Program Description and Goals:

What was the problem to be solved?

In aggressively monitoring performance improvements, strategic goals, patient feedback, and comparison to state and national benchmarks, Calvert Memorial Hospital (CMH) looked closely at concerns around outcome measures related to renal failure, clostridium difficile and obstetrical hemorrhage with a goal of ultimately decreasing hospital acquired conditions. The Quality Management and Care Coordination teams at CMH realized that some of the definitions, and associated processes, being used related to these conditions were creating challenges in consistently and efficiently documenting patient data and providing the best possible care to patients. Not only were these conditions not being tracked based on a standard definition or process adopted by other hospitals, but internal processes for documenting patient data were resulting in missed opportunities to provide a safer patient experience. Once definitions and processes around these conditions were clearly adopted, a secondary challenge became the development of an efficient method for educating providers and staff on the new methods for documentation.

How was it identified?

As a best practice at CMH, specific committees or task forces are formed under the direction of Quality Management and Performance Improvement when an opportunity for improvement is identified through any of the hospital’s performance measurement tools. Three committees were recently formed to look at very specific conditions: renal failure, clostridium difficile and obstetrical hemorrhage. These conditions were targeted as data showed trends in occurrences.

When working in committee, the Acute Renal Failure Task Force discovered that the definition used by CMH of Acute Renal Failure was not consistent with the definition offered by the Maryland Hospital Association (MHA). This led to exploring other definitions established by MHA as well as best practices by leading professional associations that could be influencing other areas of CMH’s provision of service.

It was discovered that the standard definitions were not always being used for conditions and resulting best practices were not being implemented. Each task force created an action plan to clearly define a particular process or condition and associated best practice:
Committee/Task Force | Definition or Process Needing Clarification | Best Practice to Address
--- | --- | ---
Renal Failure | MHA definition of Acute Renal Failure | IV contrast and use of lowest possible molecular composition
Clostridium Difficile | Process for identifying C-Diff present on admission | Collection of specimens in a timely manner
Obstetrics | MHA definitions of OB Hemorrhage | Changed definition of hemorrhage to meet current American College of Obstetrics and Gynecology (ACOG) definitions

What baseline data existed?

HSCRC data presented to CMH in 2013 was used as a baseline for evaluating progress toward improvements in reducing preventable conditions:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Observed</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clostridium Difficile</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Renal Failure w/o Dialysis</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Obstetrical Hemorrhage w/o Transfusion</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Obstetrical Hemorrhage with Transfusion</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

This data directly aligned with the Medicare Waiver.

What were the goals—how would you know if you were successful?

CMH discovered opportunities to increase patient safety and reduce preventable condition in the areas of renal failure, clostridium difficile and obstetrics/OB hemorrhage, by aligning three key variables – definitions, processes and education. All three of these variables share a common factor to be successful – documentation. Without a clearly adopted definition of a condition or practice, documenting that condition or practice takes on several interpretations. Without a clear process for documentation, inconsistencies result in inaccurate or missing information. Without a clear and consistent system to educate providers on documentation processes, improvements become challenging to implement. The goal of the program became:

1) Reduce preventable complications related to Acute Renal Failure, Clostridium Difficile and Obstetrical Hemorrhage
   a. Objectives for achievement of this goal included:
      i. Identify and adopt MHA definitions for Acute Renal Failure, Clostridium Difficile and Obstetrical Hemorrhage.
ii. Develop new standard protocol for documentation that reflect new definitions and enables CMH to be measured equally against other Maryland hospitals.

iii. Utilize a quick and easy-to-understand method of communication to educate providers on all new documentation processes.

Through implementation of the new documentation standards, CMH expected to see performance improvements in these areas to be reflected on MHAC data provided by HSCRC.

Process: What methodology or process was used to develop the Solution?

Through utilization of the task force structure in place at CMH, groups were formed and mobilized to address concerns in the three target areas. Led by Teri Rice, MS, RN, Manager of Documentation Improvement and Revenue Recovery, the teams utilized a multi-departmental approach with relevant representation from throughout the hospital including:

- Karen Nega, RN
- Crystal Gray, RN
- Susan Dohony, RN, Chief Quality Officer
- Bobbi Vess, Director of Radiology
- Merideth Moody, PhD
- Chang Choi, MD
- Thomas Annulis, MD
- Jean Murray, RN, Director of Infection Control
- Valarie Lee, RN, Director of Medical Surgical Unit
- Michelle Bowen, Director of Laboratory
- Adair Dooley, RN, Director of Family Birth Center
- Michele Johnson, MD
- Thibin Santha, MD
- Glenn Heaney, RN, Nurse Informatics

The team structure fostered collaboration among members to develop improvements aimed at reducing adverse outcome measures. Each team was tasked with a 3-step process:

1) Definitions - gather the complete definition for each condition as provided by MHA
2) Processes - create a process for documenting information that reflects definition
3) Education - develop a tool for sharing new processes with providers.

Task force members worked with many of the area hospitals and the Maryland Hospital Association to develop clinical definitions for renal failure and obstetrical hemorrhage based on evidenced based practice. For clostridium difficile, the team looked at the clinical definitions provided by Centers for Disease Control’s National Healthcare Safety Network. The group looked at CMH’s current hospital acquired conditions report and identified a trend of increasing conditions. Once identified, the team formed specific interdisciplinary teams to work through their internal process (including specimen collection and documentation). After attending many educational sessions provided by the Maryland Hospital Association, the teams felt it was best to
use the definitions developed by the state workgroups for each of the three conditions targeted in this project.

**Solution: What Solution was developed? How was it implemented?**

Several solutions evolved as a result of this project however the basis for developing the solutions was universal across all three teams:

- Identify a trend
- Form a team to study and address the trend
- Create a process to improve
- Educate everyone involved in implementing the new process

For these three targeted conditions, the task force developed and implemented the following specific solutions once a standard definition of the condition was obtained and best practices were identified:

- Changed communication process during handoff - discussed what specimens need collection versus what was collected as well as signs and symptoms of the patient.
- Worked with their IT Department to move their “specimen to obtain” orders, currently dropped from a patient’s record at midnight on the day of their admission, to a three day hold to accommodate the clostridium difficile definition.
- Changed the alerts within the nursing assessment - nursing assessment now asks if the patient has diarrhea, is it a new onset, and if a specimen was collected and, if so, when was it collected.
- Provide education to all emergency room staff, physicians, and nurses on when to collect stool specimens, signs and symptoms of clostridium difficile as well as the Maryland Hospital Association definitions for obstetrical hemorrhage and renal failure; discussed the signs and symptoms and documentation related to these conditions.
- Worked with the laboratory to develop a process for calculating a GFR on patients with a possible acute renal failure to assist the physicians in making a diagnosis of chronic renal failure.

**Measurable Outcomes: What are the results of implementing the Solution? Provide qualitative and/or quantitative results to data. (Please include graphs, charts, or tools).**

Looking at the graph below, the base year data from 2013 to 2015 shows how the organization performed close to or above expected cases set by the Health Services Cost Review Commission. In performance year 2015, there was a small spike in clostridium difficile, which was determined to be related to the patient population within the facility, however other targeted conditions resulted in substantial improvements. Obstetrical hemorrhage with transfusion results remained consistent.
The final step of implementing the improvements was to communicate the new documentation processes to providers. Each task force felt it was important that the communications must be consistent in the methodology, and each agreed that the methods must be clear and concise. In cooperation with the Department of Marketing and Public Relations, the teams created a newsletter format which incorporates graphics and text in an easy-to-read format. The format would be used by all three teams to share information to maintain consistency, and information contained in the newsletter gave the details providers needed to document information properly. The newsletter format was presented to providers for feedback; their buy-in was outstanding and the format was adopted to complete the education phase of the improving documentation performance to be more successful in decreasing preventable complications. The newsletters are coordinated with topics already being discussed within the organization and are shared via internal mailboxes, fax and email to all providers.

**Sustainability: What measures are being taken to ensure that results can be sustained and spread?**

To sustain the solution, and make it replicable across the organization, CMH implemented a clinical documentation improvement program to complete concurrent chart reviews, query the providers for clarification of their documentation, provide one on one education sessions and offer education sessions in a group format. Due to the success of the program in the three original targeted areas, they have expanded the process and are currently using it for assessing, documenting and providing treatment for respiratory failure, pneumonia, and sepsis. They have seen a reduction in these areas and also with urinary tract infections. Along with the evidenced based order sets and education provided from the Maryland Hospital Association and their clinical documentation improvement staff, they are able to identify and address hospital acquired conditions sooner.
Role of Collaboration and Leadership: What role did teamwork and collaboration play in the Solution? What partners and participants were involved? Was the organization’s leadership engaged and did they share the vision for success? How was leadership support demonstrated?

Identification of the problem and implementation of the solution was a multi-disciplinary effort which included representation from the hospital’s leadership including the Chief Quality Officer, physicians and several department leaders. The CMH Board of Directors demonstrated their support of this patient safety solution through their approval of funding to provide staffing and program supplies for clinical documentation improvement as well as resources to conduct successful education efforts with physicians and staff of new documentation processes.

Innovation: What makes this Solution innovative? What are its unique attributes?

In solving the problems related to these three preventable conditions, we have drawn upon the talent and expertise from within our organization to improve the process by which we solve problems. We have empowered our staff to speak up when they suspect a preventable condition and we have provided a platform for them to take appropriate action through our clinical documentation improvement program and opportunities to serve on a task force. When a trend is identified, we are able to bring all team members together to identify a breakdown in the process, or the need for a new process which enables us to tackle the trend and create a solution.

Additionally, we have practiced the “Keep It Simple” standards in educating our providers and staff on improvements to our documentation process. We proudly share that we have had no challenges in getting the information out to our providers thanks to an engaged medical staff who have welcomed any education that we can provide.

Related Tools and Resources:

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<tr>
<th>Contact Person:</th>
<th>Mrs. Teri Rice</th>
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</thead>
<tbody>
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