INDUSTRY TRENDS

CRNAs, and Entire Healthcare Industry, in Midst of EMR Transition

Thanks to the Affordable Care Act (ACA) Meaningful Use Initiative, the healthcare industry is in the midst of a major transition in documentation of care. More Americans are gaining access to medical care, and federal incentives and mandates are dedicated to making that care safer and more efficient than ever before. Healthcare professionals are working to make comprehensive patient information more accessible through the integration of electronic medical records (EMRs) into care. Although these systems—applicable to generalized healthcare with variations unique to anesthesia care—hold much promise, implementing them poses a challenge. The AANA conducted a survey of CRNAs to assess the progress, opportunities and challenges of EMR adoption in their practices.

Types of EMRs
Nurse anesthetists may encounter two types of EMRs in the clinical setting: the patient EMR and anesthesia information management systems (AIMS).

At its most basic level, an EMR is an electronic document that contains as many elements of care that can be captured electronically or entered manually. The format has many advantages over its paper counterpart, most importantly in the areas of legibility and accessibility. The electronic record is intended to reduce potential errors that may be caused by near-illegible handwriting that is common in the paper record. Storing files electronically drastically cuts down on the time needed to send them from one facility to another and will not limit the number of providers who need access to them.

Healthcare teams and researchers may use the individual and collected patient data repository to identify opportunities to improve processes of care, outcomes, and overall quality of care. As the name implies, the AIMS creates a record of the anesthesia care event while the anesthesia professional continues to focus on the patient and not frequent record keeping. Such digital recordings may include hemodynamic values, oxygen saturation, capnography, anesthetic gas analyses, and manually entered information. One purpose of the AIMS is to store patient responses to their anesthesia so that future anesthesia plans can be tailored to the patient’s individual needs. AIMS also makes an anesthesia provider’s job easier because it records procedures and responses in real time, increasing the accuracy of records. In recent years, hospitals are adopting AIMS at an increasing rate. As of 2013, about 35 percent of U.S. hospitals reported live systems or systems under implementation, a nearly 100 percent increase over the previous year.

Setbacks to EMR implementation
Despite the benefits of EMR systems, a number of financial and technological barriers hinder their implementation. Facilities can determine that both the high up-front and ongoing costs of maintaining an EMR system might outweigh potential benefits. Additional costs come from training staff on the software’s use, so facilities may lack the time and money needed to ensure a consistent level of expertise among staff. Some providers feel that using old-fashioned paper charts are simply faster than learning to use the new electronic system, and they also would rather not spend the time converting all the old charts to the new format.

Software compatibility is also an obstacle to EMR implementation. Many different companies sell different types of EMR software—some of the bigger names include Epic (Verona, Wis.), Cerner (North Kansas City, Mo.), and GE Healthcare (Little Chalfont, United Kingdom). And, because no suite of EMR software can be used straight “out of the box,” significant resources must be used to ensure its compatibility to interface with existing systems. Abeco (Irving, Texas), and other similar companies, create medical applications to link the EMR and anesthesia billing software to make anesthesia coding and reporting efficient and convenient. But the issue is still a major dilemma, especially for smaller health systems with fewer resources.

Meaningful Use
One of the provisions of the Affordable Care Act is spurring the widespread use of EMRs. The Health Information Technology for Economic and Clinical Health Act (HITECH) of 2011 incentivized the use of EMRs through Medicare and Medicaid payments to clinicians and hospitals. It will make available funds up to $27 billion over 10 years if health systems achieve specified goals. The endgame of HITECH is not merely the adoption of electronic systems, but “meaningful use”—using these tools to make sig-
significant improvements in healthcare.

HITECH set up a series of core elements that providers must achieve (different numbers of objectives apply to either private practices or hospitals) and a secondary menu of 10 additional tasks, from which providers have to choose five. These elements include an objective paired with a quantifiable measure in order to ascertain if that objective was met. Examples include:

- Objective: Maintain active medication allergy list
- Measure: Over 80 percent of patients have at least one entry recorded as structured data
- Objective: Use EHR technology to identify patient-specific education resources and provide those to the patient as appropriate
- Measure: Over 10 percent of patients are provided patient-specific education resources

Participation in the meaningful use incentive program is occurring in three stages, each with increasing requirements. Providers must meet requirements for a 90-day period in their first year of meaningful use in stage 1. In stage 2, they have to meet them for two years. The rules for stage 3 have not been finalized.¹

An update² to a recent Health Affairs study³ reported that as of July 2013, two-thirds of hospitals had achieved stage 1, while nearly all had demonstrated participation in the program in some way. Providers that do not demonstrate meaningful use by 2015 will be subject to Medicare payment penalties.⁵

**AANA Survey**

In 2014, the AANA conducted an electronic medical record survey to identify CRNA best practices in anesthesia informatics and to provide feedback for CRNAs to optimize integration of health information technology into their practice. The email survey was sent to 8,272 randomly selected CRNAs in clinical practice and 1,226 chief CRNAs. Of those, 2,226 CRNAs and 499 chief CRNAs responded.

More than 75 percent of CRNAs indicated that their primary practice setting is hospital based. More than half of all CRNA respondents are using EMRs, with 40 percent of chief CRNAs using this technology. This may be attributed to the bed size of their respective facilities. The majority of the CRNA respondents’ (65 percent) primary practice setting has 200 or more licensed beds, with more than half (51 percent) of chief CRNAs practicing in settings with under 100 beds.

Of the CRNA and chief CRNA respondents who were not currently using EMRs, about 25 percent specified that their facility plans to transition to healthcare information technology in the future. Of those currently using an anesthesia EMR, the most frequently reported challenges during the transition were slow systems, inaccuracy of data due to issues modifying errors, and frustration among users associated with the difficulty both integrating the system into practice and navigating the software. Areas of opportunity for both software manufacturers and facility administration include the consideration of workflow, usability and efficiency when designing, selecting, and upgrading software, as well as the inclusion of all representative system users in the evaluation and decision-making process when selecting appropriate features and software vendor.

More than 75 percent of all respondents who do not have an anesthesia EMR are unsure of when their primary practice setting will transition to an anesthesia EMR.

Additional key findings include:

- More than 75 percent of all respondents who do not have an anesthesia EMR are unsure of when their primary practice setting will transition to an anesthesia EMR.
- Sixty-eight percent of all respondents indicated that a CRNA at their facility participated in either the implementation process or staff education/mentoring prior to or after EMR implementation. More than half of all respondents (CRNA, 50 percent; chief CRNA, 56 percent) also indicated that a CRNA at their facility participated in the evaluation and documentation of current anesthesia workflow.
- Some respondents felt that EMRs resulted in a lack of efficiency due to the increase in time spent on documentation, citing that EMRs require more time for documentation when compared with written medical records.
- Approximately 80 respondents felt that patient care and attentiveness to the patient suffered because of the physical distraction of electronic charting.

Overall, it appears that system users with easy access to onsite technical support staff who felt appropriately trained prior to AIMS implementation experienced the greatest rewards and shared the most positive results associated with transitioning to an EMR.

To view the full survey report, go to http://www.aana.com/myaana/AANABusiness/aanasurveys/Pages/default.aspx (member login and password required).

Continues on page 16→
The findings of AANAs EMR survey mirror the trends in the overall healthcare industry. In the first several years of HITECH, private practices and hospitals are beginning to embrace the wealth of benefits offered by EMRs. With the federal government’s future incentives and requirements, most facilities will utilize electronic records, modernizing and further improving the country’s rapidly changing healthcare system.

References
3. Boonstra A, Broekhuis M. Barriers to the acceptance of electronic medical records by physicians from systematic review to taxonomy and interventions. BMC Health Serv Res. 2010; 10:231.

The Latest Industry Trends on Display at the Nurse Anesthesia Congress Exhibit Hall

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