

Creating an Audit Report Utilizing Structured Text Fields to Monitor Procedural Sedation Documentation

Debra Furlong, RN, MS¹, Jennifer Kales, MA, MS, APRN, BC¹, Cathleen Glynn RN, MS²,
David Evan, MSIT², Dan Noar, BA², Denise Goldsmith RN, MS, MPH, FAAN¹

Brigham and Women's Hospital, Boston¹, MA, Partners eCare, Boston, MA²

Keywords: - Knowledge representation, Patient Safety and Quality, EHR Audit Report

Introduction/Background

Procedural Sedation is typically performed by credentialed non-anesthetists in procedural areas and other units at Brigham and Women's Hospital. Prior to implementation of the vendor-based Electronic Health Record (EHR), documentation surveillance of these procedures was performed manually using a chart audit tool. These audits provided a random snapshot that guided attention to areas needing reminders regarding compliance with the policies and regulatory aspects of procedural sedation. The documentation requirements are addressed in The Joint Commission standards and further defined by the American Sedation Association (1). The chart audit tool utilized prior to vendor-based EHR yielded an annual average of approximately 340 audits out of an estimated 20,000 cases per year with variable completion rates per area. The compliance data was specific only to the area's level of compliance. Moving to an EHR allowed us the opportunity to improve this quality and efficiency of this process.

Methods:

In the vendor-based EHR all procedural sedation is documented in an electronic form developed specifically for these procedures. The build components of this documentation were standardized with structured text and specific fields for key data elements. The Nursing Quality and Informatics departments worked together to identify the data element required to build a report in order to extract a data set representative of the regulatory requirements. Those specifications were submitted to the reporting team and used to build the report. The report used complex logic to identify cases. First was the presence of an event documented using the electronic form, second the administration of fentanyl or midazolam and finally a maximum level of a sedation score equal to or greater than two. Cases were excluded if they were performed by an anesthetist. The report detailed specific pre, intra and post procedure metrics required by hospital policy and regulatory standards (2).

Results:

We built a report that served as an audit tool for 100% of the cases. The report was shared with the Sedation Management Advisory and Resource Team. The report can be drilled down to patient and user level specifics and revealed discrepancies in documentation practices. Required build changes were identified to assure that data fields were consistent and available to users in their workflows. The transition from sampling manual audits to 100% electronic audits required an understanding of the report algorithm as the electronic data revealed opportunities for improvement in use of the EHR and changes in workflow. In addition to the metrics for the report, staff names are available so any chart deficiencies which are identified can be addressed with the user.

Discussion/Conclusion

Having Nursing Informatics and Nursing Quality professionals members of the content decision making team resulted in the standardization of an EHR build that supported the clinician's workflow as well as the eventual report output. Our transition from limited manual to 100% electronic audits has revealed documentation education/training opportunities. Utilizing a report that samples time stamped, filed data in the record requires real time documentation. Previous manual audits lacked that specificity. The long term benefits of this report are numerous for compliance with policy and regulatory demands and to assure that patients receive the appropriate standard of care.

References

1. American Society of Anesthesiologists Task Force on Sedation and Analgesia by Non-Anesthesiologists. Practice guidelines for sedation and analgesia by non-anesthesiologists. *Anesthesiology* 2002; 96: 1004–17.
2. Urman, RD and Kaye, AD. Moderate and Deep Sedation in Clinical Practice (2012) Cambridge University Press, New York.