appropriate and quality diagnostic radiographs documented
- Dental consults documented
- Phased treatment plan approved by faculty
- Treatment plan follows data obtained
- Treatment follows sequence of treatment plan
- Treatment notes entered by student and approved by faculty
- Patient is maintained on a timely basis during active treatment (treatment notes)
- Patient is placed on recall on a timely basis to meet individual patient needs (if applicable)
- Appointments
- Transactions (billing, payments, insurance)
- Laboratory prescriptions
- Radiographic exposures (#)
- Patient Record Audit (AxiUm and Paper Chart): by Group faculty

Examples of Deficiencies

Chart Audit Item #1: Registration form complete. (Check Personal Tab and Codes Tab).

<table>
<thead>
<tr>
<th>Outcome: Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 (calendar year)</td>
</tr>
<tr>
<td>7 (31 audits): 22.6%</td>
</tr>
</tbody>
</table>

Chart Audit Item #7: Diagnostic data is present and approved by faculty. (Odontogram, perio chart [unapproved found at the top of perio chart], and any other appropriate specialty data. Must check ALL EPR’s.)

<table>
<thead>
<tr>
<th>Outcome: Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 (calendar year)</td>
</tr>
<tr>
<td>3 (31 audits): 9.7%</td>
</tr>
</tbody>
</table>

Chart Audit Item #15: Patient is placed on recall on a timely basis to meet individual patient needs. (Check daily treatment notes to see if patient is in active treatment or on recall. If on recall, check recall button - located in lower right corner of yellow card.)

<table>
<thead>
<tr>
<th>Outcome: Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 (calendar year)</td>
</tr>
<tr>
<td>1 (31 audits): 3.2%</td>
</tr>
</tbody>
</table>

In addition to routine chart audits, a review of all patient records of graduating students is conducted before the student is signed out of the clinics by the Managing Partner. This review will insure that all record entries are approved. It will also determine the status of the treatment plan and remaining treatments, the patient’s fiscal ability to continue treatment and the patient’s willingness to continue treatment. The review of each graduating student’s patient records is a prerequisite for graduation.

Corrective Actions

Outcomes from chart audits are shared with faculty. On at least a monthly basis, the measures and outcomes are discussed at Managing Partner meetings and front desk/registration staff meetings as...
applicable. Strategies are discussed and formed to help faculty with the reinforcement of excellent record keeping to student-dentists.

4. Describe how the school determines patient treatment deficiencies. What are the outcomes of the school’s reviews? How are these deficiencies corrected?

**Phased Patient Re-evaluation Examination**

The purpose of the examination is to evaluate the quality of care received by our patients and to assess the competency of students in evaluating completion of current treatment needs. The examination is a quality assurance assessment by the student conducted at the patient’s last appointment for the current phase before proceeding with the next phase. A parallel faculty assessment will be performed at the same appointment. This report is produced by the Associate Dean for Clinical Affairs on a monthly basis and is distributed to the Group Practice Managing Partner. The reports are discussed at Managing Partner meetings.

**Overview**

The Standards of Care form the basis of all quality assurance efforts. The Quality Assurance program consists of three components: review of patients or phased examinations, record audits, and review of various reports.

**Phased Examinations**

As each patient’s current comprehensive treatment plan is completed, the student conducts an assessment of treatment outcomes which is reviewed and approved by faculty in AxiUm (phased 1, 2, 3 and examination). Faculty confirm the student’s findings. Treatment deficiencies are linked to the College’s Standards of Care. Reports are generated monthly by the Office of the Associate Dean for Clinical Affairs for cataloging and tracking and also to the appropriate Managing Partner, or Graduate Program Director, and/or the Department Head. Identified deficiencies are addressed by the student or by referral to another provider. The Managing Partner (undergraduate) and/or faculty monitors follow-up care for the patient and also links deficiencies to a relevant department or an individual faculty member and works with the department and/or individual to identify changes in the clinical and/or didactic program.

**Record Review (audit)**

In addition to examination of the patient and patient care outcomes at the phase 3 examination, the record is also reviewed (audited). Criteria for record audits are tied to the Standards of Care. Periodic (weekly) record audits are conducted by the group practice faculty. Findings are directed to the Associate Dean for Clinical Affairs who, in turn, directs the information to the appropriate individual or administrative body for their information and action. Records are reviewed on an ongoing basis.

**Review of Reports**

The final component of the quality assurance program is an ongoing review of reports generated through various offices. These include: Incident Reports, Patient Satisfaction Surveys, After-Hours Dental Emergencies Report, Fixed and Removable Prosthodontic QA Report, and Patient Status Reports. These reports are submitted to the Associate Dean for Clinical Affairs who monitors and addresses identified concerns on an ongoing basis and work with the Department Heads, Program Directors and Managing Partners to further enhance patient care and treatment outcomes by suggesting modification of the plan, new reports, or other activities as deemed necessary to fulfill their charge.
Patient treatment deficiencies are determined by the three review mechanisms: phase III examination, record audits, and review of various reports. All of these sources of data are channeled to the Associate Dean for Clinical Affairs, who takes a variety of actions to correct deficiencies. These have included reminders to students and faculty of existing policy, meetings with Departments to review curricular issues, meeting with Department Heads and Managing Partners, meetings with faculty, faculty in-service, and disciplinary action for students. In the final analysis, where patient treatment deficiencies are identified, the corrective action is taken so that the patient receives quality care and the Associate Dean for Clinical Affairs monitors to make sure this happens.

The most difficult problem has not been discovering where our system/procedures could be improved, but in effecting changes or corrective measures. Dissemination of information and feedback are intended to motivate faculty and students to want to do better. Knowing that someone is monitoring and, better yet, being involved in the record review (audit) process through feedback by the Managing Partners helps the students to do a better job of providing care and keeping records. The College has devoted resources to developing a quality assurance program, and the existing program serves well as a teaching program and a mechanism for quality assurance. The College’s quality assurance program includes all components of this standard: standards of care, review of patients and records to identify causes of treatment deficiencies, patient review policies, procedures, outcomes, and corrective measures.

The program is predicated on the belief that quality assurance is a real issue affecting the profession and health care industry as a whole, in addition to ourselves. We accept the responsibility to develop and continually refine a system which will serve to enhance the quality of services delivered to our patients, develop our students’ perceptions of quality dental care, and provide a model for practitioners to emulate. The College’s Standards of Care enhance our ability to tie specific measurements to each Standard. Quality Assurance has evolved into what may better be described as Continuous Quality Improvement.

**Timeliness of Patient Care**

1. **Assignment to Student Report (AxiUm report – NOAPPT)**

Patients will be scheduled for a comprehensive clinical examination within sixty (60) days of their assignment to a student.

Measure and outcome:

On site reports show that there is a positive trend with the timeliness of patient appointments once assigned to a student-dentist. The number of overdue patients scheduled for an initial comprehensive clinical examination has been declining.


The Office of Clinical Affairs generates a report twice monthly (15th-18th and 31st -3rd) on the timely treatment of patients by their student. This report is given to the Managing Partners. This report describes timely care as not allowing more than sixty (60) days to lapse between a patient’s appointments. The Managing Partners inform the student and corrective action is taken, if indicated, to see the patient. This process is reflected on the following report.
In addition, Managing Partners and/or their designees periodically meet individually with students to review Patient Lists, every term. One of the purposes of this meeting is to identify, prevent and reduce overdue patient conditions. Individual records of performance are kept by each Managing Partner.

Measure and outcome:
This report identifies to student-dentists the need and importance of the timeliness of care. It also allows the faculty and student-dentist to identify reasons why a patient’s treatment may be delayed, i.e. patient hospital stays, family emergency issues, etc.

The Office of Clinical Affairs generates a report twice monthly (15th-18th and 31st -3rd) on the timely treatment of patients by their student. This report is given to the Managing Partners. This report describes timely care as not allowing more than sixty (60) days to lapse between a patient’s appointments. The Managing Partners inform the student and corrective action is taken, if indicated, to see the patient. This process is reflected on the following report.

Measure and outcome:
On site reports show that there is a positive trend with overdue recall patients. The number of overdue recall patients has been declining. Through these reports faculty are able to emphasize to student-dentists the importance of patient recall and the significance to a dental practice.

4 Adjustment Report (failed treatment)
The adjustment report is a quality assurance measure that provides detailed documentation on repeating a procedure previously completed at the College and subsequently deemed unsatisfactory. Appropriate feedback is then given to the Managing Partners, Program Directors, and/or specific Department Heads for subsequent action.

Measure and outcome:
The following measures are used in regards to this issue.
Failed treatment by procedure – AxiUm report
Failed treatment by clinic – AxiUm report

Possible trends are looked for by examining collected and tabulated information.

5. After-Hours Dental Emergencies
This report is a quality assurance measure that provides detailed documentation on patients of record emergencies outside normal clinic hours. Assigned Endodontic residents and/or faculty receive emergency after hour’s calls and document discussions/treatment in the patient’s chart. The incident reports are filed as needed with the Office of the Associate Dean for Clinical Affairs.

Corrective Measures:
Outcomes are discussed with faculty. On at least a monthly basis, the measures and outcomes are discussed at Managing Partner meetings.
Laboratory Quality Assurance

Fixed Prosthodontics Quality Assurance Laboratory Log
Quarterly reports of the fixed prosthodontics quality assurance laboratory log are provided for the Associate Dean for Clinical Affairs. This log is generated for each fixed case by the manager of the laboratory. Examples of categories include but are not limited to evaluation of dies, mounting, preparation(s), and incisal guide tables are evaluated. Trends of rejections and individual matters of concern are given to appropriate Managing Partners, Department Heads, Directors, and Students.

2012 calendar year (four quarters)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL # of cases</td>
<td>2629</td>
</tr>
<tr>
<td>Cases returned for review</td>
<td>144</td>
</tr>
<tr>
<td>% of cases returned for review</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Measures and outcomes:

<table>
<thead>
<tr>
<th>Specific Detail</th>
<th>Number of Specific Detail</th>
<th>% of Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cast not surveyed or tripoded (as needed)</td>
<td>30</td>
<td>14.3</td>
</tr>
<tr>
<td>Partial design not included (as needed)</td>
<td>27</td>
<td>12.9</td>
</tr>
<tr>
<td>Working Casts: improperly articulated</td>
<td>22</td>
<td>10.5</td>
</tr>
<tr>
<td>Working Casts: Need to be articulated</td>
<td>18</td>
<td>08.6</td>
</tr>
</tbody>
</table>

2013 - 1st and 2nd quarters (January to July 2013)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL # of cases</td>
<td>1191</td>
</tr>
<tr>
<td>Cases returned for review</td>
<td>79</td>
</tr>
<tr>
<td>% of cases returned for review</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Measures and outcomes:

<table>
<thead>
<tr>
<th>Specific Detail</th>
<th>Number of Specific Detail</th>
<th>% of Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cast not surveyed or tripoded (as needed)</td>
<td>18</td>
<td>12.5</td>
</tr>
<tr>
<td>Partial design not included (as needed)</td>
<td>15</td>
<td>10.4</td>
</tr>
<tr>
<td>Working Casts: improperly articulated</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Working Casts: Need to be articulated</td>
<td>15</td>
<td>10.4</td>
</tr>
</tbody>
</table>
Corrective Measures:
The outcomes are shared with faculty. The outcomes are also discussed with faculty at in-services. The faculty in-services are presented by QA Prosthodontists.

The goal of the Fixed QA Program is to have clinical faculty calibrated and able to supervise dental students in presenting quality cases to the production labs. The QA process is an important one and must be performed to high standards. Feedback to supervising case faculty is a paramount aspect to the QA process. The College must also utilize clinical faculty in the best interests of our patients and students whenever possible.

The QA process should accomplish the following:

1. Provide constant feedback to supervising case faculty.
2. Provide information that will lead to improvement in our patient care.

A quarterly Fixed Prosthodontics Laboratory Quality Assurance Report is sent to each faculty member that has supervised fixed prosthodontic cases with student-dentists. An individual evaluation compared to the average of all faculty is provided along with a table of specific concerns as illustrated above.

*Complete Removable Prosthodontics Quality Assurance Laboratory Log*
Quarterly reports of complete removable prosthodontics quality assurance laboratory log are provided for the Associate Dean for Clinical Affairs. This log is generated for each complete removable case by the manager of the laboratory. Examples of categories include but are not limited to casts with trial bases and wax occlusal rims, waxed dentures mounted on articulator after final verification appointment, and polished dentures ready for insertion appointment are evaluated. Trends of rejections and individual matters of concern are given to appropriate Managing Partners, Department Heads, Directors, and Students.

*Partial Removable Prosthodontics Quality Assurance Laboratory Log*
Quarterly reports of partial removable prosthodontics quality assurance laboratory log are provided for the Associate Dean for Clinical Affairs. This log is generated for each completed partial removable case by the manager of the laboratory. Examples of categories include but are not limited to quality assurance worksheet with definitive treatment plan, master cast, design cast, opposing cast, work authorization form, and waxed partial denture(s) mounted on articulator are evaluated. Trends of rejections and individual matters of concern are given to appropriate Managing Partners, Department Heads, Directors, and Students.


All Removable Prosthodontics

2012 calendar year (four quarters)

TOTAL # of cases 1607
Cases returned for review 125
% of cases returned for review 7.8

Measures and outcomes:

<table>
<thead>
<tr>
<th>Specific Detail</th>
<th>Number of Specific Detail</th>
<th>% of Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post palatal seal missing or incorrect</td>
<td>20</td>
<td>37.0</td>
</tr>
<tr>
<td>Working contacts unacceptable</td>
<td>12</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Measures and outcomes:

<table>
<thead>
<tr>
<th>Specific Detail</th>
<th>Number of Specific Detail</th>
<th>% of Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>High, light or no contacts in MI</td>
<td>26</td>
<td>24.8</td>
</tr>
<tr>
<td>Master Casts: not surveyed or tripoded</td>
<td>17</td>
<td>16.2</td>
</tr>
</tbody>
</table>

2013 calendar year (1st and 2nd quarters: January to June 2013)

TOTAL # of cases 1607
Cases returned for review 125
% of cases returned for review 7.8

Measures and outcomes:

<table>
<thead>
<tr>
<th>Specific Detail</th>
<th>Number of Specific Detail</th>
<th>% of Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post palatal seal missing or incorrect</td>
<td>13</td>
<td>44.8</td>
</tr>
<tr>
<td>Working contacts unacceptable</td>
<td>2</td>
<td>6.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific Detail</th>
<th>Number of Specific Detail</th>
<th>% of Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>High, light or no contacts in MI</td>
<td>16</td>
<td>51.6</td>
</tr>
<tr>
<td>Master Casts: not surveyed or tripoded</td>
<td>9</td>
<td>29.0</td>
</tr>
</tbody>
</table>

Corrective Measures:

STANDARD 5-3

A Proud Past
The outcomes are shared with faculty. The outcomes are also discussed with faculty at in-services. The faculty in-services are presented by QA Prosthodontists.

The goal of the Removable QA Program is to have clinical faculty calibrated and able to supervise dental students in presenting quality cases to the production labs. The QA process is an important one and must be performed to high standards. Feedback to supervising case faculty is a paramount aspect to the QA process. The College must also utilize clinical faculty in the best interests of our patients and students whenever possible.

The QA process should accomplish the following:

1. Provide constant feedback to supervising case faculty.
2. Provide information that will lead to improvement in our patient care.

A quarterly Removable Prosthodontics Laboratory Quality Assurance Report is sent to each faculty member that has supervised removable prosthodontic cases with student-dentists. An individual evaluation compared to the average of all faculty is provided along with a table of specific concerns as illustrated above.

**Patient Satisfaction Survey**

The patient satisfaction survey is conducted annually through site distribution at each clinic, and as of 2012, it is also available electronically on the College public website. The survey instrument is designed to collect general satisfaction responses with respect to quality of treatment, timeliness, courteousness and appearance in the clinics. The responses are calculated in Clinical operations and outcomes disseminated through the Office for Clinical Affairs Newsletter. Data is trended from survey to survey to look at possible areas of improvement. Specific patient comments either positive or negative are shared with the responsible individuals.

**Measure and Outcome:**

One concern that disseminated from patient satisfaction surveys and general patient comments involved the College’s screening process.

**Screening Process**

In August 2005 the College implemented an early morning triage for new patients. The program was set up to screen patients seeking comprehensive dental care for acceptability for the undergraduate Group Practices and eliminates patients who were not suitable candidates. The triage program is staffed by faculty.

Patients could be seen on the regular screening days (M/W/F) in a triage fashion early in the morning by faculty members who know what constitutes an appropriate undergraduate patient and only these patients would be admitted for treatment into the undergraduate Group Practices.

The procedure for admitting new patients was changed from a basic appointment/student screening program to a M/W/F, no appointment necessary, first come, first-served screening program, where assigned faculty triage patients who present for comprehensive dental care and admit only the patients who would be good learning cases for the undergraduate students. Parameters for what constitutes a qualified patient were set, discussed, modified and applied to the patients who seek dental treatment in the undergraduate clinic.
Problems with the above (former) Screening Admissions system:

1. The M/W/F became a general free for all (many individuals show up) and the admissions department is completely overwhelmed.

2. No matter how the admissions department tries, explaining this procedure over the telephone is difficult and time consuming and results in much wasted time on the phone.

3. Patients are irritated if they cannot make the date for appointments or are unable to secure an appointment on that date because of the limited number of screening appointments accepted for the undergraduate group clinics. Many days lines of prospective patients were over a block long.

4. Many patients that make appointments are not appropriate for the undergraduate group clinics. The inappropriate undergraduate prospective patient’s time is wasted in admitting, processing through AxiUm, taking radiographs and screening by the students prior to determining their acceptability/unacceptability for the undergraduate clinic.

Corrective Measure:
New screening admissions procedures.

Current Screening Process for Admission of New Patients (or Readmission of Former Patients)

1. Parameters for selection of patients for admission
   Screening is the process by which the College determines the appropriateness of new patients for the teaching and research goals that are set forth in our mission and vision statements. Acceptability of new patients is predicated on many parameters, some of which are:
   a. Medical History/Treatment needs are within the scope of practice of dental students and/or post graduate resident students.
   b. Ability of patients to conform to clinic services (ability to conform to clinic hours, student dentists performing work, etc.)
   c. Ability of the patient to pay for the dental treatment needed
   d. Ability to be treated in one of our existing clinics for patient treatment (undergraduate dental clinics, Post Graduates specialty clinics, Implant Center, Allen W. Anderson Faculty Dental Practice.)
   e. The patient’s dental needs will be a good learning experience for the student dentist or postgraduate program.
   f. The patient personality is compatible with the student learning needs.
   g. Religious requirements of the patient are compatible with the dental clinic.

2. The screening process for comprehensive care patients for the undergraduate dental clinic is a multi-step process:
   a. Patients Call to Schedule
      i. Information is available on our website
ii. Screening appointments for comprehensive care are by APPOINTMENT ONLY by calling (312) 996-1265

iii. Phone lines are open daily Monday through Friday between the hours of 9:00 am to 4:00 pm.

iv. Approximately 90 patients are appointed for the following week screening sessions held daily to include 15-18 per session.

v. College policies are explained to the patient

vi. Callers are conversationally screened to determine if they acceptable.

vii. If appropriate, an appointment is given for the following week and logistical patient information is exchanged.

viii. Patients are mailed a brochure to further explain our system

ix. Patients are called 24 hours in advance of their appointment to confirm

b. The Triage Phase

i. Patients will be screened daily at the beginning of each clinic session.

ii. Dental students supervised by faculty are assigned to triage all patients who present for screenings on these days.

iii. Patients will be provisionally accepted (pending a complete evaluation), or rejected based on their appropriateness for Comprehensive Dental Care by undergraduate students (see #1 above).

iv. Patients deemed unsuitable will not be accepted.

v. Patients who are deemed unsuitable for the undergraduate clinics may be referred to other clinics such as Post Graduate Prosthodontics or GPR (General Practice Residency) Program depending on their needs.

vi. Patients who are suitable will be registered, electronic consents forms patient/parent/guardian/picture are signed and attached to the patient AxiUm record, appropriate radiographs taken, and will be assigned to an undergraduate student.

Patient's suitability for treatment within the College parameters is also established at this initial appointment. Non-acceptance of patients can occur for the following:

vii. Financially challenged patients

viii. Inability to attend the clinic during regular operating hours

ix. Type or extent of treatment required or requested, or patient's general health status is not within the scope of the student dentists

x. Patient personalities that are not compatible with the student learning experience

xi. Special assignment requests (religious reasons, male, female etc.)

c. Patients who are accepted by our screening triage faculty in the Group Practices are registered
i. A patient number is assigned and a paper chart created.

ii. They also receive and sign a privacy statement.

iii. After the paper chart is created, the patient is seen at the designated Initial Patient Care Services (IPCS) desk and a photograph is taken and electronically integrated into the AxiUm computer record.

iv. If current and radiographs of diagnostic quality are not available, a new panoramic radiograph is ordered by the screening triage faculty and the patient is escorted to the Radiology Department.

v. The patient's triage appointment is concluded and an assigned student will contact them for scheduling an initial comprehensive examination.

vi. The data collection phase of the Comprehensive Oral Evaluation (D0150) will occur during a scheduled visit in the assigned student's undergraduate clinic.

vii. Health and dental patient histories are collected along with diagnostically relevant intra-oral photographs and study model impressions. A complete head and neck exam including cancer screening is performed.

viii. Medical consultations are generated if needed.

ix. Students are evaluated on their abilities to manage the collection of initial patient data involving history taking and examination.

This program has accomplished the following goals:

1. Two College telephone operators were hired to accommodate the volume of calls for screening appointments.

2. Patients who desire comprehensive dental care can be screened quickly (limited number of appointments are usually available on a daily basis) rather than waiting a long time for an appointment (sometimes 2-3 months)

3. Patients who receive urgent care can quickly be assimilated into the clinics sometimes as soon as the next day.

4. The screening process has been simplified for the admissions department and the student. Prospective patients with appointments present to the College in an orderly fashion rather than a complicated, time consuming and ineffective no appointment necessary, first come, first-served screening program.

With input from Managing Partners, the Director of Initial Patient Care will notify the telephone operators located at the reception/registration area on the first floor when to increase or decrease screening appointments throughout the year.

Staff, faculty and students have quickly acclimated to this new process without any interruption in the screening process or delay in getting patients to the undergraduate students. Patients have responded favorably to this new process.
Supportive Documentation

Appendix F-1: Clinic Manual (Section 5)
Appendix F-11: Record Audit Form
Appendix F-12: Record Audit Sample Report
Appendix F-13: Quality Assurance Sample Report
Appendix F-14: Lab QA Sample Report
Appendix F-15a: Patient Survey (English)
Appendix F-15b: Patient Survey (Spanish)
Appendix F-16: After Hours Emergency Protocol

Available On Site
Quality Assurance Reports
Record Audit Reports
After Hours Call Log
Incident Report Forms and logs
Patient Survey Results
5-4 The use of quantitative criteria for student advancement and graduation must not compromise the delivery of comprehensive patient care.

Conclusion: The UIC College of Dentistry complies with Standard 5-4.

Description

Our evaluation system ensures that student educational needs and patient treatment needs are met. As extensively discussed in Standard 2, the College has no numerical procedural requirements. Our Competency Model describes our process for sampling data from four domains in order to make the decision that a student is competent to enter the general practice of dentistry. We also very closely monitor performance of students on the National Board Part II which is a graduation requirement for our program.

All patient care is based upon a comprehensive, phase-sequenced treatment plan that does not allow students to provide care out of sequence for the purpose of fulfilling requirements. Rather is the responsibility of the Managing Partners and supervising faculty to assure the broad range of patient experiences necessary to address the Varied Experiences domain of the Competency Model. Should student care provision needs be identified as lacking, the faculty provide the patient experience by assigning a patient whose care needs meet the student learning needs and whose treatment sequence is such that the needed treatment follows the sequenced treatment plan.

1. Describe the school’s philosophy on comprehensive patient care. How are patients assured of receiving comprehensive care?

The College is absolutely committed to, and practices comprehensive phased patient care. All student learning experiences related to treatment planning and care delivery are consistent with the College’s policy and protocol toward comprehensive phased patient care.

Patient Care Philosophy

The mission of the patient care clinics of the College is to provide quality oral health care services to a diverse group of patients in a professional, caring, efficient, and safe environment. The students, faculty, and staff of the College achieve this mission by:

- striving to provide a high level of care to all patients in a manner which places priority on the needs of the patient;
- interacting with every individual, patient, and co-worker with respect at all times;
- dressing and acting in a manner which conveys caring, competence, and professionalism;
- being prepared, helpful, and friendly under appropriate circumstances;
- demonstrating a commitment to continually enhancing our knowledge, skill, and judgment;
- maintaining an environment which is neat, clean, efficient, and safe; and
- maintaining a positive atmosphere of cooperation, sharing, and teamwork, with appreciation for the unique contributions of each member of the College community to the achievement of our goals.
Patient Assurance
All patients receive information at their first visit which explains the comprehensive care concept. Students are introduced to the concept of comprehensive patient care based upon a sequenced treatment plan in the comprehensive care curriculum starting in the first year, and which is reinforced continually throughout their dental educational experience DADM courses in the DDS curriculum and the DAOB courses in the DMD curriculum). Our philosophy on comprehensive patient care is also stated in the Clinic Manual.

Patients are screened at an initial appointment and their care needs are evaluated by student-dentists which is confirmed and verified by faculty. The patient is then assigned to students depending on the student's clinical experience needs and clinical ability. Patient care needs are matched to student educational needs. A comprehensive exam is performed, sequenced treatment plans are formulated, a treatment plan is decided on by discussion between the patient, student-dentist and faculty member and the start of treatment is scheduled. Treatment proceeds in accordance with the phased comprehensive treatment plan. When the patient’s treatment is completed, patients are placed on an individual recall plan.

Students are required to formulate and present a phased treatment plan for comprehensive dental care to each patient, except for urgent care cases. There are no numerical procedural requirements for student-dentists. Student-dentists must pass three performance exams on treatment planning which helps to solidify the treatment planning concepts. The Managing Partners of the Group Practices determine the delivery of comprehensive patient care experiences through student discussions, faculty report and data from the electronic patient record.

2. Describe how patients are assured of best practices care and not care related to quantitative requirements.

There are no numerical procedural requirements for student-dentists. The College provides comprehensive treatment for patients following a sequenced treatment plan that is based in evidence, and which is presented to faculty for discussion prior to presenting it to the patient.

The College utilizes a Clinic Management system where students enter treatment plans (final and alternate) into the Electronic Patient Record. One of the requirements for AxiUm entry is faculty approval and a patient signature of approval on the treatment plan prior to treatment. In certain circumstances, such as walk-in urgent care patients, selective limited care is provided at a patient’s request. When the phased treatment plan is discussed, patients are informed of the potential benefits and health risks associated with deviations from the plan. The predoctoral student and faculty retain the responsibility for total care of the patient. Once a plan is agreed upon, the supervising faculty approve it which simultaneously locks the agreed upon sequenced plan and all non-agreed upon alternative plans. The patient care will proceed by completing care within a phase before moving into the next phase of care.

Referral
Patient referrals occur if, in the judgment of faculty, the comprehensive treatment needs of a patient exceed the student’s ability to deliver the care. The patient may then be referred to Postgraduate Specialty Programs, Faculty Practice or the private sector. Students, in discussion with faculty, make referrals to Postgraduate Specialty Programs and these occur much the same as in private practice. The process is accomplished by the utilization of referral codes in AxiUm, complemented with a

STANDARD 5-4

A Proud Past
treatment note in the patient's record explaining the reason for the referral. Once the referral is completed in the specialty program, the assigned resident completes the last step of the referral code if applicable.

Accepted patients may be completely referred out of the pre-doctoral clinic after a complete oral diagnosis has been conducted, or for individual procedures within the phased treatment plan. Most referrals to the private sector are made at the time of initial screening before the patient has been accepted.

**Patient Status Reports**

Patient status is monitored through College policies which require the provision of comprehensive dental care for all patients accepted into the predoctoral clinic unless the patient specifically requests limited care (i.e. urgent care) or has been referred by a private dentist to a Postgraduate Specialty Program for a specific dental procedure. The comprehensive care policy is outlined in both the Clinic Manual and in the information given at the patient's first appointment. Care of patients is monitored on a daily basis by attending faculty and on a monthly basis through Patient Status Reports generated by the AxiUm Software Specialist and distributed to Managing Partners and students. The Managing Partners make use of this report as they monitor student experiences, and as they provide feedback to students on a periodic basis.

In 2004, the College eliminated all procedural numerical requirements for student graduation. At the same time, clinical operating policy mandated that all patient care must be delivered in accordance with a phased and sequenced, faculty approved, and patient approved comprehensive treatment plan. Competency of our students is determined by the faculty of the College and conferred by the Subcommittee on Student Promotion (SSP). As fully described in Standard 2, the faculty use the College Competency Model by sampling information from the four domains (Varied Experiences, Faculty Observation, Independent Performance and Student Self-Evaluation) in determining student competency. Managing Partners and supervising faculty monitor student experiences (both intra and extramurally) to assure graduating students have received broad patient care experiences. This may require assignment of patients who need the care, but who may have primary assignment to another student. The Managing Partners and supervising faculty also closely monitor individual patient care to assure that all student-delivered care is congruent with the phased comprehensive treatment plan. Student experiences are listed in Appendices C-24a and C-24b.

Our competency evaluation model ensures that student educational needs and patient treatment needs are met. In this model, clinical faculty are ultimately responsible for patient care and student learning. Student's ability and educational needs are carefully matched to patient comprehensive care needs. Faculty allow students to perform procedures on a patient under their supervision.

In our clinical education model, faculty and patients represent the consistent link in patient care, while students are transient in the relationship. A schematic is presented below:
Student advancement is based on satisfactory completion of didactic and clinical courses, and group evaluations, with the overarching goal of demonstrating clinical competence. Students’ primary clinical evaluations revolve around patient portfolios; attendance, performance exams, and satisfactory patient care (see Standard 2-8).

The Patient Status Reports with the electronic record provide mechanisms for the Managing Partners to monitor a student’s progress, and make sure that patients are receiving sequenced treatment planned comprehensive care.

Additionally, Managing Partners monitor the varied experiences of all students via customized AxiUm reports, and systematically assign and/ or transfer patients based on the students’ needs for experience in a particular type of patient treatment. Managing Partners also meet with students periodically to review ongoing experiences. This ensures that students have the opportunities to encounter the patient conditions needed for the clinical objectives to be met.

**Supportive Documentation**

- Appendix C-2: COD Predoctoral Graduate Competencies 2012
- Appendix C-4: COD Predoctoral Competency Model
- Appendix C-11a: Competency Map – DDS
- Appendix C-11b: Competency Map – DMD
- Appendix C-21: Competency Statements 2010
- Appendix C-24a: Student Clinical Experiences – Class of 2013
- Appendix C-24b: Student Clinical Experiences – Class of 2015
- Appendix F-1: Clinic Manual
- Appendix F-3a: New Patient Handout – English
- Appendix F-4: Screening Brochure

**Available On Site**

Patient Status Reports
Group Practice Referral Codes report (AxiUm)
Clinical competency exams required for graduation
5-5 The dental school must ensure that active patients have access to professional services at all times for the management of dental emergencies.

Conclusion: The UIC College of Dentistry complies with Standard 5-5.

Description

Appropriate procedures are in place to ensure that patients of record have access to professional services to manage dental emergencies during and outside of business hours. Walk-in patients with dental emergencies (urgent care), regardless of whether or not they are registered patients are accepted during the week at 8:15 a.m. and 1 p.m. on a first come, first served basis. While spaces are limited, no patient exhibiting pain, facial swelling or fever are turned away. All patients of record have 24-hour-a-day access to emergency care.

1. Describe the school's policy for providing emergency services, including after-hours care for patients.

Adults (15 and above) with urgent care needs are appointed on the preceding day by calling (312) 996-8636 between 8:00 a.m. and 9:00 a.m. Registration staff are assigned to receive these calls as they are familiar with the operation of the dental clinics and the protocol for urgent care patients. Patients are appointed at 8:30 a.m. or 1:00 p.m. of the next day that the clinics are open. During this call, the Registration staff also question the patient to determine the degree of their dental urgency and is able to advise the caller on the protocol for immediate care and/or protocol on how to access our Comprehensive Care program.

Urgent care during normal clinical hours is provided in the pre-doctoral clinic by 3rd and 4th year dental students. Patients are notified of the availability of urgent care during their initial clinic visit and through patient information they receive at this time. Students advise patients to make every effort to contact them during regular business hours when care problems develop (Group Practices and Undergraduate Pediatric Dentistry Clinic).

For faculty, staff, and students, the procedure for handling dental emergencies after hours is outlined in the Clinic Manual. Patients are aware through handouts, student explanation, undergraduate clinic voicemails, and College's website, that an assigned Endodontic post graduate student and/or faculty receive emergency after hour's calls via pager number 312-996-2242, ID # 9559. This number is available in Group Practices to distribute to patients and after-hours information is available by recording on each Group Practice's telephone. If deemed appropriate by the Endodontic post grad on call, the patient is directed to the University of Illinois Hospital Emergency Room, where the patient is be met by the Oral Surgery resident on call.

If indicated, as determined by the on-call postgraduate student, after-hours dental care is provided at the University of Illinois Hospital. Patients with urgent needs, such as severe pain, swelling, or severe trauma are seen by the Department of Oral and Maxillofacial Surgery resident at the University of Illinois Hospital (312) 996-7297 when the College is closed. Pediatric patients have access to after hour’s emergency dental care by calling the Pediatric Dentistry Resident on call. This information is distributed to patients and by accessing a recording on Graduate Pediatric Dentistry’s main telephone.
During regular business hours, the College provides emergency care for patients who are registered, as well as those in the community who have no other mechanism to obtain dental emergency care. Under certain circumstances, this care is provided on either a gratis basis or reduced compensation rate (Public Aid) as a part of the College and University’s commitment to the community.

Supportive Documentation

Appendix F-1: Clinic Manual (Section 7, Emergencies – After Clinic Hours)
Appendix F-3a: New Patient Handout- English
Appendix F-3b: New Patient Handout- Spanish
Appendix F-16: After Hours Emergency Protocol

Available On Site
After-Hours Emergencies Log (on site)
Schedule of after-hours emergency care coverage
5-6 All students, faculty and support staff involved in the direct provision of patient care must be continuously recognized in basic life support (B.L.S.), including cardiopulmonary resuscitation, and must be able to manage common medical emergencies.

Conclusion: The UIC College of Dentistry complies with Standard 5-6.

Description

The College has policies in place to ensure that all clinical providers remain continuously certified in BLS and CPR. Students obtain CPR-BLS certification during orientation (D1 year), and again during their D3 year. Management of medical emergencies is covered at various stages in the curriculum primarily through Oral and Maxillofacial and Pediatric Dentistry clinical rotations. Clinical Faculty, students and staff remain continuously certified CPR-BLS through participation in periodic courses offered onsite at no cost. Compliance is tracked by the Office for Clinical Affairs.

1. Identify and describe the location of the emergency materials and equipment that are available for use in the dental clinic and for instruction in the management of dental office emergencies. Describe additional emergency equipment and supplies that may be accessible to the clinic and their location.

The College has in place a well-organized system for managing emergencies, coordinated through the Department of Oral and Maxillofacial Surgery (outlined in the Clinic Manual). Emergency supplies are available and monitored to assure that the necessary supplies and equipment are date compliant and operational.

Students and supervising faculty are trained to recognize the signs of a medical emergency and to initiate appropriate treatment including basic life support, if necessary. Positive pressure oxygen units are located throughout the clinics and are marked with prominent signs to aid in locating units in an emergency. Automated External Defibrillators (AED’s) are located on the first three floors near to where the clinics are located in the College. Additional AED units are located on the 4th and 5th floor in the common areas. If indicated, the school’s emergency management system is activated by designating a student, faculty, or staff member, to call ext. 3-4733 and 6-6788 as outlined in the Medical Emergency Procedures (procedural signs are prominently displayed throughout the College). Medical emergency management is provided by the Department of Oral and Maxillofacial Surgery (OMFS). Upon arrival at the scene, the emergency team members assume responsibility for the patient. Specific actions to be taken by all personnel are included in the Risk Management section of the Clinic Manual under Protocol for Medical Emergencies.

An appropriate mobile medical emergency cabinet (crash cart) is kept in the OMFS Postgraduate Clinic. The emergency team brings this crash cart with them to the emergency site. Additional crash carts are located in Group Practice clinic 211-219, Group Practice 321-329, the Department of Graduate Pediatric Dentistry (Room 230-C, second floor), and the Department of Graduate Periodontics (room 331, third floor). OMFS keeps a maintenance log on their crash cart. Staff members in OMFS check the crash cart visually every day for the attached lock. The crash cart is opened and inspected if the lock is missing or broken, the team has responded to an emergency, or if indicated to replace drugs that are about to expire. A list of the drugs and their expiration dates are kept by the Clinic
Manager RN in OMFS, who monitors expiration dates and replaces drugs that are approaching expiration.

**DDS Curriculum**

Dental students are introduced to basic emergency management (lecture) in their second year of the curriculum (Introduction to Oral & Maxillofacial Surgery, OSUR323). In the third and fourth years of the curriculum, dental students experience case-based scenarios of common medical emergencies and how to manage them (Oral & Maxillofacial Surgery Clinic I, OSUR337 and Oral & Maxillofacial Surgery Clinic I, OSUR347). Also, in the fourth year, dental students receive more lectures in managing common medical emergencies in Advanced Oral & Maxillofacial Surgery (OSUR342).

**DMD Curriculum**

OSUR323 (basic emergency management) is wholly subsumed into DBCS327, DBCS328, and DBCS329 which are presented in the Spring Term of the DMD second year of the curriculum. Management of dental emergencies are also effectively presented through live simulations and required reading (OMFS faculty generated manual and other texts). These live simulations and instruction are part of the DMD third year rotations in OMFS in the Summer, Fall and Spring Terms. The simulated experiences are part of the evaluation and grading of DAOB331, DAOB332 and DAOB333 with the Managing Partners who serve as Course Directors.

The Clinic Manual and Infection Control Manual contain information on emergency management, including policies for management of inhaled or swallowed objects, exposures to blood borne pathogens, splashes to the eye, and how to activate the school’s emergency management system. Also, on the College’s intranet are PowerPoint presentations on emergency management as presented by OMFS faculty. During the Oral Surgery rotation, students experience simulations in emergency management as an ongoing effort to make sure each student is equipped to activate the emergency system.

2. Describe how the emergency equipment is monitored to assure it is functional.

Public AED’s and Oxygen units are inspected monthly by the Director of Clinical Operations. A written maintenance log is kept by the Office of the Associate Dean for Clinical Affairs.

The Director of Clinical Operations also monitors, inspects, and updates supplies in the crash carts in Group Practice Da Vinci (room 211) and Rembrandt (room 321) on a monthly basis, or sooner if needed. Graduate Pediatric Dentistry, Graduate Oral Surgery and Graduate Periodontics monitor and maintain their own crash carts.

3. Describe the dental school’s policy regarding basic life support recognition (certification) for students, faculty and support staff who are involved in the direct provision of patient care. Describe how the dental school ensures that recognition of these individuals is obtained and does not lapse.

All students, faculty, and staff involved in direct patient care are required to maintain continuous certification in BLS (Health Care Provider Level). Students are first made aware of this policy during pre-matriculation orientation. All students are required to receive certification from a course in BLS.
and emergency management during the first year orientation period or during the first year of the curriculum. All dental students are required to be recertified in their third year of their curriculum. IDDP students receive certification training in their initial orientation and are re-certified in the spring term of their final year.

Faculty and staff involved in patient care must also maintain current certification in BLS (Health Care Provider Level). The policy is detailed in the Clinic Manual.

Cardiopulmonary resuscitation classes are provided at no cost for all faculty, staff and students involved in patient care on an ongoing basis so that those who need to maintain certification can do so. Currency of certification is monitored by the Director of Clinical Operations. BLS (Health Care Provider Level) courses are available at scheduled intervals. The Director of Clinical Operations sends a memo by Listserv e-mail to health care providers as to the available dates and times. The health care provider must verify when their certification nears expiration and register for a class. Failure to maintain current certification can result in suspension of clinical privileges.

As a part of our ongoing program of risk management, the College uses AxiUm’s Certification module to track clinical compliance for all students, faculty and support staff involved in patient care. Items monitored through this module include immunization compliance, HIPAA, OSHA, and BLS certification, among other items. The Director of Clinics maintains and monitors these records.

4. Are exceptions to this policy made for persons who are medically or physically unable to perform such services? If so, how are these records maintained by the program?

All faculty, staff, and students involved in the provision of patient care are informed, prior to patient contact, of the need to maintain current certification in BLS and a system is in place to assure that all that come into contact with patients are certified.

The College may provide exemptions to the BLS/CPR requirement in accordance to the Illinois Dental Practice Act: “The Department shall provide by rule for exemptions from this requirement for a dentist or dental hygienist with a physical disability that would preclude him or her from performing BLS.”

In the rare event that a healthcare provider expresses an inability to perform BLS services, the College follows protocols defined by Campus University Health services. If it is determined by appropriate University offices that an accommodation is needed, faculty schedules will be revised and modified if needed to ensure that other faculty are always available to assist in such situations. Records of such accommodations will be kept in the Office for Clinical Affairs. These providers will still be required to attend the cognitive portion of the CPR course. Records of this attendance will be kept in the Office for Clinical Affairs.

Supportive Documentation
Appendix F-1: Clinic Manual
Appendix F-17: Infection Control Manual

Available On Site
Course Syllabi
Basic Life Support (BLS) for Health Care Providers (CPR & AED) documentation
5-7  Written policies and procedures must be in place for the safe use of ionizing radiation which includes criteria for patient selection, frequency of exposing radiographs on patients, and retaking radiographs consistent with current, accepted dental practice.

Conclusion: The UIC College of Dentistry complies with Standard 5-7.

Description

The College policy on the use of ionizing radiation is a thirty-six page document last updated in March 2013. There are twenty-nine subsections covering all aspects related to the prescription, acquisition, evaluation and integration of diagnostic images. The policy is congruent with all University, State of Illinois and Federal government regulations. The College's policies regarding the use of ionizing radiation conform to policies established by the American Dental Association, American Dental Education Association and the National Center for Devices and Radiological Health.

1. Describe the school’s policy on the use of ionizing radiation. Describe the procedures used when working with ionizing radiation.

Our internal governing document entitled Policy for the Diagnostic Use of Ionizing Radiation, Patient Selection and Limiting Radiation Exposure can be found in the Central Radiology Clinic (Room 125), the Office of the Associate Dean for Clinical Affairs (Room 301) and the Office of the Director of Radiology (563C). Additionally, the document is available chairside on the College intranet.

Intraoral, panoramic, skull and cone-beam computer tomography studies are addressed. Selective sections from the document include the following:

The Radiographic Examination - Criteria for Patient Selection

1. No image will be taken without written/electronic prescription by a College faculty member after conducting a clinical examination and reviewing the medical history.

2. To maximize the benefits of the radiation exposure, the need for all radiographs should be determined by using high-yield criteria as the basis of professional judgment, as established through history, patient dialogue and clinical examination.

3. The need for images for diagnosis/treatment planning, during treatment and post-operatively, and the frequency of recall radiographs will be based on 2012 ADA / FDA recommendations for the prescription of dental radiographic examination: “Dental Radiographic Examinations: Recommendations for Patient Selection and Limiting Radiation Exposure” and the professional judgment of the supervising clinical faculty.

4. Where pertinent and relevant prior images are available, they will be obtained and evaluated for diagnostic yield before any new images are prescribed.

5. No radiograph or image will be made solely for the purpose of initial screening of patients for acceptability for treatment in the dental College unless there is a high likelihood of such acceptance. A clinical examination will be accomplished prior to ordering any image.
6. Patients/students/staff will not be exposed to ionizing radiation for teaching/training/demonstration purposes. There must be a diagnostic rationale evident before exposing any individual to ionizing radiation.

7. No image will be acquired solely for administrative purposes. Patients will not be exposed to ionizing radiation following treatment procedures solely to document completion of a procedure.

8. Patients will not be subjected to radiographic retakes solely for students to demonstrate technical proficiency. Retakes will be based on the need to acquire a diagnostic image with the requisite diagnostic yield needed to advance/maintain/establish the health of the patient.

9. Images which do not meet diagnostic criteria must be retaken. These retakes are made under the supervision of and/or with the assistance of an instructor/technician. If retakes are mounted in a full mouth survey mount (analog films), the retakes must be dated separately from the date the original FMX was exposed if the dates are different.

10. Diagnostic images necessary to provide urgent care for a pregnant patient will be explained to the patient, prescribed after informed consent and acquired with strict adherence to ALARA (as low as reasonably achievable). While this protocol is routinely followed on all patients, pregnancy necessitates the clinician demonstrate a concern tailored to the patient’s condition.

11. While judicious clinical protocol dictates that images for all patients be kept to a minimum, the child patient is of special concern due to susceptibility to the direct and indirect effects of ionizing radiation. An image should not be taken on a child if the supervising clinician has a reasonable suspicion that, because of movement of the child, the likelihood of success is poor. Consultation with clinic managers/program directors should be considered in these instances.

12. The radiographic procedure(s) chosen will be predicated upon the basis of maximizing relevant diagnostic yield while minimizing patient exposure to ionizing radiation. Once the need for a radiographic examination is established, the principle of ALARA is integrated into all ionizing radiation exposure decisions.

The College intranet hosts a radiology link that provides faculty and students with current information regarding the prescription, protection and administrative policies governing the use of ionizing radiation at the College. The intranet links to the most current Illinois Administrative Codes related to radiation. Section two contains the UIC/COD Policy For The Diagnostic Use Of Ionizing Radiation 2012-2013 and the ADA/FDA Guidelines for prescribing radiographs. Together these two documents form the foundation of radiation use within the College.

Patient Care is based on the following 5 principles:

1. No radiograph will be taken without written/electronic prescription by a dental faculty member. Within the electronic record, there is an x-ray section that contains patient x-ray information on the number of exposures. Additional exposures: the number of exposures gets automatically updated upon entering the appropriate procedural code.

2. To maximize the benefits of the radiation exposure, the need for all radiographs should be determined by using high-yield criteria as the basis of professional judgment, as established through medical/dental history, clinical examination and patient dialogue.
3. The need for images during treatment and post-operatively, and the frequency of recall radiographs, will be based on the individual patient’s needs and the professional judgment of the supervising dentist.

4. No radiographs, including panoramic films, will be made solely for the purpose of initial screening of patients for acceptability for treatment in the dental College unless there is a high likelihood of such acceptance.

5. Radiographic procedures chosen will be predicated upon the basis of maximizing diagnostic yield while minimizing patient exposure to ionizing radiation. Once the need for a radiographic examination is established, the principle of ALARA is integrated into all radiographic exposure decisions.

Sections III –VI provide the student/clinician with information related to the didactic predoctoral curriculum and the clinical operation of the radiology division.

Policies related to a student’s clinical experience in radiology are discussed in Sections VII – VIII. Section IX gives a detailed discussion of clinical requirements, criteria for evaluation and radiology proficiency examination procedures.

ALARA and radiation protection guidelines are the focus of section X. Section XI presents a detailed analysis of informed consent and legal aspects of diagnostic imaging. Section XII is an open forum for the planning, discussion and implementation of digital imaging within the College. Competency statements, distribution rights and ongoing site development are accessed through section XIII.

The criteria for frequency of exposing patients to radiographs are based on the following statement:

The needs of the patient for optimal diagnosis and treatment will determine the frequency of radiographic examination and not the period of time elapsed since the last examination. In each case, consistent with the guidelines stated and cited in this document and subject to the legal doctrine of informed consent, the ultimate decision to prescribe a radiographic examination rests with the professional judgment of the supervising clinician.

Radiographic examinations are ordered only after the medical, oral and dental histories are reviewed. Radiographic examination is based on the needs of the patient, not the amount of time that has elapsed since the last exposure. Radiographs are not taken for administrative reasons or to meet student requirements. The availability of recent radiographs or duplicates is determined prior to exposure. Radiographs must be ordered and evaluated by a dental faculty member. Students whose patients require radiographs are questioned by faculty members as to the frequency and need for radiographic examinations in order to develop the student’s awareness of radiographic selection criteria.

The policy for retaking radiographs is based on the following statement:

Non-diagnostic images should be retaken by faculty or trained staff unless it is their opinion that the student can successfully retake the film. Retaking a film must be conducted under direct supervision. The technical reason for the retake must be identified by the faculty member/staff and the operator must be made aware of the problem and the solution to the problem. In this way, a repeated error is not
committed which would uselessly subject the patient to additional radiation without gaining the diagnostic information required.

2. Describe how the school ensures safe use, application, and exposure of ionizing radiation for patients.

Safe use of ionizing radiation and adherence to the College’s policies are ensured by supervision.

The division of Oral Radiology is staffed with four radiology technicians and one Board Certified Oral and Maxillofacial Radiologist. The radiology clinic is open from 8:30 a.m. to 4:30 p.m. Monday through Friday. The radiology staff work in the clinic five days per week and faculty provide supervision as needed and are available to students through faculty-student consults in the Group Practice clinics. A primary responsibility of the staff is to closely monitor students, insure the technical quality of the examination and assess the progress of students in the area of technique, radiation safety and infection control. Clinical faculty are available for consultation at all times. All faculty and staff routinely involved in the utilization of ionizing radiation clinic wear film badges.

Shielding or adequate space/distance allowance of all radiology clinic areas meets federal and state standards. Remote exposure buttons, audible signals, lights and timers are used on all equipment. All x-ray equipment is inspected annually by the Radiation Safety arm of The University of Illinois at Chicago Environmental Health and Safety Office, Radiation Safety Section to ensure compliance with federal, state and university standards. The Bureau of Radiation Safety Department of the Illinois Emergency Management Agency (IEMA) conducted a limited (new radiology equipment) inspection in 2011. The next dedicated College-wide general inspection has been scheduled by IEMA for 2015.

Guidelines for Frequency of Exposing Patients to Ionizing Radiation

Professional judgment and the needs of the patient for optimal diagnosis and treatment will determine the frequency of radiographic examination and not solely the period of time elapsed since the last examination. In each case, consistent with the guidelines stated and cited in this document and subject to the legal doctrine of informed consent, the ultimate decision to prescribe a radiographic examination rests with the supervising clinician.

For category-based rationale/guidelines for frequency of exposure as well as the type of imaging examination to prescribe, consult: 2012 ADA / FDA recommendations for the prescription of dental radiographic examination: "Dental Radiographic Examinations: Recommendations for Patient Selection and Limiting Radiation Exposure".

Time-related frequency of exposure

In the practice of dentistry, patients often seek care on a routine basis in part because oral disease may develop in the absence of clinical symptoms. Since attempts to identify specific criteria that will accurately predict a high probability of finding interproximal carious lesions have not been successful for individuals, it was necessary to recommend time-based schedules for making radiographs intended primarily for the detection of dental caries. Each schedule provides a range of recommended intervals that are derived from the results of research into the rates at which interproximal caries progresses through tooth enamel. The recommendations also are modified by
criteria that place an individual at an increased risk for dental caries. Professional judgment should be used to determine the optimal time between radiographic examination within a suggested interval.

Faculty Authorization Prior to Exposing any Patient to Ionizing Radiation
All radiographic examinations, including retakes and intra-treatment images, shall be authorized by a faculty member by prescription in the patient’s dental chart/electronic patient record (EPR). This record will specify the request date of the examination, authorization code of the faculty member and type of exposure(s) requested. The number of total completed exposures, including necessary retakes, shall be recorded. This information is intended to document the patient’s history of exposure to diagnostic ionizing radiation within the College and the types of radiographs used for diagnostic evaluation. This is done in recognition that the effects of ionizing radiation are cumulative. Specific codes are used for non-diagnostic images.

Radiographic examinations made outside the Central Radiology Clinic (example, the group practice clinics) are to be supervised by a clinical faculty member of the involved group practice and must be authorized/recorded as above. The supervising faculty member is responsible for overseeing and assuring that proper radiation protection, College dictates on infection control and the radiographic prescription concept of ALARA are routinely adhered to in his/her clinic.

Facilities and Equipment

1. Shielded operatories should be equipped with a transparent leaded panel to permit a safe view of the patient during exposure. Leaded glass or a substance of similar attenuation properties is used. Operatories that have been approved for the use of ionizing radiation that do not incorporate shielding shall allow no obstruction that blocks the x-ray operator’s direct view of the patient while being imaged. In operatories equipped with intraoral dental x-ray equipment that do not have protective shielding, the operator must stand at least two meters from the tube head and out of the path of the primary beam. This protocol is in accordance with ADA/FDA guidelines and has been approved by The University of Illinois Radiation Safety Officer and the IEMA Radiation inspector of The State of Illinois. All ionizing radiation producing equipment within the College has been registered with The State of Illinois IEMA division upon installation and completed its most recent registration on March 2013. The College is scheduled for its five year State of Illinois onsite comprehensive radiology inspection in 2015.

2. Appropriate signs indicating the requirement to use the protective apron and thyroid shield are posted at all times in all functional radiology operatories. Operatories that are designated for panoramic images and cone-beam computed (volumetric) tomography shall have appropriately designed protective aprons.

3. Operation of Cone-beam Computed Tomography Equipment (CBCT) - Only individuals who have been specifically trained and authorized by a department head/specialty program director may operate cone-beam computed tomography equipment.
Operator Qualifications and Authorization

Only those categories of operators defined in the UIC/COD policy document shall be considered authorized to operate dental x-ray equipment.

Authorization for 3D CBCT Scans

It must be recognized that CBCT subjects the patient to a relatively high radiation dose. As with all imaging, the Risk-Benefit Analysis must justify prescribing a CBCT study. ALARA must be followed.

Three-dimensional diagnostic imaging (conebeam computed tomography/volumetric tomography (CBCT/CBVT)) can only be ordered by a department head or their designate, the Director of Clinics, a graduate program director, the Director of Initial Patient Services and the Director of Radiology

Three-dimensional image data sets will be reviewed for diagnostic quality and diagnostic yield within the specialty clinic that prescribed the image. As with all images acquired at the College, the Director of Radiology is available upon request (email or pager) to review any scan for quality/pathology. Three-dimensional image data sets prescribed by the Director of Urgent Care will be reviewed for diagnostic quality and diagnostic yield with the Director of Radiology on a weekly basis as well as on request.

Guidelines for Retaking Dental Images

Non-diagnostic images should be retaken by faculty or trained staff unless in their judgment the involved student can successfully retake the image. Retaking an image must be done under direct supervision. The technical reason for the retake must be identified by the student initially acquiring the image. If the student is unable to articulate the reason behind the non-diagnostic image it must be communicated to her/him by the supervising facility. To restate this concept, the operator must know before he/she initiates the retake why the original image was non-diagnostic. In this way a repeated error is not committed which would unnecessarily subject the patient to additional ionizing radiation without gaining the diagnostic information required.

Policy for Prescribing Images on Pregnant Patients

1. For urgent care situations, any image deemed necessary for the diagnosis and treatment of acute dental problems should be prescribed utilizing strict adherence to the concept of ALARA. Additionally, a faculty member may decide to authorize a specific image if the patient presents with a condition that is likely to worsen during pregnancy.

2. Images should not be taken for elective dental procedures if a patient is pregnant. This includes screening appointments for admission to the College.

3. In all cases, protective measures (protective apron with thyroid collar if appropriate, high speed film/sensor, proper infection control) must be followed.

4. Protective aprons should be removed immediately after the x-ray exposure since the weight and discomfort is difficult for some pregnant patients to tolerate.

The above policy statement is consistent with the guidelines of The American Dental Association and American Academy of Oral & Maxillofacial Radiology.
Pregnant Radiation Operators and other concerns about Pregnancy and X-rays
Operators who are pregnant should not be exposed to more than 5mSv (500 mrem) during the term of their pregnancy. Students/staff/faculty who have concerns about occupational exposure to ionizing radiation should contact the Director of Clinics, Director of Radiology, the UIC Radiation Safety Office, the Illinois Emergency Management Agency (Bureau of Radiation Safety) or the Illinois State regulation agency of their choice.

UIC Radiation Safety Forms and Monitoring Devices are available directly from UIC Environmental Health and Safety Office Radiation Safety Section,

Supportive Documentation
Appendix F-1: Clinic Manual
Appendix F-8: Policy for the Diagnostic Use of Ionizing Radiation

Available On Site
Log of x-ray unit inspections
5-8 The dental school must establish and enforce a mechanism to ensure adequate preclinical/clinical/laboratory asepsis, infection and biohazard control and disposal of hazardous waste.

Conclusion: The UIC College of Dentistry complies with Standard 5-8.

Description

The College has established protocols and compliance procedures that satisfy federal, state, and institutional requirements for infection control and management of hazardous waste. UIC has established an Environmental Health and Safety Office (EHSO) to plan and monitor compliance with applicable federal and state guidelines related to chemical, biological, and radiation hazards. EHSO has established a university-wide chemical management plan to ensure safe use and disposal of hazardous chemicals. In addition the plan seeks to minimize waste generation and reduce the potential of accident for faculty and staff.

1. Describe the policy for handling and disposing of hazardous waste. Explain how the school enforces this policy.

Within the College, the Director of Clinics has responsibility for these activities. The Director of Clinics also serves as the liaison with the University in the area of compliance with guidelines. The Director of Facilities has the daily responsibility for hazardous waste management and works with EHSO on an ongoing basis. The Chemical Management Plan states that all hazardous chemicals and wastes are identified, labeled, and tracked by the receipts from the waste haulers; all laboratories and storage areas are inspected on a periodic basis to ensure compliance; and, the College’s on-site Director of Facilities is charged with monitoring all aspects of the Chemical Management Plan including providing information and assistance to faculty, staff, and students. The Director of Facilities monitors the conditions and compliance of all laboratory and storage areas in the College. All personnel concerned with the Chemical Management Plan are required to attend periodic training and refresher courses.

Additionally, the College has developed a Chemical Spill protocol in collaboration with the campus Environmental Health and Safety Office. The protocol to manage minor chemical spills is addressed in detail in Section 9 of the Clinic Manual. Spill Kits are located in all undergraduate support laboratories and simulation clinics, and in central sterilization (second and third floors), the Postgraduate Pediatric Dentistry Department, and the Postgraduate Orthodontics Department. Completed requests for disposal sheets are kept in the Office for Clinical Affairs.

2. Describe the school’s policy for preclinical/clinical/laboratory asepsis and infection and biohazard control. Explain how the school enforces this policy.

Under the leadership of the Associate Dean for Clinical Affairs and Director of Clinics, the College has established a comprehensive risk management program that includes asepsis and infection control as well as hazard control protocols and mechanisms for monitoring compliance.
The Infection Control and Risk Management Committee, chaired by the Director of Clinics, is responsible for addressing issues related to environmental safety, assisting in policy review and development, and other related issues crucial to adherence with applicable guidelines. Policies for asepsis and infection control that conform to federal, state, local and professional guidelines have been established and are published in the Infection Control Manual 2011 (available on the College intranet). This manual also provides a comprehensive overview of all components of the infection control procedures.

In addition to receiving the written policies, students are provided information and practice in asepsis and infection control as they begin their clinical experiences. The training begins in first year didactic course work and in the orientation for international students and in the required initial orientation for graduate students. Dental students again review infection control policies and procedures during their clinic orientation in the middle of the second year of the program. Compliance is continually monitored in the pre-patient and patient care clinical settings.

Every student, staff and faculty member is required to complete an online-based course annually which includes infection control protocols. This is an online-based course which requires login identification for tracking of compliance. Compliance recording is the responsibility of the Director of Clinics.

All health care providers must abide by the practices that support the “standard precautions” theory. Procedures are in place for accidental exposures. These are explained in detail in the Clinic Manual and Infection Control Manual 2011. As of 2009, the College’s Immunization Policy has been updated to require that all incoming student, faculty or staff provide proof of immunization via blood titers to the following diseases: Measles, Mumps, Rubella, Varicella Zoster, and Hepatitis B (Antibody and Antigen). Providers are also required to provide proof of immunization against Polio and Tetanus/Diphtheria, and provide proof of a recent negative TB test, via a two-step test, a quantiferon blood test, or a current chest radiograph. College policy also requires all clinical providers to undergo yearly TB testing, which is administered by University Health Services onsite at the College. Compliance is monitored by the Director of Clinics.

Incoming students are required to satisfy immunization requirements no later than the first day of orientation (with the exception of Hepatitis B immunity, for which a grace period of 6 months is given to accommodate the three-dose immunization cycle). The review of immunization requirements is initially accomplished through a third-party online system where students upload the appropriate lab results into their individual account for review by trained staff. Personalized guidance is provided by the Director of Clinics as early as the acceptance of an offer into the program. Final clearance related to this requirement is certified by the Director of Clinics.

All newly hired clinical faculty and staff with direct patient contact must also satisfy this requirement prior to the beginning of their clinical activities. Clearance is issued by University Health Services, and by the Director of Clinics. Access to the electronic patient database is only granted after immunization and licensure requirements are met.

All personnel with direct patient care responsibilities are required to obtain immunizations, required to use barrier techniques, personal protective equipment, and required to use sterilization. This principle is followed equally in pre-patient and patient care clinical settings.

Potentially infectious waste generated during clinical activities is collected in biohazard bags located throughout the clinics. Sharps containers are delivered to Central Sterilization where they are
sterilized before being ultimately collected by an outside waste disposal company. All regulated waste is collected and properly stored in a secured area on the dock area of the College until collected by an outside waste disposal company three times each week. Waste disposal reports are kept on file in the Office of the Associate Dean for Clinical Affairs. The Director of Facilities is responsible for training and assuring that the staff who collect biohazard waste follow accepted protocols. Biopsy specimens and extracted teeth are treated as potentially infectious materials.

There are numerous mechanisms for monitoring compliance with our policies. The individuals with primary responsibility for compliance are the Director of Clinics and the Associate Dean for Clinical Affairs. The Director of Clinics monitors the overall infection and hazard control program. The Associate Dean for Clinical Affairs monitors students’ compliance with infection control during clinical activities through recorded electronic evaluations by faculty (AxiUm system).

Specific monitoring activities are outlined as follows: Clinical faculty are responsible for continuously monitoring student compliance with infection control protocols, correcting any instances of non-compliance and, when necessary, reporting violations to their Managing Partner or other administrator most directly responsible for the student's education in that clinic. Infection control compliance is included in the Daily Evaluation Form (AxiUm) completed by Group (attending) Faculty and Managing Partner. Monitoring of infection control by students is also carried out by Group Practice dental assistants and the staff of the Sterilization Room.

Pre-patient care Course Directors are responsible for training and monitoring compliance with infection and hazard control protocols in their respective courses. In the patient care clinics or the simulation clinic, a Course Director, and in turn, a Department Head, has the responsibility for assessing the situation, consulting with the Associate Dean for Clinical Affairs, if necessary, and recommending any appropriate disciplinary action. In addition, student violations can be referred to the Director of Clinics for review and follow up. The Associate Dean for Clinical Affairs assumes ultimate responsibility for disposition of any disciplinary action resulting from non-compliance with infection control protocols. See Infection Control Manual 2011.

Infection control training sessions are required annually as a part of the OSHA standard 29 CFR 1910.1030, "Blood-borne Pathogen Standard.” A test is required at the end of the training to confirm compliance and comprehension of the materials. Compliance for each user is tracked through the AxiUm Certifications module. The appropriate Department Head or Staff Supervisor is notified if a corresponding individual fails to take the course, and ultimately, provider access to AxiUm may be suspended until compliance is achieved. Also, CE sessions on Infection Control topics are provided by the Director of Clinical Operations to clinical faculty.

To further enhance our ability to meet infection control guidelines, the College has an Instrument Management System. The program involves a College-owned instrument system rather than student purchased instruments. This assures that all instruments used by students are maintained in a safe working manner. Spore testing of autoclaves is conducted weekly by the Director of Central Sterilization. Results are provided weekly to the appropriate clinic, and are kept on file at the Office for Clinical Affairs.

Supporting Documentation
Appendix F-1: Clinic Manual
Appendix F-17: Infection Control Manual
Available On Site
Safety and Environmental Rounds Form
Sample Daily Evaluation Forms for Group Practice Clinics (axium)
Safety and Environmental Rounds Form (summary data)
UIC Environmental Health and Safety Office (EHSO)
Daily Evaluation Forms for Group Practice Clinics (summary data)
Autoclave spore test results
Infection and Biohazard Control Policy
Hazardous Waste Control Policy
Results of infection control monitoring program
Post-exposure control plan
5-9 The school’s policies must ensure that the confidentiality of information pertaining to the health status of each patient is strictly maintained.

Conclusion: The UIC College of Dentistry complies with Standard 5-9.

Description

The College has established protocols and monitoring mechanisms to ensure confidentiality of patient information in accordance with federal, state and institutional guidelines. Our Patient Rights and Responsibilities statement and the University’s Notice of Privacy Practices affirm patients’ rights to privacy in health care and confidentiality of records. This information is provided to all new patients at time of registration and posted in various locations in the College. This information is also available to students, faculty, and staff in the Clinic Manual. In the first term of the first year curriculum, students are introduced to the concepts related to confidentiality, during their initial orientation, and as part of the Practice Management component of the fall term of the D1 year (DDS-DADM318; DMD-DAOB311). A detailed description of the practice management component can be found in standards 2-17 and 2-18.

1. Describe how confidentiality is maintained regarding each patient.

The College has maintained a central record system for paper charts that requires morning patient records (paper portion, as defined in the following paragraph) to be returned to this area (Central Records/Reception, first floor of College) at the end of each day. Afternoon patient records (paper portion) are secured in the clinical areas and picked up by records personnel early the next morning. Students are only permitted to check out records (paper portion) of their assigned patients. Records are requested by completing the appropriate information in the Axium record of the patient. The paper portion of the patient’s record is delivered to the student’s home clinic. Students who do not return paper records, as required, are identified and required to retrieve the paper chart as soon as possible. Abuse of this policy may result in disciplinary action including suspension of clinical privileges.

During the 2001-2002 academic year, the College made the transition to an electronic record. Radiographs (analog), new patient consents (prior to May 2008), consultations and responses, and when appropriate, EKG strips, are still kept in a paper chart in the Central Records/Reception area.

In 2012 the Undergraduate Pediatric Dentistry clinic transitioned to a fully digital record, including electronic signatures for all consents. Existing paper charts are being scanned by staff into the digital record. On August 1st 2013, the entire College converted to digital imaging.

Faculty are charged to ensure that students appropriately protect the confidentiality of patient records. Students cannot make permanent chart entries in the record without approval by a faculty digital signature (swipe card). Additional measures to ensure confidentiality through the electronic record are mentioned in detail in standard 5-3, and include: swipe card access into Records Room, electronic patient record access is by user level, monitor displays have auto shut-off, students only have access to their own assigned patients. Further, signed Release of Information forms, are required to be completed and attached into the patient card before any information is disclosed or shared with a third party. Financial guarantors are electronically entered as such in the appropriate section of the patient card.
Registration and Front Desk Staff are fully trained on HIPAA requirements. The training is completed periodically through the Front Desk Clerk meeting.

The College is also a covered entity under HIPAA guidelines, and all individuals who have access to protected health information complete an orientation provided by the Office for Clinical Affairs before beginning the educational program or work assignment as appropriate.

Additionally, all providers complete online HIPAA training annually. Compliance is tracked electronically by the Director of Clinics.

**Supporting Documentation**

Appendix F-1: Clinic Manual
Appendix F-3a: New Patient Handout - English

Available On Site
Patient Records
Front Desk Clerk Meeting Minutes
6-1  Research, the process of scientific inquiry involved in the development and dissemination of new knowledge, must be an integral component of the purpose/mission, goals and objectives of the dental school.

Conclusion: The UIC College of Dentistry complies with Standard 6-1.

Description

Research is integral to the College’s Vision which states, in part, that the College will be a world leader in “centers of research excellence that are interdisciplinary and focused on innovative research areas.” Similarly, research is integrated into the College’s Mission Statement. The mission commits to the goals of preparing “highly qualified....scientists in the basic and oral health sciences”; and fostering “collaborative research and develop centers for innovative research in areas of health and disease.” As described below, research is also integral to the College’s Goals and Objectives. This derives from the College’s belief that educational program for our dental students should be evidence-based and that our students will be competent in accessing, evaluating, and applying the best available evidence in their decision-making.

UIC is a major academic research center created in 1982 by the merger of the University of Illinois Chicago Circle Campus and the University of Illinois Medical Center Campus. Since then, it has grown to a 25,000 student campus with an annual budget of $1.3 billion. As the University has grown in size, its leadership has successfully pursued strategic initiatives to grow its research productivity. UIC’s annual grant and contract research expenditures have tripled since 1998, having grown from $96.8 million in FY 98 to $337 million in FY 08. The College of Engineering features one of the leading Centers of Artificial Intelligence and Electronic Visualization in the world and has the largest Bioengineering Department in the U.S. The College of Pharmacy houses one of the foremost centers in Pharmacognosy. The Medical School features both a Cancer Center and a Craniofacial Center; the latter is housed in the College.

Among UIC’s faculty, seven have been winners of the Nobel Prize, 10 have been awarded the National Medal of Science, 27 are Guggenheim winners, and 29 are currently members of the National Academy of Science. This substantial research growth has resulted from the recruitment of new faculty with research funding, the renovation and construction of research facilities, and the University administration’s infusion of start-up funding. The College is not a stand-alone dental school, but rather is at the geographical center of a rich support infrastructure of a major public research university.

UIC has developed a Center for Clinical and Translational Science (CCTS) that was funded by NIH’s CTSA program in 2009. In recognition of the importance of clinical translational research, UIC has also invested $5 million per year over four years to the center’s development. It has created and provided access to a standardized core of support services for clinical and translational research and educational activities to trainees from the six health science colleges of UIC. The CCTS includes cores in Clinical Interface, Design and Analysis, Community Engagement and Research, Translational Technologies and Resources, Regulatory Support and Advocacy, Novel Translational and Collaborative Studies, Evaluation, Education, and Bioinformatics that supports activities in each of the colleges. The College is fully engaged in the CCTS with a number of faculty playing leadership roles in the program. Five faculty in the College play key leadership roles in the CCTS. The PI (Marucha) is the Program Director for the CCTS Scholars Program (KL2) and is also on the Executive Committee of the K30.
The strength of all of the Health Sciences College's including Pharmacy, Nursing, Applied Health, Public Health, and Dentistry has assured a strong emphasis in interdisciplinary education and collaboration.

A critical component of the CCTS is the Research Education and Careers in Health (REACH) core. The overarching goal of all of the activities and programs in the REACH core is to establish a series of broad, flexible and integrated education programs to provide a diverse population of potential trainees with the full set of skills needed to be successful clinical translational researchers. The core provides a comprehensive range of courses, workshops, seminar series, and mentored research opportunities to serve the educational needs of clinical and translational science professionals at all stages of training and career development. The College has used this core to support three faculty in the MS in Clinical Research and three predoctoral students in the Clinical Research Certificate Program. Developing clinical research is seen as vital to the College since:

- New procedures, treatments will derive from research
- Outcomes of therapy through Comparative Effectiveness Research will be mandated
- Develops and maintains interactions with other Health Sciences
- Research, particularly collaborative/clinical research, maintains the stature of dentistry among the Health Professions

1. Describe how research is integral to the dental school's purpose/mission and list the school's research related goals and objectives.

Research and scholarship are highly regarded by the College in word and deed. The Strategic Plan Beyond 2010 clearly sets forth the College commitment in the first two goal statements:

Goal 1: To prepare well-qualified healthcare professionals, educators, scientists and dental educators.
- Recruit well-qualified students to the College DMD, IDDP, PhD, and postgraduate programs.
- Develop dental students for careers as practitioners, scientists and educators.
- Provide research training opportunities for dental students, graduate, and postgraduate students.

Goal 2: To foster collaborative research and increase external research grant funding by developing specialized centers for innovative research in health and disease.
- Promote and strengthen educational research, including a special emphasis on student learning assessment.
- Promote clinical and translational research through interdisciplinary and collaborative research projects with UIC health sciences and other colleges, and with other institutions, including the private sector.
- Encourage faculty to utilize available resources of the UIC Center for Clinical and Translational Sciences (CCTS) and to participate in its training programs.
- Complete research facilities renewal through the $9.9 million NCRR/ARRA Grant.
Growth in Research at the College
The College is emerging as one of the premier dental research and training centers of the world. The College now houses eight departments and two research centers, each of which contributes to graduate education in Endodontics, Oral Surgery, Oral Biology, Orthodontics, Pediatric Dentistry, Periodontics, and Restorative Dentistry as well as programs and opportunities for predoctoral students. From a modest baseline, the College's total research funding from NIH has grown substantially in recent years, from $1.1 million in grant and contract awards in FY98 to $7.1 million in FY10. Funding in FY10 included an additional $9.9 million C06 grant for construction and renovation of research labs, bringing the total to $17 million. Currently, twenty-one research projects in the College are funded by NIH, among which twelve are funded by NIDCR. The amount of research funds from corporate industry and philanthropic entities such as the Robert Wood Johnson Foundation has also been significant.

This growth has been due, in part, to the recruitment of new research faculty members, who either arrived with existing research funding or received awards shortly after arrival. There are now over thirty-two full-time faculty members in the College with more than half of their time committed to research activities.

College research funding reveals a profile of not only significant investigator-initiated R01s or other R-series grants, but also demonstrates strong support from the Department of Defense. The College has also done well with receipt of individual faculty research career development grants. The College has received two NIH Mentored Clinical Scientist Development Awards (K08). Six junior faculty members have received Career Transition Award (K22) and Mentored Patient-Oriented Research Career Development Award (K23) or have been appointed as junior faculty to UIC’s K12 program. The College was awarded a T32 (MOST program) to support the training of a range of future oral health scientists and clinical researchers: including PhD students, combined DDS/DMD/PhD, postdoctoral bench scientists, and clinical faculty who will pursue clinical research. The T32 was recently renewed for an additional five years of funding.

Faculty from four Health Science Colleges serve as T32 mentors, and since inception, four trainees are primarily mentored by faculty from outside the College. The College is increasingly integrating both research and research training into the larger medical campus through the Center for Clinical and Translational Science (CCTS), the Cancer Center, the Center for Wound Healing and Tissue Regeneration, and, as well, independent investigator-initiated projects.

Development of Research Infrastructure within the College
In 2004, the College was awarded a U24 award, entitled “Transforming Research at UIC College of Dentistry” under a program of Interdisciplinary Research in Cancer from an Oral Perspective. Building upon existing College strengths, faculty in this program collaborated with researchers within the College and University, and with the research community in Chicago to develop research aimed at improving prevention, diagnosis, treatment, quality of life and rehabilitation of the patient with oropharyngeal/head and neck cancers and patients with adverse oral reactions to therapy for cancer in other body regions. This initiative linked together cancer biology, epidemiology, pathology, wound healing, tissue engineering, and immunology to provide a team approach to link basic science findings to the clinical care of patients. The enhancements provided by this award for research infrastructure allowed us to build an interdisciplinary team. The U24 recruitment efforts enabled the College to hire nine research intensive tenure track faculty. This has accelerated research activity and fostered large-scale collaborations as witnessed through two NIH program awards being subsequently funded.
Faculty Recruitment and Development
In addition to improving the physical infrastructure, the College has supported newly hired faculty on research-intensive (at least 50% research time) tenure-track lines with substantial start-up funds. Over the last decade, the College has hired twenty-five new research faculty members. A total of forty funded principal investigators and eleven research assistant professors are included in the College research community. In addition to external recruitment, the College also supports the development of non-tenure track Research Assistant Professors. With mentoring and other support, two individuals recently have successfully moved from Research Assistant Professor positions into tenure track positions with new laboratory space and start-up funding. One K award recipient was recently awarded an R01, and the College has hired a new K award recipient in the tenure track. The College has provided additional discretionary funding for novel research programs. The College provided Research Support Grants of up to $5,000 per funded proposal to junior faculty, and up to $15,000 per funded proposal to senior faculty researchers who participate in interdisciplinary research.

2. Describe how the dental school determines whether its research goals and objectives are met on an annual basis. If goals and objectives are not met, what steps have been taken to correct the deficiencies?

The overall research goals and objectives are monitored and evaluated continuously by the Office for Research and the College Research Committee. The Research Committee has been formalized by developing a new charter in 2012 and has been elevated to a Standing Committee status in the Faculty Bylaws. The committee includes representatives from each College department and Center, as well representatives from junior and senior faculty. The Committee meets once per month and plans/evaluates the progress of the College in meeting/exceeding its research goals. The College supports a research retreat periodically to strategically plan research activities. The Associate Dean for Research is charged to address the research needs within departments by meeting with Department Heads at least annually and more often as dictated by the needs of specific faculty within the Department. The Associate Dean for Research reports to the Dean twice per month to discuss progress in the College meeting its research goals. Quarterly reports are provided to the Dean regarding research funding and expenditures.

The research training goals are evaluated by the Research Committee, by the Office for Research, and by the training programs related to those particular programs. For example, the PhD and DMD/PhD (Dental Scientist Training Program-DSTP) programs are evaluated by the Graduate Studies Committee (GSC) for the PhD program. The DSTP program is also evaluated by the predoctoral Curriculum Committee and the Subcommittee on Student Promotions (SSP). The University also evaluates all graduate programs (MS and PhD) every eight years through the Office of Programs and Academic Assessment. This includes both a self-study and an external review and was most recently completed in 2010 for the Master’s and PhD programs in Oral Sciences. After this review, the Graduate Studies Committee is provided suggestions on how to improve the program which were met.

All candidates for the PhD are formally evaluated by their advisors annually. The students then present their progress reports, including a self-evaluation, to the GSC each summer. The GSC assesses whether students have a strong curriculum plan, are making adequate progress in the laboratory, and are passing milestones in a timely fashion, e.g., candidacy exams and thesis defense. A formal written report is provided to the students and their advisors. Students that are not meeting the standards set are counseled on solutions to any deficiencies by their advisors, the Director of Graduate Studies (DSG), and/or the Director of the MOST program if they are supported by the
training grant. In addition, the students meet at least once per term with the DSG to provide additional oversight. After the candidacy exams and thesis defenses, the committee provides feedback to the program on the fairness, rigor, and performance during the exams. All students with United States citizenship in the PhD program are required to also write and submit a grant proposal to NIH to support themselves in the program. The reviews of these proposals provide another external evaluation of the students, the program, and their research. As stated before, the PhD program is evaluated by the University every eight years. This review requires an external component as well as a self-study. To date six individual grants for our PhD and DDS/PhD students have been awarded.

If research goals are not met the Associate Dean for Research meets with the staff of the Office for Research, the Research Advisory Committee, and the Dean to determine and/or review the causes for not meeting the goals and to establish potential solutions. In the current environment of funding, the loss of funding has become endemic and solutions are complex.

The College growth in this budget year is on a trajectory to be somewhat less than in recent years and therefore, the Office of Research has engaged the College faculty to ameliorate this reduction. We have provided bridging funds to help faculty obtain preliminary data required for successful grant applications, provided pre-submission review of grants, aided in publication editing, and maintained protected time during critical periods of proposal development. Nevertheless, there is clearly sufficient research activity to sustain student and faculty participation in research related activities.

3. Describe how the dental schools’ research program supports the overall educational program at the school, including research-driven changes in curriculum and/or clinical training.

The College features a full menu of research training opportunities for dental students, including a DMD/PhD program, a DMD/MS in clinical research, and a Certificate in Clinical Research. The College supports an active Student Research Group. All of these opportunities/activities support student exposure to research and research methodology.

The Associate Dean for Research participates on the Admissions Committee, Curriculum Committee, Graduate Dental Education Committee, and participates in the College Department Heads meeting. The Associate Dean for Research Chairs the Research Advisory Committee. Through these formal interactions, research opportunities for predoctoral students, post graduate trainees, and faculty are integrated into the decision making processes at all levels in the development of curriculum and the education of predoctoral and post-graduate dental students. An important part of both the DDS and DMD curricula is Evidence Based Dentistry that provides a primary venue in educating dental students in research methodology and its application to clinical practice.

All students have an opportunity to participate in research in our pre-matriculation summer research program, and are required to attend our annual Clinic and Research Day which features more than 100 presentations by our students and faculty. We developed a new presentation category for Clinic and Research Day named CaseCATs. Students chose a patient that they have been involved in the clinic that has an interesting or unique clinical presentation that would benefit from investigating the literature. The student presents the clinical scenario, then develops a clinical question, and performs a Critically Appraised Topic report (a structured analysis of at least three papers) relevant to the case. The student then provides a summary of how the papers inform the decisions in the case and suggests future research in the area. We have students developing CaseCATs starting in their first year and into the fourth year of the DDS/DMD programs.
The College seeks to provide the most scientifically current education for dental students. The DDS curriculum in the past and particularly the new DMD curriculum is under constant revision to ensure that students are provided, or are required to pursue, up to date information on issues related to both current and future oral health care. The Research Advisory Committee is tasked with developing curriculum proposals related to research for both students and faculty. The Associate Dean for Research then brings these proposals to the Curriculum Committee for discussion and action.

Having a faculty that is fully engaged in scholarly activity provides the best opportunity to assure that the curriculum stays cutting edge beginning with the early student experiences and through to graduation. This is further supported by “lunch and learns” that provide students and faculty with information on cutting edge and emerging technologies. There are several relevant seminar series that occur routinely in the College including the Wound Healing seminar series, the Oral Biology seminars that occur as part of the MS and PhD curricula, the Oral Cancer seminar series, as well as journal clubs given by the PhD and DMD students. These are all open to predoctoral students and lunch is provided. There is a number of campus seminars that are advertised in the College related basic and clinical biomedical research that students are encouraged to attend.

Supportive Documentation
Appendix A-2: Table 2 Outcomes Assessment
Appendix A-15a: Table 15a Research Grants – Federal
Appendix A-15b: Table 15b Research Grants – Private
Appendix A-16: Table 16 Faculty Research
Appendix B-1: UIC College of Dentistry Vision and Mission Statements

Available On Site
MS in Oral Sciences review report of 2010
6-2 The dental school faculty, as appropriate to meet the school’s purpose/mission, goals and objectives, must engage in research or other forms of scholarly activity.

Conclusion: The UIC College of Dentistry complies with Standard 6-2.

Description

Research is integral to the College’s mission, goals, and objectives and therefore, there are opportunities for all full-time and many part-time faculty to engage in research and scholarly activity congruent with their appointments in the College. They are supported by the College, which provides mentorship, facilities, equipment, time, and other resources required to participate. As a measure of research and scholarly activity, approximately 125 papers are published each year by faculty in the College. The scope of research in the College spans from basic to clinical research and is funded by NIH, the Department of Defense, as well as non-federal sources, e.g., foundations and contracts from the corporate sector. Scholarly activity also includes educational research, curriculum development, and public health advocacy.

The College tenure track has two sub-tracks entitled the Academic-Research sub-track and the Academic-Clinical/Educational sub-track. The College also has a non-tenure track entitled the Clinical/Educational Track. The expectations and criteria for research and scholarly activity are provided for each below.

1. List faculty expectations and/or evaluation criteria for research and/or scholarly activity. Include expectations and/or evaluation criteria for the following categories of faculty, as appropriate:
   a. full-time tenured,
   b. full-time tenure-track,
   c. full-time clinical track, and
   d. part-time.

   The College tenure track has two sub-tracks entitled the Academic-Research sub-track and the Academic-Clinical/Educational sub-track. The College also has a non-tenure track entitled the Clinical/Educational Track. The expectations and criteria for research and scholarly activity are provided for each below.

   a. full-time tenured
   b. full-time tenure-track

   Academic Track – Sub-track Research

   Assistant Professor (Academic Track – Research)

   Expectations include:

   • A record of peer-reviewed publications;
   • The potential for, or the possession of, research funding; and
   • Some evidence of or potential for educating students and/or activities directed at student learning.

   Associate Professor (Academic Track – Research) with tenure

   Expectations include:
• Continued growth in peer reviewed publications, which may include reviews and book chapters;
• A quality and quantity of published work that would be deemed adequate when reviewed by reasonable peers;
• Evidence of independent research funding, preferably from federal but also including non-federal sources, to support a nationally recognized research program; and
• Demonstrated evidence of excellence in educating students and/or activities directed at student learning.

Professor (Academic Track – Research)
Expectations include:
• Additional achievement in each of the above-listed areas as described for Associate Professors (Academic Track – Research), above.
• Continued excellence in research and significant innovation in his/her work.
• Recognition as a leader in his/her field with national and/or international peer recognition.
• Potential for continued growth.

Academic Track - Sub-track Clinical/Educational

Assistant Professor (Academic Track- Clinical/Educational)
Expectations include:
• Clinical excellence;
• Evidence of becoming a successful educator; and
• Potential for scholarly activities, including publications in peer-reviewed journals.

Associate Professor (Academic Track- Clinical/Educational)
Expectations include:
• Demonstrated evidence of excellence in educational, learner-centered activities;
• Development of educational materials and application of best education practices within the College curricula;
• Demonstrated excellence in the candidate’s field and promise of becoming a regional or national leader;
• A record of publication in peer reviewed journals, which may include reviews and book chapters;
• Evidence of a quality and quantity of published work that would be deemed adequate when reviewed by reasonable peers;
• Participation in faculty governance through membership on clinical/hospital/college and/or University committees;
• Participation in local, national and international professional meetings; and
• Participation in service activities consistent with Departmental, College and University missions.

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Professor (Academic Track - Clinical/Educational)
Expectations include:

• Additional achievement in each of the above-listed areas as described for Associate Professors (Academic Track – Clinical/Educational), above.
• Continued excellence and significant innovation in his/her work.
• Recognition as a leader in his/her field with national and/or international peer recognition.
• Potential for continued growth.

c. full-time clinical track, and

Non Tenure – Clinical/Educational Track

Clinical Instructor (Non-Tenured Clinical/Educational Track)
Expectations include:

• Potential for excellence in dental education.

Clinical Assistant Professor (Non-Tenured Clinical/Educational Track)
Expectations include:

• Demonstrated competence in educational activities;
• Demonstrated competence in patient care, when appropriate, or equivalent clinically-related activities;
• Demonstrated competence in department or college professional activities consistent with the College mission statement; and
• Eligibility for board certification (American or state specialty) when appropriate, or if a general dentist, documentation of exceptional performance related to the norms or acquisition of an additional degree (for example a Master’s degree in an academic discipline).

Clinical Associate Professor (Non-Tenured Clinical/Educational Track)
Expectations include:

• Demonstrated excellence in educational activity;
• Demonstrated excellence in patient care, when appropriate or equivalent clinically-related activities if appropriate to the candidates assigned role;
• Demonstrated excellence in department, college, university and professional service activities consistent with college and university mission statements;
• Evidence of scholarly activity, as related to education, patient care/clinical activity and service although documented publications are not necessary; and
• Eligibility for board certification (American or state specialty) when appropriate, or if a general dentist, documentation of exceptional performance related to the norms or acquisition of an additional degree (for example a Master’s degree in an academic discipline).
Clinical Professor (Non-Tenured Clinical/Educational Track)

Expectations include:

- Excellence at the highest level in 2 or more areas of educational activity, patient care/clinical activity, scholarship, and service;
- Evidence of scholarly publications, in peer-reviewed or non-peer reviewed journals;
- Achievement of recognition by peers at the college, university, and/or national/international level;
- Achievement of board certification (American or state specialty) when appropriate, or if a general dentist, documentation of exceptional performance related to the norms or acquisition of an additional degree (for example a Master's degree in an academic discipline).

Part-time faculty are not usually tenured and there are no absolute requirements for research or scholarly activity. Many part-time faculty do produce scholarly material as part of their commitment to enhancing their potential for advancing to a higher rank. The criteria for advancing to a higher rank are provided above.

2. Describe how faculty receive mentorship for engaging in research and/or scholarly activity.

Faculty mentorship for research is part of an overall program of mentorship and faculty development that requires a team approach to fully address the needs of faculty. Faculty receive mentorship for engaging in research and/or scholarly activity at multiple levels including through their Department, the Office for Research, individual mentors/mentoring teams, through campus-wide activities, e.g., the Center for Clinical and Translational Sciences (CCTS), and most recently through the College Office for Faculty Affairs.

The College Office of Faculty Affairs is charged with leading the process for assuring that all new faculty have appropriate overall mentoring teams. Since scholarly activity is required for tenure track faculty, it is a responsibility of the Department Head to assure that teaching loads provide needed time for tenure track faculty to participate in research and/or scholarly activity. The Department Head is required to meet with each faculty at least once per year to assess faculty progress on goals, including research, and to set new goals for the coming year. This is done in writing and at this time issues can be addressed related to teaching assignments and resources available for scholarly activity. The Associate Dean for Research meets with all faculty who have been granted time devoted to research at the initiation of their appointment and periodically to develop a research plan including developing a timeline for external funding applications, for identifying appropriate research mentors.

The general approach to mentoring in the College acknowledges that 1) all faculty should have access to mentoring, 2) many different effective mentoring methods exist, and 3) faculty may have unique mentoring needs. Therefore, our program is designed to present a mentoring “menu” that all faculty can access. Department Heads work with each faculty member to create an individualized mentoring program. Currently available programs include One-on-one mentoring, Peer Mentoring, and Mentor-Mentee Training. The availability of mentoring activities is regularly announced to all faculty and to
Department Heads and outlined within the “Faculty” section of the College website. At the time of annual review, each faculty member is asked to assess their mentorship and to identify needs in this area. Department Heads work with the Office of Faculty Affairs to fill any gaps in mentorship.

For clinical and translational scientists, the UIC CCTS provides multiple programs that can be accessed by faculty. These programs, detailed below under 3 (d) development, include grant writing workshops and working groups, faculty development activities to support for clinical and translational research. For example the CCTS provides a mentoring program that includes grant writing groups, faculty development and funding for clinical and translational research. This program is directed through the Research Education and Careers in Health core. Faculty can set up a meeting with the mentoring director and will be provided with access to resources and educational programs. The faculty will also go through a process of career development that will include setting goals and mileposts for achievement. They will also be directed towards the REACH Mentoring website that has numerous tools and resources to help with the development process. Mentors can come from many colleges in the Health Sciences Center, which helps the faculty in developing an interdisciplinary approach. The CCTS supports a term long grant writing course given twice per year that helps faculty write a grant proposal for submission. Additionally, there are small grant writing groups that have been established for writing K type awards and transitioning from K to R awards.

3. Describe the resources provided to meet the school’s research purposes/mission/goals including, but not limited to:
   a. financial support,
   b. support related to writing and administering grants,
   c. access to facilities, and equipment,
   d. faculty development opportunities, and
   e. protected time dedicated to research for faculty.

   a. financial support

The College provides significant startup packages to incoming research intensive faculty. These range from approximately $200,000 for junior faculty to over $500,000 for senior faculty bringing research grants into the College. This provides initial funding to equip laboratories and to develop preliminary data to competitively apply for external funding. The College has also provided bridge funding for faculty if external grants are not funded but there is a reasonable expectation that they will become funded in the near future. Most recently, junior clinical faculty have also been afforded modest start-up funds to jump start their pursuit of scholarship. These awards are in the $25,000 range and span a three year period.

Financial support for research is provided through College funded time for research and scholarly activity of its faculty and students. This varies substantially by individual depending upon the faculty’s success in obtaining external funding and their role in the College. The College supports stipends for DMD/PhD students as well as waives their tuition that is not covered by external grants. Each year the College invites pre-matriculation DMD students to participate in research. The College provides stipends for those students as well as travel funds so that the students can attend the AADR and other scientific meetings. The student participation augments faculty research programs.
b. support related to writing and administering grants,

The College, under the direction of the Associate Dean for Research, operates an Office for Research that provides administrative support to researchers. In addition to the Associate Dean for Research, this office has five positions dedicated to research administration, research support services and graduate research administration. The Office for Research aids faculty in identification of funding sources, proposal development and editing, budget preparation, grant submission through grants.gov, grantsmanship education, financial administration, and response to reviews. These services are particularly critical to new investigators, but are available to all. The Office also provides help in manuscript editing, preparation of IRB documents, and manages the College research training programs, from summer research through faculty development. The Clinical Research Facility is also administered through the Office for Research and there is a full time clinical research coordinator that aids in budgeting, IRBs, and coordinating clinical research. Each Department has a Business Manager who also assists research faculty in the ordering of equipment and supplies, human resources, and day to day financial oversight.

A critical role for the Office for Research is to provide support in the development of research mentoring for faculty. All faculty with research interests meet with the Associate Dean for Research to develop their research plans as they are recruited into the College. The Office helps to identify internal and/or external mentors and the Office also follows up on the interaction among mentors, the faculty, and the Department Heads. The Associate Dean also meets with faculty that have research interests individually on a periodic basis.

c. access to facilities, and equipment

Collaborations among researchers are facilitated by the close proximity of the various laboratories. In addition to individual laboratories, the College has built two interdisciplinary centers: The Center for Molecular Biology of Oral Diseases and The Center for Wound Healing and Tissue Regeneration. The College maintains more than 2,500 square feet of core lab space that includes a number pieces of shared equipment including: 3 real time PCR instruments, histology processing facilities, tissue culture equipment, ultracentrifuges, ultracold freezers, ELISA plate readers, a fluorometer, a scintillation counter, a phosphoimager and a laser microscope microdissection system.

From the years 2000-2008, the College invested more than $3 million in laboratory renovation, resulting in the creation of 11,000 square feet of additional laboratory space. This was accomplished primarily through the conversion of old predoctoral dental technique laboratories into research laboratory space. As a result, the College now contains a total of approximately 40,000 square feet of research space, nearly all of which is located on the 4th and 5th floors of the College building.

The College was awarded a $9.9M NCRR C06 grant that funded the renovation of more than 23,000 square feet of research space, adding approximately 9,000 square feet to existing research space and development of a new Clinical Research Facility encompassing 2,000 square feet on the first floor of the building that will greatly enhance the ability of faculty to conduct clinical research, both biomedical and behavioral, within the College. UIC also has a Research Resources Core that provides a full menu of cutting edge equipment and services to all faculty on the UIC campus. Through the Chicago Biomedical Consortium, faculty also have access to equipment and services at the University of Chicago and Northwestern University as well as Argonne National Laboratory (suburbs of Chicago).
All faculty with research funding or potential for research funding are assigned research space through the College Space Committee. Generally, junior faculty that have more than 50% research activity are assigned 500-1,000 square feet of laboratory space and senior faculty are assigned 1,000-2,000 square feet of research space if funded by substantial NIH or equivalent grants (e.g., R01 or center grant), according to the individual needs of the projects involved. In the new research space built through the C06 grant, approximately 5,000 square feet of the additional laboratory space will be shared and available to all faculty needing research space.

d. faculty development opportunities

**College of Dentistry**
The College offers several research seminar series and journal clubs that faculty may attend. These include the monthly Wound Healing and Tissue Regeneration Seminar, the Oral Biology Seminar Series, and the Advanced Oral Sciences Series. The College has hosted several multi-day research symposia, averaging 1-2 each year. Most recently, in June 2013, the College held a special week-long Oral Biology Legacy Symposium, open to all faculty. This conference included sessions on Functional Morphology, Evolution, Development, Mineralized Tissues, Regeneration, Stem Cells, Epigenetics, Tissue Regeneration, and History of Science. Multiple additional seminar series and programs are regularly offered throughout the campus by programs and departments external to the College.

The College Office of Research regularly offers research training and compliance seminars within the college itself. Offerings have included seminars on the NIH Public Access Policy, Conflict of Interest Compliance, and training in utilization of the REDCap (Research Electronic Data Capture), a secure web application that supports data capture for research studies. In service training on new equipment is also regularly offered within the College. The Office of Faculty Affairs also offers faculty development programs relevant to research faculty, such as CV preparation and workshops on promotion and tenure.

**UIC Office of the Vice Chancellor for Research (OVCR)**
The OVCR offers seminars and workshops that support research faculty development. For example, OVCR recently offered two training sessions on the use of the new eRA NIH Research Performance Progress Report (RPPR) module. OVCR regularly partners with the library to provide seminars on topics such as Measuring Your Research Impact, Increasing your Impact and Retaining Your Rights, and Understanding Open Access.

The OVCR also offers a Research Bridge Funding Program that provides short term financial support to sustain the research programs, laboratories, and momentum of productive researchers during funding gaps to give them a chance to regain extramural funding. The Office of Technology Management has an array of programs that encourage research innovation and facilitate economic development through the effective management, transfer, and commercialization of UIC technologies and intellectual property.

**UIC Center for Clinical and Translational Services**
The Research Education and Careers in Health (REACH) component of the CCTS is designed to train clinical and translational science researchers. REACH is an innovative inter-disciplinary and trans-
disciplinary educational program, oriented to both scientists and clinicians, that covers the full range from undergraduate to faculty.

REACH offers activities ranging from short workshops to advanced degrees.

- short workshops in research methods and grantsmanship,
- one on one professional consultations,
- structured advance peer review of grant applications prior to submission,
- NIH Grant Writing Seminars and
- on-line mentoring resources.

REACH also offers programs that are longer in length, including 1) a three-day Summer Program in Clinical and Translational Research Methods for clinicians interested in incorporating research into their clinical practices, and 2) a Summer Clinical Research Bootcamp. For intensive training, REACH offers a Clinical Research Methods Online Certificate Program that provides clinicians with the tools they need to carry out clinical and translational research. Alternatively, faculty can undertake the MS in Clinical and Translational Science program. This program has been designed for applicants with previous clinical training who need training in clinical/translational research, especially those in fellowship programs, postdoctoral training positions, or junior faculty with clinical responsibilities.

e. protected time dedicated to research for faculty

All academic tenure track faculty are assigned time for research in accordance with their other assignments as determined by the Department Head and endorsed by the Dean. Junior faculty that are research intensive are generally fully protected from teaching activity during their first year. Senior Research Intensive Faculty serve primarily as content experts for basic sciences components of the Small Group Learning and, if not funded, will also serve as Small Group Facilitator. Faculty that are dual trained in research and clinical care (DDS/PhD) have at least 50% of their time devoted to research with more protected time during their first 1-3 years appointment in the College. Faculty funded on research grants that require dedicated effort are relieved of the portion of their teaching that is offset by salary recovery. Since no tenure track faculty are supported 100% from grants, all faculty are required to teach and therefore, dental students have contact with all of our research faculty.

Clinical faculty have protected time for faculty development. The amount of time varies depending upon their research training, their career goals, and College needs. Generally full-time faculty have at least one day available for faculty development

4. Describe any formal institutional programs available to support faculty research, including application criteria and the number of faculty who have participated on an annual basis for the last five years.

The College through the Office for Research provides small grants to develop preliminary data for faculty. For example, the College provided financial support for six investigators to perform microarrays at the University’s Research Resource Center in order to increase the number of faculty
making use of new and innovative technology. The College also has an endowment, the Wach fund, that provides seed grants of up to $10,000 for faculty on annual basis. At the campus level, the 2010 Interdisciplinary Seed Grant Proposals Awards provided up to $200,000/year of funding, of which the College has received one (Diekwisch, PI). Recently, the Clinical and Translational Research Initiative Pilot Grant provided ten grants of $100,000 and an additional ten of $50,000 per year, of which the College received one in 2009 (Marucha, PI) and one in 2011 (Schwartz, PI). Other pilot grants are available periodically from the CCTS.

The Chicago Biomedical Consortium, a collaborative effort designed to stimulate interaction among scientists at Northwestern University, the University of Chicago, and the University of Illinois at Chicago, offers Catalyst Awards of up to $250,000 for projects that include PIs from at least two of the partner institutions. The Campus Research Board (CRB) provides seed money for research projects in their beginning stages. It awards up to $20,000 start-up money to tenured and tenure-track UIC faculty for research through a competitive process.

Supportive Documentation

Appendix A-15a: Table 15a Research Grants – Federal
Appendix A-15b: Table 15b Research Grants – Private
Appendix A-16: Table 16 Faculty Research
Appendix B-1: UIC College of Dentistry Vision and Mission Statements
Appendix D-1: COD Faculty Mentoring Program
Appendix D-11: Faculty Annual Self-Assessment and Review form
6-3 Dental education programs must provide opportunities, encourage, and support student participation in research and other scholarly activities mentored by faculty.

Conclusion: The UIC College of Dentistry complies with Standard 6-3.

Description

Research permeates all aspects of dental student life at the College. There are multiple opportunities for students to engage in research and other scholarly activities that the College provides, encourages and supports. Among these are research training activities, a summer research program, attendance at scientific meetings, seminars, an active student research group, Clinic and Research Day and the curricular reliance on evidence based learning and practice. These activities are all strongly mentored by clinical and research faculty.

1. Describe the integration of the student research program with the dental school’s purpose/mission and research related goals and objectives.

The College’s Mission commits to the goals of preparing “highly qualified...scientists in the basic and oral health sciences”; and fostering “collaborative research and develop centers for innovative research in areas of health and disease.” Furthermore, the College encourages research experiences for dental students that enhance their clinical skills through the development of critical thinking skills, problem-solving skills and an understanding of how research informs and shapes clinical care. Thus, all students are exposed to research at some level.

Current Research Training Programs

The environment in the College is rich with programs to support research training in basic and clinical sciences. The College supports the PhD in Oral Sciences, which has provided an umbrella for multidisciplinary research in the College. We were also successful in acquiring funding of the T32 training grant by NIDCR, which encompasses a program entitled “Multidisciplinary Oral Sciences Training” (MOST). The MOST program supports PhD students, DMD/PhD students, postdoctoral trainees, and junior faculty to provide research training and mentoring. Under the guidance of the primary investigator, Dr. DiPietro, the program has greatly expanded the opportunities for research training and the numbers of trainees in the College. It further provided opportunities for trainees outside of the College to be introduced to Oral Health Research.

The College recently partnered with the School of Public Health to create a dual degree program uniting the DMD with an MS in Clinical Research Training. For students who desire training in clinical research but who are not prepared to commit an additional year, the Center for Clinical and Translational Sciences provides a Certificate in Clinical Research. The certificate involves completing five online courses and completing a limited research experience in clinical research.

The MOST program and the DMD/MS program has had a significant impact on interactions among the trainees and has contributed to synergize and to amplify outcomes in each of the programs by stimulating true “translational” research.
In addition to formal ongoing research training, the following are research activities the College supports for dental students.

- **Pre-matriculation Summer Research Program.** research that takes place prior to the D1 year for admitted dental students who are mentored by faculty;
- **Undergraduate Research Program.** includes summer research (supported by NIH) for pre-dental students as well as course credit toward their undergraduate degree program;
- **CaseCATs Program.** annual competition program is open to all predoctoral program students and features Critically Appraised Topics associated with dental student patient care issues;
- **Oral Cancer Research Seminar Series.** monthly seminars open to all students;
- **Wound Healing Seminar Series.** monthly seminars open to all students;
- **Student Research Group.** student run AADR student research group
- **ADEA/AADR/IADR Meeting.** the College supports attendance at these nationals meeting by sending 10-15 students each year;
- **Clinic and Research Day.** a full day of research activities including ~100 posters, a keynote speaker, and CaseCAT presentations, all clinics are closed, mandatory attendance for dental students along with required class activity that must be completed by each student;
- **Midwestern Dental Student Research Forum.** annual event rotating among the University of Iowa, the University of Minnesota, and UIC for dental student research presentations;
- **Hinman Competition.** annual student research competition to which UIC sends a representative;
- **Dentsply Research Competition.** annual student research competition at the ADA meeting to which the UIC sends student poster winners from Clinic and Research Day;
- **Lunch and Learns.** promoted by the Office of Student and Diversity Affairs these presentations provide information about new emerging therapies in oral health as well as presentations on technology enhancements;
- **Oral Sciences 580/581.** held each fall term, weekly seminars are offered with a focus on cutting edge science relevant to oral health for post graduate students but advertised and open to all students;
- **Evidence Based Dentistry.** EBD is integrated into the predoctoral curriculum in every term of every year.

2. Describe how students receive mentorship for engaging in research and/or scholarly activity. How are students informed of the opportunity to engage in research?

There are comprehensive programs to assure students are informed of the opportunity to engage in research along with frequent announcements by the College’s Office of Research, research faculty and the clinical departments. The mentorship starts with recruitment activities. Each year there are a number of recruitment activities for pre-dental students that include a description and invitation for students to participate in research at the College. Recently, a new grant was awarded to the College by NIDCR “MOST in the Summer” which provides the opportunity for ten undergraduate students to participate in research in the College. During the first year we had more applicants than slots...
available, however, with identification of other sources of funding, we supported a total of twelve undergraduate students in summer research. A core component of our engagement of dental students in research is an active pre-matriculation summer research program for dental students. Approximately 10-12 students participate each year.

As students interview for the DMD program, they are informed by the admission’s team of the opportunity for research experiences and research training. The Office for Research sets up meetings with potential mentors for the coming summer. Prospective students also receive a brief orientation and have lunch with current trainees in the College, which is organized through the Student Research Group (AADR). Candidates not able to attend receive a copy of the abstracts and a link to the website in order to identify a potential mentor for the program. It is expected that all candidates for summer research have chosen a mentor before the completion of the application. This provides adequate time for planning and assures a productive summer activity.

All students participating in research have meaningful and ongoing mentorship from our basic and clinical research faculty. The Office for Research staff and Associate Dean for Research meet individually with students to assure students interested in research are matched with mentors. During the Summer Research program the students meet as a group once a week with faculty who provide research related curriculum and discussion. The topics vary from careers in research to ethical conduct of research, and also include discussions of individual student projects and methodology. Students who are engaged in departmental research work with faculty mentors who assure the students have a solid experience and understand the methodology involved in the projects. All students are required to present their research at the end of the summer and/or at Clinic and Research Day. Students that make significant progress are supported to go to national research meetings, e.g., the AADR and ADA, as well as regional meetings, e.g., the Midwestern Dental Student research Forum.

As part of the orientation process, the Associate Dean for Research orients dental students to all the research activities available in the College including research participation training opportunities and other options in research including the Student Research Group, weekly seminars, other opportunities on campus, and CaseCATs. The College advertises on its website and sends out announcements using its listservs to alert students and faculty about upcoming seminars and “lunch and learns”. The College leadership, including the Associate Dean for Research, meets with class officers once per month (Deans/Students leadership luncheon) and with each of the six predoctoral cohorts each term in town halls meetings. At these meetings research related announcements are made.

3. Describe how the school provides financial support; access to facilities, and equipment; development opportunities; and/or protected time dedicated to research for students.

The College provides substantial resources to support research activities for dental students. All students doing research have access to the more than 40,000 square feet of research space. This space includes laboratories, core equipment space, animal care space, and a new Clinical Research Facility. The College has modern research equipment available in the College and through the UIC Research Resources Core, which includes high end research equipment. Stipends are provided to students participating in the summer research program. The funds from these stipends come from alumni donations and College funds. Financial support is also provided through awards given at Clinic and Research Day, travel to meetings including the IADR/AADR meetings, the ASDA research meeting, the Dentsply competition at the ADA, and the Midwestern Dental Student Research Forum.
Through the DMD/PhD program the College supports eleven DMD/PhD students with stipends and tuition waivers. Some of this support comes from NIH grants, but a substantial portion comes in stipends for students not on NIH training grants and on tuition waivers for students not fully supported by training grants. All DMD/PhD students pay no tuition for the approximately 7-8 years in the program and receive a stipend.

The Summer Research Program, the Office for Student and Diversity Affairs, the MOST training program, attendance at the AADR, and activities of the Student Research group are supported development opportunities for dental students. There are a wide range of topics covered by these programs. The topics include, but are not limited to careers in dentistry related to research, the ethical conduct of research, workshops on writing abstracts and developing posters presentations, applying for grants, and training in survey research.

Students in our long term training programs, e.g., the DMD/PhD and the DMD/MS programs have significant protected time for research that comes from an extended program time. For example, DSTP (DMD/PhD) students have approximately forty-four months available over their 7-8 years for research training. All dental students can request protected time for research from the Executive Associate Dean for Academic Affairs in consultation with the Associate Dean for Research. Students in the Summer Research Program use the summer just before entry into dental school to initiate research in the school.

Additional support for all students includes a dedicated librarian from the Health Sciences Library faculty who is onsite one day per week, our IT department prints posters for presentations, our instructional specialist who assists with technology requirements as well as departmental support.

Supportive Documentation:
Available On Site
Student Research Projects
Student Publications