

THE UNIVERSITY OF TEXAS SCHOOL OF DENTISTRY AT HOUSTON

Competencies for the Pre-doctoral Curriculum

Revised March 30, 2011

According to The University of Texas School of Dentistry at Houston *Mission Statement* and *Strategic Plan*, the primary purpose of the School of Dentistry is “the education of dental health professionals of the highest caliber. In pursuit of excellence, the school will focus major energies on its students as it teaches the basic and clinical sciences along with professional and ethical standards in an environment of collegiality.” Additionally, the Commission on Dental Accreditation’s *Standards for Dental Education Programs*, January 1998, states that “the goals of the dental education program must include the preparation of graduates who possess the knowledge, skills and values to begin the practice of general dentistry,” and that “the dental school must define the competencies needed for graduation, which must be focused on educational outcomes.” Therefore, this document delineates the competencies required at this institution. These competencies are based upon the goals and objectives stated in the Strategic Plan.

Realizing that a general dentist must be a lifelong learner and may not reach a level of proficiency until several years of clinical experience, the School of Dentistry faculty and administration assure that they graduate competent beginning general dentists who will build on that foundation.

This document verifies the strong relationship between the biomedical sciences and the clinical practice of dentistry. There must be a sound “foundational knowledge” of the orofacial complex and its interrelationships with the entire body, both in health and disease, before a student can be a successful practitioner. Through the document, this *foundational knowledge* is evident, even though the skills are clinical in nature. *Foundational skills* are those pre-clinical activities that prepare the student for the behavioral aspects as well as the technical aspects of the clinical practice of dentistry. *Foundational skills* are needed to introduce students to clinical techniques in a controlled, standardized environment. Foundational skills are implied in this document, as they need to be mastered before clinical competencies can be mastered. The competencies in this document are arranged under topics that include general principles, care of individuals, and care of populations.

The School of Dentistry faculty defines and develops the criteria used to demonstrate competency and continued competency. The competencies are reviewed periodically by the faculty in recognition of the need to keep them relevant and current for the modern practice of dentistry.

As appropriate, each competency considers the pediatric, adolescent, adult, geriatric, and medically compromised patient.

For a concise definition of competency, a format for competency statements, and a glossary of action verbs used in this document, please see: Chambers DW and Gerrow JD: Manual for developing and formatting competency statements, *J Dent Educ* 1994;58(5):361-365.

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Competencies for the Pre-doctoral Curriculum

I. Principles of Professionalism, Ethics and the Law

1. Provide humane, ethical and compassionate care to all patients.
2. Continuously analyze patient treatment outcomes for improvement of patient care.
3. Communicate effectively with peers, other professionals, staff, patients or guardians and the public at large.
4. Recognize the role of lifelong learning and self-assessment in maintaining competency.
5. Apply the process of informed consent that meets ethical and legal responsibilities.
6. Apply ethical, legal and regulatory concepts to the provision and/or support of oral health care services.
7. Apply the principles of ethical reasoning and professional responsibility as they pertain to patient care and practice management.

II. Information Management and Critical Thinking

1. Apply critical thinking and problem solving skills in the comprehensive care of patients.
2. Apply information technology resources in contemporary dental practice.

III. Practice Management Philosophies

1. Perform and monitor infection control and environmental safety measures according to current standards.
2. Evaluate different models of oral health care management and delivery.
3. Understand the basic principles and philosophies of practice management and have the skills to function successfully as the leader of the oral health care team.
4. Establish and maintain patient records.

IV. Patient Assessment

1. Identify a patient's chief complaint, general needs and expectations.
2. Obtain patient data adequate to provide dental treatment.
3. Perform a clinical examination.
4. Assess need for and select appropriate radiographs required for diagnosis.
5. Obtain clinical radiographic and other diagnostic information and procedures.
6. Recognize the normal range of clinical and radiographic findings and deviations that require monitoring or management.
7. Recognize predisposing and etiologic factors that require intervention to prevent disease.
8. Interpret findings from the history, clinical and radiographic examinations, and other diagnostic procedures.
9. Obtain medical and dental consultations when appropriate.
10. Integrate subjective and objective clinical findings in the formulation of the diagnosis.
11. Evaluate the prognoses of various treatment options.

V. Treatment Planning

1. Formulate an individual, comprehensive, sequenced treatment plan using diagnostic and prognostic information from the comprehensive assessment of the patient.
2. Discuss etiologies, treatment alternatives, prognoses and preventive strategies with the patient; educate the patient so he/she can participate in the management of his/her own care.
3. Develop, implement and modify a sequenced treatment plan considering the patient's goals, values, concerns and special needs.
4. Identify the need for and manage timely referrals when appropriate.

VI. Establishment and Maintenance of a Healthy Dental Patient

1. Recognize and manage medical emergencies.
2. Manage dental emergencies.
3. Manage patients with pain and anxiety associated with dental procedures.
4. Apply principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health.
5. Perform and evaluate preventive therapies.
6. Restore defective teeth.
7. Manage patients with periodontal diseases and conditions.
8. Manage patients with pulpal and periradicular diseases.
9. Manage patients with malocclusion, including referral to the appropriate specialist.
10. Manage patients with oral mucosal disorders.
11. Manage patients requiring oral surgical procedures.
12. Manage patients requiring space maintenance.
13. Manage patients with partial or complete edentulous areas.
14. Manage dental care for patients with special care needs.
15. Manage a diverse patient population and have the interpersonal and communication skills to function successfully in a multi-cultural work environment.
16. Select and administer/prescribe appropriate pharmacological agents in the treatment of patients with dental disease.
17. Anticipate, prevent and manage complications of dental treatment.
18. Periodically assess and monitor the patient's preventive care.

Chambers DW and Gerrow JD.
Manual for Developing and Formatting Competency Statements.
J Dent Educ 1994; 58(5):361-365.

Manage. Using dental and related biological information and knowledge of the patient's psychological, social, economic, and personal condition in correlation with theory, practitioners manage the patient's oral health condition. Management refers to the selection of treatment – including no intervention, choice of specific care providers – including hygienists and specialists, timing evaluation of treatment success, proper handling of sequela, and insurance of patient comprehension of and appropriate participating in the process. Treatment (by the practitioner or by others) is normally a part of the management sequence.