II.A.2

Sustaining Rigor and Relevancy in the Curriculum

Standards:

The program sustains rigor and relevancy in its curriculum both by aligning with professional standards or best practices, and by regularly responding to stakeholders needs.

Guideline:

a) Describe how the program sustains rigor and relevancy in its curriculum both by aligning with professional standards or best practices, and by regularly responding to stakeholder needs.

Judgment

☐ Compliant ☐ Non-Compliant ☐ Not Applicable

Program Self-Study Narrative

Curriculum designed to meet the needs of stakeholders: The Program competencies are entry-level abilities the students need to begin dental hygiene practice. These competencies are supported by content in general education, the biomedical, dental and dental hygiene sciences. They serve as a guide in making evidence-based decisions relative to content and course sequencing. They also provide a framework for the outcomes assessment of the Program.

The Dental Hygiene Program recognizes the varying needs of our students. Faculty attend methodology training on an annual basis, via an online conference, or a face-to-face course. Training includes strategies in classroom and clinical instruction. Rigor and relevancy is maintained within the curriculum while aligning with the Commission on Dental Accreditation Standards. CODA reviews the dental hygiene curriculum on a seven-year re-accreditation cycle. CODA Standards 2-1 through 2-24 specifically address the dental hygiene curriculum. CODA Standard 2-24 addresses the Curriculum Management Plan.

The dental hygiene advisory committee meets twice a year. During these meetings, input is garnered from community dentists and hygienists on desired skills/training they would like to see in a dental hygienist. The Dental Hygiene Advisory Committee recently made a suggestion to incorporate laser therapy training into our program. We then followed up on their suggestion by researching and purchasing a laser. Faculty will be attending laser certification courses in the future.

Rigor: The Dental Hygiene Program is rigorous study of advanced science classes offered in an accelerated format. The curriculum for the program is composed of three integrated educational components: didactic, laboratory and clinical which allows for a variety of learning activities in the program. We continually focus on increasing rigor in our dental hygiene program as we scaffold our students from basic DHYG 1410 Dental Hygiene Principles (Term 1) through DHYG 2445 Dental Hygiene Clinic III (Term 4) to build future effective practitioners in the field.

Pre-clinic and clinical experiences in each of the 4 terms of the program reinforces theory, strengthens application and analysis skills. Students apply clinical skills weekly providing direct patient care in the LCCC clinic, Life Care of Cheyenne nursing home, and PACE. In addition, they learn and practice related skills with assignments as clinic assistant, office assistant and radiographic assistant. Students practice and develop strong radiographic skills exposing radiographs on patients and receive additional practice in each clinic by utilizing DXTRR mannikins.

The required practicums, proficiencies, competencies and test cases required of the students are arranged in a logical sequence, moving from simple to more complex and difficult procedures as the student advances in his or her education. Students are given the entire semester to complete all objectives, competencies and requirements allowing time to master competency at his or her own pace. Remediation is available for any student unable to master competency and is provided with an individual plan of remediation based upon student assessment. Many competencies rely on specific classifications of patient needs and a student may not be able to meet course requirements because a specific patient was not available or did not return to complete treatment. Incomplete grades are given for these deficiencies and do not affect the student's course grade. All program competencies must be met for the student to graduate.

Examples:

- Instrumentation competency on more difficult cases as the student progresses from clinic I through clinic III.
- Progression from recognition of teeth to their quadrant placement to charting of the teeth.
- Progression of learning individual instrumentation processes in the pre-clinical course, such as grasp and fulcrum of

Progression of learning individual instrumentation processes in the pre-clinical course, such as grasp and fulcrum of instruments, to the completion of a complete assessment and some debridement on a patient near the end of the semester. Required to pass Instrumentation

Practicums at 75% and all other Principles' competencies at each competency level (minimum of 75%) before beginning to treat patients in the clinic.

- Progression from learning individual assessment and treatment planning and evaluation processes in the pre-clinical course, such as review of medical and dental history and intraoral/extraoral examination, to complete chart notations for a patient near the end of the semester.

- Progression in radiology lab from DXTTR to fellow student or patient; 80% competency required before exposing radiographs in Clinic I.

- Progression from recognition of teeth, other anatomical structures, and restorative dental materials in lab sessions to charting the patient's mouth in clinical sessions.

- Progression from requirement for easier test cases in Clinic I to more difficult cases in Clinics II and III

- Fewer retakes allowed and higher competency for radiographic requirements in each clinic.

- Progression of recognition of basic structures to interpretation of abnormalities on all radiographs exposed in each clinic

To support student learning, program faculty in didactic courses employ several different learning activities. New material is typically introduced using textbook assignment and traditional lecture format utilizing PowerPoint presentations, audio visual aids including videos, film clips, and ELMO demonstrations. Once students have received the basic foundation knowledge they need, students apply their knowledge in active learning activities which include:

- Case studies (Periodontology, Dental Public Health, Seminar III, Ethics & Practice Management)
- Oral Presentations/Role Playing/Teaching (Principles, Preventive Dentistry, Periodontology, Dental Public Health, Seminar III, Ethics & Practice Management, Pain Management)
- Laboratory activities/Proficiency Evaluations (Principles, Preventive Dentistry, Radiology, Dental Biology, Dental Materials, Pain Management, Periodontology, Seminar I, II, III, Dental Public Health)
- Radiographic interpretation/critiquing exercises (Dental Radiology, Periodontology, Clinics I,II,III)
- Peer review/collaboration activities (Preventive Dentistry, Periodontology, Dental Materials, Dental Hygiene Seminar III, Dental Public Health)
- Service Learning/Journaling activities (Principles, Clinics I,II, III, Dental Public Health)
- Disease recognition/simulation activities (Periodontology, Oral Pathology)
- Pre clinic and clinic experience in each of the 4 terms of the program reinforces theory

Relevancy: Course competencies align with the program competencies based upon the Commission on Dental Accreditation (CODA) Standards. At the initiation of each dental hygiene course, written course descriptions, content outlines, topics presented, specific instructional objectives, learning experiences, and evaluation procedures found on each syllabus are given and reviewed with students.

The course curriculum and documentation are reviewed at the end of each term at the monthly faculty staff meetings and again at the Curriculum Management workshop held every July. Faculty offer feedback on changes needed in the curriculum. Student's end-of-course surveys are reviewed and analyzed for suggested changes.

Input is gathered from stakeholders at the end of the students' community service projects and clinic sessions and reviewed for relevancy. This information is used to make adjustments in courses. For example, if a clinical adjunct instructor tells us that students had difficulty with time management in clinic, we include additional learning activities in Seminar (clinic) didactic course to hone these skills. This helps us to make the curriculum relevant and meaningful for our students.

Students apply clinical skills weekly providing direct patient care in the LCCC clinic and off-campus rotation sites. In addition, they learn and practice related skills with assignments as clinic assistant, office assistant and radiographic assistant. Students practice radiographic skills exposing radiographs on patients and receive additional practice in each clinic by utilizing the radiographic mannikins (DXTRR).

Patients seen in the clinic complete a Patient Satisfaction Survey at the ed of their appointment. These surveys are analyzed for suggestions from the patient's perspective. If from these surveys, a deficiency is noted, changes to the curriculum will be made.

Exit surveys are given to students on their last day in the program, Graduation and Employer surveys are sent out

approximately six months post graduation. These are all analyzed to obtain feedback. This information is utilized when revising curriculum.

The didactic, laboratory and clinical coursework are directly correlated to each other and arranged in a sequential manner, allowing students to reinforce and build on past learning experiences. Students have the opportunity to immediately apply their classroom knowledge in a real-life situation, receive feedback and practice self-assessment.

Internal Review Comments (Jan - Mid-March)

ahoward no comment

cczarnecki: no comment

NHuseman: No Comment

kbender: The program provides especially strong narrative for recognizing and responding to stakeholder needs.

Sources

- 7.19.2016 Faculty-Curriculum Mgmt Plan Minutes
- August 2017 Curriculum Management Meeting Minutes
- CODA Standards
- Compilation DH Advisory Committee Meeting Minutes 2016-17
- DH Faculty-Staff Meeting 6.5.17
- Employer Surveys
- Exit Survey Results 2015-16
- Graduate Survey Results
- Methology CE Certificates
- Patient Satisfaction Survey
- Program Mission, Goals, & Competencies

II.C.1

Programs Identify Their Key Stakeholder Groups

Standards:

Programs identify their key internal and external stakeholder groups, such as students, employers, and/or educational partners.

Guideline:

a) Provide a list of the program's stakeholder groups. Examples of stakeholders include: students, employers, clinical supervisors,

advisory committees, LCCC academic advisers, general education faculty, accreditation agencies, state agencies, four-year

institutions, and secondary teachers in concurrent enrollment experiences.

Judgment

☐ Compliant ☐ Non-Compliant ☐ Not Applicable

Program Self-Study Narrative

Internal and external stakeholders: The Dental Hygiene Program works with a variety of stakeholders including patients, students, employers, instructors and advisory committee members to assess satisfaction and solicit input regarding our program.

Current Students

Graduate Students

Employers

Guest Speakers

Community partners

Advisory Committee

Patients

Accrediting Body, CODA

Faculty

LCCC Admissions

LCCC Advising

LCCC Financial Aid

Wyoming Workforce & Development

4 year Institutions: Wichita State University

Internal Review Comments (Jan - Mid-March)

ahoward no comment

cczarnecki: no comment

Nhuseman: no comment

kbender: No comment for this section.

Sources

- 2015-2016 Service Learning and Community Dental Health Report
- 2016 Guest Speakers
- 2016_17 LCCC Dental Hygiene Community Service & Learning
- CODA Standards
- Employer Surveys
- Exit Survey Results 2015-16
- Graduate Survey Results
- Oct 2017 - Advisory Board Comm
- Patient Satisfaction Survey
- SADHA meeting minutes June2017
- Wichita State University Articulation Agreement

II.C.3

Using Stakeholder Feedback Information to Make Adjustments to Curriculum

Standards:

Programs regularly use feedback information from these stakeholders to develop informed adjustments to the curriculum.

Guidelines:

a) Describe the process for using the program's stakeholders' feedback to make adjustments in its curriculum such as holding

faculty curriculum meetings or retreats.

b) The program provides at least one specific example of how gathered stakeholder feedback was used to improve or revise the

program's curriculum since the previous review.

Judgment

☐ Compliant ☐ Non-Compliant ☐ Not Applicable

Program Self-Study Narrative

a. Feedback from stakeholders to adjust curriculum:

Dental Hygiene Program faculty meet with stakeholders on a regular basis. An example of changes to the curriculum based upon stakeholder feedback is the Graduate surveys of 2016 had a comment from a student stating, "Need more preparation for clinical boards." In response to that comment, the program has appointed one faculty member to be the "specialist" for the WREB exam and another faculty member for the CRDTS exam (students take the exam based upon the State they plan to become employed in upon graduation.) The WREB specialist traveled to Utah to observe a WREB exam and brought back and shared information with the dental hygiene faculty. This information was incorporated in a "Mock Board" exam given to the students during clinic in preparation for the exam. This year a second instructor is scheduled to attend a CRDTS exam to also observe and share information with the program faculty to be used in preparing students for this exam.

b. Examples of using feedback from stakeholders to improve curriculum:

The primary changes to courses has been based upon the program's curriculum management plan which relies on assessment data from individual courses, program assessments data, faculty and student review of courses. Student performance on several content areas of the National Board was below the national average. Course content was reviewed and decisions were made to move topic areas among courses to improve sequencing, remove some content that was extraneous, and increase the depth of content, which is critical to the dental hygiene process of care. This required modifying several course descriptions and course outcomes throughout the curriculum.

Based upon feedback from the advisory board and faculty the following changes were made to lower the overall program credits from 98.5 down to 88.5:

Courses Removed from the Dental Hygiene Curriculum: (Appendix III)

Physical Education requirement – removed from general studies prerequisites, as it is no longer a required general education course for graduation. (1 credit)

HOEC 1140 Nutrition – removed from general studies prerequisite and moved into program curriculum (2 credits)

CHEM 1000 Introductory Chemistry – removed from the general studies prerequisite; added 1 credit to the new DHYG 1245 Dental Nutrition and Biochemistry course to emphasize biochemistry in nutrition, health and disease. Increase the emphasis of chemistry in DHYG 2460 Dental Materials, DHYG 1200 Pharmacology, and DHYG 2250 Pain Management revamping the courses' content to allow for the additional chemistry concepts. Biochemistry/Chemistry in the new curriculum will have 35 hours didactic and 12 hours laboratory.

Keeping the Chemistry course as a pre-requisite, prevented compliance with the new LCCC 2.1P procedures that requires a 2/3 program credit hours to 1/3 general studies credit hours ratio and also increased the total program hours by an additional 4 credits to 92.5 credits and exceeding the new mandate for AAS degrees by 20.5 credits. Seeking the exception that the program requested, would not be granted if the curriculum was in the 90 credits rather than the high 80 credits. (4 credits) *** CHEM 1000 Introductory Chemistry will return as a pre-requisite to the program effective Jan. 2019, per accrediting body recommendation.

DHYG 1685 Computer Applications in Dental Hygiene – removed from program curriculum; computer information courses were required for graduation from LCCC; the change in General Education requirements removed this requirement. Specific computer application information is now embedded in Dental Hygiene courses, prior to use for radiology, practice management software, and grading programs. Information literacy and portfolio projects have moved to the Dental Hygiene Seminar courses. Removal of the dental nutrition content from Dental Hygiene Seminar II and moving it to the new DHYG 1245 Dental Nutrition and Biochemistry course, allowed for additional content to be added to both the DHYG 1420 and DHYG 2430 after reworking the sequencing and curriculum content in these two courses. (1 credit)

DHYG 1310 Periodontology I – Removed from program curriculum; Content moved to other dental hygiene courses, i.e. anatomy and histology of the periodontium in health moved to DHYG 1110 Dental Biology; clinical signs of the periodontium in health and histological changes and signs in disease and advanced clinical assessment was moved to DHYG 1420 Dental Hygiene Seminar I. Histological changes in periodontal disease, bacterial etiology and host Immune response will move to DHYG 2330 Periodontology. (1 credit)

DHYG 2451 Radiographic Interpretation – Removed from the program curriculum; the basic interpretation content was moved to DHYG 2450 Dental Radiology. Beginning with the 2016 cohort, students will minimally practice conventional radiographs in the lab or as a requirement for clinic application. This reduces the time needed to instruct conventional radiographic techniques. Phosphor Storage Plates, Panoramic and Sensor digital radiography are still instructed and part of clinical requirements. Since 2010 and prior to this change in 2016, students have been using Panoramic, PSP and Sensor digital images for all clinic patients and conventional radiographs for DXTRR requirements. Processing chemistry, processing techniques, film chemistry, film errors and corrective actions will be taught in the didactic curriculum for this course since some offices and national board examination items use this technology and information. Advanced interpretation has been added to the DHYG 2200 General and Oral Pathology and DHYG 2330 Periodontology courses. (1 credit)

Following the March 2017 accreditation site visit, CODA bequeathed one Recommendation to the LCCC Dental Hygiene program. The Recommendation stated, "It is recommended that the content in CHEM 1000 Introductory Chemistry be integrated and of sufficient depth, scope, sequence of instruction, quality and emphasis to ensure achievement of the curriculum's defined competencies. (DH 2-8)." Subsequently a Response and a Program change was submitted to CODA to request placing CHEM 1000 back into the dental hygiene curriculum as a prerequisite to the program. Final decision from CODA is expected August 2017.

Internal Review Comments (Jan - Mid-March)

ahoward no comments

cczarnecki: no comment

Nhuseman: no comment

kbender: The program provides a strong narrative for guideline b.

For guideline a: please provide more description of the program's PROCESS for using stakeholder feedback to make improvements. For example, in previous sections the program mentioned the multiple meetings that faculty have. In addition, the program asks its Advisory Committee for feedback on curriculum and I believe this is in the bylaws. Does the program systematically use feedback from the accrediting body to make adjustments/improvements. All of these elements can be drawn into a process statement showing steps and timeline of monitoring feedback, periods of analysis, and windows when improvements are installed.

Sources

DH Advisory Committee Meeting - Mar 7, 2017

DH Advisory Committee Meeting - Oct 11, 2016

Program Outcome Assessment Plan