Technology Creates Opportunities For Nurses

Information technology and information management play major roles in today's health care organizations. Accurate and immediate decision-making is dependent on a well-designed health information technology (HIT). The intensified demand for the adoption of electronic medical record (EMR) systems is creating a growing need for nursing informatics in health care organizations and businesses that develop and promote health care information technology.

Hastily overlaying technology atop existing processes to meet the new requirements for achieving government incentives is neither the goal nor the objective of meaningful use. Clearly, the goal is not to institute technology for the sake of technology but to develop patient-centered processes that allow clinicians to spend more time with their patients at the point of care, improving the quality and efficiency of care. Computerized documentation should be viewed as a set of processes supported by the technology. Information systems must integrate smoothly with clinical practices and operational workflows to be effective.

When I entered the Biomedical Informatics Program at Nova Southeastern University College of Osteopathic Medicine (NSU-COM), I knew very little about informatics; I was a Registered Nurse with years of critical/intensive care and clinical/bedside nursing experience. This medical background provided me with a strong foundation for informatics practice and it seemed only logical for me to pursue such a career. It was important to me that the program's curriculum focused on clinical informatics and process improvement. Most importantly, the program is skill-based and I was able to combine online and on-site courses. I attended on-site courses for the practical/hands-on computer and quality improvement classes and I took the online courses for the more theoretical/didactical classes. This unique combination facilitated my transition from bedside nursing to clinical system analyst.

From the many possibilities of Biomedical Informatics at NSU-COM, I developed special interests in process improvement and database management system (DBMS). Process integration is complicated and poses a significant challenge in health care organizations. A Lean Six Sigma (LSS) Green Belt class provided me with a solid foundation of knowledge, principles, and techniques for process improvement in health care. I now better understand why data are needed, how to prepare them for analysis, and how to make outcome driven decisions. Most importantly, I learned that "quality" is defined by the patients and the staff working in the processes.

Adequate, accurate, relevant, and accessible information are core requirements to support high quality patient care. DBMS is the backbone to data sharing, data integrity, and data access. Today, we are collecting data and using the technology as data repositories. We need to go further and create appropriate and relevant queries to retrieve the clinical data, produce the information, analyze them, and prepare the information for decision support systems and education.

Technology has created unique career opportunities for nurses in the field of Informatics. The options appear endless and here are few examples, Clinical System Analyst, System Analyst or Administrator, IT Training Manager, Project Manager, Project Leader, Chief Informatics Officer, Chief Nursing Informatics Officer, Informatics Coordinator, Informatics Director, and Nurse Informatics Specialist. Each one of these jobs requires nursing relevant training, and increasing levels of informatics experience.

The time has come for nurses to seize this unique opportunity and transform the future of healthcare system. Technology is revolutionizing the way health care is delivered. Nurses need to be at the forefront enhancing the quality of patient care and outcomes through the development, implementation, and evaluation of information technology.

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