Utilizing Data in a Perioperative Electronic Health Record to Drive Quality Improvement

Lucy Duffy, MA, RN, CNOR, Barbara A Herrmann BSN RN CNOR and Rita Lanaras BS RN CNOR

Overlook Medical Center - Atlantic Health System 99 Beauvoir Avenue, Summit NJ 07901

Introduction

Overlook Medical Center

- 504 Licensed Beds
- 3,500+ Employees
- 10,349 DVT, Beta
- 16 Inpatient Units
- Surgical Site Identification
- Hair Clipping/Prep
- 1,290+ Physicians
- Hard Stop Fields Completed
- 204,026 Outpatient Visits
- 88,334 Emergency Visits
- Medication Documentation
- NPO Status
- Allergies
- Time Out Accuracy
- 25,177 Implant Documentation
- Surgical Safety Checklist Completion

What Drives the EMR

2012 Critical Access Hospital National Patient Safety Goals

The purpose of this study is to measure data entry in specific fields within the Perioperative electronic medical record and analyze how it affects adherence to National Patient Safety Goals and Surgical Care Improvement Project protocol.

Purpose

An estimated 2.5 to 3.5 million surgical patients per year experience unintended harm directly related to surgical interventions. Standardization and compliance of documentation in key data entry fields in the Perioperative electronic medical record heightens awareness to possible complications and drives standards for consistency in nursing practice.

An electronic medical record provides the health care team with seamless health information. Compliance of electronic documentation improves patient care, streamlines processes and provides data necessary to meet SCIP protocols and The Joint Commission NPSG. Standardizing processes allows for consistency of information and workflow.

Analysis from the EMR

Key data field elements pertaining to SCIP protocol and NPSG were built into the Perioperative EMR with the last upgrade of the electronic medical record computer application and implemented in the fall of 2011. A modified version of the World Health Organization (WHO) Checklist was built into the EMR. Some of the fields are set up as ‘hard stops’ while others do not prevent the chart from being closed even if not completed. Daily audits are routinely performed and an addendum request log is kept. The need for an audit to be done, a documentation class to be created and education on the importance of proper documentation became apparent based on the addendum log listings.

In October 2012, results were communicated by use of reports and graphs. Various training methods were implemented to highlight awareness to all Intraoperative nurses, including email blasts and communication boards. A standardized training course was created and training began with selected nurses designated as Documentation Trainers. The training was then given to all OR personnel as a pilot. Two weeks after the training was completed, a random audit of 40 records was performed to measure compliance of the newly implemented processes. Compliance increased by 29.4% in the two week period. Our goal is to train all users and reach 100% compliance by second quarter 2013.

Our areas of focus for analysis included:

- Allergies
- NPO Status
- Surgical Site Identification
- Hair Clipping/Prep
- Medication Documentation
- Implant Documentation
- Pre-Op Data Fields Completed
- Time Out Accuracy
- Surgical Safety Checklist Completion
- DVT, Intraop Blocker and Antibiotic Documentation

Data analysis showed a 36% compliance rate of complete documentation of the required fields. In October 2012, results were communicated by use of reports and graphs. Various training methods were implemented to highlight awareness to all Intraoperative nurses, including email blasts and communication boards. A standardized training course was created and training began with selected nurses designated as Documentation Trainers. The training was then given to all OR personnel as a pilot. Two weeks after the training was completed, a random audit of 40 records was performed to measure compliance of the newly implemented processes. Compliance increased by 29.4% in the two week period. Our goal is to train all users and reach 100% compliance by second quarter 2013.

Examples of how Perioperative documentation is used to measure patient outcomes by Performance Improvement departments

Conclusion

The study demonstrates the importance of proper documentation and the need for a standardized documentation course. Key data in an EMR is communicated more efficiently and more timely to Performance Improvement departments with complete documentation. What became apparent was the need for routine auditing and ground roots communication of the auditing results, regular services on proper documentation and the creation of standardized training. Quality control processes within our own department need development and implementation.

The data analysis shows that with diligent adherence to these processes, great improvement in documentation compliance is gained in a short amount of time. We found that compliance of electronic documentation in key data fields within the EMR streamlines processes and also provides data necessary to meet SCIP protocols. The Joint Commission NPSG.

References

Examples of how Perioperative documentation is used to measure patient outcomes by Performance Improvement departments

- Examples of how Perioperative documentation is used to measure patient outcomes by Performance Improvement departments

- Conclusion

- References