



**INDIANA UNIVERSITY**

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SCHOOL OF DENTISTRY

IUPUI

**Indiana University School of Dentistry  
Report to the IUPUI Program Review and Assessment  
Committee  
AS Dental Hygiene  
2014**

# Indiana University School of Dentistry

## Dental Hygiene

### PRAC Report, 2013-2014

#### Introduction: Dental Hygiene Program

Since 1999, dental education in the U.S. has been competency-based. Specific learning outcomes must be demonstrated independently by each student in order for that student to successfully complete the requirements of the degree. Since that time, IUSD has maintained student-level tracking of competencies via its Outcomes Measures documentation. In addition, institutional and program level outcomes assessment, which tracks the progress of the school in achieving the Goals and Objectives as stated in the Mission, Goals, and Vision Statement , <http://www.iusd.iupui.edu/about-us/mission-and-goals/>) also takes place annually and is ongoing. In July of 2013, the Commission on Dental Accreditation (CODA) implemented new accreditation standards under which Dental Hygiene programs in the United States and Canada are accredited. In September of 2013 the **IUSD Dental Hygiene program was the first dental hygiene program in the country to be accredited utilizing these new standards.**

Using information from course syllabi, data from course review forms, CoursEval student evaluations, analysis of student performance in courses, clinics, competency examinations, and Board results, a systematic curriculum/program review was completed to identify areas in need of improvement in student learning outcomes, and to strengthen the program in several key areas, including those represented by new accreditation standards.

#### Program-level Assessments, Recommendations and Actions

Dental hygiene accreditation standards mandate that the school have stated goals in the areas of teaching, research, patient care and service. At IUSD, each of the goals in these areas has multiple associated measures, which are evaluated regularly and used for continuous improvement. Student outcomes are used as evidence of student learning and as indicators of the quality of aspects of the program from admissions through graduation.

The following table lists the Dental Hygiene competencies, related PUL's, assessment tools, outcomes for 2013-2014 and planned changes for 2014-2015.

DH Competency	Related PUL's	Assessment Tools	2013-14 Outcomes	Planned Changes for 2014-15
1. Apply a professional code of ethics in all endeavors.	<b>PUL 6</b> Values & Ethics	Course Completion rates (direct measure); Student Self-assessment (Indirect measure) of clinical competencies and self- assessment of competency at graduation (indirect); Daily clinic grades (direct), Student	No student progress issues related to professionalism; No SPCC reports related to DH students; no clinical professionalism grade issues. <b>Evaluation of 2013 changes:</b> Modified the ethical principal activity- students identify ethical principles in clinic and send weekly report to the clinic	Evaluate outcomes of ethical principle activities in all courses and modify as necessary. Include case based classroom activity where possible, not just in clinical courses and Senior Seminar Course (H344) but to other courses as well.

		Professional Conduct Cases (SPCC) involving DH students; clinic procedural management reports	director for evaluation. Students have demonstrated the ability to identify multiple ethical principles during clinical care and relate it back to didactic teaching.	
2. Adhere to state and federal laws, recommendations, regulations and safety practices in the provision of dental hygiene care.	<b>PUL 6</b> Values & Ethics	Course Completion rates; Student Self-assessment of competency at graduation; Clinic grades for professionalism, Infection Control; Satisfactory completion of IN law exam for licensure; reported HIPAA violations	Satisfactory achievement of this competency as determined by all associated assessments and state licensure exams.	no changes recommended
3. Provide dental hygiene care to promote patient/client health and wellness using critical thinking and problem solving in the provision of evidenced-based practice.	<b>PUL 2</b> critical thinking, <b>PUL 3</b> intellectual depth, breadth, adaptiveness, <b>PUL 4</b> integration and application of knowledge	Course Completion rates (esp. Evidence Based Dental Hygiene Care, H252); Student Self-assessment of competency at graduation; Clinic grades; clinical competencies	We added self- assessment to each clinical competency. Students must self- assess prior to faculty assessment of competency.	Faculty will continue to identify specific curricular areas for increasing instruction of critical thinking concepts and principles.
4. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care.	<b>PUL 2</b> critical thinking, <b>PUL 3</b> intellectual depth, breadth, adaptiveness, <b>PUL 4</b> integration and application of knowledge	Course completion rates; clinic grades, clinical competency exams	satisfactory achievement of this competency as determined by all associated assessments	Continue to identify opportunities to incorporate evidence based education into all courses and clinics where applicable.
5. Continuously perform self-assessment for life-long learning and professional growth.	<b>PUL 4</b> integration and application of knowledge	Fundamentals of Dental Hygiene H218; Clinic 1 H219; Clinic 2 H301; Clinic 3 H302; Community Dental Health H347; self-assessments, competency self-assessments	We have made no progress in the use of e-portfolios to capture reflective artifacts.	Planning for reflective assignments related to use of eportfolio will continue.

6. Advance the profession through service activities and affiliations with professional organizations.	<b>PUL 4</b> integration and application of knowledge <b>PUL 6</b> Values & Ethics	community outreach reports; service learning participation, Student American Dental Hygiene Association (SADHA) membership	SADHA membership is close to achieving the 80% benchmark. We have invited Indiana Dental Hygiene officers to come speak to students about the importance of membership in (SADHA)	Considering mandatory membership in SADHA as an option.
7. Provide quality assurance mechanisms for health services	<b>PUL 2</b> critical thinking, <b>PUL 3</b> intellectual depth, breadth, adaptiveness, <b>PUL 4</b> integration and application of knowledge	Chart audits; process clarified and faculty evaluators calibrated.	Improved chart management by students has demonstrated improved patient care outcomes with fewer patients "falling through the cracks"	Continue chart audit procedures.
8. Communicate effectively with individuals and groups from diverse populations both orally and in writing.	<b>PUL 1</b> Core communication and quantitative skill <b>PUL 5</b> Understanding society and culture	Dental Health Education, H311 course outcomes, clinic grades, clinic competencies; record of treatment of special needs patients	Improved satisfaction by students on exit survey related to student knowledge of restorative dentistry.	Continue to monitor student satisfaction with restorative dentistry knowledge for patient education purposes. Evaluate communication competency outcomes for changes in passing rates now that some of our satellite clinics have closed.
9. Provide accurate, consistent and complete documentation for assessment, diagnosis, planning, implementation and evaluation of dental hygiene services.	<b>PUL 1</b> Core communication and quantitative skill <b>PUL 3</b> intellectual depth, breadth, adaptiveness	Clinic competency exams; success on Clinical Licensure Exam, Clinic grades	Two students were unsuccessful passing their clinical board exam. This is an improvement over the previous year where four students were unsuccessful. The ability to detect calculus remains a concern for faculty.	Continue to remind faculty to review calculus detection with every student at every assessment appointment to catch those who are struggling with the concept earlier rather than at board exam
10. Provide care to all clients using an individualized approach that is humane, empathetic, and caring.	<b>PUL 1</b> Core communication and quantitative skill, <b>PUL 5</b>	Clinic grades, clinic competency exams, patient satisfaction survey	Student success on all assessments indicates no problems in this area of the curriculum. Patient satisfaction surveys consistently show high rate of patient satisfaction.	no changes recommended

	Underst anding society and culture, <b>PUL 6</b> Values & Ethics			
Health Promotion 1: Individual. Provide planned educational services using appropriate interpersonal communication skills and educational strategies to promote optimal oral health.	<b>PUL 1</b> Core commu nication and quantita tive skill, <b>PUL 2</b> critical thinking, <b>PUL 3</b> intellect ual depth, breadth, adaptive ness, <b>PUL 4</b> integrati on and applicati on of knowled ge, <b>PUL 5</b> Underst anding society and culture, <b>PUL 6</b> Values & Ethics	Clinic competency exams; consistency of students in acquiring DDS treatment plans for new patients when needed	Student success on all assessments indicates no problems in this area of the curriculum. Efforts to ensure that all patients had current tx plans in the AxiUm chart improved consistency in this area.	Issues with treatment planning discrepancies will continue to be monitored and addressed with clinical faculty and students as they occur.
Health Promotion 2: Community: The dental hygienist should be able to initiate and assume responsibility for health promotion, health education and disease prevention activities for diverse populations.	<b>PUL 1, 2, 3, 4, 5, 6</b>	Community Health, H347 course grades and assignments	Community outreach activities remain high in number; opportunities to broaden scope of community outreach to include more child, adult and special needs populations continue to be sought; 100% of students provided documentation of their frequency of tx of special needs patients in the student record manual.	Continue to Identify opportunities to increase participation in community- based dental programs that focus more on addressing special needs populations in addition to the children's programming currently in place.
Patient Care 1: Assessment. Systematically collect, analyze and record data on the general, oral and psychological	<b>PUL 1, 2, 3, 4, 5, 6</b>	Clinic achievement reports, Clinical Practice 1, H219; Summer clinic, H221; Clinic 2, H301; Clinic 3, H302 course grades; clinical	Salivary testing still not incorporated into clinical curriculum due to lack of clinical supplies/equipment;	Continued efforts to incorporate salivary testing into clinical curriculum;

health status of a variety of patients/clients using methods consistent with medico legal principles.		competency exams		
Patient Care 2: Diagnosis. Use critical decision-making skills to reach conclusions about the patient's/clients' dental hygiene needs based on all available assessment data.	<b>PUL 2</b> critical thinking, <b>PUL 4</b> integration and application of knowledge	Clinic achievement reports, Clinical Practice 1, H219; Summer clinic, H221; Clinic 2, H301; Clinic 3 H302 course grades; clinical competency exams	Curriculum enhancements to support students' identification of patients for whom smoking cessation should be included in health education continue to be used. Students were given introductory lessons in Clinical Practice 1, H219 so that they could address these needs in their first semester of clinic.	No additional changes identified.
Patient Care 3: Planning. Collaborate with the patient/client, and /or other health professionals to formulate a comprehensive dental hygiene care plan that is patient/client centered and based on current scientific evidence.	<b>PUL 1, 2, 3, 4, 5, 6</b>	Clinic achievement reports, Clinical Practice 1, H219; Summer clinic, H221; Clinic 2, H301; Clinic 3, H302 course grades; clinical competency exams, Pre/post surveys related to IPE activity.	The collaboration of dental students and DH students in Comp Care Clinic was discontinued due to lack of enforcement of dental student responsibilities by their faculty. DH students participated in an Inter-professional case study exercise with nursing, physician assistant, social work, and occupational therapy students in November. Students gain knowledge about each other's professional responsibilities.	Adding an elective to the dental student curriculum that will lead to intra-professional opportunities to work together in the future. Continue the Interprofessional activity in the fall. The plan is to expand the activity to include another activity in the spring as well.
Patient Care 4: Implementation. Provide specialized treatment that includes preventive and therapeutic services designed to achieve and maintain oral health. Assist in achieving oral health goals formulated in collaboration with the patient/client.	<b>PUL 1, 2,3, 4, 5, 6</b>	Clinic achievement reports, Clinical Practice 1, H219; Summer clinic, H221; Clinic 2, H301; Clinic 3, H302 course grades; clinical competency exams; student success on NERB Clinical Licensure Exam	Two graduates were unsuccessful on their first attempt at the clinical licensure exam. Both students passed the retake. Reasons for their unsuccessful results were mixed--involving appropriate patient selection and calculus removal skills. Baseline data on frequency of opportunities to administer local anesthesia during patient treatment was collected. Student feedback indicated that students desired more opportunities to practice this skill prior to graduation. An additional lab was included for practice. Opportunities to administer anesthetic in other clinics are being explored to offer even more opportunities. Uniform experience for students in placing Arrestin	Efforts to increase student experience in local anesthesia are being sought out in other clinics in school: Continue to try to increase students' number of experiences in treating periodontally-involved patients to increase skill levels necessary for successful completion of the clinical licensure exam. Efforts to accomplish this goal have a long-standing history and are ongoing. Exact reasons for students' lack of success are uncertain and can only be inferred from reports they receive from the examiners. Students are provided with opportunities for remediation and additional clinical practice prior to re-taking the exam.

			continued to be problematic for numerous reasons therefore it remains a supplemental experience and not required.	
Patient Care 5: Evaluation. Evaluate the effectiveness of the implemented clinical, preventive and educational services and modify as needed.	<b>PUL 1, 2,3, 4,6</b>	Course Completion rates; Student Self-assessment of competency at graduation; Clinic grades; clinical competencies, especially Periodontal Written competency and Perio 3 clinical competency, Nutritional Counseling written competency.	Student assessment of stated treatment goals, as indicated in AxiUm treatment notes is not being recorded consistently. We have not audited chart notes during chart audits for this information.	We will again consider a random audit of student records during chart audit procedures to ensure that goals are recorded and evaluated in treatment notes at the time of completion of treatment. Faculty remediation of appropriate documentation needs to be addressed at the faculty in-service yearly.

**Assessment of Student Support (Advising), Student Self-Assessment, Competency Assessment.**

- Each full-time faculty member is an advisor to an assigned group of first and second year hygiene students. The faculty meets, at minimum, twice a semester with each of their advisees. The purpose of the advising is to assess the student’s academic and clinical status as well as audit the student’s chart management. Students have continuous access to their advisors via email. Students who are having academic difficulty, or who express a desire to do so, meet with their advisors more frequently.
- Faculty meetings occur at least once a month. Faculty discusses issues related to student achievement, professionalism, attendance, etc. During the faculty meetings we also discuss clinical and didactic achievements to see if there any patterns in behavior or knowledge deficiencies that need to be addressed with the advisor or respective clinic director.
- Our program completion benchmarks are consistently being met on-time.
- Students self-assess in the form of writing assignments, including reflective journaling, clinical competencies and self-assessment surveys throughout the curriculum.
- Clinical competencies are tracked to determine how many attempts were made before the clinical competency was successfully completed. Students who are not successful in a competency participate in remediation with selected faculty as needed prior to an additional competency examination attempt.

**Assessment Findings**

- We have a program level benchmark set at 85% passing for our National Board Dental Hygiene Exam (NBDHE). The class of 2014 achieved a 100% pass rate on this exam, indicating that students are well prepared for the Board.

- We have a benchmark set at 85% passing for our North East Regional Board Dental Hygiene Clinical Exam (NERB). The first time pass rate for the class of 2014 was 95%. 2 students passed the Board on the second attempt.

### **Actions Taken in Response to NERB Assessment Findings**

- The dental hygiene program director went to the NERB educators meeting after the NERB exam to identify areas where improvement in our outcomes could be made.
- Reasons for unsuccessful results were mixed--involving inappropriate patient selection and calculus removal skills. Exact reasons for a given students' lack of success are uncertain and can only be inferred from the reports they receive from the examiners. Students are provided with opportunities for remediation and additional clinical practice prior to re-taking the exam.
- In 2012, IUSD Dental Hygiene had a 100% pass rate on this Board. Going forward, tracking Board outcomes and reasons for failures will continue to determine if 1) trends exist across classes and 2) if curricular components require adjustment to improve student success.

