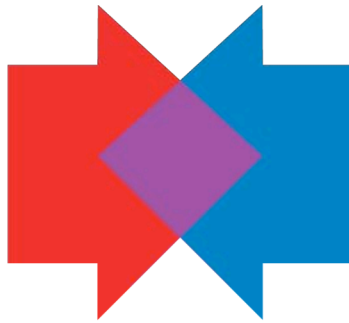


Nursing Home Special Study

*Reducing Avoidable Hospitalizations of
Nursing Home Residents*



INTERACT

Interventions to Reduce Acute Care Transfers

**Framework for Pilot Testing Interventions
to Reduce Acute Care Transfers of
Nursing Home Residents**

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- The **Institute for Healthcare Improvement (IHI)**, which created the format for the collaborative framework utilized in this project
- An expert panel of geriatric and long-term care clinicians, composed of physicians, nurse practitioners and scholars who have been instrumental in the implementation of this project
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Project Overview

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 main goal of the special study is to develop and implement strategies and tools that will reduce potentially avoidable acute care transfers (ACT) from nursing homes. The ***INTERACT TOOL KIT (INTERventions to reduce Acute Care Transfers)*** will be implemented using a Collaborative Framework similar to the model developed by IHI. The tool kit will be refined as the result of this pilot project, and disseminated nationally to assist nursing homes in the U.S. to reduce potentially avoidable ACT.

Rationale for the Project

Transfer to an acute care facility is essential for the health and well-being of many acutely ill nursing home residents. Many ACT are, however, potentially avoidable. We know from previous research and the first phase of this special study that many ACT could be avoided while safely treating the resident in the nursing home. Reducing potentially avoidable ACT will:

1. Decrease emotional trauma to the resident and the family.
2. Decrease complications of hospitalization, such as de-conditioning, pressure ulcers, indwelling bladder catheter use, injurious falls, and polypharmacy.
3. Reduce overall health care costs.

We understand that reducing potentially avoidable ACT may reduce overall health care costs, but individual nursing homes do not currently directly receive the benefits of such cost reductions. However, we also know that ACT is likely to be a major focus of Medicare's pay-for-performance and value-based purchasing initiatives over the next several years. These initiatives present an opportunity to recoup some of the cost reductions associated with reducing potentially avoidable ACT, and to use this additional support to continue to improve the quality of care in our nation's nursing homes.

Collaborative Framework

The collaborative framework was developed by IHI. For this project, the framework will consist of the Charter, Improvement Strategies and Tools, and measurement Strategy. The framework provides direction to the teams and reinforces the reason they are doing this work, what changes they can make, and how they can use measurement to determine if changes result in improvements

Charter

The goals of this collaborative are to:

1. Increase the use of strategies and tools that may help reduce ACT of nursing home residents by utilizing the **INTERACT TOOL KIT**, and
2. Decrease the number of potentially avoidable ACT of nursing home residents that result in emergency room visits and/or hospitalizations.

The **INTERACT TOOL KIT** has been designed based on an extensive review of research on ACT, review of medical records for 200 ACT from Georgia nursing homes, 80 nursing home/hospital staff interviews, and input from an expert panel composed of experienced long-term care clinicians and administrators from Georgia and across the nation. The tool kit focuses on three specific areas that are critical in ACT:

1. **Communication** about residents with acute changes in condition among staff at the nursing home as well as between the nursing home and hospital;
2. **Care paths** for common acute conditions in nursing home residents that guide treatment in the nursing home when feasible; and
3. **Advance care planning** that will assist in reducing potentially avoidable acute care transfers of residents who are terminally ill and/or on a palliative care plan

Problem Statement

Several previous studies have described factors associated with the hospitalization of nursing home residents, and documented that a substantial proportion of these acute hospitalizations are potentially avoidable. Such hospitalizations cause unnecessary discomfort for residents and anxiety among their loved ones, expose residents to complications of hospitalization (such as falls, polypharmacy and adverse drug reactions, de-conditioning, and pressure ulcers), and result in excess health care costs. Many factors can contribute to the decision to transfer, including unique characteristics of the resident and the health care environment in which they reside (Table 1).

Table 1 Key factors influencing ACT of nursing home residents

Clinical Factors	Person Centered Factors	Health System Factors
Diagnosis, underlying diseases, and clinical stability, e.g., <ul style="list-style-type: none"> • Vital signs • Hydration/nutrition • Mental status • Functional status 	Resident/family preferences Advance directives Consideration of a palliative care plan and/or enrollment in hospice	Availability of resources in the nursing home <ul style="list-style-type: none"> • Skilled nurses • Medications • Capability for intravenous fluid administration • Diagnostic testing • Physician and physician extender availability
Risk of complications Care needs, e.g., <ul style="list-style-type: none"> • Primary physician visits • Specialty consultations • Diagnostic tests • Therapeutic procedures • Skilled nursing time • Medication administration • Monitoring frequency 	Resident/family understanding and assessment of risk/benefits of hospitalization and perception of nursing home capabilities	Acute hospital <ul style="list-style-type: none"> • Familiarity of staff with nursing home patients and nursing home capabilities • Bed availability • Ability to provide good care for frail elderly nursing home residents Availability of post-acute Medicare skilled beds State Medicaid bed hold policies for long-stay nursing home residents

Several types of interventions have shown promise in reducing ACT of nursing home residents. The INTERACT tool kit has been designed to further develop and test the feasibility of implementing such interventions, and their effectiveness in reducing potentially avoidable ACT.

Mission

The mission of this collaborative is to utilize strategies and tools contained in the INTERACT tool kit, to examine their effectiveness in reducing potentially avoidable ACT, and to provide input on the refinement and enhancement of the INTERACT tool kit to make it more feasible and effective in reducing potentially avoidable ACT of nursing home residents.

Goals

The main goals of the collaborative are to:

1. Improve the process and effectiveness of communication among nursing home staff, between nursing home staff and primary care clinicians, and between the nursing home and acute hospital by using INTERACT communication tools.
2. Improve the management in the nursing home of carefully selected residents with conditions that commonly result in ACT, including altered mental status, fever, dehydration, urinary tract infection, and pneumonia by using INTERACT care paths.
3. Improve the process of advance care planning in the nursing home and increase the number of residents who have advance directives, palliative/comfort care plans, and who are enrolled in hospice when appropriate by using INTERACT tools.
4. Reduce the number of ACT rated as inappropriate by an expert panel using a structured medical record review process.
5. Provide input on the refinement and enhancement of the INTERACT toolkit to make it more feasible and effective in reducing potentially avoidable ACT of nursing home residents.

Methods

The pilot project will be conducted over a 6-month period in three Georgia nursing homes. The project will be accomplished in several phases, including pre-work, learning sessions, INTERACT implementation, and meetings of all participants to share learning from the collaborative.

The GMCF project team will coordinate the project, provide the INTERACT tool kit and educational sessions for participating nursing home staff and primary care clinicians, support participating nursing homes throughout the intervention period with on-site visits, and convene the shared learning meetings.

Each participating nursing home will appoint a team responsible for implementing the INTERACT tool kit, and a champion or leader of the team who will be responsible for overseeing INTERACT implementation and serve as the key contact with the GMCF project team.

Data on the implementation and its effects on key process and outcome measures will be collected and reviewed on an ongoing basis throughout the project. In the final project phase, a refined INTERACT tool kit will be produced, and the results of the pilot project will be summarized for dissemination to participating nursing homes, as well as to other facilities in the state and nationwide.

Expectations

The success of this collaborative pilot project will depend on each participant clearly understanding and meeting its expectations.

During the pilot project, ***the QIO is expected to:***

1. Work with participating facilities to gather the preliminary data needed for the pre-work phase of the project.
2. Develop the INTERACT tool kit, and provide it and all necessary materials and forms to the participating nursing homes.
3. Coordinate and lead two learning sessions, and follow-up conference calls to initiate implementation of the INTERACT tool kit.
4. Conduct on-site visits twice a month to review progress and collect process data.
5. Convene two meetings of the key participants from each nursing home for shared learning – one in the middle of the project period, and one at the end, which will serve as an “outcomes congress.”
6. Collect and analyze data on the effectiveness of the intervention.
7. Refine the INTERACT tool kit based on the experience in the pilot and input from the participants.
8. Summarize the results of the pilot project and disseminate them to the participating nursing homes, as well as to other facilities in the state and nationwide.
9. Ensure confidentiality of resident information.

During the pilot project, ***participating nursing homes are expected to:***

1. Commit to implementing the INTERACT intervention over the 6-month pilot project period.
2. Assist the GMCF project team in gathering data during the pre-work period, including data on ACT rates, advance directive rates, facility demographic characteristics, and current protocols and forms related to ACT.
3. Appoint an INTERACT implementation team and champion or leader of the team who will be responsible for overseeing implementation and serving as the key point of contact for the GMCF project team.

4. Enable the team and its leader to have the time to participate in two collaborative learning sessions, follow-up conference calls, a mid-project collaborative meeting, and an end of project outcomes congress.
5. Facilitate access to facility staff, the medical director, primary care clinicians, and family members for education on the INTERACT intervention.
6. Support adherence to key INTERACT implementation strategies, including:
 - a. Structured review by the team leader or other designated nursing home staff member, using an INTERACT review tool, of each unplanned ACT that occurs during the 6-month project period
 - b. Assessment by a designated supervisory nurse of the need for each unplanned ACT before the resident is transferred (with the exception of emergent life-threatening situations)
7. Fully utilize all INTERACT tools and forms, keeping copies of each for collection by GMCF project staff.

Provide, on a monthly basis, data on the number of ACT, and a copy of selected sections of the medical record of each resident who had an unplanned ACT.

INTERACT Interventions

Improvement Strategies	Key Interventions for Reducing Avoidable Acute Care Transfers
<p>Organizational and Leadership Commitment</p> <p>Provide strong and consistent organizational commitment to reducing avoidable acute care transfers (ACT).</p>	<ul style="list-style-type: none"> • Develop an organizational goal for quality improvement efforts that focuses on ACT and maintain stable administration and clinical leadership that establishes an environment that fosters efforts to reduce avoidable ACT. • Appoint an INTERACT implementation team and champion or leader of the team who will be responsible for overseeing implementation and serving as the key point of contact for the GMCF project team, and enable the team and its leader to have the time to participate in two collaborative learning sessions, follow-up conference calls, a mid-project collaborative meeting, and an end of project outcomes congress. • Facilitate access to facility staff, the medical director, primary care clinicians, and family members for education on the INTERACT intervention. • Adhere to key INTERACT implementation strategies, including; <ul style="list-style-type: none"> ○ Structured review by the team leader or other designated nursing home staff member, using an INTERACT review tool, of each unplanned ACT that occurs during the 6-month project period ○ Assessment by a designated supervisory nurse of the need for each unplanned ACT before the resident is transferred (with the exception of emergent life-threatening situations) • Fully utilize all INTERACT tools and forms, keeping copies of each for collection by GMCF project staff. • Provide, on a monthly basis, data on the number of ACT, and a copy of selected sections of the medical record of each resident who had an unplanned ACT.

INTERACT Interventions (continued)

Improvement Strategies	Key Interventions for Reducing Avoidable Acute Care Transfers
<p>Communication Strategies and Tools</p> <p>Enhance communication practices relating to change in resident condition:</p> <ul style="list-style-type: none"> • Among nursing home staff • Between nursing home staff and primary care clinicians • Between nursing home staff and the acute care hospital 	<ul style="list-style-type: none"> • Introduce interdisciplinary Situation, Background, Assessment, Recommendation (SBAR) tool using case studies/scenarios on common reasons for ACT. • Establish communication protocols using SBAR related to reporting resident change in condition from nursing assistants to licensed nurses, and from licensed nurses to nursing supervisors. • Establish communication protocols for reporting change in condition from nursing home staff to primary care clinicians focusing on common reasons for ACT. <ul style="list-style-type: none"> ○ Utilize elements of AMDA guidelines for communicating change in condition. • Assess by a designated supervisory nurse the need for each unplanned ACT before the resident is transferred (with the exception of emergent life-threatening situations). • Evaluate and revise current hospital transfer forms including a checklist for all documents that should accompany residents upon transfer. • Facilitate interaction between the nursing home, emergency room and acute care hospital staffs through site visits to understand roles and abilities.
<p>Care Paths</p> <p>Implement selected basic care paths for conditions that are common causes of ACT.</p>	<ul style="list-style-type: none"> • Care paths for residents with common acute conditions that result in ACT, focused on checklists to determine which residents should be considered for management in the nursing home, including: <ul style="list-style-type: none"> ○ Acute change in mental status ○ Fever ○ Dehydration ○ Urinary Tract Infection ○ Pneumonia/Lower Respiratory Infection ○ Congestive Heart Failure • SBAR templates for reporting symptoms relating to above syndromes • Incorporate targeted AMDA guidelines for acute changes related to these conditions into tools for daily practice, e.g., focused SBAR communication templates, laminated cards by the phone, and quick reference pocket guides.
<p>Advance Care Planning</p> <p>Enhance advance care planning by focusing on resident and family education about advance directives, palliative / comfort care, and hospice benefits.</p>	<ul style="list-style-type: none"> • Resident, family, and staff education • Provision of advance care planning tools: “Five Wishes,” overall power of attorney for health care documents • Protocols for advance care planning discussions and documentation • Tools including simple language vignettes to describe the risks and benefits of CPR and tube feeding • Written guidance on discussions related to palliative / comfort care and the benefits of hospice care when appropriate

Measurement Strategy

Outcome Measures

Measure	Statistic	Definition	Data Collection	Appropriate Goals
Number of unplanned acute care transfers that result in acute hospitalization	<p>N: Number of unplanned transfers to the emergency room and direct admissions to the acute hospital</p> <p>D: Number of resident days</p>	<p>Any unplanned transfer to the emergency room or direct admission to the hospital</p> <p>Resident days is the product of the average daily census over the month X the number of days in the month</p> <p>Data will be broken down further by:</p> <ul style="list-style-type: none"> • Transfers from Medicare Part A vs. other • Emergency room visit only vs. emergency room visit plus hospitalization, vs. direct admission to the hospital 	Data will be collected by the team leader using the unplanned transfer review forms, and shared with the project manager monthly.	Reduction from baseline rate at the end of the 6-month project period
Percent of acute care transfers rated as potentially avoidable by the project expert pane	<p>N: Number of unplanned transfers to the emergency room and direct admissions to the acute hospital rated as potentially avoidable by the project expert panel</p> <p>D: Number of unplanned transfers to the emergency room and direct admissions to the acute hospital</p>	<p>Acute care transfers will be rated by the project expert panel using the Structured Implicit Review form used in previous studies</p> <p>Data will be broken down further by:</p> <ul style="list-style-type: none"> • Transfers from Medicare Part A vs. other • Emergency room visit only, vs. emergency room visit plus hospitalization, vs. direct admission to the hospital 	<p>Selected sections of the nursing home record for the 3 months before any unplanned acute care transfer will be copied and provided to the project manager at each visit.</p> <p>Selected sections of the emergency room and/or hospital record (if applicable) will be obtained by GMCF.</p>	Less than one-third rated as definitely or probably avoidable by the expert panel

Measurement Strategy

Process Measures

Measure	Statistic	Definition	Data Collection	Appropriate Goals
Communication	N: Number of SBAR communication tools completed D: Number of days in the month	Any completed SBAR communication tool Data will be broken down by communication pattern: <ul style="list-style-type: none"> • Nursing assistant to licensed nurse • Licensed nurse to RN • RN to supervisor • RN/supervisor to MD/NP/PA 	Copies of all completed SBAR tools will be filed in the INTERACT collection box by staff who complete them and collected at each visit by the project manager.	Completion and use of at least one SBAR tool for each contact with a primary care physician
	N: Number of transfer checklists completed per month D: Number of unplanned transfers in the month	Any completed transfer checklist	Copies of all completed transfer checklists will be filed in the INTERACT notebook by staff who complete them and collected at each visit by the project manager.	Completion of a checklist for each transfer
Care Paths	N: Number of INTERACT care path checklists completed D: Number of days in the month	Any completed SBAR communication tool broken down by care path (i.e., fever, altered mental status, pneumonia, etc.)	Copies of all completed INTERACT care path checklists will be filed in the INTERACT collection box by staff who complete them and collected at each visit by the project manager.	Completion of a SBAR tool for each unplanned transfer for a condition covered by INTERACT care paths

Measurement Strategy

Process Measures (continued)

Measure	Statistic	Definition	Data Collection	Appropriate Goals
Advance Directives	<p>N: Number of residents with an advance directive</p> <p>D: Number of residents in the facility</p>	<p>A completed Durable Power of Attorney for Health Care and/or Living Will in the nursing home record</p> <p>Data will be broken down further by types of care limiting orders.</p>	Data will be obtained by the team leader and provided to the project manager on a monthly basis.	Increase in the percentage of residents with a completed Durable Power of Attorney for Health Care and/or Living Will in the nursing home record
Quality Improvement Tools	<p>N: Number of INTERACT unplanned transfer review forms completed per month</p> <p>D: Number of unplanned transfers in the month</p>	Any completed INTERACT unplanned transfer review forms	Copies of all completed INTERACT unplanned transfer review forms will be filed in the INTERACT notebook by staff who complete them and collected at each visit by the project manager.	Completion of an INTERACT unplanned transfer review form for each unplanned transfer

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Copies of Key References will be made available upon request from GMCF project staff.

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