THE MINNESOTA VIRTUAL CLINIC: LONGITUDINAL CASE PRESENTATIONS USING A SIMULATED ELECTRONIC MEDICAL RECORD

Stuart M. Speedie, PhD, Catherine Neiwoehner, MD, University of Minnesota Medical School, Minneapolis, MN.

Introduction: The Minnesota Virtual Clinic is designed to provide medical students with a simulated, longitudinal clinical experience that links basic science concepts to realistic patient cases. The intended audiences for this presentation are basic science and clinical faculty who are involved in the didactic portion of the medical school curriculum. Its innovative features include its longitudinal cases that are presented to the students in real time and its use of a simulated electronic medical record system as a means of presenting the cases to the students.

Abstract: The Minnesota Virtual Clinic (MVC) was developed to provide medical students with exposure to a variety of clinical cases during the first two years of the curriculum, before they begin their clerkship years. The MVC has three goals: 1) illustrate basic science concepts with realistic patients, 2) provide experiences that illustrate the longitudinal nature of medical care in real time from week to week, and 3) introduce the use of an electronic medical record. The MVC consists of a simulated medical records system and a collection of constructed patients that illustrate the variety of medical problems encountered in practice. For example one patient becomes pregnant and proceeds to normal delivery. Her baby then is followed through his first year. Another patient illustrates the course of Alzheimer_s over a two year period. Students also encounter ethical and cultural issues such as refusal of treatment and experience appointment "no-shows." Each Wednesday each medical student is expected to "attend" the clinic by logging into the system and reviewing the medical information presented in electronic chart form. It includes chief complaints, H&Ps, progress notes, lab results, prescribed drugs, and images. The information is updated on a weekly basis for each patient. Links labeled "Teaching Points" are embedded throughout the charts. These lead to online descriptions on the underlying basic science that is associated with a particular chart item and provides the opportunity for the student to interact by responding to questions. Student usage is tracked using a security system akin to what one finds in a typical electronic medical record.