

**Improving Student Learning Through a Case-Based Virtual Healthcare Education
Resource
Quality Enhancement Plan Executive Summary
The University of Texas Health Science Center at San Antonio**

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The goal of the QEP is to develop a case-based teaching/learning platform, called the Virtual Information System (VIS). VIS will be an online, remotely accessible system for the delivery of case-based learning activities in all Health Science Center educational programs. The VIS will be interactive, allowing students to collect patient history and physical exam data, order diagnostic tests (e.g., laboratory, pathologic, radiologic, and endoscopic examinations), and then view test results, written reports, and images using a multimedia approach. The system will provide tools for instructor grading or self-evaluation, and will provide feedback to students. Cases may be used by individual students, small groups, or as part of a group activity facilitated by an instructor. These cases could serve as supplementary material to enhance an existing didactic course or clinical rotation, or as the basis of a primarily case-based course. The long-term goal is to develop a centralized resource through which any Health Science Center instructor can easily incorporate online case-based learning into an existing or new teaching/learning activity. By improving the quality of healthcare education in all five Schools, VIS has the potential to benefit every student enrolled in a healthcare-associated educational activity at the Health Science Center, ultimately improving all student learning at the university.

The effectiveness of case-based learning in health professions education is supported by a significant body of research. Developing and implementing an electronic support system that facilitates case-based teaching/learning offers many opportunities to increase the use of research-based learning principles in UTHSCSA curricula. A comprehensive learner-centered professional development program will introduce faculty to the advantages of case-based learning. VIS support staff will assist interested faculty with designing and pilot-testing case-based learning in their courses. Support staff will also assist with formal evaluations of learning effectiveness. Scholarship of teaching reports evaluating implementations of case-based learning will be submitted for publication in journals such as *Academic Medicine*, the *Journal of Dental Education*, and the *Journal of Nursing Education*.