Guideline Implementation: Patient Information Management

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JENNIFER L. FENCL, DNP, RN, CNS, CNOR

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Purpose/Goal

To provide the learner with knowledge specific to implementing the AORN "Guideline for patient information management."

Objectives

1. Discuss the importance of documenting accurate and complete patient information.
2. Explain important features for a documentation platform.
3. Identify risks associated with a poorly designed documentation platform.
4. Describe the advantages of using standardized vocabularies.
5. Discuss documentation requirements related to patient care orders.
6. Describe considerations for the security of patient records.

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Jennifer L. Fencl, DNP, RN, CNS, CNOR, has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article.

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ABSTRACT

Clinical documentation captured in a patient's record provides health care personnel with information that can be used to guide patient care. Data collected in electronic health records can be accessed and aggregated across the health care delivery system to enhance the safety, quality, and efficacy of care. The updated AORN "Guideline for patient information management" provides guidance to perioperative personnel on documenting and managing patient information. This article focuses on key points of the guideline, which address data capture that supports the clinical workflow, incorporation of professional guidelines and standards as well as regulatory and mandatory reporting elements, use of standardized clinical terminologies, data aggregation for use in research and analytics, considerations for patient care orders, and safeguards for the patient's security and confidentiality. Perioperative RNs should review the complete guideline for additional information and for guidance when writing and updating policies and procedures. *AORN J* 104 *(December 2016) 566-577. © AORN, Inc, 2016. http://dx.doi.org/10.1016/j.aorn.2016.09.020*

Key words: *patient information, clinical documentation, data management, structured data, perioperative orders.*

The old nursing adage still rings true: If it is not documented, it has not been done. Nursing education programs have historically emphasized the importance of documenting accurate and complete clinical information that reflects the holistic care provided to patients. What has changed is that clinical data can now be captured electronically and used in new and meaningful ways. With the changing landscape of health care focused on population health and health care reform, clinical information documented in the patient's electronic health record (EHR) offers organizations a greater capacity to enhance the safety and quality of care, improve efficacy of care, and access and aggregate information.[1,2] Hallmarks of a comprehensive documentation platform include

- robust systems for patient information management that provide the ability to incorporate the nursing assessment,
- built-in patient safety mechanisms (eg, an alert notifying a provider of a potential drug-drug interaction or a contraindication based on a patient's allergy),
- the ability to create reports and analyze data,
- the capacity to store data and integrate clinical data collected in a larger platform, and
- safeguards for patient confidentiality.[3]

Regardless of the platform in which patient care information is documented, the ability to capture patient data accurately, consistently, and reliably is essential to facilitate goal-directed

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care and allow for comparison of expected versus actual outcomes.[4,5]

The AORN "Guideline for patient information management"[6] was updated in July of 2016. AORN guideline documents provide guidance based on an evaluation of the strength and quality of the available evidence for a specific subject. The guidelines apply to inpatient and ambulatory settings and are adaptable to all areas where operative and other invasive procedures may be performed.

Topics addressed in the patient information management guideline include using the nursing process to guide documentation, synchronizing documentation with workflow, using structured vocabularies, adhering to regulatory requirements and professional practice standards, maintaining the security of patient information, and modifying existing records in ways that comply with regulations and practice guidelines. This article elaborates on key takeaways from the guideline document; however, perioperative RNs should review the complete guideline for additional information and for guidance when writing and updating policies and procedures.

Key takeaways from the AORN "Guideline for patient information management" include the following:

- Clinical documentation should facilitate data capture using a format designed to support clinical workflow activities.
- Perioperative nursing documentation must correspond to local, state, and federal regulatory requirements and must incorporate mandatory reporting criteria for quality performance reimbursement.
- The health care documentation system must incorporate the standardized clinical terminologies identified by the US government to promote interoperability of health care data.
- Structured data collected using a standardized perioperative electronic framework should allow for data aggregation and be extractable for use in research and analytics.
- Perioperative documentation must include all patient care orders given in the perioperative patient care setting.
- Patient information must be secure, be held confidential, and be protected from unauthorized disclosure (Figure 1).

The following scenario highlights the key takeaways and other aspects of the AORN guideline. Each key takeaway is then discussed in detail after the scenario.

SCENARIO

The first week of implementation for the new integrated EHR at Central City Hospital had gone very well. Although there were a few minor difficulties, such as someone forgetting a password or a computer being mapped to the wrong printer, Nurse H has received several positive comments from the perioperative nurses regarding how prepared they felt and how much they liked the new documentation system. Not only is she a super user for this new EHR, but Nurse H helped select and configure the documentation platform her team is now using to record perioperative patient care.

Eighteen months ago, Nurse H was asked to be one of the clinical leads to help select an EHR and develop how it would look and work in perioperative services. Although she was pleased to be chosen for this team, she was also concerned. Nurse H had heard rumors about unsuccessful launches of EHRs at other health care facilities in town. At their first committee meeting, she and her colleagues discussed that some nurses they knew at other hospitals disliked using electronic documentation. Their concerns included that documenting took time away from patient care and that it was hard to adapt from documenting on "three pages of paper" to using "17 different computer tabs." The committee members agreed it was their responsibility to choose an easy-to-use, well-organized, standardized platform to facilitate accurate documentation and that they would need to provide thorough education for the nurses who would be using it.

The selection committee met with the vendors of various EHR platforms under consideration to assess the available products. Nurse H was pleased to discover that all of the EHR platforms the team reviewed incorporated mandatory documentation requirements and measurement criteria for quality performance reimbursement that the nurses had been struggling to capture consistently in paper documentation. Often-missed items in paper documentation included patient and family education and engagement, cultural variables, patient attributes and status, and the unique identifiers for surgical implants. In addition to incorporating federally regulated reporting requirements, the systems could be configured to include the reporting elements required by state and local statutes.

Nurse H quickly realized, however, that not every platform mirrored the perioperative nurses' workflow. For example, while participating in a demonstration of one product, Nurse H questioned why the nursing assessment documentation tab was located in the middle of the intraoperative record section when that is one of the first documentation elements a perioperative RN would complete, and why the specimen ordering and documentation tab was located at the beginning of the EHR when most specimens are handed off the field after the surgery has begun. She realized how cumbersome and inefficient it would be to use such a system and the powerful effect that the structure of the patient record format could have on

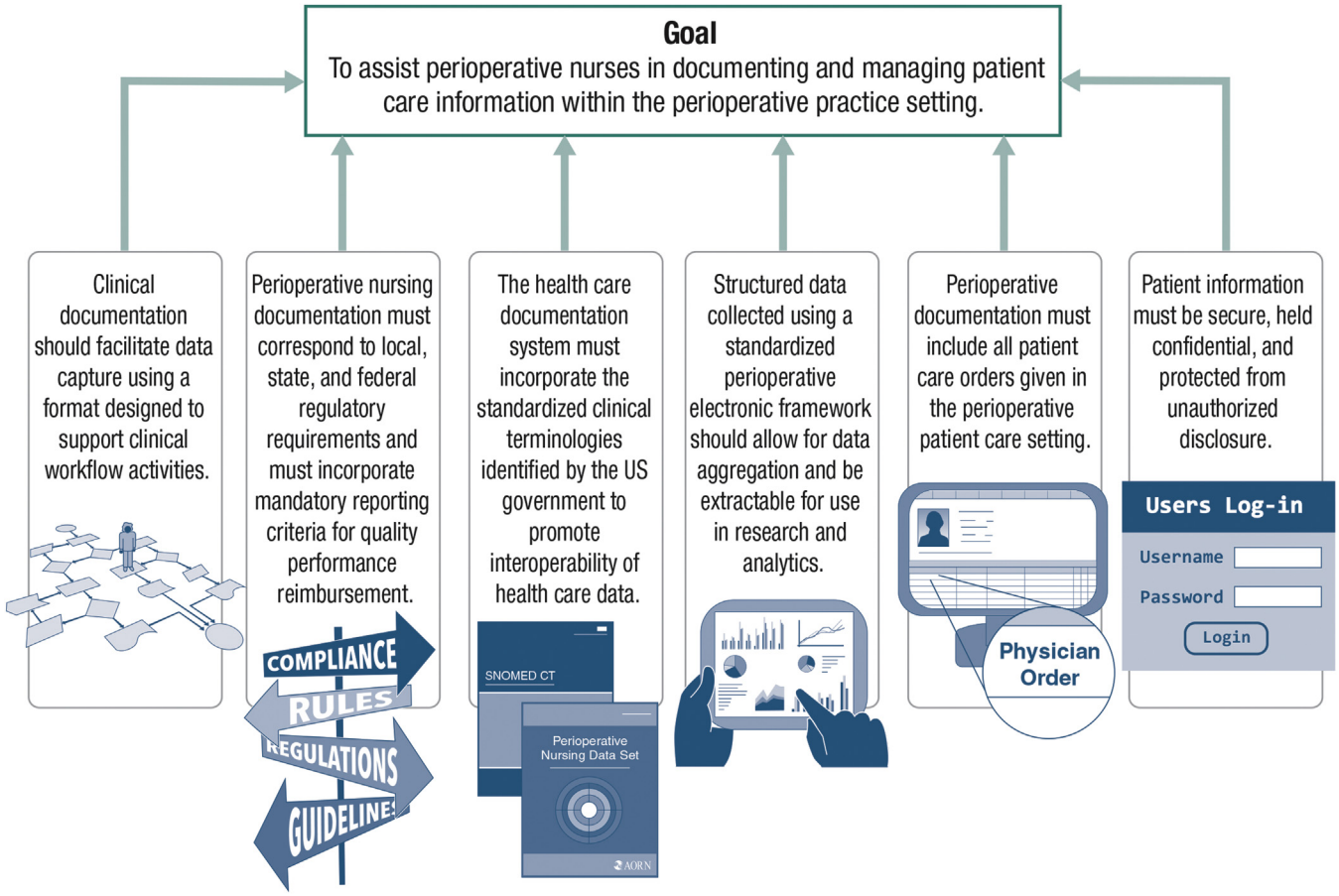

Figure 1. Key takeaways from the AORN "Guideline for patient information management."

not only the workflow but on the accuracy of the information captured.

The committee also discussed the importance of using common terminology in documentation that would promote consistency and reduce the possibility for ambiguity and misunderstanding. All of the platforms they reviewed incorporated standardized clinical terminologies identified by the US government to promote interoperability of health care data. At the previous year's AORN Surgical Conference & Expo, Nurse H had attended a presentation on the importance of standardizing vocabulary to allow for measuring the outcomes of the perioperative RN's assessment, interventions, and evaluations of patient care. She suggested that the committee choose a platform that also incorporated the Perioperative Nursing Data Set (PNDS), a structured vocabulary inclusive of the nursing process workflow that allows for sharing terminology related to each phase of perioperative care.[7]

The selection committee completed an evaluation of the different EHR platforms, assessing for congruence to workflow, ease of use, capture of mandatory (ie, federally regulated) documentation requirements, incorporation of standardized language, ability to build meaningful reports, and overall impression. After the committee made its decision, Nurse H became the head of a perioperative subcommittee to assess the chosen documentation platform and determine what, if any, changes they might need to make to ensure the system complemented the perioperative workflow.

Nurse H discovered that the ready-made product did not have a robust hand-over tool. Knowing that all patient care data important to ongoing care should be incorporated into the patient's record, the subcommittee saw an opportunity to reduce the potential for errors or omissions in communication between clinicians. They worked with the shared governance committee and the EHR vendor to develop hand-over tools for each phase of care (ie, short stay to the OR; OR to the postanesthesia care unit) and for shift changes (ie, shift-to-shift reports) or RN relief periods that could be incorporated into the EHR. It was exciting for Nurse H and her team to realize this bigger picture of developing optimal documentation. Her organization would be able to take the best parts of the ready-made product and work toward configuring those

components that could enhance the current workflow. The end product would be a more accurate and consistent record of patient care.

Using standardized and structured data allows for aggregation of the data for research and analysis. The perioperative subcommittee members were eager to begin planning how the EHR could mine information from aggregated data and develop reports to help drive initiatives and quality improvement processes in the organization. Some of the reports they determined to be a priority included a surgical site infection report, first procedure on-time starts, and an allograft documentation compliance report. The team understood that these reports could help identify trends, monitor progress, identify process improvement opportunities, and facilitate the development of action plans to appropriately address any identified concerns.

Nurse H also recognized that the transition from a paper to an electronic record would provide an opportunity to address the problem of nurses following orders from preference cards that were not regularly reviewed and might be outdated. The preference cards highlighted the surgeon's orders for the procedure, such as whether a urinary catheter is needed or what type of local medication to have on the field, but there was not a system in place to ensure that these were kept up to date and regularly verified by the physician. In addition, many of the existing preference cards used unacceptable abbreviations and did not use standardized terms for medications and instruments. Understanding the potential patient safety concerns of using outdated preference cards, Nurse H took this opportunity to discuss with her team the importance of placing all orders into the EHR, including those that were currently included on manual preference cards. She received some pushback from perioperative RNs and physicians that "this is the way we have always done it." She understood her colleagues' concerns but reminded them that established practice is not always best practice. She provided a near-miss example of a patient who almost received the incorrect concentration of heparin, almost three times the desired concentration, from a preference card that had not been updated in years, to illustrate why this is such an important patient safety issue. The subcommittee members ultimately concurred that it was imperative to have accurate orders in the perioperative environment and agreed to incorporate all orders, including the preference card orders, into the EHR. All orders would be dated and timed, and authenticated by the ordering health care provider (ie, surgeon, anesthesiologist).

An important aspect of any EHR is establishing reliable security so that only authorized care providers have access to assigned patient information; therefore, Nurse H helped develop education for the staff members to address the key security measures to be implemented. Some of these included password access only, automatic log-off of the system after five minutes of inactivity, the inability to be in more than one patient's record at a time, and programs that would monitor for inappropriate viewing of a patient's record.

Before implementation, the nurses received education from both the EHR vendor and the subcommittee members, and they participated in a simulated "go-live" to become familiar with the system before the official launch. As the first week of implementation came and went, Nurse H reflected on the experience of selecting and building an EHR for her organization, and was very satisfied with the work she and her colleagues had done.

KEY TAKEAWAYS DISCUSSION

The key takeaways from the AORN "Guideline for patient information management" address data capture that supports the clinical workflow, incorporation of professional guidelines and standards as well as regulatory and mandatory reporting elements, application of standardized clinical terminologies, data aggregation for use in research and analytics, inclusion of patient care orders, and safeguarding the patient's information security and confidentiality. These takeaways do not cover the entire guideline. Rather, they help the reader focus on important or new information that should be implemented into perioperative practice.

Clinical Documentation and Workflow

Perioperative RNs use the nursing process to critically assess every surgical patient and determine the appropriate interventions needed to provide safe care during the surgical experience.[4-6,8,9] The elements of the nursing process that provide a framework for documentation include assessment, nursing diagnosis, outcome identification, planning, implementation of interventions, and evaluation of progress toward expected outcomes.[4-6,8-10]

A poorly designed documentation platform can contribute to interruptions of clinical processes, incomplete or omitted patient care information, and decreased nursing attention or situational awareness.[6,11,12] Therefore, regardless of the documentation platform (ie, paper or electronic), it is crucial that patient care information be captured in a way that corresponds with clinical workflow activities to eliminate redundant data capture and inefficiencies.[6,13-15]

In this scenario, Nurse H became aware of instances where an EHR did not match clinical workflow and identified that this could lead to patient care interruptions and patient harm. She

Resources for Implementation

- Guideline implementation topics: information management. AORN, Inc. *http://www.aorn.org/guidelines/guideline-implementation-topics/patient-care/information-management*.
- The AORN Syntegrity solution. *http://www.aorn.org/aorn-org/education/facility-solutions/aorn-syntegrity*.
- ORNurseLink. *http://www.ornurselink.org/home*.
- *Perioperative Competency Verification Tools and Job Descriptions* [USB drive]. Denver, CO: AORN, Inc; 2016. *http://www.aorn.org/guidelines/clinical-resources/publications/document-collections/perioperative-competency-verification-tools-and-job-descriptions*.
- *Policy and Procedure Templates* [CD-ROM]. 4th ed. Denver, CO: AORN, Inc; 2015. *http://www.aorn.org/guidelines/clinical-resources/publications/document-collections/policy-and-procedure-templates*

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What Else Is in the Guideline?

Read the AORN "Guideline for patient information management"[1] to learn what the evidence says about the following issues:

- When should verbal orders be documented and how should they be verified? (Recommendation IV.b.4.)
- What are the criteria for charting by exception? (Recommendation IV.e.2.)
- What are some risk-reduction strategies to mitigate potential patient record access violations? (Recommendation V.a.1.)
- What should policies for sharing of electronic patient information include? (Recommendation V.b.)
- What should the authentication process for patient health care records include? (Recommendation V.c.1.)
- How should patient care records be modified when corrections, amendments, or addendums are needed? (Recommendation VI.)

Reference

1. Guideline for patient information management. In: *Guidelines for Perioperative Practice.* Denver, CO: AORN, Inc; 2016: e1-e26.

and her perioperative subcommittee also identified a need in the chosen EHR platform that led them to configure the product and create hand-over tools to promote standardization of critical patient care communications.

Regulatory and Mandatory Reporting Requirements

The patient record should not only reflect the care delivered during the surgical experience and the patient's response but also show compliance with regulatory requirements, health care accreditation measures, national practice standards, and mandatory reporting criteria for quality performance reimbursement.[6,16-18] Current health care initiatives focus on health care reform, improved population health, public reporting of outcomes, transparency of data, and harnessing of health data to improve the quality of care delivered while reducing overall cost of health care.[19] With publicly reported data, patients have the ability to make informed decisions about where to receive their care, organizations can evaluate the quality of patient outcomes and identify opportunities for improvement, and value-based care versus volume-based care is supported.[19] This necessitates that clinical documentation systems be built to capture key data elements mandated by law for public reporting (eg, surgical site infection rates for targeted surgeries). In this scenario, the new EHR would facilitate mandatory documentation and reporting requirements that the team had been struggling to consistently capture with paper documentation.

Standardized Clinical Terminologies

By adopting standardized vocabularies, perioperative RNs have the ability to uniformly document the care they provide in an unambiguous manner that can be consistently interpreted by health care clinicians.[6,20,21] Nurse H convinced the selection committee to choose a platform that incorporated the PNDS, a standardized nursing language specific to perioperative nursing.[7,22] Integration of the PNDS into the EHR incorporates important elements of the nursing process specific to perioperative care and demonstrates the unique contribution of perioperative nursing to patient care.[6,7,20,22] The PNDS allows the perioperative RN to capture assessments, interventions, and outcomes grounded in professional standards reflective of clinical practice guidelines. Using an EHR system with a comprehensive documentation framework ensures the appropriate integration of the PNDS and other standardized languages and vocabularies.

Data Aggregation and Analysis

Using standardized and structured vocabularies facilitates data aggregation and analysis to evaluate clinical processes and

allows for integration of data into larger platforms (eg, repositories, registries) for comparing the effectiveness of care practices among health care organizations.[6,23-26] Data that are incorporated into larger data sets[24,27] can be used in predictive analytics and preventive models to improve the quality, efficiencies, and outcomes of the health care delivery system.[24,27] The perioperative subcommittee realized the significance of aggregating data and developed several reports to drive initiatives and quality improvement processes in their facility, such as reports to identify trends (eg, a surgical site infection report), monitor progress (eg, first procedure on-time starts), and identify process opportunities (eg, allograft documentation compliance).

Patient Care Orders

A patient care order reflects the physician's directives on his or her plan of medical care for the patient.[28,29] The Centers for Medicare & Medicaid Services require patient care orders to be documented, dated, timed, and authenticated by the ordering health care provider (ie, surgeon, anesthesiologist).[6,28,30-32] This includes any verbal order, standing order, or order listed on surgeon preference cards.[6] When patient care orders are not documented, dated, timed, and authenticated by the ordering health care provider, there is risk for error and patient harm. For example, patients may be at risk if preference cards contain outdated, incomplete, or erroneous information.[6,30-32]

In this scenario, there was no consist system in place to review and update preference cards. Realizing that this posed a potential patient safety concern, Nurse H emphasized the importance of this issue and shared recent research evidence practice with the perioperative subcommittee. The team agreed to incorporate the orders currently on the preference cards into the EHR.

Security

Health care providers and organizations are obligated to protect patient confidentiality by disclosing patient information only to those directly involved in the patient's care or those the patient identifies as able to receive the information.[6,33,34] The Health Insurance Portability and Accountability Act of 1996 is the federal law mandating health care organizations and clinicians to safeguard patient's medical information.[6,33,34] This law was updated in 2009 to correspond with the Health Information Technology for Economic and Clinical Health Act to include security standards for protecting electronic health information. The health care organization is legally responsible for establishing procedures to prevent data breaches.

In this scenario, to help secure the electronic patient record, several key measures were implemented to restrict access to the patient's information to authorized clinicians only. These security measures included password access, an automatic log-off of the system, the inability to open more than one patient's record at a time, and monitoring for inappropriate viewing.

CONCLUSION

Health care organizations should have robust systems for patient information management that will allow clinical data to be captured and applied in new and meaningful ways. Essential to creating a comprehensive documentation platform that reflects the individualized care delivered in the perioperative setting is for the perioperative RN to know and understand best practices related to patient information management. Perioperative RNs should proactively engage in practices to best align clinical documentation with the patient care workflow, incorporate standardized clinical language and discrete data elements into documentation, reflect professional guidelines and standards in documentation elements, record all orders, and maintain security and confidentiality of patient records at all times. By having a thorough understanding of best practices related to patient information management, perioperative RNs can promote the use of documentation platforms that provide vital information for organizations to improve population health and care delivery outcomes.

References

1. *Management of Patient Information: Trends and Challenges in Member States*. Global Observatory for eHealth series—Volume 6. Geneva, Switzerland: World Health Organization; 2012. http://apps.who.int/iris/bitstream/10665/76794/1/9789241504645_eng.pdf. Accessed September 27, 2016.
2. What are the advantages of electronic health records? HealthIT.gov. https://www.healthit.gov/providers-professionals/faqs/what-are-advantages-electronic-health-records. Accessed September 27, 2016.
3. Gálvez JA, Rothman BS, Doyle CA, Morgan S, Simpao AF, Rehman MA. A narrative review of meaningful use and anesthesia information management systems. *Anesth Analg*. 2015;121(3):693-706.
4. Standards of perioperative nursing. In: *Guidelines for Perioperative Practice*. Denver, CO: AORN, Inc; 2015:693-708.
5. *ANA Principles for Nursing Documentation*. Silver Spring, MD: American Nurses Association; 2010.
6. Guideline for patient information management. In: *Guidelines for Perioperative Practice*. Denver, CO: AORN, Inc; 2016:e1-e26.
7. Petersen C, ed. *Perioperative Nursing Data Set*. 3rd ed. Denver, CO: AORN, Inc; 2011.

8. *Nursing: Scope and Standards of Practice*. Silver Spring, MD: American Nurses Association; 2010.
9. Peterson AM. Medical record as a legal document part 2: meeting the standards. *J Leg Nurse Consult.* 2013;24(1):4-10.
10. The nursing process. American Nurses Association. http://www.nursingworld.org/EspeciallyforYou/StudentNurses/Thenursingprocess.aspx. Accessed September 27, 2016.
11. Ash JS, Berg M, Coiera E. Some unintended consequences of information technology in health care: the nature of patient care information system-related errors. *J Am Med Inform Assoc.* 2004;11(2):104-112.
12. Harrison MI, Koppel R, Bar-Lev S. Unintended consequences of information technologies in health care—an interactive socio-technical analysis. *J Am Med Inform Assoc.* 2007;14(5):542-549.
13. Gugerty B, Maranda MJ, Beachley M, et al. *Challenges and Opportunities in Documentation of the Nursing Care of Patients*. Baltimore, MD: Maryland Nursing Workforce Commission, Documentation Work Group; 2007.
14. Lee S, McElmurry B. Capturing nursing care workflow disruptions: comparison between nursing and physician workflows. *Comput Inform Nurs.* 2010;28(3):151-159.
15. Colligan L, Potts HW, Finn CT, Sinkin RA. Cognitive workload changes for nurses transitioning from a legacy system with paper documentation to a commercial electronic health record. *Int J Med Inform.* 2015;84(7):469-476.
16. US Department of Health and Human Services. Conditions of participation for hospitals. CFR §482. https://www.gpo.gov/fdsys/granule/CFR-2011-title42-vol5/CFR-2011-title42-vol5-part482/content-detail.html. Effective October 1, 2011. Accessed September 27, 2016.
17. Scruth EA. Quality nursing documentation in the medical record. *Clin Nurse Spec.* 2014;28(6):312-314.
18. US Department of Health and Human Services. Ambulatory surgical centers (ASCs). 42 CFR §416. https://www.cms.gov/Regulations-and-Guidance/Legislation/CFCsAndCoPs/ASC.html. Published October 24, 2011. Effective December 23, 2011. Accessed September 27, 2016.
19. Reform in action: can publicly reporting the performance of health care providers spur quality improvement? Robert Wood Johnson Foundation. http://www.rwjf.org/en/library/research/2012/08/reform-in-action--can-publicly-reporting-the-performance-of-heal.html. Published August 2012. Accessed September 27, 2016.
20. Häyrinen K, Lammintakanen J, Saranto K. Evaluation of electronic nursing documentation—nursing process model and standardized terminologies as keys to visible and transparent nursing. *Int J Med Inform.* 2010;79(8):554-564.
21. Zielstorff RD. Characteristics of a good nursing nomenclature from an informatics perspective. *Online J Issues Nurs.* 1998;3(2).
22. Graling PR. Understanding perioperative nursing through PNDS. *Adv Nurses.* 2002;2(17):23. http://nursing.advanceweb.com/Article/Understanding-Perioperative-Nursing-Through-PNDS.aspx. Accessed September 27, 2016.
23. Medicare and Medicaid programs; Electronic Health Record Incentive Program—modifications to meaningful use in 2015 through 2017; proposed rule. 80(72) *Fed Regist.* (April 15, 2015) 20346-20399 (codified at 42 CFR §495).
24. Murdoch TB, Detsky AS. The inevitable application of big data to health care. *JAMA.* 2013;309(13):1351-1352.
25. *Transforming Health Care Through Big Data*. New York, NY: Institute for Health Technology Transformation; 2013.
26. Sun J, Hu J, Luo D, et al. Combining knowledge and data driven insights for identifying risk factors using electronic health records. *AMIA Annu Symp Proc.* 2012;2012:901-910.
27. Al-Rawajfah OM, Aloush S, Hewitt JB. Use of electronic health-related datasets in nursing and health-related research. *West J Nurs Res.* 2015;37(7):952-983.
28. *State Operations Manual Appendix A—Survey Protocol, Regulations and Interpretive Guidelines for Hospitals*. Rev. 151. Centers for Medicare & Medicaid Services. Department of Health and Human Services. https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_a_hospitals.pdf. Revised November 20, 2015. Accessed September 27, 2016.
29. Blanchard TP. Physician orders. Presented at: Institute on Medicare and Medicaid Payment Issues; March 26-28, 2014; Baltimore, MD. https://www.healthlawyers.org/Events/Programs/Materials/Documents/MM14/gg_blanchard_slides.pdf. Accessed September 27, 2016.
30. US Department of Health and Human Services. Condition of participation: medical record services. 42 CFR §482.24. https://www.gpo.gov/fdsys/pkg/CFR-2011-title42-vol5/pdf/CFR-2011-title42-vol5-sec482-24.pdf. Published November 27, 2007. Accessed September 27, 2016.
31. Joint Commission. *2016 Comprehensive Accreditation Manual for Ambulatory Care (CAMAC)*. Oakbrook Terrace, IL: Joint Commission Resources; 2015.
32. Joint Commission. *2016 Comprehensive Accreditation Manual for Hospitals (CAMH)*. Oakbrook Terrace, IL: Joint Commission Resources; 2015.
33. Health Insurance Portability and Accountability Act of 1996, 42 USC §201 (1996), Pub L No. 104-191, 110 Stat 1936.
34. Modifications to the HIPAA privacy, security, enforcement, and breach notification rules under the Health Information Technology for Economic and Clinical Health Act and the Genetic Information Nondiscrimination Act; other modifications to the HIPAA rules. 78(17) *Fed Regist.* (January 25, 2013) 5565-5702 (codified at 45 CFR §160, 45 CFR §164).

Jennifer L. Fencl, DNP, RN, CNS, CNOR, is a clinical nurse specialist, Operative Services, and the interim executive director of Clinical Support and Research at Cone Health, Greensboro, NC. *Dr Fencl has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article.*

Continuing Education: Guideline Implementation: Patient Information Management

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PURPOSE/GOAL

To provide the learner with knowledge specific to implementing the AORN "Guideline for patient information management."

OBJECTIVES

1. Discuss the importance of documenting accurate and complete patient information.
2. Explain important features for a documentation platform.
3. Identify risks associated with a poorly designed documentation platform.
4. Describe the advantages of using standardized vocabularies.
5. Discuss documentation requirements related to patient care orders.
6. Describe considerations for the security of patient records.

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QUESTIONS

1. A comprehensive documentation platform
   1. can be used to create reports and analyze data.
   2. can store and integrate data.
   3. has built-in safety mechanisms.
   4. incorporates the nursing assessment.
   5. safeguards patient confidentiality.

   a. 1 and 2 b. 2, 4, and 5
   c. 1, 3, 4, and 5 d. 1, 2, 3, 4, and 5

2. Capturing a patient's data accurately, consistently, and reliably allows for comparison of
   a. expected outcomes versus actual outcomes.
   b. nursing interventions versus surgical interventions.
   c. preference card orders versus verbal orders.
   d. state regulatory requirements versus federal regulatory requirements.

3. Aggregated data can help team members
   1. identify process improvement opportunities.
   2. identify trends.
   3. facilitate development of action plans.
   4. monitor progress.
   5. update preference cards.

   a. 1 and 3 b. 2 and 5
   c. 1, 2, 3, and 4 d. 1, 2, 3, 4, and 5

4. A poorly designed documentation platform can contribute to
   1. aggregation of data.
   2. decreased nursing attention.
   3. increased situational awareness.
   4. interruptions of clinical processes.
   5. omitted patient care information.

   a. 1 and 3 b. 2, 4, and 5
   c. 2, 3, 4, and 5 d. 1, 2, 3, 4, and 5

5. The patient record should show compliance with
   1. health care accreditation measures.
   2. mandatory reporting criteria for quality performance reimbursement.
   3. national practice standards.
   4. regulatory requirements.

   a. 1 and 3 b. 3 and 4
   c. 1, 2, and 4 d. 1, 2, 3, and 4

6. By adopting standardized vocabularies, perioperative RNs have the ability to uniformly document the care they provide in an unambiguous manner that can be consistently interpreted by health care clinicians.

   a. true b. false

7. Integration of the Perioperative Nursing Data Set into the electronic health record incorporates important elements of the nursing process specific to perioperative care and demonstrates the unique contribution of perioperative nursing to patient care.

   a. true b. false

8. The Centers for Medicare & Medicaid Services require that patient care orders be
   1. authenticated by the ordering health care provider.
   2. included on preference cards.
   3. dated.
   4. timed.

   a. 1 and 2 b. 3 and 4
   c. 1, 3, and 4 d. 1, 2, 3, and 4

9. Verbal orders do not need to be documented.

   a. true b. false

10. Health care providers and organizations are obligated to protect patient confidentiality by disclosing patient information only to those
    1. directly involved in the patient's care.
    2. directly or indirectly involved in the patient's care.
    3. who the patient identifies as able to receive the information.
    4. using patient information for research.

    a. 2 and 4 b. 1 and 3
    c. 1, 2, and 4 d. 1, 2, 3, and 4

Continuing Education: Guideline Implementation: Patient Information Management

1.4 CE www.aornjournal.org/content/cme

This evaluation is used to determine the extent to which this continuing education program met your learning needs. The evaluation is printed here for your convenience. To receive continuing education credit, you must complete the online Examination and Learner Evaluation at *http://www.aornjournal.org/content/cme*. Rate the items as described below.

OBJECTIVES

To what extent were the following objectives of this continuing education program achieved?

1. Discuss the importance of documenting accurate and complete patient information.
   Low 1. 2. 3. 4. 5. High

2. Explain important features for a documentation platform.
   Low 1. 2. 3. 4. 5. High

3. Identify risks associated with a poorly designed documentation platform.
   Low 1. 2. 3. 4. 5. High

4. Describe the advantages of using standardized vocabularies.
   Low 1. 2. 3. 4. 5. High

5. Discuss documentation requirements related to patient care orders.
   Low 1. 2. 3. 4. 5. High

6. Describe considerations for the security of patient records.
   Low 1. 2. 3. 4. 5. High

CONTENT

7. To what extent did this article increase your knowledge of the subject matter?
   Low 1. 2. 3. 4. 5. High

8. To what extent were your individual objectives met?
   Low 1. 2. 3. 4. 5. High

9. Will you be able to use the information from this article in your work setting?
   1. Yes 2. No

10. Will you change your practice as a result of reading this article? (If yes, answer question #10A. If no, answer question #10B.)

10A. How will you change your practice? (*Select all that apply*)

1. I will provide education to my team regarding why change is needed.
2. I will work with management to change/implement a policy and procedure.
3. I will plan an informational meeting with physicians to seek their input and acceptance of the need for change.
4. I will implement change and evaluate the effect of the change at regular intervals until the change is incorporated as best practice.
5. Other: _____

10B. If you will not change your practice as a result of reading this article, why? (*Select all that apply*)

1. The content of the article is not relevant to my practice.

2. I do not have enough time to teach others about the purpose of the needed change.
3. I do not have management support to make a change.
4. Other: _____

11. Our accrediting body requires that we verify the time you needed to complete the 1.4 continuing education contact hour (84-minute) program: _____