Exhibit 9

ADEA Competency Documents

All these competency documents were approved by the ADEA House of Delegates. They are intended to define the core competencies and supporting knowledge and skills necessary for the specified professions and to serve as resources for the schools and programs educating students entering these professions as well as other interested organizations.

ADEA Competencies for the New General Dentist
(As approved by the 2008 ADEA House of Delegates)

Preamble

The general dentist is the primary oral health care provider, supported by dental specialists, allied dental professionals, and other health care providers. The general dentist will address health care issues beyond traditional oral health care and must be able to independently and collaboratively practice evidence-based comprehensive dentistry with the ultimate goal of improving the health of society. The general dentist must have a broad biomedical and clinical education and be able to demonstrate professional and ethical behavior as well as effective communication and interpersonal skills. In addition, he or she must have the ability to evaluate and utilize emerging technologies, continuing professional development opportunities, and problem-solving and critical thinking skills to effectively address current and future issues in health care.

As used in this document, a "competency" is a complex behavior or ability essential for the general dentist to begin independent, unsupervised dental practice. Competence includes knowledge, experience, critical thinking and problem-solving skills, professionalism, ethical values, and technical and procedural skills. These components become an integrated whole during the delivery of patient care by the competent general dentist. Competence assumes that all behaviors are performed with a degree of quality consistent with patient well-being and that the general dentist can self-evaluate treatment effectiveness. In competency-based dental education, what students learn is based upon clearly articulated competencies and further assumes that all behaviors/abilities are supported by foundation knowledge and psychomotor skills in biomedical, behavioral, ethical, clinical dental science, and informatics areas that are essential for independent and unsupervised performance as an entry-level general dentist. In creating curricula, dental faculty must consider the competencies to be developed through the educational process, the learning experiences that will lead to the development of these competencies, and ways to assess or measure the attainment of competencies.

The purpose of this document and the proposed foundation knowledge concepts is to:

- Define the competencies necessary for entry into the dental profession as a general dentist. Competencies must be relevant and important to the patient care responsibilities of the general dentist, directly linked to the oral health care needs of the public, realistic, and understandable by other health care professionals;
- Reflect (in contrast to the 1997 competencies) the 2002 Institute of Medicine core set of competencies for enhancing patient care quality and safety, and illustrate current and emerging trends in the dental practice environment; they are divided into domains, are broader and less prescriptive in nature, are fewer in number, and, most importantly, will be linked to requisite foundation knowledge and skills;
- Serve as a central resource, both nationally for the American Dental Education Association (ADEA) and locally for individual dental schools, to promote change and innovation in predoctoral dental school curricula;
- Inform and recommend to the Commission on Dental Accreditation standards for predoctoral dental education;
- Provide a framework for the change, innovation, and construction of national dental examinations, including those provided through the Joint Commission on National Dental Examinations and clinical testing agencies;
- Assist in the development of curriculum guidelines, both nationally for ADEA and locally for individual dental schools, for both foundation knowledge and clinical instruction;
- Provide methods for assessing competencies for the general dentist; and
- Through periodic review and update, serve as a document for benchmarking, best practices, and interprofessional collaboration and, additionally, as a mechanism to inform educators in other health care professions about curricular priorities of dental education and entry-level competencies of general dentists.

Domains

1. **Critical Thinking**
2. **Professionalism**
3. **Communication and Interpersonal Skills**
4. **Health Promotion**
5. **Practice Management and Informatics**
6. **Patient Care**
   A. **Assessment, Diagnosis, and Treatment Planning**
   B. **Establishment and Maintenance of Oral Health**

The statements below define the entry-level competencies for the beginning general dentist.

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1. Critical Thinking

Graduates must be competent to:

1.1 Evaluate and integrate emerging trends in health care as appropriate.
1.2 Utilize critical thinking and problem-solving skills.
1.3 Evaluate and integrate best research outcomes with clinical expertise and patient values for evidence-based practice.

2. Professionalism

Graduates must be competent to:

2.1 Apply ethical and legal standards in the provision of dental care.
2.2 Practice within one's scope of competence, and consult with or refer to professional colleagues when indicated.

3. Communication and Interpersonal Skills

Graduates must be competent to:

3.1 Apply appropriate interpersonal and communication skills.
3.2 Apply psychosocial and behavioral principles in patient-centered health care.
3.3 Communicate effectively with individuals from diverse populations.

4. Health Promotion

Graduates must be competent to:

4.1 Provide prevention, intervention, and educational strategies.
4.2 Participate with dental team members and other health care professionals in the management and health promotion for all patients.
4.3 Recognize and appreciate the need to contribute to the improvement of oral health beyond those served in traditional practice settings.

5. Practice Management and Informatics

Graduates must be competent to:

5.1 Evaluate and apply contemporary and emerging information including clinical and practice management technology resources.
5.2 Evaluate and manage current models of oral health care management and delivery.
5.3 Apply principles of risk management, including informed consent and appropriate record keeping in patient care.
5.4 Demonstrate effective business, financial management, and human resource skills.
5.5 Apply quality assurance, assessment, and improvement concepts.
5.6 Comply with local, state, and federal regulations including OSHA and HIPAA.
5.7 Develop a catastrophe preparedness plan for the dental practice.

6. Patient Care

A. Assessment, Diagnosis, and Treatment Planning

Graduates must be competent to:

6.1 Manage the oral health care of the infant, child, adolescent, and adult, as well as the unique needs of women, geriatric, and special needs patients.

6.2 Prevent, identify, and manage trauma, oral diseases, and other disorders.

6.3 Select, obtain, and interpret patient/medical data, including a thorough intra/extra oral examination, and use these findings to accurately assess and manage all patients.

6.4 Select, obtain, and interpret diagnostic images for the individual patient.

6.5 Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care.

6.6 Formulate a comprehensive diagnosis, treatment, and/or referral plan for the management of patients.

B. Establishment and Maintenance of Oral Health

Graduates must be competent to:

6.7 Utilize universal infection control guidelines for all clinical procedures.

6.8 Prevent, diagnose, and manage pain and anxiety in the dental patient.

6.9 Prevent, diagnose, and manage temporomandibular disorders.

6.10 Prevent, diagnose, and manage periodontal diseases.

6.11 Develop and implement strategies for the clinical assessment and management of caries.

6.12 Manage restorative procedures that preserve tooth structure, replace missing or defective tooth structure, maintain function, are esthetic, and promote soft and hard tissue health.

6.13 Diagnose and manage developmental or acquired occlusal abnormalities.

6.14 Manage the replacement of teeth for the partially or completely edentulous patient.

6.15 Diagnose, identify, and manage pulpal and periradicular diseases.

6.16 Diagnose and manage oral surgical treatment needs.

6.17 Prevent, recognize, and manage medical and dental emergencies.

6.18 Recognize and manage patient abuse and/or neglect.

6.19 Recognize and manage substance abuse.

6.20 Evaluate outcomes of comprehensive dental care.

6.21 Diagnose, identify, and manage oral mucosal and osseous diseases.

APPENDIX
Glossary of Terms

Competency: a complex behavior or ability essential for the general dentist to begin independent, unsupervised dental practice; it assumes that all behaviors and skills are performed with a degree of quality consistent with patient well-being and that the general dentist can self-evaluate treatment effectiveness.

Critical thinking: the process of assimilating and analyzing information; this encompasses an interest in finding new solutions, a curiosity with an ability to admit to a lack of understanding, a willingness to examine beliefs and assumptions and to search for evidence to support these beliefs and assumptions, and the ability to distinguish between fact and opinion.

Curriculum guidelines (content): the relevant and fundamental information that is taught for each category of foundation knowledge; these are to be used as curriculum development aids and should not be construed as recommendations for restrictive requirements.

Domain: a broad, critical category of activity for the general dentist.

Emerging technologies: current and future technologies used in patient care, including technologies for biomedical information storage and retrieval, clinical care information, and technologies for use at the point of care.

Evidence-based dentistry: an approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence relating to the patient's oral and medical condition and history integrated with the dentist's clinical expertise and the patient's treatment needs and preferences.

Foundation knowledge and skills: the basic essential knowledge and skills linked to and necessary to support a given competency; these would serve to help guide curriculum in dental schools, assist educators in removing irrelevant, archaic information from current curricula, aid in including important new information, and help test construction committees develop examinations based upon generally accepted, contemporary information.

General dentist: the primary dental care provider for patients in all age groups who is responsible for the diagnosis, treatment, management, and overall coordination of services related to patients' oral health needs.

Health promotion: public health actions to protect or improve oral health and promote oral well-being through behavioral, educational, and enabling socioeconomic, legal, fiscal, environmental, and social measures; it involves the process of enabling individuals and communities to increase control over the determinants of health and thereby improve their health; includes education of the public to prevent chronic oral disease.

Informatics: applications associated with information and technology used in health care delivery; the data and knowledge needed for problem-solving and decision making; and the administration and management of information and technology in support of patient care, education, and research.

Interprofessional health care: the delivery of health care by a variety of health care practitioners in a cooperative, collaborative, and integrative manner to ensure care is continuous and reliable.

Management: includes all actions performed by a health care provider that are designed to alter the course of a patient's condition; such actions may include providing education, advice, treatment by the general dentist, treatment by the general dentist after consultation with another health care professional, referral of a patient to another health care professional, and monitoring the treatment provided; it may also include providing no treatment or observation.

Patient-centered care: the ability to identify, respect, and care about patients' differences, values, preferences, and expressed needs; relieve pain and suffering; coordinate continuous care; listen to, clearly inform, communicate with, and educate patients; share decision making and management; and continuously advocate disease prevention, wellness, and promotion of healthy lifestyles, including a focus on population health.

Problem-solving: the process of answering a question or achieving a goal when the path or answer is not immediately obvious, using an acceptable heuristic or strategy such as the scientific method.

Special needs care: an approach to oral health management tailored to the individual needs of people with a variety of medical conditions or physical and mental limitations that require more than routine delivery of oral care; special care encompasses preventive, diagnostic, and treatment services.

ADEA Foundation Knowledge and Skills for the New General Dentist
(As approved by the 2011 ADEA House of Delegates)

In the ADEA Competencies for the New General Dentist, each of the thirty-nine competencies is introduced with the phrase "Graduates must be competent to." In this document, the supporting foundation knowledge and skills appear below each competency.

1. Critical Thinking

1.1 Evaluate and integrate emerging trends in health care as appropriate.
- Trends in health care
- Health care policy
- Economic principles of health care delivery
- Health care organization and delivery models
- Quality assessment and quality assurance
- Demographics of the oral health care workforce
- Interprofessional health care relationships
- Relationship of systemic health to oral health and disease
- Impact of political and social climate on health care delivery
- Critical evaluation of health care literature

1.2 Utilize critical thinking and problem-solving skills.
- Application of scientific method to clinical problem-solving
- Evidence-based delivery of oral health care
- Clinical reasoning skills
- Diagnostic skills
- Treatment planning
- Self-assessment
- Reading comprehension
- Verbal and written communication skills
- Computer literacy

1.3 Evaluate and integrate best research outcomes with clinical expertise and patient values for evidence-based practice.
- Application of scientific method to clinical problem-solving
- Evidence-based delivery of oral health care
- Critical thinking and problem-solving skills
- Cultural competence
- Communication skills, verbal and written

- Reading comprehension
- Ethics
- Statistics literacy
- Computer literacy
- Epidemiological methods

2. Professionalism

2.1 Apply ethical and legal standards in the provision of dental care.
- Ethical decision making and conflicting obligations
- Legal and regulatory principles and standards

2.2 Practice within one's scope of competence, and consult with or refer to professional colleagues when indicated.
- Self-assessment of competence
- Standards of care
- Communication skills, both orally and in writing, with patients, patients' families, colleagues, and others with whom other health care providers must exchange information in carrying out their responsibilities
- Scope of practice of dental and medical specialties and social support services
- Identification of community resources for referrals

3. Communication and Interpersonal Skills

3.1 Apply appropriate interpersonal and communication skills.
- Communication theory and skills
  - Interpersonal (one-on-one) communication principles
  - Verbal and nonverbal communication principles
  - Conflict resolution
  - Reflective listening
- Collaborative teamwork

- Emotional and behavioral development and sensitivity
- Physiological and psychological indications of anxiety and fear
- Addressing patient concerns/issues/problems
- Behavior modification and motivation techniques
- Special needs/diversity of patients
- Health literacy
- Language barriers
- Cognitive barriers

3.2 Apply psychosocial and behavioral principles in patient-centered health care.
- Counseling skills and motivational interviewing principles
- Social and behavioral applied sciences
- Behavior modification
- Fear and anxiety management
- Pain management (acute and chronic pain)
- Geriatrics
- Special patient needs
- Cultural competence

3.3 Communicate effectively with individuals from diverse populations.
- Influence of culture on health and illness behaviors
- Culture related to oral health
- Complementary and alternative therapies
- Communication with patients in a culturally sensitive manner
- Communication in overcoming language barriers
- Communication with special needs patients
- Communication skills to address diversity-related conflict

4. Health Promotion

4.1 Provide prevention, intervention, and educational strategies.
- Patient and family communication
- Education of patient and/or family
- Risk assessment
- Prevention strategies (intervention, motivation, nutrition)
- Clinical evaluation

4.2 Participate with dental team members and other health care professionals in the management and health promotion for all patients.
- Various practice settings (community settings)
- Organizational behavior of team
- Professional communication
- Collaborative and leadership skills
- Interprofessional education

4.3 Recognize and appreciate the need to contribute to the improvement of oral health beyond those served in traditional practice settings.
- Cultural competence
- Alternative oral health delivery systems
- Barriers to improving oral health
- Global health
- Population trends
- National and international health goals

5. Practice Management and Informatics

5.1 Evaluate and apply contemporary and emerging information including clinical and practice management technology resources.
- Data analysis for disease trends
- Basic understanding of computer software
- Basic computer utilization skills
- Evidence-based literature on practice management
- Models of dental practice and types of delivery systems
- Application of contemporary electronic information systems
- Computer systems for practice management

5.2 Evaluate and manage current models of oral health care management and delivery.
- Business models of dental practice
- Effects of governmental health policy decisions
- Workforce models
- Auxiliary utilization principles
- Application of contemporary clinical information systems

5.3 Apply principles of risk management including informed consent and appropriate record keeping in patient care.

- Principles of record keeping/documentation
- Concepts of professional liability
- Risk management protocols
- Legal responsibilities in patient care management
- Legal responsibilities in personnel management
- Management of patient information
- Quality assurance

5.4 Demonstrate effective business, financial management, and human resource skills.
- Effective functioning of the oral health care team
- Principles of business management
- Employment laws and regulations
- Reimbursement systems
- Basic communication skills
- Leadership and motivation skills
- Organizational behavior

5.5 Apply quality assurance, assessment, and improvement concepts.
- Self-assessment for quality improvement
- Concepts and principles of quality assurance and quality assessment
- Awareness of continuous professional development (lifelong learning)

5.6 Comply with local, state, and federal regulations including OSHA and HIPAA.
- Elements of applicable local, state, and federal regulations
- Methods of effective application and pursuance of local, state, and federal regulations

5.7 Develop a catastrophe preparedness plan for the dental practice.
- Emergency response planning
- Emergency evacuation planning
- Preparedness measures and emergency response skills

6. Patient Care

A. Assessment, Diagnosis, and Treatment Planning

6.1 Manage the oral health care of the infant, child, adolescent, and adult, as well as the unique needs of women, geriatric, and special needs patients.
- Human development (structure and function)
- Pathophysiology of oral and systemic disease
- Patient and social/family assessment
- Communication
- History taking
- Exam techniques
- Diagnostic tests and evaluation
- Diagnosis
- Risk assessment
- Treatment planning
- Implementation
- Outcomes assessment

6.2 Prevent, identify, and manage trauma, oral diseases, and other disorders.
- Epidemiology of trauma, oral diseases, and other disorders
- Patient motivation/education for prevention
- Prevention principles and therapies
- Patient assessment and treatment planning
- Risk analysis
- Lab findings
- Systemic conditions
- Diagnostic skills
- Pharmacology and patient medications
- Clinical evaluation
- Applied biomedical sciences related to trauma, oral diseases, and other disorders

6.3 Select, obtain, and interpret patient/medical data, including a thorough intra/extraoral examination, and use these findings to accurately assess and manage all patients.
- History acquisition and interpretation
- Pharmacotherapeutics
- Clinical evaluation
- Medical and dental referrals
- Diagnostic test interpretation
- Risk assessment

- Assessment and management of patient behaviors
- Assessment and management of patient social context

6.4 Select, obtain, and interpret diagnostic images for the individual patient.
- Diagnostic imaging modalities
- Interpret forms of imaging used in dental practice
- Differential diagnosis
- Imaging safety protocols
- Imaging technologies and techniques

6.5 Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care.
- Systemic manifestations of oral disease
- Systemic medical conditions that affect oral health and treatment
- Oral conditions that affect systemic health

6.6 Formulate a comprehensive diagnosis, treatment, and/or referral plan for the management of patients.
- Clinical evaluation
- Diagnostic skills and techniques
- Risk assessment and analysis
- Patient assessment
- Sequencing of treatment
- Critical thinking and analysis
- Evidence-based health care
- Treatment presentation, communication, and considerations
- Treatment alternatives and financial considerations
- Self-assessment of clinical competence and limitations
- Referrals
- Case management

B. Establishment and Maintenance of Oral Health

Competency 6.1 serves as an umbrella competency for all competencies (6.7–6.21) under Establishment and Maintenance of Oral Health.

6.7 Utilize universal infection control guidelines for all clinical procedures.

- State/federal regulatory guidelines
- Universal infection control protocols
- Applied biomedical sciences related to transmission of disease

6.8 Prevent, diagnose, and manage pain and anxiety in the dental patient.
- Psychological and social manifestations of pain
- Pathophysiology of pain
- Pharmacotherapeutic management of pain and anxiety
- Behavioral management of pain and anxiety

6.9 Prevent, diagnose, and manage temporomandibular disorders.
- Epidemiology of temporomandibular disorders
- Physical, psychological, and social factors
- Multidisciplinary approaches
- Outcomes assessment
- Applied biomedical sciences related to temporomandibular health and disorders

6.10 Prevent, diagnose, and manage periodontal diseases.
- Epidemiology of periodontal disease
- Pharmacologic management
- Behavioral modification
- Nonsurgical management
- Surgical management
- Applied biomedical sciences related to the periodontium and periodontal diseases

6.11 Develop and implement strategies for the clinical assessment and management of caries.
- Caries risk factors and assessment
- Pharmacotherapeutic management
- Mechanical management
- Behavioral modification
- Applied biomedical sciences related to dental hard tissues, disease transmission, and caries

6.12 Manage restorative procedures that preserve tooth structure, replace missing or defective tooth structure, maintain function, are esthetic, and promote soft and hard tissue health.
- Biomechanical concepts

- Principles of biomaterial sciences
- Behavioral modification
- Applied biomedical sciences related to soft and hard tissues

6.13 Diagnose and manage developmental or acquired occlusal abnormalities.
- Principles of biomaterial sciences
- Multidisciplinary approaches
- Behavioral modification
- Applied biomedical sciences related to health and pathology of dental hard tissues

6.14 Manage the replacement of teeth for the partially or completely edentulous patient.
- Principles of biomaterial sciences
- Multidisciplinary approaches
- Behavioral modification
- Principles of biomechanics
- Applied biomedical sciences related to oral tissues

6.15 Diagnose, identify, and manage pulpal and periradicular diseases.
- Epidemiology of pulpal and periradicular disease
- Principles of endodontic therapy
- Applied biomedical sciences related to the pulpal and periradicular tissues and associated diseases

6.16 Diagnose and manage oral surgical treatment needs.
- Multidisciplinary approaches
- Behavioral modification
- Principles of biomaterials
- Applied biomedical sciences related to oral surgery

6.17 Prevent, recognize, and manage medical and dental emergencies.
- Emergency protocols
- Pharmacotherapeutics
- Multidisciplinary approaches
- Non-pharmacologic approaches
- Applied biomedical sciences related to emergency care

6.18 Recognize and manage patient abuse and/or neglect.
- Signs and symptoms of abuse and/or neglect
- Cultural awareness
- Behavioral modification
- Multidisciplinary approaches
- Ethical/legal principles and responsibilities

6.19 Recognize and manage substance abuse.
- Signs and symptoms of substance abuse
- Cultural awareness
- Behavioral modification
- Multidisciplinary approaches
- Ethical/legal principles and responsibilities
- Applied biomedical sciences related to substance abuse

6.20 Evaluate outcomes of comprehensive dental care.
- Criteria for evaluation
- Evaluation methods
- Mechanisms for continuous quality improvement

6.21 Diagnose, identify, and manage oral mucosal and osseous diseases.
- Epidemiology of oral soft tissue and osseous diseases
- Multidisciplinary approaches
- Pharmacotherapeutic management
- Nonsurgical management
- Surgical management
- Applied biomedical sciences related to the health and pathology of oral soft tissue and osseous tissues
- Screening and risk assessment for oral, head, and neck cancer.

ADEA Competencies for Entry into the Allied Dental Professions

(As approved by the 2011 ADEA House of Delegates)

Introduction

In 1998–99, the Section on Dental Hygiene of the American Association of Dental Schools, now the American Dental Education Association (ADEA), developed and presented Competencies for Entry into the Profession of Dental Hygiene. These competencies were widely used by the majority of accredited dental hygiene programs in defining specific program competencies.

Following the June 2006 Allied Dental Education Summit, a special task force of the ADEA Council of Allied Dental Program Directors was formed to advance the recommendations from the summit. One recommendation was to develop similar competency statements for the dental assisting and dental laboratory technology disciplines. Given that charge, the ADEA Task Force on Collaboration, Innovation, and Differentiation (ADEA CID) undertook a comparative review of the then-draft Competencies for the New General Dentist and the existing Competencies for Entry into the Profession of Dental Hygiene. Both documents were analyzed from the perspective of where the allied dental professions should be headed to support an overall health care team concept and a professional model of education and practice and, at the same time, address curriculum innovation and change and better address access to care issues in the spirit of collaboration with multiple health care partners. The final ADEA Competencies for Entry into the Allied Dental Professions includes the dental assisting, dental hygiene, and dental laboratory technology disciplines and serves as a companion to the final ADEA Competencies for the New General Dentist. The Competencies for Entry into the Profession of Dental Assisting and the Competencies for Entry into the Profession of Dental Hygiene were approved by the ADEA House of Delegates in 2010; the Competencies for Entry into the Profession of Dental Laboratory Technology were approved by the ADEA House of Delegates in 2011.

The purpose of this document is to

- Define the competencies necessary for entry into the allied dental professions.

- Serve as a resource for accredited allied dental education programs to promote change and innovation within their programs.
- Support existing and future curriculum guidelines.
- Serve as a resource for new and developing accredited programs in the allied dental professions.
- Serve as a mechanism to inform other health disciplines about curricular priorities in allied dental education.
- Enhance opportunities for intra- and interprofessional collaboration in understanding professional roles of oral health team members and other health care providers.
- Support developing new education models for accredited allied dental education programs.

The competencies delineated in this document are written for the three primary allied dental professions and apply to formal, accredited programs in higher education institutions. While some competencies are common to these disciplines, application would differ based on the discipline, type of program, length of program, graduate credentialing options, defined scopes of practice, and institutional mission and goals for the program. Program faculties should define actual competencies and how competence is measured for their programs. While the majority of allied dental professionals work within an oral health care team supporting private practice dentistry, other models have and will evolve. Accredited allied dental education programs have a responsibility to prepare their graduates for the highest level of practice in all jurisdictions.

The competencies describe the abilities expected of allied dental health professionals entering their respective professions. *These competency statements are meant to serve as guidelines.* It is important for individual programs to further define the competencies they want their graduates to possess, describing 1) the desired combination of foundational knowledge, psychomotor skills, communication skills, and professional behaviors and attitudes required; 2) the standards used to measure the student's independent performance in each area;

and 3) the evaluation mechanisms by which competence is determined.

The five general domains described in this document should be viewed as themes or broad categories of professional focus that transcend specific courses and learning activities. They are intended to encourage professional emphasis and focus throughout the discipline-specific curriculum. Within each domain, major competencies expected of the program graduate are identified. Each major competency reflects the ability to perform or provide a particular professional activity, which is intellectual, affective, psychomotor, or all of these in nature. Supporting competencies needed to support the major competencies and specific course objectives delineating foundational knowledge, skills, and attitudes should be further developed by each program's faculty, and these should reflect the overall mission and goals of the particular college and program. Demonstration of supporting competencies related to a specific service or task is needed in order to exhibit attainment of a major competency.

This document is not intended to be a stand-alone document and should be used in conjunction with other professional documents developed by the professional agencies that support the disciplines. This document is not intended to standardize educational programs in allied dental education but rather to allow for future program innovation, growth, and expansion. This document is also not intended to serve as a validation for program content within allied dental education or for written or clinical licensing examinations.

Program faculties should adapt this document to meet the needs of their individual programs and institutions. Given the dynamic nature of science, technology, and the health professions, these competencies should be reviewed and updated periodically.

Domains
1. **Core Competencies** (C) reflect the ethics, values, skills, and knowledge integral to all aspects of each of the allied dental professions. These core competencies are foundational to the specific roles of each allied dental professional.
2. **Health Promotion and Disease Prevention** (HP) are a key component of health care. Changes within the health care environment require the allied dental professional to have a general knowledge of wellness, health determinants, and characteristics of various patient communities.
3. **Community Involvement** (CM). Allied dental professionals must appreciate their roles as health professionals at the local, state, and national levels. While the scope of these roles will vary depending on the discipline, the allied dental professional must be prepared to influence others to facilitate access to care and services.
4. **Patient Care** (PC). Allied dental professionals have different roles regarding patient care. These are reflected in the competencies presented for each discipline. The roles of the allied dental disciplines in patient care are ever-changing, yet central to the maintenance of health. Allied dental graduates must use their skills following a defined process of care in the provision of patient care services and treatment modalities. Allied dental personnel must be appropriately educated in an accredited program and credentialed for the patient care services they provide; these requirements vary by individual jurisdiction.
5. **Professional Growth and Development** (PGD) reflect opportunities that may increase patients' access to the oral health care system or may offer ways to influence the profession and the changing health care environment. The allied dental professional must possess transferable skills (e.g., in communication, problem-solving, and critical thinking) to take advantage of these opportunities.

Competencies for Entry into the Profession of Dental Assisting

Entry-level dental assistants work within a private practice or other clinical setting and assist the dentist in providing patient care. They may be certified but have no uniform state licensing requirements. These competencies assume a supervisory relationship.

Core Competencies (C)
C.1 Apply a professional code of ethics in all endeavors.
C.2 Adhere to state and federal laws, recommendations, and regulations in the provision of oral health care.
C.3 Use critical thinking skills and comprehensive problem-solving to identify oral health care needs.

C.4 Use evidence-based decision making to evaluate emerging technologies and materials to assist in achieving high-quality, cost-effective patient care.

C.5 Assume responsibility for professional actions and care based on accepted scientific theories, research, and the accepted standard of care.

C.6 Continuously perform self-assessment for lifelong learning and professional growth.

C.7 Integrate accepted scientific theories and research into educational, preventive, and therapeutic oral health services.

C.8 Promote the values of the dental assisting profession through service-based activities, positive community affiliations, and active involvement in local organizations.

C.9 Apply quality assurance mechanisms to ensure continuous commitment to accepted standards of care.

C.10 Communicate effectively with diverse individuals and groups, serving all persons without discrimination by acknowledging and appreciating diversity.

C.11 Record accurate, consistent, and complete documentation of oral health services provided.

C.12 Facilitate a collaborative approach with all patients when assisting in the development and presentation of individualized care plans that are specialized, comprehensive, culturally sensitive, and acceptable to all parties involved in care planning.

C.13 Facilitate consultations and referrals with all relevant health care providers for optimal patient care.

C.14 Manage medical emergencies by using professional judgment, providing life support, and utilizing required CPR and any specialized training or knowledge.

Health Promotion and Disease Prevention (HP)

HP.1 Promote positive values of overall health and wellness to the public and organizations within and outside the profession.

HP.2 Respect the goals, values, beliefs, and preferences of all patients.

HP.3 Identify individual and population risk factors, and develop strategies that promote health-related quality of life.

HP.4 Evaluate factors that can be used to promote patient adherence to disease prevention or health maintenance strategies.

HP.5 Utilize methods that ensure the health and safety of the patient and the oral health professional in the delivery of care.

Community Involvement (CM)

CM.1 Assess the oral health needs and services of the community to determine action plans and availability of resources to meet the health care needs.

CM.2 Provide educational services that allow patients to access the resources of the health care system.

CM.3 Provide community oral health services in a variety of settings.

CM.4 Facilitate patient access to oral health services by influencing individuals or organizations for the provision of oral health care.

CM.5 Evaluate reimbursement mechanisms and their impact on the patient's access to oral health care.

CM.6 Evaluate the outcomes of community-based programs, and plan for future activities.

CM.7 Advocate for effective oral health care for underserved populations.

Patient Care (PC)

Assessment

PC.1 Systematically collect, analyze, and record diagnostic data on the general, oral, and psychosocial health status of a variety of patients, using methods consistent with medicolegal principles.

PC.2 Recognize predisposing and etiologic risk factors that require intervention to prevent disease.

PC.3 Recognize the relationships among systemic disease, medications, and oral health that impact overall patient care and treatment outcomes.

PC.4 Identify patients at risk for a medical emergency, and manage the patient care in a manner that prevents an emergency.

Planning

PC.5 Select and assemble the appropriate materials and armamentarium for general and specialized patient care.

PC.6 Collaborate with the patient and other health professionals as required to assist in the formulation and presentation of a comprehensive care plan that is patient-centered and based on the best scientific evidence and professional judgment.

Implementation

PC.7 Utilize universal infection control guidelines for all clinical procedures.

PC.8 Provide, as directed, restorative procedures that preserve tooth structure, replace missing or defective tooth structure, maintain function, are esthetic, and promote soft and hard tissue health.

PC.9 Provide clinical supportive and intraoral treatments within the parameters of general and specialized patient care.

PC.10 Prevent, identify, and manage medical and dental emergencies.

Evaluation

PC.11 Evaluate the effectiveness of the provided services, and modify as needed.

Professional Growth and Development (PGD)

PGD.1 Pursue career opportunities within health care, industry, education, research, and other roles as they evolve for the dental assistant.

PGD.2 Develop practice management and marketing strategies to be used in the delivery of oral health care.

PGD.3 Access professional and social networks to pursue professional goals.

Competencies for Entry into the Profession of Dental Hygiene

Dental hygienists must complete an accredited educational program and qualify for licensure in any state or jurisdiction. They practice in collaboration with dental and other health care professionals in a variety of settings.

Core Competencies (C)

C.1 Apply a professional code of ethics in all endeavors.

C.2 Adhere to state and federal laws, recommendations, and regulations in the provision of oral health care.

C.3 Use critical thinking skills and comprehensive problem-solving to identify oral health care strategies that promote patient health and wellness.

C.4 Use evidence-based decision making to evaluate emerging technology and treatment modalities to integrate into patient dental hygiene care plans to achieve high-quality, cost-effective care.

C.5 Assume responsibility for professional actions and care based on accepted scientific theories, research, and the accepted standard of care.

C.6 Continuously perform self-assessment for lifelong learning and professional growth.

C.7 Integrate accepted scientific theories and research into educational, preventive, and therapeutic oral health services.

C.8 Promote the values of the dental hygiene profession through service-based activities, positive community affiliations, and active involvement in local organizations.

C.9 Apply quality assurance mechanisms to ensure continuous commitment to accepted standards of care.

C.10 Communicate effectively with diverse individuals and groups, serving all persons without discrimination by acknowledging and appreciating diversity.

C.11 Record accurate, consistent, and complete documentation of oral health services provided.

C.12 Initiate a collaborative approach with all patients when developing individualized care plans that are specialized, comprehensive, culturally sensitive, and acceptable to all parties involved in care planning.

C.13 Initiate consultations and collaborations with all relevant health care providers to facilitate optimal treatments.

C.14 Manage medical emergencies by using professional judgment, providing life support, and utilizing required CPR and any specialized training or knowledge.

Health Promotion and Disease Prevention (HP)

HP.1 Promote positive values of overall health and wellness to the public and organizations within and outside the profession.

HP.2 Respect the goals, values, beliefs, and preferences of all patients.

HP.3 Refer patients who may have physiological, psychological, or social problems for comprehensive evaluation.

HP.4 Identify individual and population risk factors, and develop strategies that promote health-related quality of life.

HP.5 Evaluate factors that can be used to promote patient adherence to disease prevention or health maintenance strategies.

HP.6 Utilize methods that ensure the health and safety of the patient and the oral health professional in the delivery of care.

Community Involvement (CM)

CM.1 Assess the oral health needs and services of the community to determine action plans and availability of resources to meet the health care needs.

CM.2 Provide screening, referral, and educational services that allow patients to access the resources of the health care system.

CM.3 Provide community oral health services in a variety of settings.

CM.4 Facilitate patient access to oral health services by influencing individuals or organizations for the provision of oral health care.

CM.5 Evaluate reimbursement mechanisms and their impact on the patient's access to oral health care.

CM.6 Evaluate the outcomes of community-based programs, and plan for future activities.

CM.7 Advocate for effective oral health care for underserved populations.

Patient Care (PC)

Assessment

PC.1 Systematically collect, analyze, and record diagnostic data on the general, oral, and psychosocial health status of a variety of patients using methods consistent with medicolegal principles.

PC.2 Recognize predisposing and etiologic risk factors that require intervention to prevent disease.

PC.3 Recognize the relationships among systemic disease, medications, and oral health that impact overall patient care and treatment outcomes.

PC.4 Identify patients at risk for a medical emergency, and manage the patient care in a manner that prevents an emergency.

Dental Hygiene Diagnosis

PC.5 Use patient assessment data, diagnostic technologies, and critical decision making skills to determine a dental hygiene diagnosis, a component of the dental diagnosis, to reach conclusions about the patient's dental hygiene care needs.

Planning

PC.6 Utilize reflective judgment in developing a comprehensive patient dental hygiene care plan.

PC.7 Collaborate with the patient and other health professionals as indicated to formulate a comprehensive dental hygiene care plan that is patient-centered and based on the best scientific evidence and professional judgment.

PC.8 Make referrals to professional colleagues and other health care professionals as indicated in the patient care plan.

PC.9 Obtain the patient's informed consent based on a thorough case presentation.

Implementation

PC.10 Provide specialized treatment that includes educational, preventive, and therapeutic services designed to achieve and maintain oral health. Partner with the patient in achieving oral health goals.

Evaluation

PC.11 Evaluate the effectiveness of the provided services, and modify care plans as needed.

PC.12 Determine the outcomes of dental hygiene interventions using indices, instruments, examination techniques, and patient self-reports as specified in patient goals.

PC.13 Compare actual outcomes to expected outcomes, reevaluating goals, diagnoses, and services when expected outcomes are not achieved.

Professional Growth and Development (PGD)

PGD.1 Pursue career opportunities within health care, industry, education, research, and other roles as they evolve for the dental hygienist.

PGD.2 Develop practice management and marketing strategies to be used in the delivery of oral health care.

PGD.3 Access professional and social networks to pursue professional goals.

Competencies for Entry into the Profession of Dental Laboratory Technology

Dental laboratory technicians provide laboratory services as prescribed by a dentist within a laboratory setting. These competencies assume this prescriptive authority of the dentist. Dental laboratory technicians may be certified but have no licensing requirements.

Core Competencies (C)

C.1 Apply a professional code of ethics in all endeavors.

C.2   Adhere to state and federal laws, recommendations, and regulations in the provision of prosthetic laboratory services.

C.3   Use critical thinking skills, comprehensive problem-solving, and evidence-based decision making to evaluate emerging technology that can be applied to achieve high-quality, cost-effective patient care.

C.4   Assume responsibility for professional actions and care based on accepted scientific theories, research, and the accepted standard of care.

C.5   Continuously perform self-assessment for lifelong learning and professional growth.

C.6   Integrate accepted scientific theories and research into prosthetic laboratory services.

C.7   Promote the values of the dental laboratory technology profession through service-based activities, positive community affiliations, and active involvement in local organizations.

C.8   Apply quality assurance mechanisms to ensure continuous commitment to accepted standards of care.

C.9   Communicate effectively with diverse individuals and groups, serving all persons without discrimination by acknowledging and appreciating diversity.

C.10   Provide accurate, consistent, and complete documentation for prosthetic laboratory services.

C.11   Manage medical emergencies by using professional judgment, providing life support, and utilizing required CPR and any specialized training or knowledge.

Health Promotion and Disease Prevention (HP)

HP.1   Respect the goals, values, beliefs, and preferences of patients and oral health professionals in the delivery of care.

HP.2   Promote factors that can be used to enhance patient adherence to disease prevention or health maintenance strategies.

HP.3   Utilize methods that ensure the health and safety of the patient and the oral health professional in the delivery of care.

Community Involvement (CM)

CM.1   Facilitate patient access to oral health services by influencing individuals or organizations for the provision of oral health care.

CM.2   Evaluate the outcomes of community-based programs and plan for future activities.

CM.3   Advocate for effective oral health care for underserved populations.

Patient Care (PC)

Assessment

PC.1   Ensure that adequate information has been supplied by the dentist for the manufacture of custom-made dental restorations and dental prostheses.

PC.2   Provide information on the advantages, limitations, and appropriateness of various designs of custom-made dental restorations and dental prostheses relevant to proposed treatment plans.

Planning

PC.3   Demonstrate interpretation of the dentist's prescription accurately.

PC.4   Facilitate in the design of custom-made dental restorations and dental prostheses

PC.5   Help guide selection of appropriate materials for manufacture of custom-made dental restorations and dental prostheses.

PC.6   Demonstrate an understanding of the manufacturing requirements for dental restorations and dental prostheses.

Implementation

PC.7   Use effective infection control procedures.

PC.8   Manufacture dental restorations and dental prostheses in a broad range of areas to an acceptable level adhering to the standards of appropriate regulatory agencies.

PC.9   Recognize and institute procedures to minimize hazards related to the practice of dental laboratory technology.

Evaluation

PC.10 Ensure that the dental restoration or dental prosthesis follows the prescription, and obtain dentist feedback on meeting clinical acceptance.

PC.11 Determine whether manufactured dental restorations and dental prostheses meet established industry standards.

PC.12 Recognize the importance of quality assurance systems and standards in the manufacturing processes.

PC.13 Demonstrate efficient handling, storage, and distribution of dental restorations and dental prostheses.

Professional Growth and Development (PGD)

PGD.1 Pursue career opportunities within health care, industry, education, research, and other roles as they evolve for the dental laboratory technician.

PGD.2 Develop practice management and marketing strategies related to the management of a dental laboratory.

PGD.3 Access professional and social networks to pursue professional goals.

GLOSSARY OF TERMS

Access. Mechanism or means of approach into the health care environment or system.

Assessment. Systematic collection, analysis, and documentation of the oral and general health status and patient needs through a variety of methods, including radiographs, diagnostic tools, and instruments.

Critical thinking. The disciplined process of actively conceptualizing, analyzing, and applying information as a guide to action; ability to demonstrate clinical reasoning, diagnostic thinking, or clinical judgment.

Community. Group of two or more individuals with a variety of oral health needs including the physical, psychological, cognitive, economic, cultural, and educational and compromised or impaired people. The community also includes consumers and health professional groups, businesses, and government agencies.

Cultural sensitivity. A quality demonstrated by individuals who have systematically learned and tested awareness of the values and behavior of a specific community and have developed an ability to carry out professional activities consistent with that awareness.

Dental assistant (DA). An allied dental health professional who assists the dentist in practice and may choose to specialize in any of the following areas of dentistry: chairside general dentistry, expanded functions dental assisting (restorative) in general or pediatric dentistry, orthodontics, oral surgery, periodontics, assisting in dental surgery at area hospitals, endodontics, public health dentistry, dental sales, dental insurance, dental research, business assisting, office management, or clinical supervision.

Dental hygiene care plan. An organized presentation or list of interventions to promote health or prevent disease of the patient's oral condition; plan is designed by the dental hygienist based on assessment data and consists of services that the dental hygienist is educated and licensed to provide.

Dental hygiene diagnosis. The dental hygiene diagnosis is a component of the overall dental diagnosis. It is the identification of an existing or potential oral health problem that a dental hygienist is educationally qualified and licensed to treat. The dental hygiene diagnosis utilizes critical decision making skills to reach conclusions about the patient's dental hygiene needs based on all available assessment data.

Dental hygiene process of care. There are five components to the dental hygiene process of care: assessment, dental hygiene diagnosis, planning, implementation, and evaluation. The purpose of the dental hygiene process of care is to provide a framework within which individualized needs of the patient can be met and to identify the causative or influencing factors of a condition that can be reduced, eliminated, or prevented by the dental hygienist.

Dental hygienist (DH). A preventive oral health professional who has graduated from an accredited dental hygiene program in an institution of higher education, licensed in dental hygiene to provide educational, clinical, research, administrative, and therapeutic services supporting total health through the promotion of optimum oral health.

Dental laboratory technician (DLT). An allied dental professional who manufactures custom-made dental restoration and dental prostheses according to the prescriptive authorization from licensed dentists using a variety of materials, equipment, and manufacturing techniques in the specialty areas of complete dentures, removable partial dentures, orthodontics, crown and bridge, and ceramics.

Dental prosthesis. An artificial replacement (prosthesis) of one or more teeth (up to the entire dentition in either arch) and associated dental/alveolar structures. Dental prostheses usually are subcategorized as either fixed dental prostheses or removable dental prostheses and include maxillofacial prostheses.

Evaluate. The process of reviewing and documenting the outcomes of treatment and interventions provided for patients.

Evidence-based care. Provision of patient care based on the integration of best research evidence with clinical expertise and patient values.

Intervention. Oral health services rendered to patients as identified in the care plan. These services may be clinical, educational, or health promotion-related.

Medicolegal. Pertains to both medicine and law; considerations, decisions, definitions, and policies provide the framework for many aspects of current practice in the health care field.

Occupational model. Suggests technical training for a trade or occupation.

Outcome. Result derived from a specific intervention or treatment.

Patient. Potential or actual recipients of health care, including oral health care, and including persons, families, groups, and communities of all ages, genders, and sociocultural and economic states.

Patient-centered. Approaching services from the perspective that the patient is the main focus of attention, interest, and activity and that the patient's values, beliefs, and needs are of utmost importance in providing care.

Practice. To engage in patient care activities.

Professional model. Requires formal academic education and qualification for entry into a profession through prolonged education, licensure, or regulation and adherence to an ethical code of practice.

Refer. Through assessment, diagnosis, or treatment, it is determined that services are needed beyond the practitioner's competence or area of expertise. It assumes that the patient understands and consents to the referral and that some form of evaluation will be accomplished through cooperation with professionals to whom the patient has been referred.

Reflective judgment. A construct that merges the mental capabilities of critical thinking and problem-solving and represents a higher level clinical decision making skill.

Risk assessment. Qualitative and quantitative evaluation gathered from the assessment process to identify the risks to general and oral health. The data provide the clinician with the information to develop and design strategies for preventing or limiting disease and promoting health.

Risk factors. Attributes, aspects of behavior, or environmental exposures that increase the probability of the occurrence of disease.

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ADEA Core Competencies for Graduate Dental Hygiene Education

(As approved by the 2011 ADEA House of Delegates)

Introduction

Graduate education in dental hygiene is imperative for developing a cadre of dental hygiene professionals who will lead the profession and assume leadership roles in health care and education, as well as developing scholars to participate in the generation and dissemination of knowledge. Dental hygiene graduate education is based on a body of knowledge that is specific to the roles of the dental hygienist. In addition, a master's degree program must meet the diverse needs and interests of its students, as well as prepare graduates capable of meeting the complex oral health needs of a diverse population. Therefore, the master's degree program should consist of a multifaceted education composed of theory and practical application that provides an expanded education and the opportunity to develop additional skills in emphasis areas. In addition, technology should be utilized to make graduate education accessible to students regardless of geographic location.

Ultimately, the dental hygiene graduate program should prepare graduates to assume roles in various employment environments and provide them with the tools to initiate as well as to adapt to change. It is imperative that these programs promote advanced communication and interpersonal skills, critical and reflective thinking, evidence-based decision making, problem-solving, technology and information literacy, interdisciplinary and interprofessional collaboration, scholarly inquiry and application, ethical and professional behavior, and the value of lifelong learning.

The intent of this document is to further define the body of professional knowledge and to establish an educational foundation for all graduate-level dental hygiene programs. Competencies describe the knowledge, skills, and attitudes expected of the graduate, establish benchmarks for outcomes assessment, and guide the development of relevant curriculum content.[1] The defined core competencies for the master's degree in dental hygiene are intended to

support the educational quality of existing, developing, and future graduate education programs.

There are several purposes for the creation and use of this document. One purpose is to concisely establish the competencies that are expected of graduates. Educational competencies serve to inform and guide faculty members, students, and other stakeholders to have a common understanding of the knowledge, skills, abilities, and characteristics of program graduates. Second is to offer direction to graduate dental hygiene programs with respect to curriculum development and enhancement and to establish a benchmark of educational quality. Another purpose is to assist new professionals by defining what it means to be a graduate of a master's degree program in dental hygiene and offer direction to those seeking a graduate degree in the profession.

Core competencies also provide direction to faculty for designing learning experiences for students, while informing stakeholders about the expectations of the graduate. The core competencies for the master's degree in dental hygiene assist in defining the profession of dental hygiene. In addition, all master's level dental hygienists should understand how oral health and the profession of dental hygiene align with a global perspective on overall health, regardless of the roles they assume after graduation, e.g., education, teaching, community health, administration, or others.

Since 2008, both the American Dental Education Association (ADEA) and the American Dental Hygienists' Association (ADHA) have discussed the development of competencies through their respective structures: the ADEA Graduate Dental Hygiene Program Directors Special Interest Group and the ADHA Council on Education. Both organizations have missions that support the development of graduate competencies for the profession. ADEA's mission is "to lead individuals and institutions of the dental education community to address contemporary issues influencing education, research, and the delivery of

oral health care for the improvement of the health of the public."[2] For the ADHA, "to improve the public's total health, the mission of the American Dental Hygienists' Association is to advance the art and science of dental hygiene by ensuring access to quality oral health care; increasing awareness of the cost-effective benefits of prevention; promoting the highest standards of dental hygiene education, licensure, practice, and research; and representing and promoting the interests of dental hygienists."[3]

In early 2010, ADEA and the ADHA agreed to collaborate in the development of competencies for graduate dental hygiene education programs. A working group comprised of three representatives from each association was appointed to develop draft core competencies for dental hygiene education. It was agreed that this endeavor is an excellent opportunity for ADEA and the ADHA to work in partnership to support graduate dental hygiene education.

The resulting core competencies for the master's degree in dental hygiene recognize the complex and diverse range of dental hygiene graduate programs. The development of these core competencies reflects current trends in the profession and the educational and health care system needs of the future. The intent of this document is to serve as a guide and provide a foundation for all graduate-level dental hygiene programs irrespective of areas of emphasis, e.g., administration/management, advanced clinical practice, community health, oral health sciences, teaching/education, and/or research. Individual programs could modify the core as is appropriate to achieve individual program and institutional missions and goals. For example, if the primary goal of a graduate program is to produce dental hygiene faculty members, some core domains would be emphasized more than others, and additional competencies would be added to reflect education.

The organization of the document features eight core domains, which are general categories of content, and competencies within each domain delineating more specific skills, knowledge, and behaviors for the particular domain. Each of the content areas need not be a specific course within the curriculum. Threaded through multiple domains are themes related to critical thinking, lifelong learning, communication, collaboration, advocacy, evidence-based decision making, and ethics. Graduate education provides the opportunity to enhance a professional's

analytical and communication skills with evidence to connect theory to practice. To this end, a culminating experience in the format of a scholarly project is strongly recommended.

To assist programs, the following guidelines are suggested:
1. The dental hygiene graduate program should be offered within an institution of higher learning and build on a foundation of baccalaureate education.
2. The dental hygiene graduate program should consist of a coherent pattern of courses culminating in a scholarly project such as a thesis or equivalent experience.
3. The core curriculum should ensure a basic knowledge/skill framework necessary to support specialization in designated emphasis areas and provide for supervised experience to facilitate the attainment of core competencies.
4. Behaviors expected of graduates will consist of behaviors expected of all graduates of master's-level programs, as well as the behaviors for the chosen emphasis area.
5. Adequate advanced preparation at the master's level must include education from the dental hygiene discipline as well as from other compatible disciplines (i.e., education, business, basic sciences, humanities, public health, advanced clinical procedures, health care management, etc.). An interdisciplinary approach is encouraged as much as feasible. However, the primary focus of graduate education in dental hygiene must be in the discipline of dental hygiene.
6. Outcome behaviors will, to varying degrees, reflect the various roles of the dental hygienist: administrator/manager, educator, researcher, clinician, advocate, and health promoter. Additionally, these roles will be influenced by changes in societal and professional expectations, in the health care delivery system, and the oral health care needs of the public.

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Core Competencies for Graduate Dental Hygiene Education

Diversity, Social, and Cultural Sensitivity refers to the ability to engage and interact with individuals and groups across and within diverse communities and cultures in an effective and respectful manner.

1. Recognize the impact of health status and ability, age, gender, ethnicity, and social, economic, and cultural factors on health and disease, health beliefs and attitudes, health literacy, and the determinants of health.
2. Model cultural sensitivity in all professional endeavors.
3. Identify the needs of vulnerable populations and communities to prevent and control oral diseases and reduce health disparities.
4. Develop programs and strategies responsive to the diverse cultural and ethnic values and traditions of the communities served.

Health Care Policy, Interprofessional Collaboration, and Advocacy refers to the understanding of policy and its development, the value of collegiality and interprofessional collaboration, and advocacy related to the promotion of health, education, and the profession of dental hygiene.

1. Examine legislative and regulatory processes that determine policy, health priorities, and funding for health care and education programs.
2. Identify principles related to the organization and financing of various health care delivery systems.
3. Evaluate the impact of legislation, regulation, and policy on oral and general health, education, policy issues, and trends at the national, state, and local levels.
4. Participate in the public policy process to influence consumer groups, businesses, and governmental agencies to support education and oral health care initiatives.
5. Determine evidence and data needed to support the development of new workforce models including their impact on oral health and overall health from a policy perspective.
6. Examine methods of facilitating access and partnerships to enhance health care and education.
7. Establish and promote interprofessional collaborations with other professionals, interest groups, and social service agencies to promote and restore health.

Health Informatics and Technology relates to the ability to recognize and utilize technology to advance research, health care, teaching, and education.

1. Demonstrate the ability to access, evaluate, and interpret data from various information systems.
2. Identify existing and emerging technologies and their applications.
3. Determine the appropriate technology and software systems in the design, implementation, and evaluation of community or educational programs.
4. Demonstrate knowledge of the legal, ethical, and social issues related to emerging technology and communication/social networks.
5. Utilize information technology and health informatics in health care, educational, business, and/or other employment settings.
6. Use information technology to promote and advocate for programs and policies.
7. Demonstrate effective written, oral, and electronic communication skills.

Health Promotion and Disease Prevention refers to all aspects of health promotion, risk assessment and reduction, and education of individuals, families, and communities in the promotion of optimal oral health and its relationship to general health.

1. Design programs to reduce risks and promote health that are appropriate to health status and ability, age, gender, ethnicity, social, economic, cultural factors, and available resources.
2. Use epidemiological, social, and environmental data to evaluate the oral health status of individuals, families, groups, and communities.
3. Incorporate health promotion theories and translational research into developing teaching and oral health counseling strategies that preserve and promote health and healthy lifestyles.
4. Foster interprofessional collaborations to optimize health for individuals and/or communities.
5. Evaluate the impact of oral disease on overall health to determine patient or community risk and in the development of intervention and prevention strategies to optimize positive health outcomes.

Leadership refers to the ability to inspire individual, community, and/or organizational excellence, create and communicate a shared vision, and successfully manage change to attain an organization's strategic ends and successful performance.

1. Examine the dynamic interactions of human and social systems and how they affect relationships among individuals, groups, organizations, and communities.
2. Disseminate new knowledge and contribute to best practices in the profession.
3. Apply leadership skills, theories, and principles in interactions with groups and organizations to enhance innovation and change.
4. Advocate for the advancement of the dental hygiene profession and oral health improvement through service activities and affiliations with professional associations.
5. Develop strategies to motivate others for collaborative problem-solving, decision making, and evaluation.
6. Demonstrate team-building, negotiation, and conflict management skills.
7. Demonstrate knowledge of coaching, mentoring, and networking skills in interactions with individuals, groups, organizations, and/or communities.

Professionalism refers to the ability to demonstrate, through knowledge and behavior, a commitment to the highest standards of competence, ethics, integrity, responsibility, and accountability in all professional endeavors.
1. Apply self-assessment skills and lifelong learning to enhance professional development.
2. Demonstrate a commitment to standards of excellence in any role of the dental hygienist.
3. Employ a professional code of ethics in all endeavors.
4. Demonstrate responsibility and accountability for actions within the various roles of the dental hygienist according to defined standards, regulations, and policies.
5. Recognize one's obligation to take action to enhance the health, welfare, and interest of a diverse society.
6. Promote high standards of personal and organizational integrity, honesty, and respect for all people and communities.

Program Development and Administration relates to the assessment, planning, implementation, and evaluation of programs and systems related to an area of emphasis such as teaching, education, community outreach, or other area.

1. Demonstrate a program development process to include assessment, planning, implementation, and evaluation to meet the goals of a developed program.
2. Develop collaborative partnerships to accomplish program goals.
3. Select program development models to meet specific program objectives.
4. Apply outcomes assessment and quality improvement models that apply to and evaluate programs.
5. Examine financing and resource management processes within organizational systems.
6. Formulate a comprehensive strategic plan for a department, organization, association, or other entity.
7. Employ basic managerial, administrative, interpersonal, and human relations skills in a team-based environment.

Scholarly Inquiry and Research relates to the ability to utilize scientific theory, research methodology, and research findings, as well as critical and reflective thinking for clinical and/or organizational evidence-based decision making.
1. Apply the research process to an identified problem.
2. Demonstrate professional writing and presentation skills in the dissemination of research findings.
3. Conduct a comprehensive systematic literature search relevant to a specific topic and critically evaluate the evidence gathered.
4. Demonstrate skill in proposal development and writing.
5. Analyze and interpret quantitative and qualitative data from the research literature to guide problem-solving and evidence-based decision making.
6. Synthesize information from evidence-based literature to apply to a community health, education, clinical practice, and/or research problem.
7. Design and implement a scholarly project in an area of emphasis.

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