Influenza and Pneumococcal Vaccinations

Organization Name: Mercy Medical Center
Type: Acute Care Hospital
Contact Person: Jamie Chew
Title: QI Manager
Phone: 410.659.2910
E-Mail: jchew@mdmercy.com

IDENTIFICATION:

Problem to be solved:
- Increase compliance with administering Pneumococcal and Influenza vaccinations

How was the problem identified?
- Pneumococcal and Influenza vaccination are measures included in the Pneumonia Inpatient Hospital Quality Measure Set (Core Measures)
- Mercy Medical Center collects and submits data for the Pneumonia measure set to CMS and The Joint Commission quarterly, during which the opportunity for improvement was revealed

What baseline data existed?

MMC (Mercy Medical Center)

<table>
<thead>
<tr>
<th>Pneumococcal Vaccination Rates</th>
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<tbody>
<tr>
<td>Quarter</td>
<td>MMC 75%</td>
<td>State 72%</td>
</tr>
<tr>
<td>Jan - Mar '06</td>
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<th>Influenza Vaccination Rates</th>
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<tbody>
<tr>
<td>Quarter</td>
<td>MMC 69%</td>
<td>State 66%</td>
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<td>Jan - Mar '06</td>
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PROCESS:

MMC has a Pharmacy initiated protocol for screening patients with an admitting diagnosis of Pneumonia for Pneumococcal and Influenza vaccination. Criteria are defined below:

Pneumococcal Vaccination:
- Admitting diagnosis of Pneumonia
- Patients age $\geq$ 65 years
- Exceptions:
- Patient has a history of pneumococcal vaccination in the medication history for the applicable timeframe
- Patient is being admitted directly to the Intensive Care Unit or Intermediate Care Unit

**Influenza Vaccination:**
- Admitting diagnosis of Pneumonia
- Patients age \( \geq 50 \)
- Admitted during the months of October through April
- Exceptions:
  - Patient has a history of influenza vaccine for the current season in the medication history
  - Patient has a documented allergy to eggs or to a previous dose of influenza vaccine
  - Patient has a history of Gullian-Barre syndrome
  - Patient is being admitted directly to the Intensive Care Unit or Intermediate Care Unit

Mercy Medical Center (MMC) utilizes the A.I.I.M. (Assess, Improve, Implement, Measure) improvement methodology for analyzing, improving and implementing processes that have been identified as opportunities for improvement.

<table>
<thead>
<tr>
<th>Assess</th>
<th>Improve</th>
<th>Implement</th>
<th>Measure</th>
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<tbody>
<tr>
<td><strong>TOPIC/PROJECT:</strong></td>
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<tr>
<td><strong>A</strong> Assess</td>
<td>Provide a qualitative and/or quantitative description of the current state of the selected process/topic</td>
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<tr>
<td><strong>I</strong> Improve</td>
<td>Define the goals/objectives of the process improvement, or provide a description of what needs to be improved</td>
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<td><strong>I</strong> Implement</td>
<td>List the process improvements/action plans that will be initiated</td>
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<tr>
<td><strong>M</strong> Measure</td>
<td>Measure the process/outcome to determine if the process has been improved and if the goals/objectives have been met</td>
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**SOLUTION:**
• Formulated Influenza & Pneumococcal Vaccination multi-disciplinary workgroup
• Physician and Nursing champions identified
• Established vaccine administration goals using the state average as a benchmark
• Ordering of vaccines were made Pharmacy-initiated protocols, executed on admission
• Reformatted Pneumococcal and Influenza order sheets to resemble traditional order sheets
• Re-education of Nursing and support staff:
  • Vaccine in-services
  • Vaccination administration qualifying criteria and contraindications
  • Documentation of patient refusal of vaccine administration
  • The new order form format
• IT Department developed daily report for managerial staff to track eligible in-house patients
• Concurrent chart review and feedback to applicable staff
• Monthly vaccination administration audits and feedback
• Created “Need to Know” documents for all units
• Quarterly vaccine administration rate updates to the Nursing Quality Committee and Nursing Practice Councils
• Vaccine administration compliance incorporated into Nursing staff competencies

**OUTCOMES:**
Mercy Medical Center Pneumococcal Vaccination Rates

Mercy Medical Center Influenza Vaccination Rates

Mercy
State Average