HOW DOES PATIENT SATISFACTION IMPACT THE LIKELIHOOD OF READMISSION?

A look at how hospitals can leverage interactive technology and processes to improve the patient experience and reduce preventable readmissions.
Almost one-fifth of Medicare beneficiaries discharged from hospitals are readmitted within 30 days. These unplanned readmissions are estimated to cost the Medicare program $26 billion annually, of which $17 billion represents potentially preventable readmissions.

Preventable readmissions are of a critical concern for hospitals not only from a quality-of-care perspective, but there are also financial implications. The Centers for Medicare & Medicaid Services (CMS) can impose substantial penalties to those hospitals that exceed the maximum 30-day readmission rates set by CMS. These penalties can reduce a hospital’s Medicare reimbursement by up to three percent for all inpatient stays and will include those patients readmitted for an entire fiscal year. Medicare estimates that fines for excessive readmissions during the 2015 fiscal year will total about $428 million.

While hospitals have employed numerous procedures to reduce preventable readmissions, there may be an alternative approach. One study shows that there is direct correlation between patient satisfaction levels and 30-day hospital readmission rates. Specifically, the study found that hospitals earning high patient satisfaction ratings experience significantly lower 30-day readmission rates for core measures.

This paper examines the findings from Boulding, et al. and looks at ways hospitals can leverage interactive technology and processes to improve the patient experience and help reduce preventable readmissions. This paper also explores how these approaches can improve scores on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient satisfaction surveys.
Higher overall patient satisfaction, and satisfaction with discharge planning, are associated with lower 30-day hospital readmission rates.

To better understand the causal relationship between patient satisfaction and reduced-30 day hospital readmission rates, Boulding, et al. conducted an observational analysis using data from the hospital compare database. Conducted by physicians and researchers affiliated with Duke University’s Fuqua School of Business, the Duke Clinical Research Institute, and the School of Medicine, the study evaluated clinical performance, patient satisfaction and 30-day risk-standardized readmission rates for acute myocardial infarction, heart failure and pneumonia for patients 18 years or older.

The cross-sectional analysis focused on determining if there is a correlation between 30-day readmission rates and patient-reported satisfaction measures. The analysis took into account patient satisfaction with the overall hospital stay, the hospital staff, and the discharge experience. Data sample sizes included:

- 1,798 hospitals that had 30-day readmissions for acute myocardial infarction
- 2,561 hospitals that reported 30-day readmissions for heart failure
- 2,562 hospitals that reported 30-day readmissions for pneumonia

According to the study, “Higher overall patient satisfaction, and satisfaction with discharge planning, are associated with lower 30-day risk-standardized hospital readmission rates after adjusting for clinical quality. This finding suggests that patient-centered information can have an important role in the evaluation and management of hospital performance.”

3
An Overview of Medicare’s 30-Day Readmission Penalties

HOSPITAL PERFORMANCE ON MEASURES CANIMPACT REIMBURSEMENT

Reimbursement penalties of up to 3% apply for all Medicare inpatient stays.

Medicare’s Hospital Readmission Reduction Program became effective for discharges beginning on October 1, 2012. Since that date, Medicare has been collecting patient discharge and readmission data annually to calculate hospitals’ excess readmission ratio by measuring hospital performance compared to the national average, adjusting for specific clinically relevant variables.

The ratio is based on readmission data for five clinical conditions:

1. Congestive Heart Failure
2. Acute Myocardial Infarction
3. Pneumonia
4. Chronic Obstructive Pulmonary Disorder (COPD), such as emphysema and bronchitis*
5. Elective hip and knee replacements*

The ratio is used to calculate the hospital’s adjustment factor to assess penalties, which range from one hundredth of a percent to three percent. The penalty is applied to all Medicare patient reimbursements at the hospital for the fiscal year, not just for patients who were readmitted within 30 days of discharge. Penalties are applied on a prospective basis, meaning that excess readmissions from the previous fiscal year are used to calculate the penalty percentage for all patient stays in the next fiscal year.

For Medicare fiscal year 2015, 2,610 hospitals were penalized under the program, which represents three-fourths of the hospitals in the program. (There are currently 1,400 hospitals which are excluded from the program because of their location, specialty care status, or because they are a critical access hospital.) Among the hospitals penalized, 39 received the three percent reimbursement reduction – the largest penalty allowed. Medicare estimates that penalties during the 2015 fiscal year will total about $428 million.[2]
Leveraging Technology and Processes to Drive Higher Patient Satisfaction

IMPROVING THE QUALITY OF PATIENT INTERACTIONS

Interactive content can improve patient satisfaction and impact HCAHPS domains

Improving patient satisfaction is highly dependent upon the personal interactions that take place within the hospital. Among the findings in the study, it was noted that: “patient satisfaction is less about trying to make patients ‘happy’ (e.g., improving the food or the décor of the room) and is more about increasing the quality of their interactions with hospital personnel, especially nurses and physicians.”

Evidence from the study found that the correlation between HCAHPS reported domains and overall patient satisfaction was strongest among nurse-patient communications. This finding suggests that the patient experience is more influenced by patient-clinician interactions than by environmental factors.

Improving these interactions requires a combination of approaches that include care delivery, standardized messaging and the use of technology to provide condition-specific education directly to patients. These approaches must be reinforced by the personal interactions that physicians and nurses have with patients to educate them and address their concerns

Consistently engaging patients to learn about their conditions and prevent complications following discharge is a challenge. Introducing technology and automating processes can help, especially when it facilitates interactions that improve patient satisfaction, in addition to measuring and monitoring satisfaction.

An innovative approach that hospitals can take is to use the televisions in patient rooms to improve patient engagement and education. With this approach, hospitals can use the TVs to deliver interactive educational materials that help patients better manage their hospital experience. The interactive technology also creates the foundation for next-generation patient-engagement strategies delivered via tablet and smartphone devices.

By leveraging existing information with other health system-owned solutions, in-room TVs can provide a customized experience for patients based upon their conditions, treatments and other preferences. For example, patients can navigate on-screen menus to view education materials ordered by clinicians, review information about their hospital stay, including care team members and their daily schedule, register for the hospital's patient portal, and interact with their environment.

The interactive content delivered via in-room TVs and tablets gives patients a greater sense of control over their hospital stay, which can help improve satisfaction. Providing patients with a greater sense of control over their hospital stay can positively impact HCAHPS scores.
Key Considerations

DELIVERING PATIENT-CENTERED INFORMATION AND CAPTURING PATIENT PERSPECTIVES

A successful interactive patient engagement and education strategy using in-room TVs and tablets needs to address the following areas:

COMMUNICATION DELIVERY METHODS
– Recognizing a patient’s unique preferences for learning and retaining information is the cornerstone of a successful patient engagement strategy. Traditional communication methods include direct clinician interaction that is reinforced using printed materials. However, the patient’s ability to retain information is limited by several factors, including the patient’s level of healthcare literacy. Interactive solutions need to support traditional communication methods with consistent messages while providing additional content and delivery options to improve healthcare literacy. This expanded communications approach helps accommodate patient learning preferences and styles.

CLEAR AND FREQUENT COMMUNICATIONS
– A benefit of interactive technology is the ability to automate information delivery. However, there is a risk that patients may experience information overload if they are constantly being sent information that doesn’t distinguish between its level of importance. A balance needs to be achieved. An interactive solution needs to allow organizations to prioritize information by its importance and how it is delivered. For example, organizations can require that patients electronically acknowledge when they view important information, while less vital information can be stored for the patient to access on an as-needed basis. When the right balance is achieved, patients have a greater sense of control over their hospital stay without feeling overwhelmed or distracted by too much information.

INFORMED AND EDUCATED PATIENTS –
Evidence suggests that patients who are more informed on their condition are more likely to be engaged in their care. The ability to deliver condition-specific content is a critical component of using video education to enhance a hospital’s patient engagement strategy. Having the interactive solution interface with the hospital’s electronic medical record (EMR) allows for condition-specific content to be delivered to the patient based on orders placed within the EMR. A strategy that allows for the automatic delivery of education improves nurse workflow processes and drives improved communication with the patient.

PROMOTION OF PATIENT RESPONSIBILITY
– A key benefit of an interactive system is its ability to capture data from patients that can be used in assessments. These include assessments to measure patient comprehension of the education materials presented to them, and Patient Activation Measure (PAM) tools to determine how active patients will be in their self-care. Analyzing this data enables organizations to conduct risk assessments so they can tailor the patient experience based upon their level of activation.

REAL-TIME FEEDBACK AND RESPONSE –
Assessment data collected by the interactive solution is also valuable to drive service recovery programs where issues impacting patient satisfaction are identified and corrected during the inpatient stay. Research shows that the most satisfied customers are the ones who experience no serious problems with the service they receive. The second most satisfied are the ones who experience problems, but have them resolved to their satisfaction. Successful service recovery programs can convert unsatisfied customers into loyal customers.5
How SONIFI Health Can Help

IMPROVING PATIENT OUTCOMES BY ENGAGING PATIENTS AND THEIR FAMILIES IN THE CARE PROCESS.

SONIFI Health tailors education and other communications based on the results of patient assessments and by accessing data retrieved from other solutions within the hospital, including the EHR.

The patient-centered information that SONIFI Health’s interactive solution delivers through TVs and tablets inspires active patient participation along the care continuum for positive behavior change and improved outcomes. The Boulding, et. al. study suggests that taking a patient-centered approach can be an important component in the evaluation and management of hospital performance. According to the study, “higher overall patient satisfaction, and satisfaction with discharge planning, are associated with lower 30-day risk-standardized hospital readmission rates after adjusting for clinical quality.”

Additionally, SONIFI Health’s patient-centered approach takes into account how information is delivered, making it easily accessible and tailored to patients’ needs. This contributes to the delivery of high-quality care, which the Institute of Medicine defines as “patient centered and responsive to patients’ preferences, needs, and values.”

Furthermore, the ability of SONIFI Health’s interactive solution to collect patient perspectives during the inpatient stay can initiate the service recovery process and improve patient satisfaction levels prior to discharge. Findings from the Boulding, et. al. study “support the use of patient-reported information to complement the more used and more objective clinical measures when assessing the quality of patient care for a given hospital.” Additionally, the study concludes that “although the key drivers of hospital readmission are complex, our findings suggest that patients’ perspectives on inpatient care and discharge planning provide important insights into hospital performance with respect to quality.”

The benefits of SONIFI Health’s interactive solution have helped hospitals improve their HCAHPS scores, as illustrated in the table below:

<table>
<thead>
<tr>
<th>HCAHPS QUESTION CATEGORY (QC)</th>
<th>IMPROVEMENT*</th>
<th>HOW SONIFI HEALTH HELPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC1: Patients who reported that their nurses “always” communicated well</td>
<td>2.36%</td>
<td>SONIFI Health presents clear, consistent messaging to patients. Nurses can customize information presented on the system.</td>
</tr>
<tr>
<td>QC2: Patients who reported that their doctors “always” communicated well</td>
<td>2.23%</td>
<td>SONIFI Health presents clear, consistent messaging to patients. Nurses can customize information presented on the system.</td>
</tr>
</tbody>
</table>

*MEAN SCORES, SAMPLE SIZE IS 9
<table>
<thead>
<tr>
<th>HCAHPS QUESTION CATEGORY (QC)</th>
<th>SCORE*</th>
<th>HOW SONIFI HEALTH HELPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC5: Patients who reported that their staff “always” explained about medicines before giving it to them.</td>
<td>7.1%</td>
<td>SONIFI Health includes a Medication Library to provide information on all medications. Nurses can provide information to patients each time a new medication is given.</td>
</tr>
<tr>
<td>QC7: Patients who reported that the areas around their room was “always” quiet at night.</td>
<td>9.6%</td>
<td>SONIFI Health helps to set expectations for the patient through use of patient prompts and education. A White Noise channel is available to help reduce ambient noise and provide messaging to patients that rest is a priority and to notify staff if the ambient noise is too much.</td>
</tr>
<tr>
<td>QC9: Patients who gave their hospital a rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest).</td>
<td>5.36%</td>
<td>SONIFI Health helps place the patient at the center of the care team. The system incorporates familiar technologies (TVs and tablets) and adapts these tools to the patient environment. SONIFI Health helps hospitals provide tools and an environment that places the patient in the driver’s seat. Patients can order meals, adjust temperature, and make requests from the comfort and safety of their bed.</td>
</tr>
<tr>
<td>QC10: Patients who reported “yes,” they would definitely recommend the hospital.</td>
<td>4.47%</td>
<td>SONIFI Health delivers interactive information and entertainment through the TV or tablet that helps to reduce patient anxiety and increase patient comfort. As a result, patients become more receptive to education and more likely to engage in meaningful conversations with their care teams.</td>
</tr>
</tbody>
</table>

*MEAN SCORES, SAMPLE SIZE IS 9

3. Boulding, PhD, W., Glickman, MD, PhD, S., Manary, MSE, M., Schulman, MD, K., & Staelin, PhD, R. (2011). Relationship Between Patient Satisfaction with Inpatient Care and Hospital Readmission within 30 Days. American Journal of Managed Care, 17(1), 41-48.