Quality Improvement and CAUTI Project: A Nursing Approach

PDCA Phase: *Act*

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Tools
PDCA

Nurses provide direct patient care and are key members in contributing to quality improvement. A multidisciplinary approach is essential to the application of performance improvement in a hospital setting. There are multiple levels of QI councils for nurses, starting at the unit level and then continuing upward through the hierarchy to hospital and corporate levels. These councils, manned mostly by nurses, follow a PDCA – Plan, Do, Check, Act – approach when performing data collection to initiate changes in practice. This data is collected from, among other places, patients' medical records, quality control, and staff and research studies. It is a continuous process that is peer-reviewed. Data is collected only by certified and trained nurses and then submitted to the

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council leaders. To maintain confidentiality, the use of medical record numbers is in place of patient identifiers.

The main projects that nursing quality and safety councils work on include Catheter Associated Urinary Tract Infection (CAUTI), Healthcare Acquired Pressure Ulcers (HAPU), pain assessment, infection prevention, and fall prevention. As a result to using the PDCA approach in combination with our applied research, changes to nursing policies and practices have come about that have improved the overall quality of care of our patients. HAPU and CAUTI rates have drastically declined, and more members of the health- care team are contributing to fall prevention and pain management than in previous years.

It is my strong belief that a nurse's approach to contributing to the overall QI of a hospital facility is quintessential. Nurses can provide critical direct research, such as CAUTI, while also implementing better quality through unique practices. This is all highlighted by using a PDCA nursing approach.

Plan

The first step of the PDCA approach was initiated by a plan to collect a variety of data on urinary catheters. This was done to assess the amount of CAUTI that has the potential to be preventable and to initiate a change in practice in order to drastically reduce, or eliminate, CAUTI infections all together. The data collected includes information on Foley insertion dates, bag placement, amount of urine in the bag at a random check, and other measurable actualities. The data was to be collected on a monthly basis from the members of the Quality and Safety Hospital Council. Information from the data collection then needed to be written on a formatted standardized handout to which each nurse physically assessed the patient's urinary catheter and performed an electronic as well as a tangible chart review.

Do

The next step in the process started with the nursing process of information assessment, implementation, and evaluation. A

collaboration with other nurses occurred secondary to similar interest in order to reach the goal. We performed interventions on a small scale that included removing Foley catheters on day one or two post insertion and educated staff on the project. Another intervention involved having the catheter distributor come into the hospital and review proper placement and protocol that specifically related to the brand that our hospital uses. With the help of the professional practice council, who devised a nurse-driven protocol, a change was made to our practice. A new policy came about that states nurses no longer need a physician's order to discontinue an indwelling urinary catheter. Exceptions include those catheters placed via urologist.

Check

The third step was to analyze our preliminary data. We found that with an increase in auditing, open communication to physicians, and awareness to staff of the project, there was a decline in the amount of CAUTIs. The preliminary final results starting with the first quarter went from 1.2 to 0 in the second quarter (number of infections/urinary catheter days × 1000).

Act

The final step in the process is to continue to implement evidenced-based practices to prevent indwelling catheter-associated urinary tract infections. We applied the interventions as previously stated and will continue semiannual Foley catheter audits and monthly CAUTI audits to evaluate the effectiveness of the continued interventions.

Challenges to this project included limited amount of time to complete the audits and standardizing the audit tool. Other barriers included getting all members of the healthcare team onboard and aware of the project and arranging a time for staff to be reeducated on the correct practice of Foley placement.

Successes encountered during this project contain a variety of sources. The first and most obvious is the actual reduction in the CAUTI rate and that supports our goal accomplishment. Other success includes the empowerment of nurses to be more autonomous which in turn increases morale on the unit. The teamwork involved providing an open communication in the workplace, and it is because of all the team members contribution that the project was a success.

In addition to research, as stated, nurses have unique practices that can implement quality improvement because they make up the front line of patient care. It is imperative that all members of the health-care team remember that QI is a multidisciplinary action that the patient, and their families, can benefit from by all of us working collectively.

If you have any questions about the information covered in this chapter or other medical safety and quality improvement-related topics, please contact us at http://www.medicalqualityandsafetyforum.com. The website will also provide a forum where you can ask specific questions about your safety and medical quality improvement projects or mentor upcoming medical quality leaders.