

School	Health Sciences and Wellness
Program Area	Dental Hygiene
Major Programs	A.A.S. Dental Hygiene (92.5 credits)
Review Period	Fall 2012 to Fall 2017
Self-Study Developed	AY 2017-2018
Review Status	Academic Standards Accepted the Program Review Without Contingencies
Program Leaders	Caron Shipley
Committee Chair	Cindy Henning
Academic Standards Program Review Subcommittee Reviewers	Nate Huseman: Faculty, Arts & Humanities Clark Harris: VP, Academic Affairs Kim Bender: AVP – Institutional Effectiveness Erin Bauer: Chair of SLA Committee Jesse Brumfield: Student Services Representative Sabrina Lane: Administration and Finance Representative Connie Czarnecki: 18-19 APR – Surgical Technology

A. Brief Overview of Program

Dental Hygiene is the study of the art and science of preventive oral health care, including the management of behavior to prevent oral disease and promote health. Dental hygienists provide the unique opportunity to positively impact the oral health of every person that comes into the dentist's office. The LCCC Dental Hygiene Program is a sixteen-month accelerated program combining academic study with supervised clinical experience in the dental hygiene clinic and at an additional three off-campus extern sites. Students are granted an Associate of Applied Science Degree (AAS) upon completion and are eligible to take the national written board exam (NBDHE) and a regional clinical exam (CRDTS or WREB, or another regional exam). Once students have passed both board exams and complete a State Jurisprudence exam they are eligible for licensure by the individual State Board of Dentistry. The program prepares students for immediate employment upon licensure as a Registered Dental Hygienist (RDH) with employment opportunities in private dental offices or public dental health.

History

In the fall of 1987, an Ad Hoc Dental Hygiene Advisory Committee consisting of dentists and dental hygienists in the college service area conducted a feasibility study. Based on this study the college administration sought and received approval from the Wyoming Community College Commission to begin a Dental Hygiene Program. In 1991, a Dental Hygiene Accreditation Eligible Self-Study Application was completed, an accreditation eligible site visit was conducted in July, and in December 1991 the American Dental Association Commission on Dental Accreditation adopted a resolution granting the accreditation classification of accreditation eligible. In the fall of 1991, the first dental hygiene class of 15 students was admitted. The dental hygiene program was administered by the Division Director, Dr. Michelle Haney and coordinated by Ms. Mary Ann Andrews.

At its May 1993 meeting, the Commission on Dental Accreditation adopted a resolution to change the accreditation classification from accreditation eligible to approval and set the next regularly scheduled site evaluation for 2000.

At its July 1998 meeting, the Commission on Dental Accreditation reviewed the report submitted by Laramie County Community College concerning a major change within the dental hygiene program. The change was for the program to admit students every other year rather than every year. Based on the

information submitted, the Commission adopted a resolution to continue its approval of the dental hygiene program.

Due to an inability to attract and retain qualified faculty, the college requested a postponement of the scheduled October 10 – 11, 2000 site visit. In a letter dated August 2, 2000, the Commission was unable to grant the request. The college responded in a letter dated August 15, 2000 that it had no other option than to terminate the existing Dental Hygiene Program and requested the “Guidelines for Submitting Phase-Out Reports by Institutions Terminating Commission Accredited Educational Programs”. The final class graduated from the traditional two-year program on May 15, 2001.

During the phase-out period, the college continued to look for viable options to continue the dental hygiene program at LCCC. In the spring of 2001, a plan was implemented to place the program under the Community Education Division. The program had been under the direction of the Math, Agriculture, Health and Science Division. This new option allowed the institution to go off the LCCC Faculty Salary Schedule in order to recruit and hire qualified staff. Representatives from the dental community continued to be involved in this revival and planning process.

Under the new Community Education option, the program developed plans to be self-sustaining. A new model for providing the necessary program of study was developed. This new model awards an Associate of Applied Science degree in an accelerated four term, sixteen month accelerated program. The key people involved in this process were Mr. Stan Torvik, Director of Community Education, Dr. Connie Sharuga, Dental Hygiene Program Director and Dr. Jim Johns, Vice President of Instruction. Individuals from admissions, housing, food service, registration, financial aid, Wyoming Student Loan Corporation, library services and the Dental Hygiene Program Advisory Committee were also involved in the planning process for the new innovative program format.

The first class of eighteen students matriculated on August 1, 2001 beginning the 16 month accelerated program of study and graduating at the end of October 2003.

In January 2006, the program made a major calendar change, starting new students in January with graduation scheduled for April of the following year. This change was undertaken to match the school calendar with the national and regional board cycles and to assure students meet program competencies prior to taking their board exams. At the same time, the program began admitting 20 students, utilizing two external clinical sites and the 12 operator dental hygiene clinic to provide students with clinical opportunities. External clinical sites included the dental clinic at F.E. Warren Air Force Base and a portable unit and small clinic area along with bedside care at Cheyenne Health Care long-term care facility.

In the summer of 2007, under a reorganization of college divisions, the dental hygiene program joined the Health Science and Wellness division under the direction of Dr. Lisa Stich. In the fall, F.E. Warren Air Force Base dental clinic notified the program that it would be discontinuing the Memorandum of Understanding with the LCCC Dental Hygiene Program in January 2008. While this created a major change in clinical opportunities, it opened the door to establish the first evening clinic housed at LCCC. This was done in conjunction with Cheyenne Health and Wellness, which also provided limited dental services for qualified community members who had limited resources available to seek either dental or dental hygiene care.

Organizational Structure

The program currently enrolls 20 Students per Cohort and falls under the direction of the Dean, Terry Harper in the School of Health Science and Wellness and Dental Hygiene Program Director, Caron Shipley RDH, MPH. The accelerated format of this program requires students to take 33 credit hours of prerequisites consisting of general education and biomedical courses prior to applying for admission to the program. These serve as the foundation for the dental hygiene curriculum and represent a knowledge base for the profession. The four terms of the program are face-to-face courses, lab, and clinic, which incorporate the dental hygiene sciences and theoretical and clinical framework of dental hygiene practice. Students are picked from a pool of approximately 50-70 applicants each year.

High Performance Areas

The program in dental hygiene has full accreditation by the Commission on Dental Accreditation [and has been granted the accreditation status of “approval without reporting requirements”]. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

In August 2015, the Commission on Dental Accreditation (CODA) approved a major program change to reduce the overall credits from 98.5 to 88.5 to adjust the ratio of occupational credit hours to general education credit hours. CHEM 1000 was removed as a prerequisite to the program. The curricular revisions affecting content were approved by CODA and found to meet all accreditation standards.

The program subsequently underwent a self-study (Documents 1 through 4 uploaded below) and site visit for re-accreditation in March 2017. The Commission on Dental Accreditation had only one Recommendation following this visit, to add more chemistry content back into the program. In April 2017, a Program Change was submitted to CODA to add CHEM 1000 Introductory Chemistry back into the program as a Gen/Ed prerequisite. Total prerequisite credits will increase from 33 to 37 with the addition of CHEM 1000. The Commission on Dental Accreditation approved this program change in September 2017. This change is currently under review by the LCCC Academic Standards committee.

The dental hygiene program utilizes the LCCC dental hygiene clinic plus an additional three external clinical sites, F.E. Warren Air Force Base, Life Care Center of Cheyenne, and PACE. Many patients seek treatment in the LCCC Dental Hygiene Clinic on an on-going basis, returning each year for re-care visits.

Only Accelerated Dental Hygiene program in Wyoming

The LCCC Dental Hygiene program is the only program serving southern Wyoming. There is only one other dental hygiene program in the State, and it is located in Sheridan, WY, a 6 hour drive from Cheyenne. The LCCC dental hygiene program is unique in that it the only accelerated program in the State of Wyoming. The program is fully accredited through the American Dental Association.

Course Success rates, Graduation Rates

The program has consistently performed well in several areas. The overall 2013-14 through 2015--16 (three-year average) for course success rate was 97.49. The Graduation rate for this same three-year period was 93.87. Total (three-year average) number of AAS degrees awarded was 17.33 per year. FTE student to FTE faculty ratio was 22.10. The average time to completion (three-year average) was 2.42.

Written Board Pass Rates

Over the last ten years, the program has achieved a 96% first attempt pass rate on the NBDHE (written board exam) and an 85% pass rate on the CRDTS and/or WREB) clinical board exam), with 100% of students passing on second attempt.

In 2016, the U.S. News & World Report listed Dental Hygienist as the #2 profession in its “100 Best Jobs” list under the Health Care Support grouping.

The U.S. Bureau of Labor Statistics projects that employment of dental hygienists will grow 33.3% through 2022. Dental Hygienists make yearly salaries of about \$71,110 according to the Bureau of Labor Statistics.

According to U.S. News & World Report, “Hygienists make comfortable salaries, especially considering that half of them work part-time. In 2015, their median salary was \$72,330. The best-paid earned about \$98,440, and the bottom 10 percent earned \$50,140.”

The dental hygiene faculty are committed to creating an educational environment that is conducive to the development of ethical, caring dental hygiene professionals who are self-directed and capable of critical thinking, problem solving, and responsible decision-making. Additionally, we are dedicated to addressing the oral health care needs of the community by providing quality patient care, promoting community and professional oral health education through service activities, and scientific inquiry.

Employment Rates

The five-year composite average for employment six months post-graduation is 99%.

B. Program Achievements Over the Review Period

Program Level Achievements:

1. **Strong Curriculum with Accreditation Approval:** Based on the analysis of the program, the program’s curriculum has several strengths over the past five years. The curriculum follows professionally recognized [American Dental Association \(ADA\) standards of accreditation](#) and [American Dental Hygienist’s Association \(ADHA\) professional standards of clinical performance](#) in preparing students to enter the workforce.

The program underwent reaccreditation in March 2017. Following the site visit, the Formal Accreditation Report received from the [Commission on Dental Accreditation \(CODA\)](#) stated,

“The program (LCCC Dental Hygiene) has documented its effectiveness using a [formal and ongoing outcomes assessment process](#) to include measures of dental hygiene student achievement. Outcome measures include national/regional board results, placement rates, student retention rates, patient, exit, graduate and employer survey satisfaction results, chart audit compliance rates/competency, class cohort grade point average, clinical/laboratory competency completion rates, participation rates for continuing education, student chapter of the American Dental Hygienists’ Association, and community service activities. These are used to evaluate program goals as well as manage the curriculum.”

2. **Positive Program Student Outcomes:** Based on a review of the program’s outcomes assessment process and student achievement measures, the visiting (Commission on Dental Accreditation - CODA) committee found the program has demonstrated positive programmatic student achievement outcomes.

Examples of program outcomes and program changes made include:

- Time in DHYG 1410 Dental Hygiene Seminar I was increased to allow more time for laboratory experience to practice ultrasonic scalers, non-injectable anesthetics, oral irrigation, and area specific instrumentation.
- A 13th operatory was added to the clinic during the 2012 remodel.
- Computers in clinic and offices replaced.
- Five (5) new laptop computers purchased for extern sites.
- Revised the calculus detection form used in clinic to make the form simpler to use.
- Laboratory hours in DHYG 2440 Dental Hygiene Seminar III was increased to allow students to practice advanced clinical skills in pulp vitality testing, suture removal, treatment of dry sockets and periocoronitis.
- DHYG 2451 Dental Radiology Laboratory removed all manual/automatic film processing procedures and processing solutions to focus and enhance the students’ knowledge in digital imaging.
- DHYG 2430 Dental Hygiene Seminar II introduction of the intraoral camera imaging.
- Medical emergency content was increased by including patient simulation assessment and debrief into the Pain Management course so that content and assessment is progressively more complex beginning in DHYG 1410 Dental Hygiene Principals, DHYG 1200 Pharmacology, and culminating in DHYG 2250 Pain Management.
- To strengthen the regional board results, the testing site location has been moved to a closer location in Denver, Colorado.”

–*Commission on Dental Accreditation, 2017 Formal Report*

Students are pleased with the program. [Feedback](#) from graduates has been positive. The program enjoys strong support from the [program advisory committee](#) and the dental community, with a reputation for quality. The program enjoys high [National \(Written Board Pass Rates\)](#), high job [placement rates](#) for graduates, and high [employment rates](#) (Full-time (4 days/wk) within 9 months) for students completing the program from 2009 – 2012 are the following:

2009: 89%	2010: 100%
2011: 94%	2012: 100%
2013: 100%	2014: 100%
2015: 94% (1 St.moved to Europe/military)	2016: 100%

3. Strong KPI Performing Areas:

Based upon KPI Measures the following areas attained either a 4 or 5 Rating on a 5 point scale (see links)

<u>Indicator</u>	<u>Ranking</u>
Course Success Rate	5
Graduation Rate	5
Number of Degrees & Certificates	4
FT Student to FT Faculty Ratio	4
Average Time to Completion	5
Average Section to Fill Rate	5

[KPI Program Analysis & Ranking 89%](#)

Other Achievements:

1. **[Serving the Underserved](#):** In addition to graduating qualified entry-level dental hygienists, prepared to take a National written board examination and a Regional Clinical board examination, the LCCC dental hygiene students and faculty provide services to underserved populations in the community and on-campus. The two uploaded tables list services rendered to the community from [2015 – 2016](#) and [2016-17](#).

In 2016 and previous years, the students and faculty participated in the Colorado Mission of Mercy (COMOM), which gave away \$1.2 million of free dentistry. Advisory Committee Members felt this was a great learning experience for the students as well as a benefit to the community, as many Wyoming residents took advantage of the services.

Each year in partnership with the Southeast Dental District, the students and faculty host the [Give Kids a Smile](#) event at the LCCC dental hygiene clinic. This is held the first Saturday of each February. Faculty members have participated in activities sponsored by the Colorado Educators Association, Wyoming and Colorado Dental Hygiene Association Meetings, and the Rocky Mountain Study Club. Students attended a continuing education course at the Wyoming Dental Hygienists' Association meeting in October 2015, where they participated in continuing education seminars. Students have also presented their table clinics for hygienists attending a continuing education meeting and state visit by the American Dental Hygienists' Association President in Cheyenne, Wyoming in March 2015. Students attended a CE course held for community dental professionals at LCCC and presented their Table Clinic presentations in March 2016. Each year students, faculty and staff attend the Rocky Mountain Dental Convention in Denver and if desired they sit in on the National Board Review course hosted by Jane Weiner. In addition, as part of their courses, students visit a Dental Laboratory and visit with the Dental Lab Technician and owner, the Laramie City County Health Department, WIC Program offices, and the Cheyenne Water Treatment plant.

2. **Providing Advanced Skills Training:** The [Dental Hygiene Advisory members](#) had also recommended in the past that LCCC offer continuing education courses for dental professionals to expand their skills and knowledge. It was reported to the members that a Nitrous Oxide and a Sealant course were offered at the campus and both had good attendance by local dental hygienists. The dental hygiene program receives many requests from community members to hold various types of continuing education courses and the program tries to respond by offering courses on various topics.

Written Board Pass Rates:

*Data collected by program

Program Measure	Annual Results	Composite Five-Year Average
National Board All but two students passed their national boards on 2 nd attempt. 2006 added rigor to curriculum 2007 1 st class to complete after calendar change to Jan. start. 1 student passed 2013 graduated 2014	2003: 75% 2004: 73% 2005: 77% 2006: 88% * Added depth to curriculum 2007: 93% (14/15) 2008: 100% (20/20) 2009: 94% (17/18) 2010: 100% (19/19) 2011: 94% (15/16) 2012: 100% (20/20) 2013:100% (17/17) (18/18) 2014: 95% (18/19) or (19/20) 2015: 100% (16/16) 2016: 100% (16/16) 2017: 94% (15/16)	81%: 2007 86%: 2008 90%: 2009 95%: 2010 96%: 2011 98%: 2012 98%: 2013 98%: 2014 98%: 2015 99%: 2016 98%: 2017

Employment Rates:

Program Measure	Annual Results	Composite Five-Year Average
Employment Rates (Full-time (4 days/wk) within 9 months). 2010 first year to start calculating 9 months; up from previous 6 months. Market slowed and license turns around increased.	2004: 100% 2005: 84% No report from 2 students 2006: 100% 2007: 93% 2008: 100% 2009: 89% 1 student 2.5 days 2010: 100% 2011: 94% 1 student 3 days 2012: 100% 2013: 100% 2014: 100% 2015: 94% 1 student moved to Europe 2016: 100%	95% 2008 93% 2009 96% 2010 95% 2011 97% 2012 97% 2013 99%: 2014 98%: 2015 99%: 2016

C. Mission and Values

MISSION:

1. Both the [program's mission statement](#) and goals are consistent with [LCCC's mission and values](#). While the college's mission and values are broader, the program's mission and goals directly contribute to the achievement of the college's stated purpose and intent.

LCCC Mission Statement:

The [mission of Laramie County Community College](#) is to transform our students' lives through the power of inspired learning. We are all bound by a basic understanding that our students, regardless of how they arrive at LCCC, yearn for a better life by engaging in the process of acquiring knowledge. Thus, we are compelled to aid this transformation by offering diverse educational experiences designed to be inspirational for all those involved in the learning process. While we recognize our work is diverse, the entirety of the work we do is grounded in the four foundational elements of the comprehensive community college mission:

1. To prepare people to succeed academically in college-level learning
2. To engage our students in learning activities that will prepare and advance them through the pursuit of a baccalaureate degree
3. To develop individuals to enter or advance in productive, life-fulfilling occupations and professions
4. To enrich the communities we serve through activities that stimulate and sustain a healthy society and economy

Dental Hygiene Program Mission Statement:

The [mission of the Dental Hygiene Program](#) at Laramie County Community College is to prepare graduates for entry-level positions as licensed dental hygienists, equipped for success in the workplace and in the community. The dental hygiene mission is supported by program competencies that are designed to ensure that students successfully meet program goals. To that end, the program values educational excellence and provides this through the use of current and relevant content and technologies along with input from the professional community to identify needed improvements.

By requiring active participation in service learning opportunities, the program strives to develop mutually beneficial interactions and experiences for students within the local and regional community. These experiences engage students early on and support their understanding of the profession and the needs of the community thereby creating a healthier society.

VALUES:

Program's Value Statements

[Dental Hygiene Value Statement:](#)

"With passion, dedication, and innovation, the Dental Hygiene program promotes critical thinking and active learning in an ethical and professional environment. We embrace diversity, we respect and nurture individual talents, we seek to improve the quality of life of our students, faculty, staff, and community, and we guide future professionals during their education and beyond."

In addition, the following core values guide us in our clinical practice:

Individual autonomy and respect for human beings

People have the right to be treated with respect. They have the right to informed consent prior to treatment, and they have the right to full disclosure of all relevant information so that they can make informed choices about their care.

Confidentiality

We respect the confidentiality of client information and relationships as a demonstration of the value we place on individual autonomy. We acknowledge our obligation to justify any violation of a confidence.

Societal Trust

We value client trust and understand that public trust in our profession is based on our actions and behavior.

Nonmaleficence

We accept our fundamental obligation to provide services in a manner that protects all clients and minimizes harm to them and others involved in their treatment.

Beneficence

We have a primary role in promoting the wellbeing of individuals and the public by engaging in health promotion/disease prevention activities.

Justice and Fairness

We value justice and support the fair and equitable distribution of healthcare resources. We believe all people should have access to high quality, affordable oral healthcare.

Veracity

We accept our obligation to tell the truth and expect that others will do the same. We value self-knowledge and seek truth and honesty in all relationships.

D. Program Competencies and Outcomes

Program competencies taught to students are entry-level skills needed to begin dental hygiene practice. These competencies are supported by content in general education, the biomedical, dental and dental hygiene sciences.

The following are a list of competencies with which students from LCCC Dental Hygiene Program graduate:

A. Program-level Student Learning Competencies

1. Demonstrates ethical and professional behavior by:
 1. Focusing on the patient's needs
 2. Functioning as a member of the dental health team
 3. Adhering to a published Dental Hygiene Code of Ethics
2. Apply preventive and therapeutic dental hygiene care for a child, adolescent, adult, geriatric, and special needs patient by:
 1. Utilizing the most current infection control guidelines and safety precautions
 2. Assessing, planning, implementing and evaluating dental hygiene care
 3. Involving the patient in treatment decisions
 4. Receiving patient consent
 5. Applying comprehensive dental hygiene therapy including patients who exhibit moderate to severe periodontal disease
 6. Providing appropriate life support measures for medical emergencies

3. Demonstrate critical thinking and effective communication skills by:
 1. Communicating effectively with patients, colleagues, other health care workers, and community resource people
 2. Applying principles of quality assurance and self-evaluation and documenting dental hygiene services correctly
3. Promote the values of the profession and for life-long learning by:
 1. advancing the profession through leadership, service activities, and affiliation with professional organizations
 2. reading, interpreting, evaluating, and applying research findings
 3. Participating in continuing education experiences
4. Promote community health and services by:
 1. Identifying the diverse needs of the community
 2. Working with other professionals and agencies to bring consumers into the health care delivery system

B. Dental Hygiene (CODA) Operational Outcomes:

1. Clinical (CRDTS or WREB) Board results analyzed; 80% will be successful on first attempt; 100% will be successful on second attempt
2. Written (NBDHE) Board results analyzed - 85% will be successful on first attempt; 100% will be successful on second attempt
3. All Clinics: 90% of all Patient chart audits will comply with CODA standard 6-2
4. 95% of patients surveyed on Patient Satisfaction Survey will be minimally 90% satisfied
5. 90% of employers will report satisfaction on annual Employer Satisfaction Survey

These outcomes are tied to [LCCC Strategic Plan Goal 1: Completion Agenda for the 21st Century](#)

1. 100% Student Enrollment in SADHA w/ 75% Participation
2. 100% FT faculty participation in WDHA; 75% PT participation
3. Obtaining articulation agreements for students to complete B.S. degree upon graduation
4. Students participate in 4 service activities/ program
- 5) FT faculty serve on 1 college committee annually
6. 100% FT and 70% of PT faculty will participate in community service
7. 100% of enrolled students will attend at least 1 continuing education meeting annually
8. 100% of faculty will attend at least one continuing education meeting annually

These outcomes are tied to [LCCC Strategic Plan Goal 2: Connections that improve student transitions](#)

1. Faculty Course Evaluations administered minimum 1 x year; 90% positive response
2. Clinical Instructor Evaluation administered minimum 1 x year; 85% positive response
3. Faculty attend or instruct 1 Educational Methodology course annually or; research and incorporate new methods into instruction and/or course

These outcomes are tied to [LCCC Strategic Plan Goal 3: An Organizational Culture to Thrive in the Future](#)

The program outcomes are also tied to the Dental Hygiene Academic Planning Assessment Operational Outcomes # 1 and 2.

The Laramie County Community College Strategic Plan and dental hygiene mission/values/program goals/competencies incorporate the program's assessment plan and operational plan in the formalized

assessment process. An assessment plan with outcome measurements is in place and updated annually. The outcome data supporting these goals is included in the Program Outcomes Assessment Plan.

The Operational Outcome #2: *“Written (NBDHE) Board results analyzed - 85% will be successful on first attempt; 100% will be successful on second attempt”* **ties directly to program competencies #2 and #3.**

Upon graduation with an A.A.S. degree in Dental Hygiene, students are required to pass both a clinical (practical) board exam and a written (NBDHE) board exam. Depending on the State jurisdiction the student wishes to practice in they take either the Central Regional Dental Hygiene Exam (CRDTS) or the Western Regional Dental Hygiene (WREB) exam. In years prior to 2017, the students taking the CRDTS exam would test at a location in either Omaha NE or Lincoln NE (8-9 hour drive from LCCC in Cheyenne, WY). Students are required to identify a patient of certain difficulty, arrange hotel accommodations for themselves and their board patient in addition to providing all expenses and travel to and from the exam. The amount and type of deposits on one's teeth determines the qualifications of becoming a board patient. The closest location for taking the WREB exam is located in Utah. These students have no choice but to test at a location with a 6-8 hour drive.

b) Example of how the program's learning competencies align with program values:

Program Competency #2. Apply preventive and therapeutic dental hygiene care for a child, adolescent, adult, geriatric, and special needs patient by:

- a. utilizing the most current infection control guidelines and safety precautions
- b. assessing, planning, implementing and evaluating dental hygiene care
- c. involving the patient in treatment decisions
- d. receiving patient consent
- e. applying comprehensive dental hygiene therapy including patients who exhibit moderate to severe periodontal disease
- f. providing appropriate life support measures for medical emergencies

Program Competency #3. Demonstrate critical thinking and effective communication skills by:

- a. communicating effectively with patients, colleagues, other health care workers, and community resource people
- b. applying principles of quality assurance and self-evaluation and documenting dental hygiene services correctly

Both Program-level Learning Competencies cited above tie to the Dental Hygiene [Program Value](#)

Statement: *“With passion, dedication, and innovation, the Dental Hygiene program promotes critical thinking and active learning in an ethical and professional environment. We embrace diversity, we respect and nurture individual talents, we seek to improve the quality of life of our students, faculty, staff, and community, and we guide future professionals during their education and beyond.”*

Value Statement, “Societal Trust”

“We value client trust and understand that public trust in our profession is based on our actions and behavior.”

The competencies outlined in this section are the entry-level abilities the students need to begin dental hygiene practice and exhibit professional behavior. 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 program competencies directly relate to the success of students performing on their regional board exams. The dental hygiene program is committed to achieving the goal for minimum pass rate.

c) Example of how the program’s operational outcomes align with program values:

The Operational Outcome #1 ties to the Program Value, *“The dental hygiene program values high quality, and student -centered education through active participation in classroom, lab, and clinic settings, incorporating community collaboration, and professional development.”*

Examples of this: Students participate in extern rotations at three separate locations, F.E. Warren Air Force Base, PACE, and Life Care long-term care facility. In completing these rotations, students apply learned theory to clinical settings and engage in active participation.

“Operational goal #2.) [“Written \(NBDHE\) Board](#) results analyzed - 85% will be successful on first attempt; 100% will be successful on second attempt” tie to the program competencies #2 and #3. **This ties to the Program Value Statement:** *“With passion, dedication, and innovation, the Dental Hygiene program promotes critical thinking and active learning in an ethical and professional environment. We embrace diversity, we respect and nurture individual talents, we seek to improve the quality of life of our students, faculty, staff, and community, and we guide future professionals during their education and beyond.”*

The program has and will continue to use the curriculum management plan and quality assurance program documentation to make program improvements. The program assessment document can be found in the Dental Hygiene Program Handbook for student and instructor use.

E. Abbreviated Summary of Program Data (KPIs)

KPI Data Analysis

i. Program demand (Participation KPIs): below expected performance and want to improve

KPI Indicator	Current Result	Current Score	3 -year Average Result	3-year Average Score
Annual FTE (KPI A.1.b)	41.21	4	41.79	3
Number of "Participants" enrolled (A.1.b.)	36.00	1	35.67	1
Number of "Concentrators" enrolled (A.3)	36.00	2	38.33	2

It is presumed that many of these participants may be enrolled part-time completing their general education requirements. It is unclear how many students may be "pre-dental hygiene" until formal application is made to the program. Students in the dental hygiene program do not have their major "declared" until formal acceptance to the program. The number of enrolled students must meet the demand for employment and the program is capped at 20 students and per accreditation must maintain minimum faculty to student ratios.

ii. Student success (Success KPIs): meeting expected performance

The current, average course success rate is a 97.22% and the three-year average is 97.32%. Upon review, 97% appears to be a reasonable goal (score of 5) of which we have attained.

iii. Transfer preparation (applicable to transfer programs--Success KPIs): meeting expectation

KPI Indicator	Current Result	Current Score	3-year Average Result	3-year Average Score
Course success rate (KPI a.7)	97.22%	5	97.32%	5
Graduation rate for "Concentrators" (KPI A.4)	100%	5	95.95%	5
Number of Associates and Workforce degrees/certificates awarded (KPI C.2.a, D.2.a)	16.00	4	16.00	4
Number of "concentrator" matriculating to university (KPA c.3)	1.0	2	1.0	2
University matriculation rate (KPI c.3)	10.00%	2	8.10%	2
Licensure pass rate (KPI D.5)	100%	5	96.16%	5

With a score of "5" (Course Success Rate and Graduation Rate), Dental Hygiene Graduates are successful in passing their courses and graduating. The number of Associates degrees awarded is a "4". This number is limited by space restraints due to the dental hygiene clinic size. Licensure pass rates are a "5" indicating graduates do successfully pass their National Board exam, Clinical Board exam, and obtain licensure. Matriculation rates rest at a "2" which is not unreasonable considering we prepare students for entry-level employment in the dental hygiene field. This question is asked on the [Graduate survey](#) administered by the program director six-months post-graduation, however tracking students over a five - ten year period post-graduation would give a more comprehensive look at the number returning to college after private practice employment to obtain a higher degree. Degree completion information is given to students prior to graduation, however, most Associate-level (entry-level) dental hygienists practice in clinical settings a number of years prior to returning to school for a degree-completion (Bachelor's degree).

iv. Job readiness/placement (currently unavailable in the KPI measures)

While this data is currently unavailable in the KPI measures, the program director collects this data for the accrediting body reporting. Based upon this data, 99% of Students have gained Full-time [employment](#) (4 days/wk) within 9 months of graduation.

v. Program efficiency (Efficiency KPIs)

KPI Indicator	Current Result	Current Score	3-year Average Result	3-year Average Score
Average credits to completion (KPI F.1.a)	55.30	4	70.70	2
Average time to completion (KPI F.1.b.)	2.74	4	2.49	5
Average section fill rate (KPI F.4)	87.19%	5	85.82%	5
Core expenditures per FTE (KPI G.1)	\$13,927.33	1	\$14,469.19	1

The current, course section fill rate is "5", which is deemed excellent at 86%. The average time to completion of degree is also excellent with a current average score of "5". The program recently revised the curriculum to lower the total credit hours by 10 credits. The Commission on Dental Accreditation then stated CHEM 1000 needed to be added back to the curriculum. This results in an overall reduction in credits equal to 6 beginning in 2018. The expenditures are high for the Dental Hygiene Program ranked at "1". Dental Hygiene programs in general have higher expenses due to the dental hygiene clinic equipment, need for a dentist and four dental hygiene faculty members assigned to each clinic. The program fee was raised \$1,000 in 2018 to offset this higher expense. The program works diligently to reduce costs and reduced their budget 3% for FYE 18.

F. Accomplishing the Program's Previous Action Plan Goals

The last Program Review for Dental Hygiene was in 2009. Thirteen action items were identified for future planning. Eight of those action items have been completed, three items are ongoing and continue to be a challenge for the dental hygiene program, the fourth action item related to library resources has changed to include, databases, publishing and online resources rather than updating holdings directly and the last action item was not implemented by LCCC. See list of action items below:

2009 Action Plan and Results

In addressing the above challenges and capitalizing on opportunities, the program plans to:

1. Hire a permanent, full-time dental hygiene instructor to replace the current temporary full-time instructor. **Completed for the 2009-2010 year, and again in 2014, 2015 and 2017.**
 - a)
2. Hire a replacement program assistant prior to the current position vacancy in mid-April. **Completed in July 2009 and 2012.** Explore options for additional administrative support. **Technology (digital patient records, business records, learning management system) and supplementation with part-time work-study have helped.**
 - a) & b)
3. Prepare for and participate in ADA Accreditation program review in 2010. **Completed in 2010 and 2017. In both CODA, the program was granted Full accreditation without reporting. Program stability, curriculum and student success affirmed at each review and subsequent award of continued accreditation. 2024 next accreditation site visit.**

a) & b)

4. Implement nitrous oxide administration into the curriculum for the 2010-2011 class or sooner if resources are available. ***Accomplished for fall 2009 for LCCC students, provided as continuing education course in 2010 and 2012 for community members and adjunct faculty. Valuable skill addition to program assuring ongoing student, community member dental hygienists and graduate competency in newly legalized skill addition to the Scope of Practice for Dental Hygienists practicing in the State of Wyoming and 39 other States across the United States.***

a) & b)

5. Investigate resources for implementing clinic computers into the curriculum for the 2011-2010 class or sooner if resources are available. ***Full implementation with clinic remodel in 2012; all-dental operatories equipped with computers, monitors, keyboards and signature pads, all faculty workstations fully computerized; 3 radiology stations fully digitized and panelptic unit fully digitized. Software management system implemented for patient records. Provided a modern dental hygiene clinic for students to develop skills in providing care for community members using the latest technology and computer software available.***

a) & b)

6. Investigate methods to manage and store patient records including scanning current records and digitizing future records. ***All patient records fully digitized 2016. Improved time management for working with patient record retrieval, freed up storage space in in the Dental Hygiene Clinic and brought the Dental Hygiene Clinic into compliance with Federal mandate of the American Recovery and Reinvestment Act, which required that all public and private healthcare providers and other eligible professionals (EP) were required to adopt and demonstrate "meaningful use" of electronic medical records (EMR) by January 1, 2014.***

a) & b)

7. Initiate plans for clinic floor replacement and purchasing new dental operatory equipment in 2011. ***Full remodel including floor and operatories completed in fall 2012. Dental materials lab completed in 2014. Space was created for all 10 students assigned to lab to have seating and working space in the dental materials lab with the latest technology to improve student learning. Replacing the dental hygiene clinic floor removed a safety hazard for faculty, students and community members.***

a) & b)

8. Utilize Angel to incorporate hybrid-learning environment into the program courses and position the program for possible expansion to distance learning sites by 2012. ***Entering the 3rd phase of learning management systems. Canvas will be implemented live on April 11, 2018 with Dental Hygiene being the pilot cohort. Hybrid delivery of course content has been very successful and has improved with each system. Student learning enhanced with availability of content expanded to 24 hours and interaction with content increased. Additional benefit of having consistent practice with exams computerized to simulate the migration of the National Dental Hygiene Board Exam to computer format. Expansion to distance learning remains on the goals list for the 2018 program review, since it has not been completed.***

a) & b)

9. Monitor changes in scope of practice, technology and workplace need to update and/or enhance the program curriculum to strengthen the employability of program graduates. **Ongoing; implemented Nitrous Oxide course for curriculum and as continuing education for practicing community dental hygienists (See goal #4 above); developed and implemented a course for dental sealant placement for dental assistants when the Wyoming Board of Dental Examiners approved this as a new function for Dental Assistants in 2012-13. Will develop and implement a new course for Dental Lasers as a result of the Wyoming Board of Dental Examiners' change in the Practice Act for Dental Hygienists 2019.**

a)

10. Continue to recruit, train and mentor adjunct faculty to lessen full-time instructor overloads and provide consistency for student learning. Explore options for hiring another full-time instructor to reduce the reliance on adjunct faculty. **Incomplete. This has become an action plan goal # 2 item for the new program review with a 2/3 to 1/3 ratio of full-time to part-time FTE, consistency and calibration remain a concern. Budget constraints for the near future may make this goal a long-range item. Implementing a stronger adjunct training program, will be explored to address this issue in the short-term.**

a) & b)

11. Maintain and enhance current clinical relationships and patient satisfaction to retain and increase the current patient pool for student experience and competency development.

Ongoing. Patient retention and satisfaction are high. Implemented an online survey through Campus Labs in 2014 to make data gathering more consistent and simpler for patients and program staff. A consistent pool of new patients is needed for student requirements. Externship sites provide some of these resources, but the pool is always short of the needed numbers from year-to-year.

a)

12. Strengthen dental hygiene library resources. **Ongoing, but resources strong with support of databases, online and publisher resources available to support students and course content.**

a)

13. Incorporate WIDS format into all courses by 2013. **WIDS initiative was not adopted by LCCC. Incomplete.**

G. Summary of Review Action Plan Goals

After the completion of the 2018 Program Review, two Action Plan Goals were identified based on the assessment of the program's strengths, concerns, opportunities and challenges in both the student learning and program operations categories. Analysis of the opportunities, concerns and challenges (Section III.iii.D.1) presents an opportunity to enhance the program curriculum by adding a new competency and explore the options of hiring another full-time faculty member.

a) Action Plan Goal #1 Incorporate Dental Lasers

b) Analysis of the strengths of the Dental Hygiene Program includes a finding of "Strength, depth and relevancy of curriculum supporting student performance on dental hygiene national and regional exams and positive employer and graduate survey responses." Relevant curriculum means that the program teaches the skills and competencies required to practice Dental Hygiene in the state and region. Likewise, a concern identified in Student Learning "Curriculum needed for Dental Lasers" led the faculty to identify an Action Plan Goal. A competency that was identified as lacking was applying Dental Laser treatment for soft tissue management. While the skill has been included in the Wyoming and Colorado Practice act for a few years, the Wyoming Board of Examiners' (WBDE) only mechanism to achieve certification was through a Dental Laser training company. Recent changes to the WBDE Rules allow for Dental Hygiene Schools to seek approval from the WBDE to incorporate Dental Laser training into the Dental Hygiene Curriculum. Certification would then be available upon graduation and application for a Dental Hygiene license. For at least three years, the Graduate and Employer Surveys have had comments about adding Dental Laser to the competency for graduates. Until now, the mechanism did not exist to incorporate into the program. Adding this Action Plan Goal and subsequent curriculum change will prepare students with skills needed to practice using the latest Laser technology.

a) Action Plan Goal # 2 Increased Staffing (title change in Plans)

b) Based on the results of the program review analysis, the program is presented with both opportunities and challenges. The primary challenges include keeping up with technology, and balancing student learning, program and college requirements with faculty and staff workload and calibration. The primary opportunity is the tightening of the dental hygiene market in Cheyenne and an increase in Dental Hygiene faculty wages, which leads to an attractiveness in faculty positions. The dental hygiene faculty and staff agreed that the timing was right to develop Action Plan Goal #2 Consistent Student Learning: Explore options for hiring another, permanent, full-time dental hygiene instructor to reduce the reliance on adjunct faculty. A full-time faculty member would not completely eliminate the need for adjunct faculty due to CODA standards of a 4 to 1 clinic student to instructor ratio. With consistent instruction in both classroom and clinic through full-time employment, calibration and coordination issues would be greatly minimized. Balance for student instruction, advising and mentoring would be enhanced along with program and college requirement workloads and contributions. Adding this Action Plan Goal will provide the planning, documentation and rationale to move forward with a requested position.

H. Identified Strengths, Concerns, Opportunities, and Challenges for Student Learning and Program Operations Resulting from the Review Process

Program Challenges and Opportunities:

Utilizing the program review data, the following analysis and diagram was developed:

Strengths Student Learning

- Highly qualified and dedicated instructors
- Motivated students with a high level of initiative
- Low faculty to student ratios in classroom, labs and clinic

Concerns Student Learning

- Budget constraints; Financial and infrastructure resources are limited for upgrading and providing students the necessary workplace experience

- Strength, depth and relevancy of curriculum supporting student performance on dental hygiene national and regional exams and positive graduate and employer satisfaction survey responses
- Dedicated classroom with state of the art technology
- State of the art, fully computerized onsite dental hygiene clinic and lab for student skill development and community patient care
- Modern educational models and learning aids available for each student
- Student experience and competency in community service learning, treating diverse populations in interdisciplinary, collaborative community clinics and onsite dental hygiene clinic positions them for the changing Job market.
- Motivated students with a high level of initiative
- Student experience & competency in the treatment of Geriatric and community clinic patients strongly positions them for the changing job market
- Turnover among faculty creates continuous calibration issues and interferes with student learning.
- Curriculum needed for Dental Laser Certification
- Inconsistent patient pool
- Increased faculty workload has created more stress and the ability to offer students assistance needed outside of workload demands.

Opportunities Student Learning

- New Pathfinder building provides an opportunity to utilize Cadaver Lab to strengthen competency activities
- B.A.S availability at UW and articulation agreement with Wichita State, and an increasing number of online BS degrees for dental hygienists to further their education
- Availability and support of on-line instruction at LCCC; innovative options for student learning
- Population growth along the Front Range and demographic changes in

Challenges Student Learning

- Increasing Program costs and decreasing financial resources for students attending college may increase stress for students and threaten retention
- Increasing number of allied health programs increases competition of institutional resources and space in prerequisite courses
- Increasing technology and rising costs makes updating equipment and facilities difficult
- Limited job market in Cheyenne & slowing job market in the region due to financial downturn may create job placement issues and decrease applicant pool

- patient population may increase potential clinical sites for students
- Increasing partnerships with college departments, community organizations and other dental hygiene programs expands opportunities for students

- Increasing number of allied health programs increases competition for institutional resources and space in prerequisite courses

Strengths Program Operation

- Consistent, high first time pass rate on national board exams
- Strong, first time pass rate on regional board exams
- High cohort retention
- Large, consistent applicant pool (Almost 3 to 1)
- High job placement rates with competitive wages
- Respected and proven 16-month program design appeals to students and addresses regional workforce needs
- Well-equipped clinic, labs and faculty and staff offices

Concerns Program Operations

- Clinic Dentists did not receive a pay increase in 2015, as did the dental Hygiene faculty. Wages have remain stagnant for over 10 years
- Availability of well qualified faculty when positions are open
- Limited storage space for dental hygiene clinical and educational equipment/supplies
- Burnout and turnover among instructors and staff
- Lack of signage for the Dental Hygiene Clinic. Patients are lost due to the inability to find the clinic at appointment time

Opportunities Program Operations

- One other Dental Hygiene program in Wyoming and three Dental Hygiene programs in Colorado, decrease competition in the region for attracting students and employing graduates
- Projected growth in job opportunities nationwide of 20% through 2026 (BLS)
- Tightening of dental hygiene market in Cheyenne and increased salaries for dental hygiene faculty increases attractiveness of FT and PT instructor positions
- Quality of online delivery of curriculum content may expand opportunities for outreach into underserved communities in the

Challenges Program Operations

- Commission on Dental Accreditation standards requiring current education methodology in subject matter for faculty, strains faculty development budget due to lack of opportunities for training online and in the region; high turnover among faculty stresses the budget even greater. Limited job market in Cheyenne and slowing job market in the region due to financial downturn, may create job placement issues and decrease applicant pool
- Faculty turnover and small pool of qualified applicants for open positions
- Increasing program costs and decreasing financial resources for students attending college may decrease the applicant pool.
- Increasing technology and rising costs makes updating equipment and facilities difficult

region, expanding the potential for educating site bound students.

Based on the results of the program review, the program is presented with both opportunities and challenges. The primary challenges include keeping up with technology, and balancing student learning, program and college requirements with faculty and staff workload and calibration.

Action Plan Goal #2: Explore options for hiring another permanent, full-time dental hygiene instructor to reduce the reliance on adjunct faculty.

I. Continuous Improvement: Follow-Up Reporting and Planning for Strengthening Program Performance

To be consistent with its continuous improvement processes, LCCC includes follow-up action planning in its academic program review activities. Program review includes a peer-review step where an Academic Standards Subcommittee for Program Review rates program performance using an Academic Program Review Rubric. Programs perform well on the majority of self-study sections, but occasionally the rubric rating identifies a few areas that need additional attention. For these situations, the program review process includes a structured follow-up planning phase to support program strengthening of these areas.

In early May, after programs have had their self-studies peer reviewed, the Academic Standards Committee notifies those programs that are to participate in additional continuous improvement planning. Academic Standards accepted the Dental Hygiene program review without contingencies, so it was not required to submit follow-up action planning.