



## Five Steps To Successfully Reduce Re-hospitalization Rates

### Executive Summary

- Reduction of unnecessary hospitalizations as a result of acute changes in condition is an achievable goal
- Five Steps can serve as the foundation for leadership efforts
  - Identify Residents With Highest Risk For Developing Acute Change of Condition
  - Educate Caregiving Staff Related to the Identification of Risk and Ability to Identify Acute Change of Condition
  - Identify Causes of Acute Change of Condition and Feasibility of Managing the Resident in the Nursing Facility
  - Manage The Acute Change of Condition
  - Integrate Unplanned Hospital Transfers Into Ongoing Quality Improvement Processes
- Use of INTERACT II Framework tools can help focus facility efforts

### Step 1: Identify Residents With Highest Risk For Developing Acute Change of Condition

In 2006 the Medicare Payment Advisory Commission (MedPAC) published a study that reported increased Rehospitalization rates and identified five conditions for which re-hospitalization is potentially avoidable in nursing homes. These conditions include congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance. Therefore, the question for nursing facilities is this: What can be done to affect positive change for at-risk residents? The ultimate cause for hospitalization always comes back to the resident's condition, however, and that is precisely where the nursing facility needs to focus.

First and foremost, reducing hospitalizations requires early identification of at-risk residents, followed by preventative measures and a heightened awareness protocol whereby all clinicians are trained in identifying the early signs and symptoms of a declining condition. Only when these steps are in place and working effectively can a timely intervention be made and a hospitalization averted.

The first step—identification—is critical. Resource utilization groups (RUG) have been used to identify at-risk nursing facility residents. In a recent evaluation of case-mix changes using RUG data and a system for stratifying residents in each RUG into low-risk and high-risk groups using a model based entirely on *non-payment related* items only two categories of residents have seen a rise in hospitalization rates. This stratification helps identify changes from year to year based on true changes in acuity as opposed to those that might be due only to differences in coding practices. Overall the proportion of residents discharged to hospital remained constant over three years studied (2004-2006), however, increases were noted for **SE3** and **SSC** overall and for high risk residents. By definition, high risk means probability of re-hospitalization  $\geq 0.5$ ; low risk means

probability of re-hospitalization  $\leq 0.5$ . By separating the RUG groups into these categories, researchers were able to confirm the notion that nursing facilities have in fact faced a steady increase in acuity and therefore a higher “risk” of hospitalization.

Few facilities are utilizing the predictive capabilities of the minimum data set (MDS) data, which can aid in correctly identifying residents at a higher risk of hospitalization. A scale developed by PointRight Inc. provides a tool that utilizes various MDS items, such as diagnoses and unstable conditions, in a statistically validated model that predicts the risk probability of a resident’s discharge to the hospital after admission or readmission to the nursing facility. MDS modeling has revealed a re-hospitalization prediction model that has proven effective in lowering rates in Medicare residents during 30 days. Additional “versions” of the model will assist in lowering rate of re-hospitalization in other types of residents.

## **Step 2: Educate Caregiving Staff Related to the Identification of Risk and Ability to Identify Acute Change of Condition**

The education process begins by identifying stages of recognition and assessment of a suspected acute condition change that can be applied to all symptom categories: physical, behavioral, cognitive and functional. Stage One involves initial observation and reporting of signs and symptoms by individuals in close contact with the resident and should be emphasized in programs that target the direct care staff (CNAs), housekeepers, family members, etc. Stage Two is directed towards LPNS and RNS and identifies additional clinical observation to help define the nature, severity, and possible causes of the problem. Finally, Stage Three targets advanced clinical analysis of the nature, severity, causes, and other aspects of the problem and should be a part of physician and physician training modules. These three stages can be converted to training modules that address the roles and responsibilities of the nursing assistant, staff nurse, charge nurse and attending/covering practitioner. These roles and responsibilities should be clearly defined, communicated and incorporated into job descriptions to ensure accountability.

Roles and Responsibilities in Monitoring Residents with Acute Change in Condition: Nursing Assistant:

- Recognize and report condition changes
- Make frequent observations of residents condition and symptoms
- Change of shift report: review resident status with nursing assistants from the next shift before leaving for the day
- Communicate findings to a nurse and request nursing follow-up
- Advise a charge nurse or unit manager if nursing follow-up has not occurred

Roles and Responsibilities in Monitoring Residents with Acute Change in Condition: Staff Nurse

- Recognize condition change early
- Assess the resident’s symptoms and physical function and document detailed descriptions of observations and symptoms
- Update the charge nurse or supervisor if resident’s condition deteriorates or resident fails to improve within expected time frame
- Report resident’s status to the practitioner as appropriate

Roles and Responsibilities in Monitoring Residents with Acute Change in Condition: Charge Nurse

- Ensure consistent, timely evaluation, documentation, and reporting of relevant information about the resident
- Ensure effective communication of necessary information to other members of the interdisciplinary team who are responsible for the resident’s care

Roles and Responsibilities in Monitoring Residents with Acute Change in Condition:  
Attending/Covering Practitioner

- If notified by telephone, listen and ask sufficient questions to arrive at a tentative diagnosis and begin workup and treatment
- Ensure all interventions are consistent with resident's advance directives
  - Communicate information to appropriate family member or responsible party to discuss change in advance directives if resident fails to improve as expected
- Visit resident as needed to manage the situation
- Remain in contact by telephone about the resident's progress until resident's condition stabilizes
  - Don't assume "no news is good news"
- Communicate with other practitioners involved in resident's care
- There is a set of tools available to all long term care organizations to assist in the training endeavor through The INTERACT II Program which is designed to improve the quality of nursing home care by providing tools and resources to staff that will help to Reduce Avoidable Acute Care Transfers. This pilot project is a part of a special study supported by CMS. The special study is being conducted by Georgia Medical Care Foundation (GMCf), the Medicare Quality Improvement Organization (QIO) for Georgia. The **INTERACT II Resource Binder** can be downloaded from <http://interact.geriu.org/>.

Key components of the **INTERACT Resource Binder** include:

- Overview for Champions: Getting Started on **Interact II**
- Early Warning Assessment Tool—uses "Stop and Watch" acronym to define what symptoms should be reported directly to charge nurse for further assessment.
- Changes in Condition Index Cards—defines what a change in condition is. These can be placed by the phone, on medication carts, and given to staff to keep in their pockets.
- Guidelines for vital signs and laboratory results—define parameters that should be reported immediately to the attending/covering practitioner and parameters that can wait until the next day to be reported
- Guidelines for signs and symptoms "A-Z" that define what to report immediately, the next day or by fax to the attending/covering practitioner
- Guidelines for how to report acute change of condition to the attending/covering practitioner using the **SBAR** process

**S**

- Situation
- What is the situation you are calling about
- When did it happen and how severe is it?

**B**

- Background
- Admitting diagnosis
- Current medications, allergies, IV fluids, labs
- Most recent vital signs
- Code status, advanced directives

**A**

- Assessment
- RN's assessment of the situation

**R**

- Recommendation
- What does the RN want?
- Resident needs to be seen
- Order change

### **Step 3: Identify Causes of Acute Change of Condition and Feasibility of Managing the Resident in the Nursing Facility**

- Common Reasons for Admission of Long-Term Care Residents to Acute-Care Settings include:

#### Cardiopulmonary

- Congestive heart failure and other cardiac conditions
- Respiratory conditions

#### Functional

- Falling

#### Infectious

- Fever
- Pneumonia
- Sepsis
- Urinary Tract Infection

#### Metabolic

- Dehydration
- Fluid/electrolyte imbalance

#### Neuropsychiatric

- Altered mental status
- Significant change in behavior
- Transient ischemic attack, stroke

#### Traumatic

- Fracture

The feasibility of managing residents with acute change of condition in the nursing facility can be affected by factors that often are related primarily to the resident's current condition or status and include:

- Availability of in-house diagnostic support services
- Level of care to which resident is assigned on admission to long-term care facility
- Resident's level of dependency in performing activities of daily living
- Resident's underlying medical complexity or co-morbidity
- Premature discharge from acute-care facility to long-term care facility
- Presence or absence of advance care planning instructions about management of acute medical illness
- Severity of illness or degree of medical instability

Reasons less directly related to the resident's current condition or status can also be factors that affect whether or not the resident can be managed in the nursing facility and include

- Inability of staff at long-term care facility to obtain medical supervision of acute change of condition

- Inadequate practitioner-nurse communication
- Inadequate reimbursement for provision of acute care in the long-term care facility
- Pressure from family, nursing staff, or physician to hospitalize the resident
- Time of day or week when the acute change of condition occurs

Capabilities that support testing and treatment of acute change of condition in a long-term care facility include:

- Appropriate reporting mechanisms to ensure that changes in condition are reported to appropriate personnel in a timely fashion
- Ability to initiate treatment within several hours—
  - Antibiotics
  - Respiratory therapy
  - Pain medication
- Ability to initiate IV therapy for re-hydration within 2 hours of initial order
- Sufficient direct RN supervision to oversee effective resident management and monitoring over a 24-hour period
- Sufficient RN staffing
  - Daily RN assessment of any resident until acute condition change stabilizes
  - Recognition and reporting possible complications of the illness or treatment within a day of identification
- Sufficient practitioner availability to respond to calls from nursing and discuss resident condition and diagnostic results

#### **Step 4: Manage the Acute Change of Condition**

Facility procedures for recognizing acute changes in condition lay the foundation for managing these changes within the nursing facility. The cornerstone of these procedures centers on ensuring that communication of all resident-related information follows a defined process. All interdisciplinary team members should be expected to report findings that might represent an acute change of condition and follow defined procedures for reporting concerns, observations, or information to the appropriate individuals. Roles and responsibilities for identifying, analyzing, managing, and communicating information about acute changes of condition need to be clearly assigned and should include defining responsibility for documentation of symptoms, observations and discussions with the physician. In-depth discussion of acute changes of condition should occur at specific times such as change of shift report and 24 hour report.

The resident plan of care should identify approaches for management of acute changes of condition and focus on matching diseases and conditions with consequences and risks. **Interact II** care paths can be used to determine the expected course and known complications in specific conditions. Advance care planning tools and communication guides can offer guidance to identify candidates for palliative care and hospice. Risk factors that could result in negative outcomes should also be identified in the plan of care and interventions that might reduce the incidence and severity of complications should be determined.

Finally, use of a transfer form that identifies a facility's capabilities to care for a resident in the nursing home can be instrumental when a transfer to the emergency room is deemed appropriate for evaluation of an acute change in condition. Clear communication of the nursing home's capabilities to the emergency room staff can make the difference between a resident's return to the facility or an admission to the hospital.

## **Step 5: Integrate Unplanned Hospital Transfers into Ongoing Quality Improvement Processes**

The last step details the importance of organizational and leadership commitment to reduce hospitalization rates. Development of an organizational goal for quality improvement efforts that focuses on acute care transfers and establishment of an environment that fosters efforts to reduce avoidable acute care transfers is key to success.

Key implementation strategies for integration of unplanned hospital transfers into the facility's ongoing quality improvement processes include:

- Assessment by a designated supervisory nurse of the need for each acute care transfer before the resident is transferred (with exception of emergent life-threatening situations)
- Structured review by designated staff member of each unplanned acute care transfer
  - Monthly
  - Medical record review
    - Avoidable
    - Unavoidable
- Identification of opportunities for improvement
  - Set goals for decrease in avoidable hospitalizations
  - Identify patterns in avoidable hospitalizations identified by record review to select a process to improve upon
  - Utilize PDCA process

### **For More Information:**

- Littlehale, S., J., Capitosti, S., *Avoiding Hospitalizations*, Provider, February 2009
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- Sloss E et al. Selecting target conditions for quality of care improvement in vulnerable older adults. *J AM Geriatr Soc* 2000; 48:363-369

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