The Crucial Role of the Nurse in EHR Implementation

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As residents coming out of medical school, one of the most important lessons physicians learn is the crucial role experienced nurses play in helping them understand how to treat patients. Nursing practice is the glue that holds the patient care spectrum together. Nurses play a significant role in the patient care given at the physician's office and can be extremely instrumental in the successful adoption of electronic health records (EHR). My (Dr. Anders recalls) first night call as a resident in a major teaching hospital, a seasoned head nurse said "stick with me and you will do just fine." She was right! The same is true when implementing an ambulatory EHR.

The nursing staff can be a great asset in getting physicians through that first day with an EHR. In late 2007 and early 2008, the Institute for Health Policy (IHP) conducted a survey of 2,758 physicians using a grant from the Office of the National Coordinator for Health Information Technology (ONCHIT) to determine the degree of EHR implementation, the physician's satisfaction with their EHR system, the perceived barriers to EHR adoption, and the perceived effect EHRs had on the quality of care. The survey found a stunningly low rate of adoption, with only 13% of the physicians using the basics of EHR, and 4% using the full functionality.[1] The AC Group, in May of 2008, conducted a survey of 137 practices to determine the EHR implementation success rate when a nurse is involved in the implementation and use of the system. The survey found an 83% higher success rate of adoption when the group assigned a nurse or medical assistant to follow the physician's clinical protocols and guidelines to enter the History of Present Illness (HPI) and Review of Systems (ROS) data for patients into the EHR, using physician approved data entry templates.[2]

Paying careful attention to the needs of nurses and how they can participate in the entry of patient information can help physicians save data entry hours. It can also better ensure higher adoption rates during the deployment of your EHR. How nurses view implementing and using an EHR varies tremendously. Their computer skill sets and

exposure to electronic information will often determine the level at which they are able to embrace the technology and successfully adopt the EHR.

"On one side of the spectrum, I've seen nurses who can't wait to get on board with an EHR, who recognize the benefits of having the chart on-line and embrace technology," said Susan Reed, R.N., EHR Project Manager with MED3OOO, Inc. "But I've also seen nurses who are scared to death of electronic technology and don't want to give up their paper charts. I've even had one nurse tell me that she doesn't use a PC at home and didn't go to nursing school to learn to use a PC. She went to nursing school to learn to take care of patients. It took a while, but I was eventually successful in convincing her that, by using the PC instead of paper for documentation, she would actually improve patient safety and care. After the EHR was fully implemented, she actually told us that she would never go back to a paper chart!"

Nurses, like physicians, bring a unique perspective to the table during implementation. Involving their expertise early in the implementation could influence their attitude towards EHR and how favorably they embrace it. According to a descriptive study of 100 nursing personnel at a large Magnet hospital in Southwest Florida, which was conducted to assess their needs, preferences, and perceptions associated with Electronic Health Records (EHR), "[among] nurses with expertise in computer use, 80% had a more favorable attitude toward EHRs than those with less expertise." [3]

Understanding why nurses embrace and resist EHR systems is a vital consideration when implementing an EHR system. Through our experiences with numerous implementation deployments, MED3OOO has identified why most nurses immediately embrace an EHR:

➢ They no longer will need to spend time tracking down reports (e.g., EKGs, lab and x-ray reports, and hospital admission and discharge summaries) that have not yet been filed into a paper chart. These items can be easily placed in the EHR either via an interface or by scanning the document.

➢ They will easily be able to refill prescriptions, without delaying the process while searching for the chart or waiting for the chart to be faxed from one location to another. The information will be readily available at their fingertips.

➢ They will have immediate access to the patient's chart. No more answering patient calls without a chart because the chart is in another office or can't be located.

➢ When calling patients with their lab results, they will easily be able to compare those results to prior values.

➢ They can easily send letters to patients to notify them of test results. A copy of the letter will be saved in the patient chart for future reference.

➢ They will have a library of standard forms and letters they can generate from the EHR. This includes things like jury duty excuses, back to work excuses, work releases, and school rescue inhaler forms. These items can be printed from the EHR with the patient's name and address automatically entered, thereby freeing the nurse up for more valuable activities.

Removing barriers is vital to a successful EHR adoption. "Having grown up in healthcare for 33 years at the clinic, I lived through the paper system and now having the EHR system is night and day from how we practiced medicine," said Joan Shurbet, R.N., at Christie Clinic and InteGreat EHR user. Having nurses involved in the EHR deployment and having them focus on the key issues can help put your group on the path to a higher EHR adoption rate. Some critical points to consider in the role of nurses in your EHR implementation include:

➢ Understanding Your State Nursing Practice Act – Care should be taken to ensure that the EHR is designed to reflect state laws governing the scope of nursing practice, as well as the role and scope of nurses within the practice. For example, nurses may be given the ability to enter prescription medications in the EHR, but not the ability to authorize those medications except by the protocol of the physician practice. Also, practices may rely on nurses to enter the

documentation for visits, with subsequent physician signoff. It's important to note that having an EHR does not expand a nurse's scope of practice. Involving nurses in the implementation of the EHR can help ensure that they can maximize their effectiveness within their scope of licensure, and that provisions are made for appropriate physician oversight.

➢ Security – Nurses should always be aware of how the data is secured and what impact it could have if security is breached. They should be involved in giving input and contributing to the security and HIPAA plans being developed around the EHR to make sure PHI is protected in their work areas.

➢ Where to document (in the room or at a nurses station) – Nurses should be involved in the decision making process of where to put the hardware and what hardware is chosen.

➢ Notes – Nurses should be involved in the review of visit note templates and development of note templates and forms, along with the physician.   The physician and nurse should decide if there are any specific notes which only the nurse will approve.

➢ Training – Nurses should be involved (on the core team) in the system implementation and in providing training to the staff. Nurses are very valuable "super users" and can provide a great deal of assistance to physicians during the early phase of adoption.

➢ Simulation – The more practice prior to going live, the better. Nurses should be involved intimately in the implementation and in system simulation prior to going live. It's a great opportunity to adjust workflows and tweak the system prior to going live. The nursing staff should be involved in how the following workflow items will occur during the deployment of the EHR.

- How the patient's exam room location will be entered into the EHR
- If the task of reviewing and updating the past medical and social history and patient medication list will be delegated to the nursing staff

- How phone calls will be logged into the EHR

- How the charting of all nursing functions (including injections, blood pressure checks, and dressing changes) will be entered into the EHR

➢ Temporary Staffing – You may want to consider adding temporary nursing staff to support the nursing staff during the initial training and "go live." This can ease the frustration and lessen the stress within the office during the time when the learning curve is just ramping up.

➢ Prescriptions / Medication interactions – Nurses should be involved in the workflow setup for ordering and refilling medications, and how drug interactions, failed medications, and allergies are recorded by the new EHR.

➢ Health Maintenance – Nurses should be involved in the set up and continuance of health maintenance items, along with the physicians. This will most likely be a new workflow for all the staff. The nurses' input can be extremely valuable to refining the workflow process and ensuring higher adoption rates.

➢ Nursing research – Nurses can benefit tremendously from the availability of clinical data for research purposes. They should be included in the development of clinical research reports from the EHR.

The Institute of Medicine Committee on Data Standards for Patient Safety[4] reports evidence that improved clinical efficiencies, patient safety, and quality care outcomes can be promoted by having an effectively structured and implemented EHR. Several studies propose that designing an EHR implementation which addresses the real concerns nurses have about impending EHR system implementations will improve adoption rates. Some of the concerns nurses have about EHR systems may be related to increased risk to patient confidentiality, increased workload on the nursing staff, more regulatory monitoring, and lack of enhancement of nursing professionalism.[5]

As we move toward greater interoperability and sharing data within networks, it will become even more critical to involve the nursing staff in identifying and understanding the value and uses, as well as the input and other requirements, of information included

in the record. For example, nursing notes and care plans can be added into EHRs to help identify patterns in the care that is provided, and to communicate with the physician about interventions and outcomes nurses have observed. To date nursing has failed to acknowledge that the day in which patient data will be stored electronically is fast approaching and that this electronic data will be used for secondary analysis, resulting in decisions that affect all of healthcare.[6] Nursing plans can also decrease the amount of documentation time and paperwork, while increasing efficiency.

Having nurses on board as part of the implementation cycle will be critical to an organization wanting to achieve higher adoption rates of EHR. Understanding how nurses feel about EHRs can enable the implementation team to structure communication, reframe misconceptions and offer possible new perceptions.[7] Nurses who are rooted in product knowledge will help promote and "champion" the product, and will also help educate staff members on techniques for improved utilization. Nurses are an essential part of the team and play a critical in implementation of the EHR.

References:

1 Institute for Health Policy (IHP) survey to study "Electronic Health Records in Ambulatory Care—A National Survey of Physicians." *New England Journal of Medicine,* July 3, 2008.

2 Mark Anderson, AC Group, "Overcoming Hurdles to EHR Adoption." *MDNGLive News Media*, June 5, 2009.

3 Moody LE, Slocumb E, Berg B, Jackson D., "Electronic health records documentation in nursing: nurses' perceptions, attitudes, and preferences." University of South Florida College of Nursing, Tampa, FL 33612, USA. *Computers, Informatics, Nursing : CIN.* 2004 Nov-Dec;22 (6):337-44

4 Institute of Medicine (U.S.). Committee on Data Standards for Patient Safety, Institute of Medicine (U.S.). Board on Health Care Services. "Key capabilities of an electronic health record system," *Letter Report*. Washington, D.C.: The National Academies Press; 2003.

5 McLane S. "Designing an EMR planning process based on staff attitudes toward and opinions about computers in healthcare" *Comput Inform Nurs.* Mar-Apr 2005;23(2):85-92.

6 Linda Thede, PhD, RN-BC, "Informatics: The Electronic Health Record: Will Nursing Be on Board When the Ship Leaves?" The Online Journal of Issues in Nursing, Vol. 13 - 2008 No 3 Sept 2008

7Ann S. Laramee, APRN-BC, Fletcher Allen Health Care, Burlington, Vt, "Learning from Within to Insure a Successful Implementation of an Electronic Health Record," *Vermont Nurse Connection*.