Optimizing the Electronic Health Record (EHR) to Implement Evidence-Based Practice for Early Identification and Targeted Discharge Planning

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Background
Centers for Medicare and Medicaid (CMS) conditions of participation require hospitals to screen all inpatients for discharge needs at an early stage of hospitalization. The recognition and process rely on a multidisciplinary approach. Collaboration with Care Management (CM) team identified:

A lack of standardized screening process to identify discharge needs
The process relies on subjective judgment which often leads to false identification and initiation of discharge planning
Late initiation of discharge planning impacts:
- Patient/family engagement
- Patient satisfaction
- Length of stay (LOS)
- Readmissions
- Care Management staff

Mayo Clinic Enterprise convergence to standardize early discharge planning screening process: The (Early Screen for Discharge Planning) ESDP is an evidence-based tool, proven to be effective in identifying patients who require discharge planning intervention and allows for appropriate allocation of discharge planning resources.

Goal
Utilize the EHR to implement and automate a predictive discharge planning tool for early identification of discharge needs in order to mitigate discharge barriers, improve patient engagement and satisfaction, shorten of length of stay, and reduce readmissions.

Methods
- Discharge planning section modified within hospital nursing admission assessment incorporating the four ESDP assessment questions
- Elements of the ESDP are mandatory fields in nursing documentation
- Assessment pulls the age from patient demographics and automatically calculates a score as documentation is completed
- ESDP score of 10 or greater triggers an automated consult and creates a task on the CM department task list
- Existing EHR processes and reports were evaluated to determine impact of ESDP calculation
- Created and revised CM reports
- Updated hospital readmission risk score rules

Outcome
The initial ESDP study demonstrated a score of 10 or greater has a 79% sensitivity to identify patients with discharge planning needs. Our results are consistent with the study (Table 1)

Early initiation of discharge planning:
- Ensures the patient is discharged to the appropriate level of care
- Increases patient/family engagement & satisfaction
- Mitigates discharge barriers
- Decreases length of stay
- Decreases readmissions

Utilizing the EHR to implement and automate a predictive discharge planning tool:
- Determines value of utilizing ESDP tool for pre-surgical patients
- Monitor the impact of the ESDP on LOS and readmission rates
- Determine patients with discharge needs through the use of the ESDP tool
- Develops an evidence-based screen for specialized discharge planning services

References

Next Steps
- Continued collaboration with Care Management to:
  - Monitor the impact of the ESDP on LOS and readmission rates
  - Develop an evidence-based screen for specialized discharge planning services
  - Determine value of utilizing ESDP tool for pre-surgical patients

Table 1: ESDP Sensitivity

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<thead>
<tr>
<th>Year</th>
<th>Count of patients with &gt;=10</th>
<th>Need for CM intervention</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>2012</td>
<td>1044</td>
<td>808</td>
<td>77.3%</td>
</tr>
<tr>
<td>2013</td>
<td>1053</td>
<td>806</td>
<td>76.3%</td>
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<tr>
<td>2014</td>
<td>1120</td>
<td>827</td>
<td>73.8%</td>
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Figure 1: Old EHR Assessment

Figure 2: ESDP Assessment

Figure 3: ESDP Workflow

Figure 4: New EHR Assessment

Figure 5: ESDP Summary

Graph 1

Graph 2

Graph 3

Graph 4

Graph 5

Graph 6