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Using EHR data to enhance quality improvement

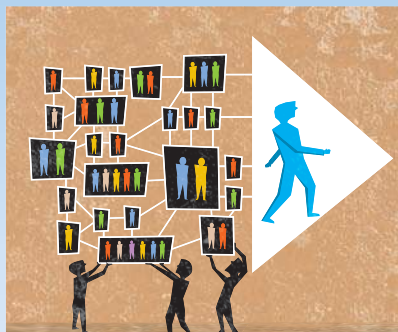
Q How do I retrieve data from our electronic health record (EHR) to help drive our unit-based quality program?

Luckily, thanks to lawmakers, one of the benefits of the EHR is the use of data to improve the quality of patient care. The American Recovery and Reinvestment Act of 2009 spells out that one of the main purposes of “meaningful use” is to improve quality.¹ In 2010, the Centers for Medicare and Medicaid Services (CMS) established a plan for implementing meaningful use in three phases. We’re currently in phase two of the plan. Now, these rules actually assist the CMS in obtaining quality metrics for incentive payments. However, we can also profit at the unit level.

First, one must understand what information is available from the department providing the data. For simplicity’s sake, we’ll refer to this department as the outcomes department. Before you begin your unit-based program, there are several points you’ll want to evaluate and discuss with your outcomes department.

Start by asking what kind of information is obtainable from your EHR. Can the system provide reports or will the outcomes department abstract the needed material? Will these reports be available for current activity or post activity? How’s the information presented? Is it raw data or in a dashboard format? Will your outcomes department be able to obtain information from any part of the record or only from a discrete location of the EHR, such as a flow sheet? The answers to these questions can influence the decisions for your program.

After you have some idea of the information your EHR can provide, narrow down what you want to measure. Begin by looking broadly at what you want to evaluate and determine whether it deals with people, processes, and/or technology.² For example, if your unit wants to investigate the quality of staff documentation, such as whether particular staff members are completing care plans, then you may ask your outcomes department to build a report by user. If you’re attempting to validate a process, such as compliance with the 3- and 6-hour sepsis bundles, you may ask your outcomes department for data elements at several points in time within the identified process. Technology may be a more difficult item to measure due to whether an interface is needed to transfer data to your EHR. An example of this type of measure is identifying if staff members



are using a specific method, such as a bedside laboratory testing device.

Let’s look at one quality idea in two ways when using data from the EHR. The topic is improving the safety and accuracy of medication administration on the unit. The first option is to look at the timeliness of medication. The outcomes department will need to know what medication names or classes to include, as well as what the time parameters are

for the data capture. The timeliness question can assist with workflow process, which looks at data ranges based on administration time and scheduled medication time. In another situation, medication administration accuracy may focus on data from barcode verification. This can provide compliance data for the unit, as well as individual staff compliance with the process.

A note of caution when requesting data from the EHR: identify if you’ll need to conduct further auditing—other than verification of information—to obtain the answer to your question(s). This can possibly be time consuming for you and your unit quality team. But it can also be well worth the effort depending on your end goal and resources available. Also, obtaining reports from your EHR will require initial validation of data accuracy and then periodically throughout your program. This is an imperative step when obtaining data because there can be errors in areas such as coding or in the fields captured by the outcomes department.

The direction of your program may depend on what information/data you can obtain from your EHR. Determine your team’s quality ideas before meeting with the outcomes department so they’ll be able to effectively assist you. There’s a great deal of data available from the EHR; be sure you can capture the data needed to improve patient care. **NM**

REFERENCES

1. U.S. Department of Health and Human Services. What is “meaningful use?” www.hrsa.gov/healthit/meaningfuluse/MU%20Stage1%20CQM/whatis.html.
2. National Learning Consortium. Continuous quality improvement (CQI): strategies to optimize your practice. https://www.healthit.gov/sites/default/files/nlc_continuousqualityimprovementprimer.pdf.

DOI-10.1097/01.NUMA.0000473513.38679.83

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