Hotspotting in Healthcare: Using Care Management to Improve Healthcare Outcomes

Umaru Barrie, Abhi Gupta
University of Massachusetts Class of 2019

Background
- Hotspotting in healthcare is a method to pinpoint high utilizers of healthcare services using available data and stage interventions to help patients improve their health and reduce overall healthcare costs.
- The goal of this summer’s hotspotting project was to identify patients who are considered “Super Utilizers” of healthcare services at UMass and use case management techniques to improve their health.
- The Office of Clinical Integration at UMass is an organization that provides care management for high-risk patients that use MassHealth.

Approach
1. Patient referred to PBCM program by provider
2. Needs assessment conducted during face-to-face meeting with patient
3. Appropriate interventions searched and provided to patient
4. Follow-up outreach to patient to record progress

Top Needs Identified by Patients
(n=7 patients)

<table>
<thead>
<tr>
<th>Top Needs</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>7</td>
</tr>
<tr>
<td>Medication Authorization/DMME</td>
<td>5</td>
</tr>
<tr>
<td>Housing</td>
<td>3</td>
</tr>
<tr>
<td>Mental Health Access</td>
<td>2</td>
</tr>
<tr>
<td>Missed Appointments (No-shows)</td>
<td>2</td>
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<tr>
<td>ADL/IADL</td>
<td>1</td>
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</tbody>
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Sample Interventions Conducted
(I = No. patients)

- Set up PT-1 (4)
- Facilitated PA for medications (2)
- Referral for knee/back braces (1)
- Referral for glasses Rx(1)
- Education about mental health care management (1)
- Referral for mental health care management (1)
- Referral for psychiatry eval (2)
- Phone calls to remind patients about appointments (3)
- Found new visiting nurse (1)
- Referral for home health agency (1)

Only one patient had an ER visit or hospital admission since engagement began.

Results

Outcome
- Patient satisfied with new nurse
- Patient more informed about diabetes
- Received insulin pen
- Applied for handicap status
- No additional ED visits / admissions

Interventions
- Found new nurse for patient
- Facilitated transportation
- Attended appointments with specialists to reinforce education about diabetes
- Facilitated PA for insulin pen
- Sent handicap placard application

Main Needs
- Frustration with home health care nurse
- Missed appointments d/t transportation
- Education regarding diabetes
- Prior authorization (PA) for insulin pen
- Handicap status

Case Example
- JS is a 46 y/o male with PMH of ESRD (s/p renal transplant), anxiety, depression, T2DM, and HTN
- Patient referred to PBCM program by Provider
- Needs assessment conducted during face-to-face meeting with patient
- Appropriate interventions searched and provided to patient
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Future Work
- Develop a hotspotting population health clerkship project for MS2 students
- Develop ways of collaborating with the Emergency Department at UMass
- Refine patient selection and recruitment to focus on need and not eligibility
- Continue improving patient needs resource guide
- Help with organizing hotspotting symposium in the Fall of 2016

Acknowledgement
This work is made possible by the support provided by: UMMHC Office of Clinical Integration (William Behan, RN, Amy Cundall, RN, Erin Kirungi, Linda Potvin, RN, Natasha Rodriguez), UMMHC Office of Community Relation and Community Benefits (Monica Lowell), and UMMHC Hotspotting Advisory Committee (Suzanne Cashman, John Broach, Christine Cernak)