

## WEST VIRGINIA UNIVERSITY SCHOOL OF DENTISTRY COMPETENCIES FOR THE GRADUATING DENTIST

APRIL 1, 2001; Revised July 21, 2004; May 30, 2007, April 23, 2008;  
April 4, 2012; August 2, 2012; February 8, 2013; April 9, 2015; December 8, 2016

### INTRODUCTION

For many years, the curriculum at WVU School of Dentistry has been discipline-driven. In dental education this traditional approach has evolved over many years into a competency-driven approach to curriculum design and management. "Competencies for the Graduating Dentist" establishes the skills, knowledge and attitudes that we feel our students should have by the time of graduation. While we have defined and assessed clinical competencies for a number of years, we have recently decided to make our entire curriculum subject to a competency-based analysis. *Competencies* are the skills, knowledge base, attitudes and judgment abilities that a dentist must have at the start of unsupervised independent practice. A graduating student must possess an array of competencies although he or she may not be proficient or expert yet. By defining a curriculum-wide spectrum of competencies, the educational mission of the School is enhanced in two ways: First, the competencies guide our curriculum design and enable increased abilities to analyze curricular content. Second, we can be more focused and efficient in assessing the students' acquisition of the defined competencies. To the extent that it can be affirmed that the student acquires sufficient competency to enter the independent practice of dentistry, the curriculum has more value.

The twenty-one major competencies were developed and approved by the Curriculum Committee in the spring of 2001. General assistance was provided by competency statements developed by Baylor College of Dentistry and University of Louisville School of Dentistry. However, the unique educational mission of WVU School of Dentistry played a significant role in developing our competency statements. All faculty of the School had the opportunity to review and suggest changes to the competencies developed by the Curriculum Committee.

In the initial years of implementing a competency-based curriculum, it is expected that both the content of the curriculum and the substance of the competency statements will evolve. It will take time to reconcile the curriculum, as viewed through an analysis of course objectives, with our defined competencies. In time, as we gain confidence in the value and appropriateness of our competency statements, curricular changes should stabilize.

The twenty-four major competencies are divided into seven categories of thought, behavior or knowledge. Each major competency is furthered by course objectives the sum total of which, when accomplished by the student, enable acquisition of the competency. Assessment of the acquisition of each competence will occur in many ways that are appropriate to the subject matter.

An additional competency addressing diversity awareness was approved and included in this document on July 1, 2004. Competency #2 was revised to address special needs and changes were approved and made to the document on May 30, 2007. Competency #11 - Surgical Therapy was revised on April 23, 2008 to include recognize. Competency #18 was modified from Community Leadership to Community Engagement on April 4, 2012 and approved on the same day. A competency statement on Implant Therapy (#17) was approved and included in this document on August 2, 2012. Competency numbering was modified following the insertion of the new #17 competency. A new competency on tobacco cessation (#6) was approved with modification on February 8, 2013. Competency numbering was modified following the insertion of the new #6 competency. On April 9, 2015, revisions to Competency statements #3, 5, 17 and 22 were made to reflect what is currently being taught in the curriculum. On December 8, 2016, revisions to Competency statements #11, 18 and 23 were made to reflect what is currently being taught in the curriculum. A new competency, Dental Sleep Medicine, was added effective with the Class of 2020.

The ultimate benefits of Competencies for the Graduating Dentist will be a more efficient and rational curriculum that is responsive to the educational mission of the School of Dentistry.

**I. Scientific and Critical Thinking**

1. Scientific Process: The graduating dentist must acquire, critically evaluate and assimilate scientific information necessary for the evaluation, diagnosis, treatment, management and prevention of oral health problems.

**II. Patient Evaluation**

2. Examination of the Patient: The graduating dentist must be able to perform an examination that collects the medical, physical, psychological and social information needed to evaluate the systemic and oral condition(s) of patients of all ages (infant through older adult) or with special needs (including, but not limited to, persons with developmental disabilities, complex medical problems and physical limitations) and manage behavioral factors which affect oral health and use the information to implement strategies that facilitate the delivery of oral health care.

**III. Diagnosis**

3. Diagnosis: The graduating dentist must be able to determine a differential, provisional or definitive diagnosis for patients of all ages by interpreting and correlating findings from the history, clinical and radiographic examination and other diagnostic tests.

**IV. Treatment Planning**

4. Treatment Planning: The graduating dentist must be able to develop, present, and discuss individual treatment plans for patients of all ages consistent with the patient's condition, interest, goals and capabilities.

**V. Patient Treatment and Management (for Patients in all Stages of Life)**

5. Prevention of Disease and Maintenance of Health: The graduating dentist must be able to provide evidence-based interprofessional care for patients of all ages that emphasizes prevention of oral diseases and supports the maintenance of existing systemic and oral health.
6. Tobacco Cessation: The graduating dentist must be able to provide evidence-based tobacco cessation strategies.

7. Diversity Awareness: The graduating dentist must be able to discuss cultural factors that impact oral health and provide culturally-sensitive care to persons with varying individual characteristics and backgrounds.
8. Control of Pain and Anxiety: The graduating dentist must be able to employ techniques to manage orofacial discomfort and psychological distress.
9. Caries Management: The graduating dentist must be able to treat and manage caries in the primary, mixed and permanent dentition.
10. Endodontic Therapy: The graduating dentist must be able to treat diseases of pulpal and periradicular origin in the primary, mixed and permanent dentition.
11. Periodontal Therapy: The graduating dentist must be able to assess, treat and manage periodontal disease in the primary, mixed, permanent and implant dentitions utilizing a non-surgical approach.
12. Surgical Therapy: The graduating dentist must be able to recognize, evaluate, treat and/or manage conditions requiring surgical procedures on the hard and soft tissues in patients of all ages.
13. Emergency Situations: The graduating dentist must be able to prevent and manage dental and medical emergency situations encountered in the practice of general dentistry.
14. Occlusal/TMD Therapy: The graduating dentist must be able to manage functional disorders of occlusal or non-occlusal origins.
15. Orthodontic Therapy: The graduating dentist must be able to manage developmental or acquired abnormalities in esthetics or occlusion.
16. Stomatology: The graduating dentist must be able to manage limited or common non-life threatening oral mucosal diseases or disorders.
17. Restorative/Prosthodontic Therapy: The graduating dentist must be able to convey laboratory instructions and provide restorations and prostheses that are correct in anatomical form, comfortable and functionally effective, and which satisfy the esthetic requirements of the patient or legal guardian.
18. Implant Therapy: The graduating dentist must be able to assess, diagnose, treatment plan and treat patients requiring single tooth posterior implant-supported restorations and mandibular implant-supported overdentures.
19. Assessment of Patient Treatment: The graduating dentist must be able to determine the prognosis for proposed patient care, evaluate the initial results of the care and determine appropriate periodic maintenance.

## **VI. Disease Prevention and Health Promotion**

20. Community Engagement: The graduating dentist must be able to assume a leadership role in improving the oral health of individuals of all ages, families and groups in the community by planning, implementing and evaluating programs to eliminate oral health disparities through a dynamic, evidence-based and interprofessional approach to wellness.

## **VII. Practice Dynamics**

21. Ethics: The graduating dentist must be able to discern and manage the ethicolegal issues of dental practice.
22. Dental Informatics: The graduating dentist must be able to utilize or appreciate office computerization, different forms of digital imaging and electronic communication and information retrieval for patient care, practice management, research and professional development.
23. Professional Practice: The graduating dentist must possess the skills to transition from dental school to various practice settings.
24. Scope of Practice: The graduating dentist must be able to know the limit of one's competence and when to make referrals to colleagues.
25. Dental Sleep Medicine: The graduating dentist must recognize and refer patients at high risk for sleep disorders and prescribe and manage oral appliances, as a member of the sleep medicine team. (Effective with Class of 2020 and beyond)