

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

Foundation Knowledge for the New General Dentist (*continued*)

- 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.