



**INDIANA UNIVERSITY**

**SCHOOL OF DENTISTRY**

**IUPUI**

**Indiana University School of Dentistry  
Report to the IUPUI Program Review and Assessment  
Committee  
AS Dental Hygiene  
2016-2017**

# Indiana University School of Dentistry Dental Hygiene PRAC Report, 2016-2017

## 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, <https://www.dentistry.iu.edu/index.php/departments/periodontics-and-allied-dental-programs/mission-statement/> 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 is completed annually to identify areas in need of improvement in student learning outcomes, and to strengthen the program in several key areas, including those represented by accreditation standards that are constantly changing..

## 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 2015-2016 and planned changes for 2016-2017.

DH Competency	Related PUL's	Assessment Tools	2016-17 Outcomes	Planned Changes for 2017-2018
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	No student progress issues related to professionalism; No Professional Conduct Committee reports related to DH students; no clinical professionalism grade issues.	Evaluate ability to include more ethical principles into all courses. Received a CEG grant to create a standardized patient simulation video for students to identify ethical principles. ( <b>Launch January 2018</b> )

		(direct), Professional Conduct Committee cases (PCC) involving DH students; clinic procedural management reports		
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 is demonstrated through infection control competency, daily clinical infection control evaluation, Satisfactorily completing H344 Senior Seminar, a law and ethics course, and state licensure exams which include Indiana Law.	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	In 2013 we added self-assessment to each clinical competency. Students must self-assess prior to faculty assessment of competency. It has proven to be ineffective and meaningless. Our assessment pilot demonstrated positive outcomes with the new self assessment procedure designed with our CEG grant. Students gave more honest self assessment of their work than the self assessment check off list embedded in competencies so we removed the old self assessment.	Demonstrating critical thinking throughout the curriculum is an ongoing process. We will work toward a portfolio to capture critical thinking artifacts. <b>(ongoing)</b>
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, assignments.	Students take a course on evidence based dentistry; Students work on a case study project that must use evidence from peer reviewed journals to solidify their decisions. These presentations are given at IUSD's Research Day every spring. Students have other papers and projects throughout the curriculum where they must demonstrate evidence based thinking.	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;	We have made no progress in the use of e-portfolios to capture reflective artifacts. We're trying to encourage student participation in professional organizations to	Planning for reflective assignments related to use of e-portfolio is ongoing.

	ge	self-assessments, competency self-assessments	encourage lifelong learning with little success.	
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	Student American Dental Hygiene Association membership for 2014-2015 dental hygiene students was close to 100% benchmark. Membership has slipped ever since. Even with presentations from Association members and attendance in state meetings students are not seeing the value. There was talk at the state level for dh students within Indiana participate in table clinics at the state meeting in 2017. It didn't happen due to logistical issues.	Considering mandatory membership in SADHA as an option. Continue to demonstrate the value of membership in their professional organization. Students are encouraged to participate in Association meetings at the state and national level.
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	Students report satisfaction on exit surveys and reflection assignments when discussing the ability to communicate effectively with patients from diverse backgrounds. For 2017 we planned to incorporate a cultural diversity workshop to help students recognize and learn from cultural differences. However we haven't scheduled it at this time.	Continue to monitor student Communication competency outcomes for changes in passing rates. We are expanding our community outreach again with clinical rotations to continue and expand in community clinics within Marion County.
9. Provide accurate, consistent and complete documentation for assessment, diagnosis, planning, implementation	<b>PUL 1</b> Core communication and quantitative skill <b>PUL 3</b> intellect	Clinic competency exams; success on Clinical Licensure Exam, Clinic grades	<b>Evaluation of 2016:</b> Student documentation of clinical treatment is reviewed at chart audit meetings. Added appointment planning lectures focusing on dental hygiene process of care to give students the chance to identify good documentation	Calibration of clinical faculty continues to be a priority with semi-annual calibration sessions for faculty. Calibration leads to better clinical learning for students. Calibration is ongoing.

and evaluation of dental hygiene services.	ual depth, breadth, adaptive ness		vs. poor documentation. This is ongoing process.	
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> Understanding society and culture, <b>PUL 6</b> Values & Ethics	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
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 communication and quantitative skill, <b>PUL 2</b> critical thinking, <b>PUL 3</b> intellectual depth, breadth, adaptive ness, <b>PUL 4</b> integration and application of knowledge, <b>PUL 5</b> Understanding 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 special needs, geriatric, adolescent, child and informed consent competencies demonstrate communication with different populations is good. Assessments indicates no problems in this area of the curriculum. Efforts to ensure that all patients had current tx plans in the AxiUm chart have improved consistency in this area.	Continue to monitor and reiterate with clinical faculty and students potential issues related to inadequate communication skills.
Health Promotion 2: Community: The dental hygienist should be able to initiate and assume responsibility for health promotion,	<b>PUL 1, 2, 3, 4, 5, 6</b>	Community Health H347, and Clinic H301, H302 course/clinic grades and assignments	Opportunities to broaden scope of community outreach to include more children, adult and special needs populations continue to be sought; 100% of students provided documentation of their	Continue to identify opportunities to increase participation in community-based dental programs that focus more on addressing special needs populations. Identifying community partners to collaborate with

health education and disease prevention activities for diverse populations.			frequency of tx of special needs patients in the student record manual. <b>Evaluation of outcomes:</b> Added Marion County Health Department and Jane Pauley dental clinics to our community outreach to expand student exposure to community dentistry.	is ongoing.
Patient Care 1: Assessment. Systematically collect, analyze and record data on the general, oral and psychological health status of a variety of patients/clients using methods consistent with medico legal principles.	<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	In summer of 2016 all course directors were charged with reviewing the Compendium of Dental Hygiene Education to evaluate their courses and determine consistency with ADEA's recommendations. Changes are ongoing with most courses reviewed and changes made if necessary.	Monitor clinical outcomes including student grade sheets for patterns where assessment may not be detailed enough.
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	Modifying lectures in periodontics courses to help students identify reasoning for proposed periodontal treatment. Will include more in class case studies to help students close the loop in determining course of treatment based on criteria learned in class.	Continue to evaluate students' ability to connect the dots from didactic to clinical education.
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.	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. This will occur again for the fourth year in a row. A spring IPE ethics exercise has been added. <b>Evaluation of 2015 outcomes:</b> The dental student elective was very successful for the second year. Students demonstrated increased understanding of dental hygiene related job duties and skills.	Dental Hygiene students will be included in the TEACH curriculum through the Center for Interprofessional Education Students will participate in exposure, immersion and competence activities throughout the hygiene curriculum starting in 2017
Patient Care 4: Implementation. Provide specialized treatment that	<b>PUL 1, 2,3, 4, 5, 6</b>	Clinic achievement reports, Clinical Practice 1, H219; Summer clinic, H221; Clinic 2, H301; Clinic	Students are expanding their opportunities to administer local anesthesia in our external clinics which is giving them real life	The need is there to increase students' number of experiences in treating periodontally-involved patients to increase skill

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.		3, H302 course grades; clinical competency exams; student success on NERB Clinical Licensure Exam	experience with administering local anesthesia for the dentist and how that fits into a tight schedule.	levels necessary for successful completion of the clinical licensure exam. Efforts to accomplish this goal have a long-standing history and are ongoing. Working on consistency among faculty to make sure all students are involved in goal planning with their patients and are recording these goals in the patient chart.
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. Still in process. We had a faculty meeting to review with all faculty what the periodontal description should look like, how students should be describing it in clinic and how it should be documented in the patient chart. We seem to have improved our consistency slightly, but still have work to do.	We continue to evaluate clinic policies and procedures and review with faculty when consistency is lacking. Calibration is an ongoing and valuable necessity. Still working to calibrate our periodontal description among faculty. We may need to identify verbage that is consistent with the message we are trying to get across to students. A lot of the time faculty are saying the same thing but students hear it differently.

**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 and face to face appointments. Students who are having academic difficulty, or who express a desire to do so, meet with their advisors more frequently. These meetings help us identify students in need of remediation early in the semester as opposed to the end of the semester. This way we can address the problem before it is too late. We had 1 student on academic probation last year who was able to graduate with their cohort with help from their advisors and clinic directors.
- We have regularly scheduled curriculum assessment meetings to review course outcomes. We look at student course evaluations as well as our own observations as to what worked and didn’t. Every June we meet to discuss clinical competencies. We gather input from full time and part time faculty and review the comments to determine if we need to make changes for the upcoming class.

- 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 competency self-assessment 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.
- Each first year dental hygiene student is paired with a second year dental hygiene student. The second year student acts as mentor to the first year student guiding them through the varied experiences in the program from computer training, to help with patient care.

### **Benchmark Findings**

- We have a program level benchmark set at 85% passing for our National Board Dental Hygiene Exam (NBDHE). The class of 2017 achieved an 80% pass rate on this exam, indicating that students may not have been as prepared for the Board this year. All students attended a board review course prior to taking the exam. One of the unsuccessful students is an (ESL)
- We have a benchmark set at 85% passing for our Commission on Dental Competency Assessments (CDCA) clinical patient board exam. The first time pass rate for the class of 2017 was 90%.