

## Model of the Domain of Dentistry

### Foundation Knowledge for the General Dentist

### Domain of Dentistry: Component Sections

### Clinical Competencies

**FK1** Apply knowledge of molecular, biochemical, cellular, and systems-level development, structure, and function to the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**FK2** Apply knowledge of physics and chemistry to explain normal biology and pathobiology in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**FK3** Apply knowledge of physics and chemistry to explain the characteristics and use of technologies and materials used in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

### Diagnosis and Treatment Planning

#### Diagnosis and Treatment Planning

1. Obtain and interpret patient/medical data, including a thorough intra/extra oral examination, and use these findings to accurately assess and manage all patients.
2. Identify patient's chief complaints.
3. Obtain medical, dental, psychosocial, and behavioral histories.
4. Perform head and neck and intraoral examinations.
5. Obtain medical and dental consultations when appropriate.
6. Use clinical and epidemiological data to diagnose and establish a prognosis for dental abnormalities and pathology.
7. Recognize the normal range of clinical findings and significant deviations that require monitoring, treatment, or management.
8. Select, obtain and interpret diagnostic images for the individual patient.
9. Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care.
10. Formulate a comprehensive diagnosis, treatment and/or referral plan for the management of patients.
11. Discuss etiologies, treatment alternatives, and prognoses with patients and educate them so they can participate in the management of their own care.

**FK4** Apply knowledge of the principles of genetic, congenital, and developmental diseases and conditions and their clinical features to understand patient risk in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**FK5** Apply knowledge of the cellular and molecular bases of immune and non-immune host defense mechanisms in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**FK6** Apply knowledge of general and disease-specific pathology to assess patient risk in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**Oral  
Health  
Management**

**Oral Health Management**

1. Manage patients in a hospital setting.
2. Manage the unique needs relating to the oral health care of infants.
3. Manage the unique needs relating to the oral health care of children.
4. Manage the unique needs relating to the oral health care of adolescents.
5. Manage the oral health care of adults, including the unique needs of women.
6. Manage the unique needs relating to the oral health care of geriatric patients.
7. Manage the unique needs relating to the oral health care of special needs patients.
8. Select and administer or prescribe pharmacological agents in the treatment of dental patients.
9. Anticipate, prevent, and manage complications arising from the use of therapeutic and pharmacological agents employed in patient care.
10. Prevent, diagnose and manage pain and anxiety in the dental patient.
11. Prevent, diagnose and manage temporomandibular disorders.
12. Diagnose and manage periodontal diseases.
13. Implement strategies for the clinical assessment and management of caries.
14. Maintain function and promote soft and hard tissue health.
15. Manage patients with oral esthetic needs.
16. Diagnose and manage developmental or acquired occlusal abnormalities.
17. Manage the replacement of teeth for the partially or completely edentulous patient.
18. Restore partial or complete edentulism with uncomplicated fixed or removable prosthetic restorations.
19. Manage the restoration of partial or complete edentulism using implant procedures.
20. Diagnose and manage pulpal and periradicular diseases.
21. Perform uncomplicated endodontic procedures.
22. Diagnose and manage oral surgical treatment needs.
23. Perform uncomplicated oral surgical procedures.
24. Manage patients requiring modification of oral tissues to optimize restoration of form, function and esthetics.
25. Prevent, recognize and manage medical and dental emergencies.
26. Perform basic cardiac life support.
27. Recognize and manage acute pain, hemorrhage, trauma, and infection of the orofacial complex.
28. Recognize and manage patient abuse and/or neglect.
29. Recognize and manage substance abuse.
30. Evaluate outcomes of comprehensive dental care.
31. Diagnose and manage oral mucosal and osseous diseases.

**FK7** Apply knowledge of the biology of microorganisms in physiology and pathology in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**FK8** Apply knowledge of pharmacology in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**FK9** Apply knowledge of sociology, psychology, ethics, and other behavioral sciences in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**FK10** Apply quantitative knowledge, critical thinking, and informatics tools in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

**Practice  
and  
Profession**

**Practice and Profession**

1. Evaluate emerging trends in health care and integrate new medical knowledge and therapies relevant to oral health care.
2. Evaluate social and economic trends and their impacts on oral health care.
3. Utilize critical thinking and problem-solving skills.
4. Evaluate scientific literature and integrate best research outcomes with patient values and other sources of information to make decisions about dental treatment.
5. Apply advances in modern biology to clinical practice.
6. Apply principles of ethics and jurisprudence to the practice of dentistry.
7. Practice within one's scope of competence and consult with or refer to professional colleagues when indicated.
8. Apply appropriate interpersonal and communication skills.
9. Apply psychosocial and behavioral principles in patient-centered care.
10. Communicate effectively with individuals from diverse populations.
11. Apply prevention, intervention and educational strategies to maximize oral health.
12. Participate with dental team members and other health care professionals in health promotion and disease management for individuals and communities.
13. Evaluate and apply contemporary clinical, laboratory and information technology resources in patient care, practice management and professional development.
14. Evaluate different models of oral health care management and delivery.
15. Apply principles of risk management, including informed consent and appropriate record-keeping in patient care.
16. Use effective business and financial management skills.
17. Use effective human resource management skills to coordinate and supervise the activity of allied dental health personnel.
18. Apply quality assurance, assessment and improvement concepts.
19. Assess one's personal level of skills and knowledge relative to dental practice.
20. Understand and apply local, state and federal laws and regulations pertaining to dentistry and healthcare, including OSHA and HIPPA.
21. Develop a catastrophe preparedness plan for the dental practice.
22. Utilize universal infection control guidelines for all clinical procedures.
23. Communicate case design with laboratory technicians and evaluate the resultant restoration/prosthesis.