Organization
Frederick Memorial Hospital

Solution Title
Reducing Patient Harm: Multidisciplinary Teamwork leads to Hospital -wide Success

Program / Project Description, including Goals:
Statistics regarding United States medical errors are alarming. The United States medical errors and complications are now estimated as the 3rd leading cause of death. 758 hospitals in the CMS Medicare program were penalized in 2015 as a result of hospital acquired conditions losing $364 million dollars in reimbursement. A 36 year old waiver from CMS that excludes Maryland from the CMS program was modernized in 2014 linking all-payer payment to hospital performance with penalties and rewards. Serving as a test for a model for CMS and other states, a reduction in potentially preventable conditions by 30% over a 5 year time frame is required as part of the waiver. Maryland’s program uses the POA indicator associated with 3M’s list of 65 potentially preventable conditions classification system based on their clinical appropriateness and significant cost implications when they occur. One main difference between the CMS and Maryland MHAC program is the sheer number of reportable preventable complications. Maryland’s program has more than 4 times the number of reportable complications and potentially preventable conditions that all other states have for which Maryland Hospitals are held accountable. All hospital patients are at risk for any of the 65 conditions. These conditions are identified through the present on admission indicator of “N” for any condition that wasn’t present on admission for every hospital inpatient. Hospital performance is measured using Observed (O) / Expected (E) value for each MHAC and calculations that also include the improvement and attainment scores from 0-10. Reduction in the numbers of each complication leads to more points are obtained for statewide comparisons between hospitals. This session will focus on the multi-disciplinary teamwork and strategies that have led to decreased numbers of hospital acquired complications. Presenters will share the multi-disciplinary strategies that have been associated with improving quality and avoiding financial penalty. Participants will learn how to build in-hospital processes to promote culture changes that will secure buy-in, improve clinical outcomes and improve accuracy in coding and documentation. Identification of success can be observed through a decrease in the number of complications and through an increase in overall points and O/E value which ultimately will lead to financial reward.

Learning Objectives
1. Describe how Maryland Hospitals are held accountable for the potentially preventable complications that are included within the 3M list.
2. Identify strategies to improve hospital quality of care to decrease patient harm events.
3. Discuss multi-disciplinary and collaborative processes to enhance organizational success in the reduction of complications with increased clinician engagement.

Process:
Identification of the patients that fall into the MHAC conditions can be difficult at best. FMH currently has no quick and easy way of identification of which patients will fall into the MHAC
categories while the patients are in the hospital or even shortly after discharge. The State has deadlines for quarterly patient information submissions regarding financial and coding information and the inability to identify patients earlier in the process led to missed opportunities on documentation clarification and correction of coding errors. There was a critical need to develop a process for detailed reviews of the cases that were identified as MHACs and to develop strategies for improvement on identified trends, documentation and coding issues. FMH contracted with BRG Research Group to obtain detailed information regarding the identified cases. An initial MHAC Multi-Disciplinary Steering Committee was formed that included the staff to review potential trends and to form strategies to decrease the number of harm events. A monthly review process was created to identify trends and issues and to review the cases in an effort to reduce the number of harm events.

Solution:
Numerous processes have been implemented to ensure success in the reduction of hospital acquired conditions, include the formation of other breakout groups such as a Nursing MHAC team and a Peri-Op MHAC team. Each of these teams meets to discuss opportunities where each discipline could have an impact on reducing harm events. Each team has identified opportunities and strategies for high volume complication categories. The lead PI Coordinator and Medical Director of Physician Utilization meet weekly to determine accuracy of coding and issues with documentation. The PI Coordinator subsequently meets with the coding manager to discuss identified issues and opportunities. Communication and meetings to discuss the complications has enhanced the teamwork between the coding manager and performance improvement to reduce coding issues and educate physicians for clarity of documentation. Electronic queries are sent to the physicians by the PI coordinator, Clinical Documentation Specialists and Coding to clarify documentation and diagnostic information if an opportunity is observed. Education and updates are provided at physician department meetings as well as to the Quality Council and Board Quality. Additional high volume and high impact MAHCs have been targeted to create workgroups to identify trends and failures in the clinical care processes. High volume and cost MHACs are reported monthly on a hospital wide HARM report. This report is provided to staff, leaders and is also reported to the Board Quality Committee. Employees are incentivized each year with four goals to improve quality, service, finance and staff satisfaction. For the last two years and once again this year, the quality goal is to decrease harm which is measured by the HARM report.

Measurable Outcomes:
FMH has experienced a significant reduction in the number of patient harm events since these processes have been put into place. FMH has experienced significant improvement in the clinical outcomes and documentation since 2013. From 2013 to 2015 our Maryland hospital generated a 35% reduction in all Maryland Hospital Acquired Conditions. Improvement in 2015 led to a $500,000 reward from the State program. The number of harm events has been significantly reduced from 609 in 2013 to 396 in 2015. We have a 100% response rate to queries and are able to send some queries sooner with the help of the CDIs. The final O/E scoring from the State for calendar year 2015 was 0.52 with a represented calendar year 12.46% improvement in the reduction of events for the hospital.
**Sustainability:**

Each of the MHAC committees meets on a routine basis to review new trends, findings, and to discuss plans continued strategies for improvements that can occur through each team. The nursing and Peri-Op teams each discuss clinical improvement opportunities that are then reported up to the Steering committee. The PI Coordinator continues to review each identified MHAC through the BRG report for opportunities for documentation clarification or coding issues. A weekly meeting takes place with the Medical Director of Physician Utilization for additional review. Engagement with physicians to increase awareness and increase understanding of the MHAC strategies take place on routine basis. Additional attention is placed on high-volume / high-cost complications through the hospital wide harm report that is reported monthly to the Quality Council and Board Quality with analysis and actions to prevent the identified events.
**Role of Collaboration and Leadership:**

The key players included VPMA, AVPMA, Medical Director of Utilization, Finance, IT, Coding, Clinical Documentation Specialists, nursing, performance improvement department, physicians in various disciplines including OB, anesthesia and surgery, pharmacy, laboratory, infection control practitioners, and clinical education staff, Quality Council and Board Quality, including the hospital CEO and COO. The use of reports and specialty knowledge of the state methodology process from our BRG consultant has led to the ability to provide areas of focus and assisted in determining trends and identification of the areas of greatest opportunity. Administration and physician leader support has been critical to the success of this program. The detailed review of each complication has led to clinical care protocol implementations and additional education to staff at all levels to improve the care of patients.

**Innovation:**

This has been a collaborative approach across the patient continuum. It utilizes EMR technology to assist with physician query and verification of coding information and changes. The EMR also has been utilized for the development of new nursing assessments and physician documentation tools for present on admission status. The prevention strategies begin at the time of patient arrival to the facility, regardless of the admission status category or setting.

**Culture of Safety:**

The multiple solutions and enhanced awareness to staff has improved the culture of safety at all levels throughout the facility. Physicians are more aware of the implications of their documentation of present on admission status. Additional safety precautions have been implemented at all levels to prevent harm to the patients. Nursing units request detailed information from the PI Coordinator for breakdowns of complications for their department to share with the staff. The culture of safety has increased throughout the facility.

**Patient and Family Integration:**

Patients and families are included in the prevention process for numerous potential complications. Fall prevention strategies, infection prevention strategies, aspiration pneumonia and pneumonia prevention strategies to just name a few. For example, the nursing MHAC team developed this precaution strategy. All patients are identified for aspiration risk at the time of admission. If they are identified as a high risk, communication of the prevention strategies are communicated with families and signs are posted in the room at the head of the bed and on communication boards that include the dietary precautions for all that enter the room to see. Education is provided to patients and families regarding the precautions.
Related Tools and Resources:
[See attached]

Contact Person: Sharon Powell, MS, RN, CPHQ
Title: Patient Safety Officer & Director, Performance Improvement, Accreditation and Regulatory Compliance, Infection Prevention & Control, Medical Staff Office & Interpreter Services.
Email: spowell@fmh.org
Phone: 240-566-3514
MHAC Validation & Correction Process

1. Patient Care Provided and Documented
2. CDIs review records concurrently and send queries as possible
3. Patient Discharged
4. Medical Record Department Codes based on MD Documentation
5. Data forwarded to HSCRC for processing

- Actions taken to resolve issue (coding, query, performance improvement)
- Cases forwarded
  - Coding
  - Dr. Trumble
  - Nursing
  - Physician Queries

- Performance Improvement Department reviews all cases for triage

- BRG forwards information to FMH
  - BRG performs case review and queries through Coding

- MHAGs (PPCs) determined based on codes and algorithm (HSCRC)

- Code changed to eliminate MHAC
- Process improved to prevent further MHACs and protect patients from harm
- New Case level information forwarded to HSCRC

- 3-7 days to process
- Continues through Calendar Year
- FMH receives financial penalty or reward based on score

- Avg 4 Day LOS
- 2-6 weeks post discharge

- 50% reward/penalty

2014 score: 0.53

Avg 4 Day LOS
2-6 weeks post discharge

21st of the Month

2-3 weeks

3-7 days to process

1-2 weeks

1-2 weeks

2-3 weeks

60 days after end of quarter

2014 score: 0.53  $0 reward/penalty
<table>
<thead>
<tr>
<th>Project Name</th>
<th>MHAC – Project to reduce the number of hospital acquired conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division/Section/ Unit/ Program</td>
<td>Performance Improvement/ Medical Staff</td>
</tr>
<tr>
<td>Executive Sponsor</td>
<td>Manuel Casiano, MD, Vice President of Medical Affairs</td>
</tr>
<tr>
<td>Project Lead</td>
<td>Debra O’Connell, RN, BSN, CPHQ</td>
</tr>
</tbody>
</table>
| Primary Stakeholders | Sharon Powell, Director Performance Improvement, Hospital Safety Officer  
| | Graham Moore, Manager, Performance Improvement  
| | Jim Trumble, MD, Case Management  
| | Debra O’Connell, RN, BSN, CPHQ  
| | Deb McLain, RN, MSN, CDI  
| | Andrea Burrier, RN, CDI  
| | Fran Abeshouse, Coding Department  
| | Kristen Geissler, Consultant, BRG |

**Project Description/ Statement of Work**

Analysis and reduction of Maryland Hospital Acquired Conditions (or PPCs) by performing 100% case reviews of all MHACs as reported by consulting firm BRG to FMH followed by identification of the greatest areas of impact to reduce the overall numbers of MHACs through education to physicians regarding documentation clarification.

**Business Case/ Statement of Need (why is this project important now?)**

Hospital acquired conditions have become more of a focus and an incentive driver by the State of Maryland and the United States to improve the quality of patient care. As a result, the State has placed monetary incentives on all hospitals to decrease the number of MHACs. Statewide hospitals as a whole are to meet a 7% decrease in MHACs. Monetary gains or losses are set by the State of Maryland based on an intricate scoring process based on Observed / Expected ratios, tier system for the PPCs and points scored based on attainment and improvement. For 2014, FMH was able to avoid any penalties for MHACs, but also did not gain any money either. For FY2015 to avoid monetary penalty the hospital must obtain a score > 0.45. If the hospital falls into the penalty zone there is a $5 million at risk. To obtain a financial gain the hospital must obtain a score of 0.6. $1.9 million would be a potential gain for a score greater than 0.6.

<table>
<thead>
<tr>
<th>Customers</th>
<th>Customer Needs /Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Improvement Department</td>
<td>Timely reviews of MHAC charts as provided by BRG. Timely queries to obtain responses from physicians for any documentation clarification to meet quarterly deadlines for any potential changes or MHAC reversals.</td>
</tr>
<tr>
<td>BRG</td>
<td>Providing FMH the MHACs listing per month for additional review and analysis. Providing FMH with monthly breakdowns and updates on status within the scoring system.</td>
</tr>
<tr>
<td>FMH Coding Department</td>
<td>Assist with query process upon initial coding of chart. Work with PI Department and Project lead for reviewing charts with potential coding inquiries.</td>
</tr>
<tr>
<td>FMH Medical Staff</td>
<td>Education on needs for changes in physician documentation to assist coding for clarification and to help decrease number of MHACs. Group discussions regarding practice variances and standardization to prevent hospital acquired conditions. Periodic reports to various Department meetings for updates on progress.</td>
</tr>
<tr>
<td>Team Members</td>
<td>Roles</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Debra O'Connell</td>
<td>PI Department Project Lead</td>
</tr>
<tr>
<td>Graham Moore</td>
<td>PI Manager</td>
</tr>
<tr>
<td>Jim Trumble</td>
<td>Medical Director of Physician Utilization</td>
</tr>
<tr>
<td>Kristen Geissler</td>
<td>BRG Consultant</td>
</tr>
<tr>
<td>Fran Abeshouse</td>
<td>Coding Manager</td>
</tr>
</tbody>
</table>

**Project Definition**

**Project Goals:**

1. 100% review of all MHACs as reported to FMH by BRG.
2. Implement an electronic query process for the Physician MHAC queries.
3. Create increased awareness and knowledge throughout the hospital regarding the importance of the MHAC project and improvement in the quality of patient care.
4. Query and education physicians regarding any chart reviews that represent an opportunity that the condition may have been present on arrival or not present at all.
5. Attend physician departmental meetings to provide regular updates and status on the project.
6. Monthly meetings regarding nursing sensitive MHACs.

**Project Scope:** Decreasing overall quantity of MHACs hospital-wide during CY 2016. Obtain score of > 0.6.

**Project constraints/risks** *(Elements that may restrict or place control over a project, project team or project action)*

1. Vendor timeliness in providing MHAC charts to FMH for review.
3. Physician education (ability to reach out to all FMH Medical Staff)

**Implementation Plan/Milestones**

Monthly meetings require updates. Quarterly deadlines must be met for state submission of changes.

**Communication Plan**

1. Outcomes are reported monthly at MHAC steering committee meetings, Quality Council and Board Quality Meetings.
2. Harm reports are reported out monthly to Quality Council, Leadership and Board Quality.
3. Team meetings facilitate discussions to be continued down to non-team members.

**Change Management/Issue Management**

Incorporated into above plan.
importance of accuracy of coding. Facilitate direction to coding staff for query process and information.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Roles</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deb McLain/ Andrea Burrier/ Connie Clegg</td>
<td>CDI</td>
<td>When reviewing charts during admission, look for opportunities to query for present on admission status if see can be an issue in documentation.</td>
</tr>
<tr>
<td>Barb Hrabowski</td>
<td>Infection Control Practitioner</td>
<td>Assist in review and analysis of C-diff and other infectious MHACs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stakeholder Roles and Responsibilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stakeholder</strong></td>
<td><strong>Roles</strong></td>
<td><strong>Responsibilities</strong></td>
</tr>
<tr>
<td>Manuel Casiano, MD</td>
<td>Executive Sponsor, Vice President Medical Affairs</td>
<td>Communication to CEO, COO and other Leadership position holders on process and progress.</td>
</tr>
<tr>
<td>Sharon Powell</td>
<td>PI Director, Safety Officer</td>
<td>Leader of MHAC Steering Committee. Facilitate communication of needs of team to Executive Sponsor and other leaders as well as BRG. Provide support for PI Leader.</td>
</tr>
<tr>
<td>Graham Moore</td>
<td>PI Manager</td>
<td>Provide support and help facilitate guidance for lead PI Coordinator. Attend MHAC meetings. Assist in communication of needs from BRG.</td>
</tr>
<tr>
<td>Debra O’Connell</td>
<td>PI PDCA Lead Coordinator</td>
<td>Receive reports from BRG. Review each of MHACs for opportunities of reversal, education, documentation clarification and clinical process changes. Lead Nursing MHAC team and Peri-Op MHAC team. Provide education and updates to physician and nursing staff.</td>
</tr>
<tr>
<td>Kristen Geissler</td>
<td>BRG Consultant</td>
<td>Supply information to FMH regarding Maryland strategic processes and FMH comparisons to other facilities as well as reference for information. Provide reports.</td>
</tr>
<tr>
<td>Jim Trumble</td>
<td>Medical Director of Physician Utilization</td>
<td>Assist in review of each MHAC. Provide information and education to physician groups and individual physicians about MHAC process as well as opportunities.</td>
</tr>
<tr>
<td>Fran Abeshouse</td>
<td>Coding Manager</td>
<td>Facilitate education to coders regarding MHACs and importance of accuracy of coding. Facilitate direction to coding staff for query process and information.</td>
</tr>
</tbody>
</table>
MHAC Query Template

Documentation Clarification for Provider - Present on Admission

Dear Dr. 

MHACs (Maryland Hospital Acquired Conditions)* are potentially preventable complications that occur while in the inpatient setting. The patient listed below was coded as having one or more of these complications.~ If the condition(s) is/are either present on admission, or if the condition was ruled out (not present), your answer to the question(s) in the MHAC Query below will allow FMH to make the appropriate changes to the patients medical record to assure accuracy.~ This patient’s medical record was reviewed and those observations are reflected below:

MHAC: _____________________________

The medical record reflects the following clinical findings:

In responding to this query, please exercise your independent, professional judgment. We greatly appreciate your clarification in this issue.

Based on the above finding(s), can you please document if the finding(s) were Present on Admission or not in your response?

Y - Present on Admission

N - Not Present on Admission

W - Clinically undetermined if Present on Admission