



Game Based Learning to Teach Electronic Health Record (EHR) Use

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Patient centered care demands that we incorporate patient data, information, and knowledge wisely into our documentation to facilitate patient care among providers in a timely manner. There is a growing demand to educate nurses on electronic documentation worldwide. While education for electronic health record (EHR) documentation is best handled by clinical staff, some facilities have chosen to utilize nonclinical staff to train new hires. This approach does not link clinical reasoning to data capture and processing. We propose a novel game- based learning (GBL) venue where both clinical knowledge and technology can be integrated in a virtual learning environment to facilitate learning clinical documentation in a safe environment. By engaging with a focused clinical situation in a safe environment, the student can learn to read clinical cues that lead to appropriate nursing actions. Games can be built on algorithms that allow the user to think, understand, prepare, and execute independent actions with variable consequences. Gaming allows the user or player to personalize learning, and the design can influence how the players move ahead or continue to work on a concept or skill before advancing. These actions can update players' competencies. We conducted a research study to determine if the use of GBL can be used to teach how to navigate and use the electronic documentation system. A convenience sample of undergraduate nursing students played the game within the Second Life (SL) environment. SL is a web-based virtual world that is fully interactive and mimics the real world. The GBL scenarios were designed to incorporate clinical decisions into using the EHR. Students were orientated to both SL and the game before being asked to engage in the scenarios. After completing the game, the students participated in a debriefing session. This proposed new game venue could benefit nursing by incorporating both technical and clinical learning into using the EHR in a safe environment. The practitioners would learn to integrate EHR documentation into the nursing process, thereby reinforcing the data capture and processing required for sound clinical reasoning and informed decision making. Benefits to the informaticist include evidence supporting the use of GBL for nursing education. Limited studies have been conducted in this field. The results of this study provide preliminary information and recommendations related to the use of GBL in nursing.

