High Utilizer Smart Alert

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The Johns Hopkins Hospital  1,162 patient beds • 2,590+ full-time attending physicians

Johns Hopkins Bayview Medical Center  463 patient beds • 870+ attending physicians

Howard County General Hospital  243 patient beds • 420+ active medical staff

Suburban Hospital  228 patient beds • 330+ active medical staff

Johns Hopkins Community Physicians  503 active medical staff
Agenda

• Describe Use Case
• Review Workflows
• Discuss Impact
• Share Lessons Learned
Improve early identification of vulnerable populations

- Lack of statewide data to identify high utilizers at point of care
- Improve identification of people with complex health and social needs across care settings; reduce avoidable re-hospitalizations
- Partner with CRISP to explore Blind Panel/ Smart Alert capabilities
Technical Workflow

CRISP PCP panel
- CRISP sends all discharge messages for patients who were cared for by the panel MDs. (JHM sends PCP panel to CRISP)

CRISP Blind panel
- CRISP monitors all patient messages for 3rd visit (Hospital Adm or ED visit) that occurs at JHM Hospital then sends that message to JHM blind panel address

DXR (Care Everywhere Repository)
- PCP Panel routed to specific providers, Blind Panel routed to Blind Panel Pool

Staff Pools in Outside Messages folder

BlindPanel Pool
- (To be purged every 60 days)

ETL to Clarity (IB_Messages)
- Daily Datalink process evaluates PCP panel patients - ID’s high utilizer when there have been 2 or more discharges (IP or ED) in the last 6 months and writes 2nd most recent date to SDE.

High Utilizer Registry
- SDE Date within 6 months, add to registry. PCP Panel Date: 1st discharge. Blind Panel Date: 3rd Encounter

Header of Ambulatory and ED flagged and Case Management work list flagged

Clinical Workflow

Emergency Department
- Add “High Utilization” flag to JHM ED track boards
- Triggers proactive CM assessment/care plans

Admission
- Add “High Utilization” flag to Epic EHR header
- Added to case management Epic daily census reporting
- Triggers proactive CM assessment/care plans

Ambulatory
- Add “High Utilization” flag to Epic EHR header
- “High Utilizer” flag added to CRISP Encounter Notification System (ENS) Messages in Epic EHR
- “High Utilizer” information displayed in Ambulatory Utilization Tableau Dashboards

Transitional Care Programs
- Add “High Utilizer” flag to program dashboards
- Triggers case finding for enrollment into care management programs

Enhances patient-centered plans of care and performance evaluation efforts
Identifying populations using hospital services at high frequencies

Pre Implementation:
Ave 68 patients/day

Post Implementation:
Ave 178 patients/day

62%
Blind Panel impact: Acute Care

JHH High Needs: Percentage in Care Coordination

JHH High Needs: Percentage Care Plans/Alerts

10% increase in Care Coordination; 20% increase in Care Plans and Care Alerts

Data as of 2/22; Source: CRISP Reporting Services (crisphealth.org)
Reducing ED high utilizer low acuity ED visits

<table>
<thead>
<tr>
<th>Low Acuity ED Visits</th>
<th>Unique Patients</th>
<th>High Utilizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>76,122</td>
<td>44,143</td>
<td>5,414</td>
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</table>

- **84%** relative reduction in JHH high utilizer ED low acuity visits for 2019 - 2021; **3,943-602/yr.**
- **85%** relative reduction in high utilizer low acuity ED visits at JHH YTD; **20%-3%**.

CY 22 data as of 03/31/2022
**Impact: Ambulatory**

- EHR High Utilizer flag facilitates timely scheduling
- CRISP ENS High Utilizer flag facilitates priority of transitional care management calls and follow up appointments
- Clinical Decision Support alerts providers of high utilizers and prompts Care Management referral
- Data used for routine ED High Utilizer mail outreach

*Call us first.*

We are here for you. Day and night.
Lessons Learned

- Engage an interdisciplinary project team
- Secure an EHR project champion
- Select common data definitions across care settings
- Create a robust communication and onboarding plan
- Measure impact pre/post implementation
A special thank you to our collaborators

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- Amy O’Neil

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Appendix

CRISP ENS High Utilizer Indicator

Ambulatory Utilization Dashboards

Epic EHR High Utilizer Indicator

Date: February 2022
Appendix

CRISP High Utilizer Indicator: patient advice/triage

Two new columns have been created to indicate if a patient has a high risk of hospitalization and if the patient is a high user. The High ACG Score and High Utilizer Column will be found in the In the Patient Calls, Pt Advice Request and After Hours Triage folders.

CRISP High Utilizer Indicator: provider scheduling

New Utilization Level Column Added to Schedule

[All Ambulatory Locations – All] A column for Utilization Level has been added to the multi-provider schedule. Previously this information was only available from the patient header, which meant that the provider had to be in the chart to see it. Now providers can add this column to their schedule and see those patients who are identified as high utilizers. This change is already in Production.

CRISP High Utilizer Indicator: JHM Emergency Departments

ED Track Board (JHH EM)

30d Readmit? High Utilizer

- High
- High
- High