Assessment Contact Person: Judith Schafer

Annual Reports for 2006 and 2007 (attached)

The Dental Hygiene Program was scheduled for a 3 year review in 2008. Due to change in program administration in January 2008 this report was waived. No annual report or 3rd year review were submitted in 2008.

Department Assessment Plan: (assessment grid attached)

Program Goals: Dental hygiene graduates will be able to:

1. Utilize knowledge and clinical competencies to provide current, comprehensive dental hygiene services.
2. Communicate; write, speak, and listen effectively to acquire, develop and convey ideas and information.
3. Practice their profession adhering to ethical, legal, and professional codes of conduct expected of the dental hygiene practitioner.
4. Apply critical thinking skills to one’s practice of dental hygiene.

Changes to Goals since Third Year Report, 2005

Dental Hygiene program goals are generally the same as they were in the previous report with the addition of goal number four. The program adheres to the American Dental Association Commission on Dental Accreditation Standards to guide in the development of didactic and clinical courses. Goal number four is tied to an accreditation standard that requires graduates be competent in critical thinking. Clinical patient evaluations and the development of the Critical Thinking Portfolio are program measures addressing this program goal.

ASDH graduates demonstrate competency through success on credentialing exams of the Dental Hygiene National Board Exam (DHNBE) and the North East Regional Board Exam (NERB). The assessment and evaluation of dental hygiene students in attainment of these goals has led to student and program success.

Assessment and Measurement Tools (assessment criteria, instruments or data are attached)

Direct Measures

- Daily Process and Complete Treatment Clinical Evaluations
- Clinical Skill Assessments
- Corroborative Error Assessments
- Clinical Patient Requirements
- North East Regional Board Exam (NERB)
- Dental Hygiene National Board Examination (DHNBE)
- Critical Thinking Portfolio
Indirect Measures

- Survey results (Graduate Exit, Employer, Patient Satisfaction, Alumni)

Assessment Techniques and Changes

*Daily Process and Complete Treatment Clinical Evaluations* are used routinely as students treat patients in the clinical setting. The rubric format which evaluates components of the Dental Hygiene Process of Care are adjusted each clinical level to build clinical competence. Faculty review and update these forms of assessment and outcomes annually to determine whether they accurately measure clinical competence.

*Clinical Skill Competency Assessments* are detailed measures of evaluation to determine competency in specialized clinical procedures. Each clinical semester students are required to complete skill assessments proportionate to their clinical level. As clinical procedures are modified, skill assessments are reviewed, revised, and updated annually by faculty.

*Corroborative Error Assessments* are performed each semester evaluating specific fundamental clinical skills by three clinical faculty simultaneously. The goal is to identify clinical strengths and weaknesses and provide remediation for those needing direction and practice. If a student is not at a passing level, Individualized Clinical Instruction (ICI) is provided as remediation prior to re-testing. In addition to student assessment, this provides an effective exercise in faculty calibration.

*Clinical Patient Requirements* are required each semester. The Commission on Dental Accreditation requires that graduates complete patients at varying levels of age and difficulty level to become competent. Faculty monitor students’ progress in these areas throughout and at the end of the each semester.

*North East Regional Board Exam (NERB)* is the credentialing examination for dental hygiene licensure. Two years ago the Indiana State Board of Dentistry recognized NERB as the examination for clinical licensure in Indiana. NERB provides evaluation of applicants on the Computer Simulated Clinical Examination (CSCE) and the Clinical Board Exam. NERB is recognized by a total of 16 states.

Mock board exam competencies are required in the final two clinical semesters to prepare students for success on this clinical exam. School critiques on the CSCE and the Clinical Board exam are included in the assessment data included. Students are required to successfully complete mock clinical exams prior to graduation and before taking this credentialing exam.

*Dental Hygiene National Board Examination (DHNBE)*

Analysis of curriculum content areas on the DHNBE provides information on program strengths and weaknesses in didactic content areas. The program goal is to meet or surpass the national average in the individual content areas of the exam. In review of the DHNBE Five Year Performance Summary (attached), we are achieving this goal. In 2008, the programs had a 100% overall pass, and an 84.5% school average compared to the 83% national average.

Success can be attributed to traditional assessment means of quizzes and examinations in each course. Faculty use of technology via Oncourse provide students with improved access and a means of understanding course content through postings of lecture power points, engaging students in discussion forums, and utilizing online tests and surveys can also be contributed to this didactic course success.
The only areas that the program falls slightly below the national average are in the content areas of the basic sciences (Physiology, Biochemistry and Microbiology) which are pre-requisite courses prior to admission to the program. Mock board exams and review of these content areas while students are in the program is a strategy that has provided scores comparable to the national average. Meetings with faculty teaching these courses and communicating dental hygiene curriculum content are a strategy also employed.

**CRITICAL THINKING PORTFOLIO** (replaced Writing Portfolio) is a writing assignment which challenges students to unravel a patient case study and make recommendations for the treatment of this case within the dental hygiene process of care.

Critical thinking portfolio goals:

1. Demonstrate the ability to critically analyze an article using the program critical thinking template.
2. Apply basic techniques of research methodology in the analysis of articles and dental hygiene case studies.
3. Demonstrate the ability to apply communication, computer, and patient treatment skills clearly and accurately in writing.
4. Demonstrate competency in the evaluation of current scientific literature.

The critical thinking portfolio (*guidelines attached*) is initiated in DHYG-H242 Introduction to Dentistry with the use of the critical thinking template in analysis of an article. The development of critical thinking skills continues in analysis of a case in the subsequent semesters. Case study guidelines and an evaluation rubric are provided to assist students in attaining competence of this goal.

**SURVEYS** such as the graduate exit survey, employer surveys, patient satisfaction and alumni surveys are utilized to assess program goals.

**Graduate Exit Survey** is administered every August following May graduation from the program. This survey serves as a beginning reflection of graduates on their education as they begin employment experiences.

**Employer Survey** is administered in October every five years. This survey evaluates the extent to which employers feel the graduates are prepared for entry level positions in dental offices.

**Patient Satisfaction Survey** is available to patients receiving treatment in the clinic on an ongoing basis. At the end of each semester surveys are collected, data tabulated and action taken as result of the performance levels indicated.

**Alumni Survey** is conducted every five years. This survey requests information about our graduates’ professional education and requests information on what they would want from the program to enhance and further their education. The dental hygiene alumni day survey was conducted in March 2009 to gather this information.
Changes made to the program as a result? (Curriculum, classes offered, classes discontinued, scheduling, advising, faculty education, etc.)

*DHYG-H 250 Local Anesthesia Course Development*

As a result of legislative changes in the Indiana State Dental Practice Act allowing hygienists to administer local anesthesia, a didactic and lab course have been developed to provide this education to dental hygiene students. DHYG-H250 (2 credits, approved as a new course, Nov. 2008) Local Anesthesia for the Dental Hygienist will be added to the program curriculum beginning fall 2009. DHYG-H215 Pharmacology was previously taught in the fall semester. This has been moved into the summer session as a pre-requisite for H250.

Changes to make in the coming years to the program and assessment techniques and why?

To remain as an accredited program of excellence in the dental hygiene field, the ASDH will need to continually update its assessment and evaluation tools and techniques to graduate competent professionals meeting the needs of an evolving profession. Access and delivery of care, advances in technology and profession advancement will require continued program assessment and development.

The assessment data and analysis by faculty will be used in preparation for the program reaccreditation by the Commission on Dental Accreditation in September 2010.

Individuals and Groups involved in the assessment:

The full-time faculty of the dental hygiene program meets on a regular basis to discuss student assessment and evaluation. Each semester associate clinical faculty attends meetings to discuss clinical evaluation, calibration and implementation of program changes. Annually, clinical coordinators and the director meet to evaluate and update assessment mechanisms.

Faculty provides students with assessment criteria each semester in each of their courses. In clinical courses a faculty mentor is assigned to meet at least two times during the course of a semester. A written academic or clinical alert system is used to officially notify students when discrepancies in student performance and standards are observed. This assessment and notification has been helpful identifying remediation needs and achievement of competency.

At the end of the fall and spring semesters, a meeting with the Programs in Dental Education Advisory Board is held. Assessment data is shared and input from the board is solicited and discussed.

Summary (most important aspects of the assessment of student learning on the program):

An assessment and evaluation of the ASDH Programs in Dental Education reveal that graduates are competent for entry-level positions as clinical dental hygienists. Students are acquiring the knowledge and clinical competencies required to be licensed through credentialing exams. Regular clinical performance evaluations and didactic course passing rates demonstrate formative competence. Success on the written (DHNBE) and clinical (NERB) exams with a high passing rate are evidence of summative program competence.

Critical Thinking Writing Portfolios have provided opportunities for students to demonstrate competence in the integration of knowledge and skills necessary in all aspects in the dental hygiene process of care (assessment, diagnosis, planning and evaluation). The dental hygiene process of care
deals not only with the specific provision of healthcare through treatment services, process of care also refers to higher order thinking, processing, problem-solving, and critical thinking.

Program surveys also support program goals of preparing students through clinical competence. The results show overall high percentages of positive satisfaction scores on all skills and competencies in the practice of dental hygiene. A high percentage of positive responses in the patient satisfaction surveys indicate that the dental hygiene services provided in the clinic are consistently provided at a level that reflects great respect and appreciation by our patients and the community.