Technology management strategies for nurse leaders

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Technology has changed the world, and health information technology (HIT) will continue to have an enormous impact on healthcare delivery processes and structures. Many hospitals use implementation and optimization of the electronic health record (EHR) as an opportunity to streamline, standardize, and improve care processes. To sustain these efforts, it’s essential to design workflows to support the use of the valuable data contained in the EHR and mined from other technologies to promote care coordination, best practices, and quality improvement.

Frequently, nurse leaders aren’t fully invested in this work, leaving content development, workflow redesign, and innovation explorations to nurse informaticists and others. Unfortunately, this leaves nurse leaders at a significant disadvantage. Nursing is now a multigenerational workforce and leaders need to be fluent in the language of technology to attract and retain nurses who’ve experienced advanced technologic solutions throughout their lives. This article offers hints and tips for nurse managers to improve the use of HIT in the care of patients.

Documentation

EHR documentation templates should support clinicians in their ability to reflect and critically think to develop individualized care plans. However, as EHRs become ubiquitous, some researchers have found that computers aren’t yet part of the ongoing workflow; they’re accessed periodically and nurses tend to chart in “batch mode.” Both the technology and the nursing access of the technology need to evolve in order to fully realize potential benefits and efficiencies, resulting in greater access and synthesizing of electronic documentation. This means that computers will be seen as essential, rather than additional.

A landmark 2008 study found that nurses spent approximately 35% of their time documenting. A time and motion study in 2012 found very little difference in time spent documenting with or without the use of EHRs or computerized nursing notes. This study noted that nurses spent 19% of their time completing documentation, regardless of electronic charting usage, compared with all other categories of care. These findings suggest that integrated EHRs and computerized nursing notes don’t appear to increase the time nurses spend documenting.

Despite these findings, many nurses believe that electronic documentation has resulted in more time spent documenting and less time spent caring for patients. Reasons for this perception include:

- initial recording of data on temporary notes or by memory with the intention of transcribing the data at a later point
- lack of comfort, competence, or confidence in electronic documentation
- too few devices to support bedside documentation
- awkward placement of fixed or mobile bedside devices
- ineffective documentation templates or content.

Nursing leadership can promote better time management and efficiency in electronic documentation by promoting real-time documentation at the bedside. The benefits of real-time documentation include:
• time savings by decreasing superfluous documentation
• increased time spent at the bedside
• improved interdisciplinary communication regarding patient status by providing real-time information to team members
• increased collaborative workflows among the interdisciplinary team
• improvement in documentation accuracy by eliminating secondary sources or relying on memory for assessment findings

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• accuracy improvement, which may occur as the interdisciplinary team increasingly sources nursing documentation; nurses will view their documentation as a lynchpin of patient care.

Real-time documentation allows nursing data to become a significant contributor to the development of predictive analysis and automated indexes. A recent journal article validated the frequency and clinical validity of nursing assessment data and mortality.¹ A literature search reiterated the need for decision support tools for predictive analysis and further extrapolated the need for adequate communication and escalation protocols to accompany such tools.¹⁰

Leadership can promote real-time documentation in the EHR by incorporating strategies to reduce the volume of required documentation. A reduction in the overall burden of electronic documentation can result in more time for patient care. Nursing leadership can pair with informatics workers to inaugurate specific strategies to reduce documentation requirements. Suggestions for reduction of documentation requirements include:
• Simplify data collection requirements as much as possible.
• Implement documentation shortcuts, such as charting by exception, and focused midshift reassessments when appropriate.
• Automate data collection (such as vital signs) via devices that interface into the EHR.
• Avoid adding systems that require dual or extraneous documentation.
• Use the power of automation to make data serve many purposes and avoid redundancy. Incorporate specific quality and safety data language into data collection via drop-down boxes and checklists to ensure alignment with best practices and reporting requirements.
• Standardize electronic handoff tools to improve efficiency, safety, and communication during transitions in care. Most EHRs incorporate self-populating standard information into the handoff tool. This may include a homepage designed to give an overview of the patient story.¹¹ The homepage may include a brief medical-surgical history and reason for hospitalization, the problem list, patient itinerary, and selected order categories (diet, activity, care plan, and all I.V. lines, drains, and airways present).
• Incorporate an electronic work list for real-time task recognition and automated reminders, especially for unlicensed assistive personnel and patient care technicians. Hourly rounding documentation can also be incorporated into the work list.
• Incorporate existing technology solutions to automate data entry.

–An example of this automation involves documentation of hourly rounding, which has long been shown to decrease the incidence of falls and call bell use.¹¹-¹³ Currently, many organizations document hourly rounding via manual entry into the EHR. However, this documentation can be automated by exploring the capability of existing technologies in the environment, such as existing wireless tracking systems, handheld devices, or interactive white boards.¹⁴ Many of these modalities can track the presence of a healthcare team member in the patient’s room. Some of these technologies can send an alert to the handheld device or display an icon or light outside the room if no one has rounded in the last 60 minutes. Automating this process can diminish some of the burden of documentation.

–Additionally, some of these technology solutions will send data to the EHR so that manual documentation is avoided; yet active surveillance of the patient record continues, including flagging the records of patients who haven’t had vital signs or interventions registered in a certain time period. Integrating into the record provides an audit trail of user documentation of hourly rounding.

Governance participation
As evidenced by the aforementioned strategies, it’s vital for nurse leaders to have a deep understanding of the function and capabilities of the EHR and other technologies. Becoming involved with organizational informatics governance structures will result in increased knowledge of technologic capabilities and
awareness of proposed changes to technology and enhancements. By participating in technology governance, nurse leaders have the opportunity to weigh in on the development of content, workflow, and quality measures to ensure that these represent key clinical, regulatory, and strategic priorities. By participating in advisory groups and governance structures, nurse leaders can gain understanding of available analytics and may become familiar with the EHR reporting catalog.

EHR systems require a great deal of content customization. This content development requires designated clinicians to participate in EHR content development teams. Leaders should promote nursing unit participation in these clinical teams, not only to ensure that particular priorities are included in the record, but also because participation nurtures a sense of ownership of the system. This participation creates expertise among clinicians who can guide other colleagues in improved use of the system while seeking input for inclusion in the content.

Analytics

There are usually many management reports available from the EHR catalog regarding clinical efficiency and timeliness. Many organizations have additional business intelligence and analytics software that presents performance dashboards and comparative performance reporting.

Nurse leaders should understand the breadth of the available reports and take advantage of the opportunity to learn how to create custom reports to focus on key quality improvement areas. Many organizations have reported that a major benefit of the EHR has been the ability to look at patterns in performance data to identify problem areas, thereby facilitating quality improvement efforts and identifying opportunities for ongoing process redesign. Most EHRs are equipped with the ability for users to formulate independent queries to explore questions and test hypotheses.

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### Stay on top!

Healthcare settings are becoming more complex and technology-driven. As technology challenges increase, there’s a coordinated need for nurse leaders to manage this complex environment. It’s becoming more critical for nurse leaders to have in-depth knowledge regarding technology and EHR systems to promote optimal nursing workflow and effectively manage the technology challenges presented to nursing staff.

### REFERENCES

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