Using a Tool to Assess the Cause of a Sepsis-Related Readmissions

Results of a Pilot Project

Presented by Shannon Davila, MSN, RN, CIC, CPHQ
The Sepsis Factor for Readmissions

- Patients discharged following an admission with sepsis are at increased risk of readmission and higher mortality
- Many factors (e.g., chronic conditions) can increase that risk of readmission
- Healthcare organizations must work collaboratively to identify patients at high risk of readmission

New Jersey HIIN
7 day versus 30 day Readmission Mortality

Mortality Rate of Sepsis Readmissions

Sepsis Collaborative Began

Sepsis 30 Day Readmission on Mortality Rate
Sepsis 7 Day Readmission on Mortality Rate
Transitions Matter

NJ Severe Sepsis/Shock Index Admission Discharge Location

- Hospice – Medical Facility
- Discharged/Transferred to skilled nursing facility (SNF)
- Discharged/Transferred to home/self (routine discharge)
- Discharged/transferred to another rehab facility
- Discharged/transferred to a long term care hospital
- Discharged/Transferred to a Facility that Provides Custodial or Supportive Care
- Discharged to home under care of organized home health service provider

DX Description

Rate

2016
2015
2014
2013
2012
Overview of the CMS Hospital Improvement Innovation Network’s Sepsis Efforts

• HIIN efforts to reduce harm across the board
• Affinity group structure
• Efforts of sepsis affinity group
• Joint action with readmission affinity group
Overview of the Project

• Create a unified approach with a standardized patient interview tool that has a sharpened focus on sepsis in order for HIINs and their network hospitals to better understand reasons for sepsis related readmissions.

• Members of this working group committed to select a small number of hospitals (2-3) to interview a sample number of patients to identify root causes for sepsis related readmissions.

• Responses were compiled and shared with the larger Affinity Group(s) and PfP Community at large.
Review of Existing Readmission Interview Tools

• ASPIRE Guide
  • Not the medical model
  • More patient/family centric
  • Used by clinicians and non-clinicians
  • Provide usable findings to further sepsis/readmission improvement efforts

• Home grown versions

Elements of the tool

• **Purpose**
  • Designed to elicit the “story behind the story”: going well beyond chief complaint, discharge diagnosis, or other clinical parameters to understand the communication, coordination, or other logistical barriers experienced in the days after a patient’s discharge that resulted in a readmission.

• **Instructions**
  • Identify patients in the hospital who were discharged with sepsis that have been readmitted for any cause within 30 days.
  • Ask the patients/caregivers if they are willing to have a 5- to 10-minute discussion about their recent hospitalizations.
  • Capture patient/caregiver responses at the bedside.
  • Review the interview findings using a root cause analysis method to determine the factors that led to the readmission.
  • Document your root cause analysis findings.
  • Use findings to further improve sepsis care practices.

• **Suggested staff interviewers**
  • Quality improvement, nursing, case management staff.
  • Some hospitals have found Patient and Family Advocates and/or Volunteers are well suited to conduct readmission interviews. It is recommended that a Social Worker or Case Manager review the first 10 interviews with the Volunteer and provide coaching as required.

• **Time requirements**
  • 5-10 minutes to conduct each patient interview;
  • 3-5 minutes to analyze and summarize each patient/caregiver encounter
  • Some teams may be concerned that patient interviews will take too much time. You can address time constraints by using a simple framing script at the beginning of the interview.
Framing the Interview

• Suggested script to seek participation:
  • We are working to improve care after hospitalization for our patients that have been recently hospitalized for sepsis.
  • We noticed that you were here recently and now you’re back. Would you mind telling me about what happened between the time you left the hospital and the time you returned?
  • This will help us understand what we might be able to do better for you and what we might be able to do better for our patients in general. It shouldn’t take more than 5-10 minutes.
  • Would that be okay with you?
Interview questions (should take 5-10 minutes)

• Why were you hospitalized earlier this month? (Prompt for patient/caregiver understanding of the reason for hospitalization)

• When you left the hospital:
  • How did you feel?
  • Where did you go?
  • Did you have any questions or concerns? If so, what were they?
  • Were you told by anyone about what sepsis is?
  • Did anyone explain to you that after discharge, you might not feel well for a while, like having difficulty sleeping, fatigue, weakness, loss of appetite, depression or difficulty concentrating?
  • Were you able to get your medications?
  • Did you have an appointment with your primary care provider?
  • Did you need help taking care of yourself?
  • If you needed help, did you have help? If so, who?
  • Were you made aware of resources available for people who have had sepsis?

• Tell me about the time between the day you left the hospital and the day you returned:
  • When did you start not feeling well?
  • Did you call anyone (doctor, nurse, other)?
  • Did you try to see, or did you see a doctor or nurse or another provider before you came?
  • Did you try to manage symptoms yourself?
  • Prompt patient/caregiver to describe any self-management techniques they used.

• In our efforts to provide the best possible care to you and others like you, can you think of anything that we—or anyone—could have done to help you after you left the hospital the first time so that you might not have needed to return so soon?
Analysis and Summary Guide

- Analyze responses and break down readmission factors by categories:
  - Clinical
  - Social
  - Logistical
  - Behavioral
- Identify key findings by using the 5 “whys”
- Goal: Summarize the root cause of the readmission

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Behavioral</th>
<th>Social</th>
<th>Logistical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing circumstances after discharge in a way that led to the readmission</td>
<td>A sense that readmissions are undesirable and frustrating</td>
<td>Challenges in accessing services: appointments, transportation, medications, equipment</td>
<td>Lack of coordination of post-discharge transitional care or follow-up</td>
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<tr>
<td>A report to the primary care provider of post-hospital symptoms or questions with instructions to return to the ED.</td>
<td>A sense that readmissions are O.K., expected, or otherwise as “following doctor’s orders”.</td>
<td>Lack of care giver and/or community support</td>
<td>A lack of specific instructions on what to do in the days following discharge</td>
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<tr>
<td>Chronic condition related to complication</td>
<td>A sense of leaving the hospital unprepared, or inadequately informed</td>
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## Example of Findings

<table>
<thead>
<tr>
<th>Example No.</th>
<th>Patient Description</th>
<th>Readmission Interview Findings</th>
<th>Key Finding</th>
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</table>
| 1. 24-year-old, dual-eligible female with HIV/AIDS | Hospitalized 8 times and visited the ER twice in the last year. First hospitalized with pneumonia. | 1. Clinical – Patient has chronic asthma with frequent exacerbations.  
2. Behavioral – Patient admits to frequent alcohol use and says that often forgets to take her medications after she is drinking.  
3. Social – Patient is homeless and stays most nights in a shelter.  
4. Logistical - When asked how the hospital can help her and others prepare she said, “It would have been helpful if the hospital had made an appointment for me”. | **Logistical** - Needed assistance navigating the health system. |
| 2. 46-year-old Spanish-speaking-only female | Medicaid patient with breast cancer. Hospitalized 6 times and visited the ER 3 times in the past year. | 1. Clinical – Patient has been experiencing severe fatigue, nausea and vomited related to chemotherapy.  
2. Behavioral – Patient seems cooperative and willing to be engaged in her own healthcare decisions.  
3. Social – Patient is divorced and lives with her three children.  
4. Logistical - Patient received instruction in English, and her 12-year old daughter was asked to translate. Patient had poor understanding of prescription instructions. | **Logistical** - No use of interpreter services; lack of Teach-Back to confirm understanding and clarify. |
Feedback from Pilot: Key Interview Findings

• Medication management patient education insufficient
• Chronic disease management education insufficient
• Lack of care support at home (family, home health)
• Palliative Care should have been involved (either not offered or family/caregiver refused)
• Insufficient staff education of signs/symptoms of Sepsis at STR/SNF/ALF
• Social factors such as homelessness, low literacy, substance abuse
• Discharge Education/Communication Insufficient (Sepsis education.)
• Discharge instructions too complicated
• 58% (25/43) of the patients reviewed were readmits from SNF/ALF/STR
• Of the actual questionnaires received 96% were not told they have Sepsis
Feedback from Pilot Interviewers

- Interviewers n=20
  - 65% Nurse/MD,
  - 35% Case Manager/Other
- # of Interviews n= 28
  - 60% Med/Surg
  - 15% Telemetry
  - 15% PCU
  - 7% ICU
  - 3% Other (Med. Oncology)

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<tr>
<th>Feedback</th>
<th>% SA/A</th>
<th>% D/SD</th>
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<tbody>
<tr>
<td>I found the tool helpful in understanding the patient/caregiver’s perspective on why they were readmitted.</td>
<td>80%</td>
<td>0%</td>
</tr>
<tr>
<td>I found the tool helpful in collecting information that was useful in the root cause analysis process to understand the cause of the sepsis readmission.</td>
<td>70%</td>
<td>10%</td>
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<td>I found the tool easy to understand and use.</td>
<td>65%</td>
<td>5%</td>
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<td>I was able to complete the interview in 5- 10 minutes</td>
<td>55%</td>
<td>40%</td>
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<td>Overall, I would recommend this tool to be used for all patients readmitted following treatment of sepsis.</td>
<td>70%</td>
<td>20%</td>
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## Pros and Cons of Tool

### Positives
- helped to organize many thoughtful questions about the patient’s status
- good conversation starter
- the interview questions were brief
- helped create awareness with patient and family
- quick and easy to complete
- open-ended questions allowed the patient to give their story

### Negatives
- it took a long time to get through the questions with the patient and family in order to gain meaningful feedback
- too many questions
- the question that asks about resources for patients with sepsis. we are not even aware of these resources
- length of time should be adjusted. Took 30 min. or more
Improvements needed

• Better identify the population to be interviewed
  • Several patients that were interviewed, did not have sepsis on their index admission (i.e. hip fracture)
  • Make sense that they would not have heard the term “sepsis”

• Keep the focus on the issues that led up to them being readmitted

• Dig into the “why”
  • For example “medication noncompliance” needs be further investigated
  • Why, why...
Discussion for Group

• Would a tool like this be useful to your improvement efforts?
• Who is currently conducting patient readmission interviews?