

# University of Hawaii Maui College

## 2011 Annual Report of Instructional Program Data

### Dental Assisting

#### Program Mission:

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##### **UHMC Dental Assisting Program Mission**

The UH Maui College Dental Assisting Program is dedicated to educating and preparing dental assisting leaders for careers in a diverse and changing health care environment and providing a liberal education as well as outstanding clinical experiences.

The curriculum reflects the core values of the dental profession in private and public health settings. The program is committed to creating a humanistic, educational environment that will facilitate the development of responsible, ethical, oral health professionals who are sensitive to patient needs and competent in all areas of dental assisting. The program strives to produce graduates who are confident and compassionate in their profession and competent in self-assessment in preparation for lifelong learning.

Educational and clinical services provided by dental assisting students include dental health education, disease prevention, and promoting the highest standards of oral health care for a diverse population of patients.

## Part I: Program Quantitative Indicators

### Overall Program Health: **Cautionary**

Majors Included: DENT

Demand Indicators		Program Year			Demand Health Call
		08-09	09-10	10-11	
1	New & Replacement Positions (State)	49	63	73	<b>Cautionary</b>
2	New & Replacement Positions (County Prorated)	5	6	9	
3	Number of Majors	11	21	11	
4	SSH Program Majors in Program Classes	133	300	46	
5	SSH Non-Majors in Program Classes	247	105	385	
6	SSH in All Program Classes	380	405	431	
7	FTE Enrollment in Program Classes	13	14	14	
8	Total Number of Classes Taught	9	9	9	

Efficiency Indicators		Program Year			Efficiency Health Call
		08-09	09-10	10-11	
9	Average Class Size	16.6	17.3	18.7	<b>Healthy</b>
10	Fill Rate	84%	96%	93%	
11	FTE BOR Appointed Faculty	1	2	2	
12	Majors to FTE BOR Appointed Faculty	11	10.3	5.3	
13	Majors to Analytic FTE Faculty	12.9	24.1	12.3	
13a	Analytic FTE Faculty	0.9	0.9	0.9	
14	Overall Program Budget Allocation	Not Reported	\$74,786	\$85,055	
14a	General Funded Budget Allocation	Not Reported	\$85,286	\$67,055	
14b	Special/Federal Budget Allocation	Not Reported	\$0	\$0	
15	Cost per SSH	Not Reported	\$185	\$197	
16	Number of Low-Enrolled (<10) Classes	0	0	0	

Effectiveness Indicators		Program Year			Effectiveness Health Call
		08-09	09-10	10-11	
17	Successful Completion (Equivalent C or Higher)	100%	97%	99%	<b>Cautionary</b>
18	Withdrawals (Grade = W)	0	5	0	
19	Persistence (Fall to Spring)	0%	82%	62%	
20	Unduplicated Degrees/Certificates Awarded	13	16	17	
20a	Degrees Awarded	0	0	0	
20b	Certificates of Achievement Awarded	0	0	0	
20c	Academic Subject Certificates Awarded	0	0	0	
20d	Other Certificates Awarded	13	16	17	
21	Transfers to UH 4-yr	0	2	2	
21a	Transfers with credential from program	0	0	0	
21b	Transfers without credential from program	0	2	2	

Distance Education: Completely On-line Classes		Program Year			
		08-09	09-10	10-11	
22	Number of Distance Education Classes Taught	0	0	0	
23	Enrollment Distance Education Classes	0	0	0	
24	Fill Rate	0%	0%	0%	
25	Successful Completion (Equivalent C or Higher)	0%	0%	0%	
26	Withdrawals (Grade = W)	0	0	0	
27	Persistence (Fall to Spring Not Limited to Distance Education)	0%	0%	0%	

Perkins IV Core Indicators 2009-2010		Goal	Actual	Met	
28	1P1 Technical Skills Attainment	90.05	100.00	Met	
29	2P1 Completion	44.50	57.14	Met	
30	3P1 Student Retention or Transfer	55.50	77.78	Met	
31	4P1 Student Placement	50.50	50.00	Not Met	
32	5P1 Nontraditional Participation	16.00	0	Not Met	
33	5P2 Nontraditional Completion	15.10	0.00	Not Met	

Last Updated: November 28th, 2011

## Part II: Analysis of the Program

### A. Institutional Data

#### 1. Demand Indicators

The Maui County demand indicators state that there are only 9 new or replacement positions in dental assisting in 2010-2011. However, the dentists on Maui have requested this program to fulfill urgent needs. In addition, 16 of the 18 graduates are working full or part-time in the dental field. One graduate is currently enrolled in the UHMC dental hygiene program and one student is enlisted in the military with a goal of attending dental school through military benefits.

#### 2. Efficacy Indicators

Due to American Dental Association Commission on Dental Accreditation (ADACODA) accreditation requirements the maximum class size is 18 students. Therefore, the fill rate is 100%. There is only one full-time faculty member (2 reported).

#### 3. Effectiveness Indicators

In Spring 2011, the University of Hawai'i Maui College granted all 18 DENT major students the Certificate of Completion certificate. Therefore, actual persistence of Fall 2010-Spring 2011 is 100% (62% reported) and actual successful completion is 100% (99% reported). 100% or 18 (17 reported) students are working in the dental field or pursuing a dental degree.

Attached is the Hawai'i Community Health Needs Assessment, December 2010 fact sheet that all of Maui has a shortage of dental professionals.

### Dental Health Professional Shortage Areas (Dental HPSA)

Type Of Shortage/Under Served Area	Shortage Areas By County
<b>Primary Care Health Professional Shortage Areas (Primary Care)</b>  Primary Care Health Professional Shortage Areas are federal designations of geographic areas with less than one physician for every 3,500 residents, and in which primary care professionals in contiguous areas are over-utilized, excessively distant, or inaccessible.	§ Maui County – Hāʻiʻi, Haʻiku, Lāʻiʻi, and Molokaʻi § Hawaiʻi County – Puna, Kaʻa, and Hāʻiʻi § Honolulu County – Kalihi-Palama and Kalihi Valley § Kauaʻi County – the entire island of Kauaʻi  <i>Many of these areas are considered to have unusually high needs, based on the poverty status of the population.</i>
<b>Dental Health Professional Shortage Areas (Dental HPSA)</b>	§ Maui County – the entire island § Hawaiʻi County – the entire island § Honolulu County – Kalihi Palama and Kalihi Valley § Kauaʻi County – the entire island of Kauaʻi and Niʻihau
<b>Mental Health Professional Shortage Areas (Mental Health HPSA)</b>	§ Maui County – Hāʻiʻi and Molokaʻi § Hawaiʻi County – the entire island except Hilo and Kona § Honolulu County – Kalihi Palama and Kalihi Valley § Kauaʻi County – Waimea
<b>Medically Under-Served Populations (MUP)</b>	§ Maui County – the entire island § Hawaiʻi County – the entire island

The term medically under-served population refers to an urban or rural area that is designated by the federal government as having a shortage of personal health services and populations groups characterized by either economic barriers (low-income or Medicaid-eligible population) or cultural and/or linguistic barriers to receiving primary care, or those without medical insurance.	<p>§ Honolulu County – Kalihi Palama, Waikāʻe, and Waimānalo</p> <p>§ Kauaʻi County – the entire island</p> <p>Source: Bureau of Primary Health Care, Guidelines for MUA/MUP Designation and Guidelines for HPSA Designation, June 12, 1995. Public Health Service, HHS 42 CFR, Ch. 1, Part 5, as of January 18, 1996.</p>
<p><b>Medically Under-Served Areas (MUA)</b></p> <p>These areas are geographic locales in which a high proportion of the population is below 100 percent of the poverty line, is elderly, exhibits a high infant mortality rate, and has a relatively low ratio of primary care physicians per 1,000 population.</p>	<p>§ Maui County – Molokaʻi</p> <p>§ Honolulu County – Kalihi Valley, Koʻolau Loa, and Waiʻanae</p>

Source: *Health Trends in Hawaii* (Health Trends.org); State Department of Health, Family Health Services Division, Primary Care

Kaiser Foundation Health Plan of Hawaii, Hawaii Community Health Needs Assessment, December 2010, pp. 19-20.

Evidence was collected in DENT 176 in the Fall 2010 to assess PLO 2. Evidence was collected in DENT 152 in the Spring 2011 to assess PLO 3.

## 1. Evidence and Results of Student Learning

The evidence and methods used to assess the program learning outcomes will be described separately for each course that was assessed during this review period.

### DENT 176 Dental Radiography I

The student learning outcomes for DENT 150 include, obtain full mouth, panoramic, bitewing, and occlusal surveys with diagnostically usable film and practice proper infection control, OSHA, and biohazard practices while exposing and processing radiographs. Program Learning Outcome 1 of dental assisting learning outcomes was assessed in this course by having the students complete various skill competencies, quizzes and exams, and learning skills lab exercises. In addition to the dental assisting program outcomes, the student was assessed on his or her knowledge of the following general education standards: quantitative reasoning, oral communication, and critical thinking.

Only dental assisting majors were enrolled in this course; therefore the summative results reflect the Spring 2011 dental assisting graduates' achievement of the program learning outcomes. Evidence was reported on the eighteen students who completed the course. For PLO 1, 100% (18 of the 18 students) met or exceeded competency in obtaining full mouth, panoramic, bitewing, and occlusal surveys with diagnostically usable film and in practicing proper infection control, OSHA, and biohazard practices while exposing and processing radiographs.

In DENT 176, ten quizzes, one final exam, nine learning skills lab critical thinking exercises, class participation, and lab practical were used to assess PLO 2 (Demonstrate basic theoretical knowledge and skills in biological science, dental radiology, chairside dental assisting, and business office procedures to support dental assisting practice and build the foundation for an associate degree dental hygiene program). In the competency evaluations students are assessed on a particular skill such as producing maxillary and mandibular occlusal radiographs. Students are assessed by an instructor, a peer, and themselves.

Proficiency in quantitative reasoning, oral communication, and critical thinking was assessed the skills competencies, learning skills critical thinking labs, and lab practicals. The students performed well in all aspects (100% exceeded or met expectation). All of the students were proficient in these general education standards at a level necessary for their intended role as dental assistants.

### DENT 152 Chairside Dental Assisting

The student learning outcomes for DENT 152 include describe orally and in writing, theoretical information and demonstrate all clinical skills and techniques previously experienced and learned in the dental assisting courses. Program Learning Outcome 3 of Dental Assisting Program Learning Outcomes was assessed in this course by having the students share dental knowledge and serve their community. In addition to the dental assisting program outcome, the student was assessed on his or her knowledge of the following general education standard: oral communication and critical thinking.

Only dental assisting majors were enrolled in this course; therefore the summative results reflect the Spring 2011 dental assisting graduates' achievement of the program learning outcomes. Evidence was reported on the eighteen students who completed the course. For PLO 3, 55.55% (10 of the 18 students) demonstrated exemplary commitment to life-long learning and advancing competency over a lifetime of clinical practice and 44.44% (8 of the 18 students) met expectations.

Student commitment to serving their community and life-long learning was assessed in the number of service learning hours completed. Course requirement was 5 total hours and campus service learning certificate was 20 hours of community service. Five students completed over 60 hours of service which spurred the Maui County Dental Society to award these students with a plaque and gift card.

Proficiency in oral communication and critical thinking was assessed by service learning supervisor evaluation and student reflections. All of the students were proficient in these general education standards at a level necessary for their intended role as dental assistants.

## 2. Summative evidence

Program Assessment Rubric					
	Exceeds	Meets	Needs Improvement	Insufficient Progress	N/A
<b>DENT 176 Dental Radiography I</b>  <b>PLO 2</b> - Demonstrate basic theoretical knowledge and skills in biological science, dental radiology, chairside dental assisting, and business office procedures to support dental assisting practice and build the foundation for an associate degree dental hygiene program.	18				
<b>Average PLO Score for the course</b>	18	0	0	0	0
<b>General Education Standards</b>					
Critical Thinking	100%				
Oral Communication	100%				
Written Communication					
Information Retrieval					
Quantitative Reasoning	100%				
Creativity					
<b>DENT 152 Chairside Dental Assisting</b>  <b>PLO 3</b> - Demonstrate a commitment to life long learning and advancing competency over a lifetime of clinical practice.	10	8			

<b>Average PLO Score for the course</b>	<b>18</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>General Education Standards</b>					
Critical Thinking	<b>100%</b>				
Oral Communication	<b>100%</b>				
Written Communication					
Information Retrieval					
Quantitative Reasoning					
Creativity					

### 3. Explanation of assessment evidence

100% of the Dental Assisting students have met or exceeded expectations in Dental Assisting Program Learning Outcomes 2 and 3. 100% of dental assisting students met or exceeded in expectations in General Education Standards, written and oral communication, quantitative reasoning, and critical thinking.

### 4. Student learning discovery

Effective student learning can be achieved by using a variety of learning strategies that speak to our students who are diverse in their cultural backgrounds, experience, learning styles, and challenges. The use of various learning strategies enables students to develop the knowledge and skills they will need to provide culturally competent health care to a diverse population.

### 5. UHMC Dental Advisory Committee

The UHMC Dental Advisory Committee has direct and ongoing access to program coordinator and faculty. The UHMC Dental Advisory Committee discusses results of student learning at Dental Advisory Committee meetings. Recommendations are implemented to assure that training is complete and students are industry-ready.

### 6. Program Strengths and Weaknesses

Strengths:

- Strong community support from community dentists who provide direct instruction in the program, externships in their offices, and financial support for program equipment and supplies, student travel to the annual Hawaii Dental Association Convention on Oahu, have established two \$500 scholarships for program students, and have supported exemplary student community service with cash awards.
- Students and faculty actively participate in community service and oral health education by attending health fairs, school dental education sessions, and other community activities.
- Qualified dental assisting applicants have more than tripled the number of available seats due to determined promotion at monthly general orientation meetings advertised in the local newspaper, participation in high school and college career fairs, dental assisting program career-shadowing program, and dental program orientations at local high schools and at UH Maui College.
- The UHMC Dental Assisting has a high graduation (fall to spring persistence) rate ranging from 90-100% over the 9 years of the program.
- Dental Assisting students demonstrate interest in continuing education. Each year, one or more graduates have continued to the UHM Dental Hygiene BS or UHMC Dental Hygiene AS program and many are enrolled in the prerequisite courses required for the AS DH program at UHMC.

Weaknesses:

- Students and community dentists indicated a need for increased clinical experiences prior to the spring semester. Clinical hours were increased to 375 hours in fall 2010, but facility constraints have allowed limited clinical practice in the fall semester. The remodel of the science building and subsequent increased availability of facilities will make increased clinical experiences a reality.

## Part III: Action Plan

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### **a. Planned Changes**

Due to the recommendation of the UHMC Dental Assisting Program accrediting commission, the American Dental Association Commission on Dental Accreditation (ADACODA), student clinical contact hours were increased to 375 hours in Fall 2010. Increased clinical practice made for stronger, more industry ready dental assistants. Program will increase contact hours of DENT 154 from 2 to 3 contact hours.

Program will have increased access to clinical facilities when the remodel of the science building is completed. Increased access to clinical facilities will enhance training for stronger and more industry-ready dental assistants.

### **b. How assessments support your current program goals and/or influence future planning**

Current assessment influence current goals by supporting the requirements mandated by accreditation by the ADACODA and by the UHMC Dental Advisory Committee. As requirements or interpretation of current requirements change, as did the student clinical contact hours, assessments will reflect these changes.

## Part IV: Resource Implications

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Funds for the renovation of the science building will provide increased access to clinical facilities and allow students to gain invaluable skills and a practical insight into the dental profession.

# Program Student Learning Outcomes

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## a. Program Learning Outcomes:

The program learning outcomes for the UH Maui College Dental Assistant Program are to facilitate the development of entry level care providers who:

- PLO 1 - Demonstrate an understanding of dental assistant roles including the legal, professional, and ethical responsibilities within the community.
- PLO 2 - Demonstrate basic theoretical knowledge and skills in biological science, dental radiology, chairside dental assisting, and business office procedures to support dental assisting practice and build the foundation for an associate degree dental hygiene program.
- PLO 3 - Demonstrate a commitment to life long learning and advancing competency over a lifetime of clinical practice.

## b. Program Map

Attached is the Hawai'i Community Health Needs Assessment, December 2010 fact sheet that all of Maui has a shortage of dental professionals.

## UHMC Dental Assisting Student Learning Outcomes Grid