Real Time Quality Initiatives Dashboard Within the Electronic Medical Record

Darla Marks, MSN, RN, Manager of Nursing Informatics
Michael Ward, BSBA, and Matthew Loser, BBA, Information Technology System Analysts
Penn State Milton S. Hershey Medical Center

Background

The organization’s commitment to innovating care delivery and improving outcomes capitalized on the opportunity to leverage new technology within the electronic medical record (EMR). Quality indicators such as ventilator acquired pneumonia bundle compliance (VAP), vaccine compliance (Influenza and Pneumococcal), catheter associated urinary tract infections (CAUTI), falls, and hospital acquired pressure ulcers were generally reviewed retrospectively, resulting in a missed opportunity to improve practice in real time.

Quality Indicators Dashboard within the EMR

<table>
<thead>
<tr>
<th>Room</th>
<th>Patient</th>
<th>Falls</th>
<th>Pain</th>
<th>Vaccines</th>
<th>Urinary Catheter Days</th>
<th>Skin Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>2063</td>
<td>Test, Carolyn</td>
<td>✗</td>
<td>17</td>
<td>P</td>
<td>5 REMOVE</td>
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</tr>
<tr>
<td>2065</td>
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<td>✗</td>
<td>0</td>
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<td>13</td>
</tr>
</tbody>
</table>

Results

The QI dashboard has strengthened operations in clinical workflow and has improved interprofessional team focus on preventing patient harm.

- Decreased falls from 3.61 to 3.03/patient days
- Decreased Hospital Acquired Pressure Ulcers from 1.73 to 0.82/patient days
- Decreased VAP Rate from 0.95 to 0.37/1000 ventilator days
- Decreased CAUTI Rate from 3.5 to 1.8 infections per 1000 catheter days
  - Statistically significant reduction p-value <0.001
  - Standard deviation decreased from 1.23 to 0.90

Conclusion

- The QI dashboard in the EMR provides immediate, and actionable information for use during patient centered rounding, RN/MD rounding and Hand Off Communication.
- The QI dashboard is a “quick view” of quality indicators and allows direct charting into the patient’s individual record.
- The organization has used the methodology and tools to develop additional dashboards:
  - Anticoagulation,
  - Antimicrobial stewardship,
  - Phenylketonuria management, and
  - Population health.

Contact

Darla S. Marks at dmarks1@hmc.psu.edu
Mike Ward at mward@hmc.psu.edu
Matt Loser at mloser1@hmc.psu.edu