Raising Awareness for Interventions to Reduce Acute Care Transfers (INTERACT):

Implementation of "STOP and WATCH" Tool

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Abstract

Challenges in meeting the healthcare needs of the aging population have led to an increased rate of preventable hospitalizations, which are reported to be costly and detrimental to the health of the elderly, especially for those in Skilled Nursing Facilities (SNFs). Quality improvement initiatives have been proposed as an intervention to improve quality of care of individuals and populations. The purpose of this project was to raise awareness and set the foundation for staff engagement and empowerment in the use of INTERACT (Interventions to Reduce Acute Care Transfers) tools in a SNF. INTERACT is designed to improve quality of care of SNF residents by reducing potentially preventable hospitalizations through interventions made possible by early identification, assessment, documentation, and communication about changes in condition of residents. The Plan-Do-Study-Act (PDSA) framework structured the project. The foundation of this project centered on intense educational sessions on staff role and the project tools. Anticipated short-term outcomes were increasing staff awareness and empowerment of their key role in reducing preventable hospitalizations.

*Keywords*: Skilled nursing facilities/staffing, residents, potentially avoidable/preventable/unnecessary hospitalizations, re-hospitalizations, INTERACT, interventions to reduce hospitalizations, Medicare/Medicaid beneficiaries, and quality improvement.
Chapter 1

Introduction/Overview of Problem/Significance

In April 2008, the Institute of Medicine (IOM) released a report on recommendations to build the healthcare workforce to care for an aging population. The report, “Retooling for an Aging America: Building the Health Care Workforce,” exposed the inadequacy of the healthcare environment to meet the complex health needs of the aging population living with multiple chronic diseases (IOM, 2008). Escalating hospitalization and re-hospitalization rates of the elderly is one of the major consequences of the inability to meet their needs, thus affecting healthcare cost and quality of life issues (Nagamine, Jiang, & Merrill, 2006).

Skilled nursing facilities (SNFs) and their staffs are major players in the healthcare environment of the aging population. In 2006, almost one-fourth of Medicare beneficiaries discharged from the hospitals to SNFs were readmitted to the hospital within 30 days. The cost to Medicare was approximately $4.34 billion (Mor, Intrator, Feng, & Grabowski, 2010). The Centers for Medicare and Medicaid Services (CMS) is particularly interested in SNFs that provide care to a substantial number of elderly clients, most of whom are Medicare and Medicaid consumers (CMS, 2012a). Evidence suggests that 45% of this acute care re-hospitalizations from SNFs is avoidable (United States Department of Health and Human Services [USDHHS], 2011). According to CMS (2010), potentially avoidable hospitalizations or potentially preventable hospitalizations are defined as hospitalizations that result from those conditions that could be safely treated within SNFs.

In 2012, CMS announced an initiative to reduce hospitalizations from SNFs with the goal to improve quality of care of residents in a cost effective manner (CMS, 2012b). The initiative proposed a partnership between CMS and eligible organizations to identify evidence-based
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practice (EBP) interventions that meet the set goal of 20% hospitalization rate reduction (CMS, 2012b). One of the EBP interventions proposed is the use of INTERACT (Interventions to Reduce Acute Care Transfers) tools (Ouslander et al., 2011). According to Ouslander et al. (2011), INTERACT was developed as a quality improvement project to not only reduce hospitalization of SNF residents but also provide residents with a better care experience.

Purpose and Aims

The purpose of this project was to raise awareness and set the foundation for staff engagement and empowerment in using INTERACT tools in a SNF located in northwest Georgia and owned by one of the nation’s leading providers of SNF services. INTERACT is designed to improve quality of care of SNF residents by reducing potentially avoidable hospitalizations through interventions made possible by early identification, assessment, documentation, and communication about changes in condition of residents (Ouslander et al., 2011).

The specific aims of this project were:

1. To implement the STOP and WATCH tool, designed to identify and communicate early warning signs of change in condition of residents (see Appendix A)
2. To raise staff awareness and empowerment of their key role in reducing preventable hospitalizations and re-hospitalizations of SNF residents
3. To reduce the overall hospitalization and re-hospitalization rates of residents

Problem Statement

SNFs play a major role in providing healthcare services to the elderly and disabled population, most of whom are Medicare/Medicaid beneficiaries (CMS, 2010). The United States Social Security Administration (2010) defines a SNF as “an institution that has a transfer agreement with one or more participating hospitals, which is primarily engaged in providing
skilled nursing care and rehabilitative services to inpatients, and meets specific regulatory
certification requirements" (glossary). Rather than custodial care, the type of care provided by
SNFs is skilled nursing, medical, and rehabilitation services.

Medicare and Medicaid beneficiaries are eligible for two types of care in SNFs: short
term stay and long term stay (Grabowski, 2007). Short term stay residents are mostly Medicare
Part A beneficiaries who are eligible for 100 days of service, while long term stay residents are
mostly state Medicaid beneficiaries who are eligible for unlimited days of service (Gage,
Morley, Spain, & Ingber, 2009). The Medicare Payment Advisory Commission (MedPAC) in its
March 2013 report to Congress revealed that 20% of hospitalized patients are discharged to
SNFs post-hospitalization for recovery, and 28% of those discharged to SNFs are readmitted to
the hospital within 30 days of discharge (MedPAC, 2013).

Hospitalization of SNF residents has become a major concern to the government and the
public due to multiple undesirable consequences. Evidence reveals that hospitalization of the
elderly is not only costly but also detrimental to their health, causing disruption in functional
status and affecting quality of life (Jones, Dwyer, Bercovitz, & Strahan, 2009; Ouslander et al.,
2010). More than 25% of SNF residents are hospitalized each year, and the rate is projected to
increase (Grabowski, O’Malley, & Barhydt, 2007). A study done by the National Institutes of
Health (NIH) revealed increasing re-hospitalization rates of SNF residents discharged within 30
days from an acute care setting, rising from 18.2% in 2000 to 23.5% in 2006 (Mor, Intrator,
Feng, & Grabowski, 2010). The same study found that, when comparing the likelihood of re-
hospitalization between patients discharged to SNFs and those discharged to the community,
patients who were discharged to SNFs had a higher percentage of re-hospitalization (26.8%) than
did those discharged to the community (19.4%) (Mor, Intrator, Feng, & Grabowski, 2010) (see Appendix B).

Hospitalization of SNF residents is projected to increase due to a growing population of older adults living with multiple chronic diseases, making clinical management difficult for the SNF staff (USDHHS, 2011). The Centers for Disease Control and Prevention (CDC) reported that 80% of older Americans live with at least one chronic disease and 50% with at least two chronic diseases (CDC, 2011). In 2012, 43.1 million people age 65 and over lived in the United States, an increase of 21% in the past 10 years. The 65 and over age group accounted for 13.7% of the total population in 2012 (USDHHS, 2013a). In 2012, more than 1.4 million people had a SNF stay, 3.2% of the population greater than 65 years of age. However, the percentage of SNF stay increases with the oldest adults, and even the young adults are experiencing an increase in SNF stay. In 2012, the age group above 85 experienced a higher SNF stay of 10.2%, the age group above 95 experienced a SNF stay of 7.7%, and those less than 65 years of age experienced an increased SNF stay of 15% (CMS, 2013a).

Of particular importance are the numbers presented by CMS (2012a) that revealed 45% of hospital admissions from SNFs are considered potentially avoidable: those cases that could be safely treated within the facilities without subjecting the residents to acute care transfers (Ouslander & Maslow, 2012). CMS reported that, for the year 2005, these potentially avoidable hospitalizations of SNF residents cost Medicare $2.6 billion and involved 314,000 hospitalization cases (CMS, 2012b).

In order to combat the elevated healthcare cost arising from potentially avoidable hospitalizations and to meet CMS goal of 20% reduction, proposals have been made to Congress by policy makers to hold not only hospitals but also SNFs accountable for reducing
hospitalization rates (MedPAC, 2012, 2013). These proposals have resulted in the initiation of EBP interventions geared towards not just reducing hospitalization rates but also improving care in a cost-effective manner. So far, proposed interventions include increasing the employment and presence of registered nurses (RNs) to function as direct care givers, increasing the employment of nurse practitioners (NPs) to function as in-house primary care providers, and providing staff with adequate educational and training tools to aid them in recognizing clinical issues that require medical follow-up and interventions (USDHHS, 2011).

The SNF where this project was implemented is owned by one of the nation’s leading providers of post-acute and long term care services. It is a 118-bed facility dually certified to accommodate both Medicare and Medicaid customers. It also offers services to veterans, commercial insurance residents, and private-pay residents. This SNF provides both long term and short term care skilled rehabilitation services to the community it serves. Long term care residents make up 85% of the facility population, while the rest is made up of short term residents. There are 114 staff employees with various qualifications employed in different departments (see Appendix C). The mission statement of this SNF is “to improve the lives they touch through the delivery of high quality health care and everyday compassion.” A component of their top core measures is the reduction of re-hospitalization rates. This measure was set by corporate administrators as a non-negotiable goal for fiscal years 2013 and 2014.

Significance of the Project

One of the USDHHS’s Healthy People 2020 (2014) goals for older adults is to improve their health, function, and quality of life. This is a challenging goal to meet for the older adults living in a SNF either for short term rehabilitation purposes or long term placement. The older adults are admitted to this setting with multiple debilitating chronic diseases that present a
challenge to the facility staff to manage. Consequences of the inability of the staff to manage the care of this population have led to elevated preventable hospitalization rates. These preventable hospitalizations have been cited to be costly and detrimental to the health of SNF residents (Jones et al., 2009; Nagamine, Jiang, & Merrill, 2006; Ouslander et al., 2010).

Hospitalization of SNF residents has become a major issue with the government and policy makers. In response, MedPAC has proposed recommendations to Congress to pass laws holding SNFs, as well as hospitals, accountable for higher hospitalizations rates (MedPAC, 2013). In 2011, CMS challenged the public to identify evidence-based interventions that are geared towards reducing potentially avoidable hospitalization rates of SNF residents. Financial assistance was proposed to qualified entities that will partner with SNFs to come up with interventions to reduce hospitalization rates (CMS, 2012b). The use of INTERACT tools has been recognized as evidence-based intervention aimed at not only reducing hospitalization rates but also improving quality of life of residents (AHRQ, 2012; Ouslander et al., 2010).
Chapter 2

Framework and Literature Review

Plan-Do-Study-Act (PDSA) Framework

According to the Agency for Healthcare Research and Quality (AHRQ) (2013), the PDSA framework is a successful model in implementing quality improvement projects in healthcare settings. The Institute for Healthcare Improvement (IHI) (2014) reported that “the PDSA cycle is shorthand for testing a change by developing a plan to test the change (Plan), carrying out the test (Do), observing and learning from the consequences (Study), and determining what modifications should be made to the test (Act).”

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Figure 1: PDSA Framework

Source: The Scottish Government Health Delivery Directorate
Evidence from the literature reveals how PDSA has been successfully used as a quality improvement approach to bring about changes in health care settings, especially when changes on a continuous nature are needed. In Australia, PDSA was the framework of choice when a need was identified to increase the use of Kangaroo care (a method of skin-to-skin holding used to enhance mother-infant relationships) in a neonatal intensive care unit (Stikes & Barbier, 2013). Researchers reported that this quality improvement approach successfully led to a 31% increase in participation from nursing staff in the use of Kangaroo care within 4 months post implementation (Stikes & Barbier, 2013). In 2008, PDSA was also the framework of choice for the Medical Center of Central Georgia in Macon, Georgia, when it was decided to implement a high-quality pediatric surgery service line to meet the needs of an increased case load of complex pediatric patients (Nakayama et al., 2010). The successful outcomes achieved from using this quality improvement framework led the hospital staff to propose the adoption of the PDSA cycle in other departments (Nakayama et al., 2010).

The PDSA quality improvement approach is a framework that encourages education and learning, staff involvement and engagement, and process validation and recommendations within a short period of time throughout implementation (IHI, 2014; Stikes & Barbier, 2013). The Plan in this project was to implement the early warning sign tool, STOP and WATCH, by increasing staff awareness and empowerment of their key role in reducing preventable hospitalizations and re-hospitalization of residents. The Do involved a series of educational sessions geared towards educating staff on the use of INTERACT tools. The educational sessions were carried out on all shifts (day, evening, night) including weekends. The early warning sign tool STOP and WATCH was implemented immediately after completion of educational sessions. The Study involved initial interpretation of data on the actual use of STOP and WATCH and staff perceptions or
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feedback on project implementation (see Appendix D). The Act part involved developing recommendations for addressing deficiencies and enhancing strengths, as well as reassessing the educational sessions and use of the tool.

Literature Review

A review of the literature was conducted using Academic Search Complete, CINAHL Plus with Full Text, MEDLINE with Full Text (at EBSCO host), ProQuest Nursing and Allied Health Source, Research Library (at ProQuest), Cochran Library, Centers for Disease Control and Prevention, National Institutes of Health, Centers for Medicare and Medicaid Services, Agency for Healthcare Research and Quality, and Google Scholar databases. The search years were from 2000 to 2014. Key words included skilled nursing facilities, nursing homes, residents, potentially avoidable hospitalizations, potentially preventable hospitalizations, unnecessary hospitalizations, re-hospitalization, INTERACT tools, interventions to reduce hospitalizations, Medicare/Medicaid beneficiaries, nursing home staffing, and quality improvement.

The literature review on the problem of potentially preventable hospitalizations of SNF residents can be grouped under three main headings: (a) factors promoting potentially avoidable hospitalizations, (b) effects of potentially avoidable hospitalizations, and (c) interventions to reduce potentially avoidable hospitalizations.

Factors Promoting Potentially Avoidable Hospitalizations

The quest for answers to understand what is driving potentially avoidable hospitalizations has generated a significant amount of research. These studies have revealed that a combination of factors drive this unfavorable practice, including (a) change in the characteristics of SNF residents; (b) inadequate numbers of direct care and skilled staff; and (c) lack of onsite primary care providers, leading to ineffective communication between providers and facility staff.
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In recent years, SNFs have seen a change in the characteristics of their patient population. The population is no longer composed solely of frail elderly patients requiring assistance with activities of daily living. Evidence reveals that patients admitted into SNFs are older with multiple chronic and disabling conditions and experience shorter lengths of stay and increased mortality rates (Toles, Young, & Ouslander, 2012; Young, Barhydt, Broderick, Colello, & Hannan, 2010). Exacerbation of chronic diseases presents a challenge to the abilities of the SNF staff in properly identifying and assessing change in condition of residents (Mueller, Anderson, McConnell, & Corazzini, 2012).

As reported by the American Health Care Association (AHCA) (2013), inadequate direct care and skilled staff are major contributors to avoidable hospitalizations in SNFs. In general, healthcare workers are employed by SNFs in these roles or job titles: registered nurses (RNs), who mostly function as managers or supervisors; licensed practical nurses (LPNs), who function as charge nurses; certified nursing assistants (CNAs), who provide direct patient care; and rehabilitation therapists, who provide rehabilitation services to meet the needs of the residents. The problem with staffing lies in the number of qualified professional staff employed and the total number of healthcare providers employed. Federal law requires all SNFs to provide adequate staffing to care for the residents without specifying details on what adequate staffing means (CMS, 2013b). The only requirements specified include RN hours for at least 8 hours a day 7 days a week and either an RN or LPN on duty 24 hours each day. CNAs provide care to SNF residents 24 hours per day 7 days a week. The number of rehabilitation therapy service hours depends on the needs of the residents. Primary care providers or specialty physicians are not required for SNF staffing (CMS, 2013b). The staff in SNFs who are therefore responsible for providing 24-hour daily service is composed mostly of LPNs and CNAs. These healthcare
workers do not have any advanced geriatric education to bring to the bedside in the care of residents with multiple chronic and complex disease processes (Ashcraft & Champion, 2012; CMS, 2013b). The lack of skilled staff knowledgeable in identifying changes in condition of residents has been cited as the leading cause of potentially avoidable hospitalizations (Ouslander et al., 2010; Perry, Cummings, Jacobson, Neuman, & Cubanski, 2010).

Lack of onsite primary care providers leading to ineffective communication between SNF staff and physicians has also been cited as one of the major causes of potentially avoidable hospitalizations (Ashcraft & Champion, 2012; Ouslander et al., 2010). SNF staff are responsible for identifying and communicating change in condition of residents to physicians. Physicians are not available at the facilities to frequently assess residents in a timely manner. According to CMS guidelines, the initial comprehensive visit in a SNF during which the physician completes a thorough assessment, develops a plan of care, and writes or verifies admitting orders for the resident must occur no later than 30 days after a resident’s admission into the SNF (CMS, 2013b). This timeframe allows for delays in physician assessment of residents, which may result in missed opportunities to intervene early in conditions that might have been manageable in the nursing home had the intervention occurred.

Other factors cited in the literature that promote potentially avoidable hospitalization include (a) inability by SNFs to obtain timely test results due to lack of onsite capabilities, (b) physician and medical director preference to treat residents at the hospital due to convenience as most physicians make rounds in hospitals and can obtain test results there in a timely manner, (c) family member expectations due to lack of confidence in SNF staff capabilities, and (d) staff preference for hospitalization due to their inability to deal with certain residents such as those that present with behavior problems (CMS, 2011; Cohen-Mansfield & Lipson, 2006; Ouslander
et al., 2010; Perry et al., 2010). Specific medical diagnoses have also been identified in the literature as contributing factors to avoidable hospitalization of SNF residents. These include pneumonia, urinary tract infection, dehydration, and congestive heart failure. These diagnoses are termed avoidable due to the fact that they can easily be managed within SNFs with early identification of symptoms before they become too complicated to manage (Ashcraft & Champion, 2012, Ouslander et al., 2010).

Effects of Potentially Avoidable Hospitalizations

The consequences of avoidable hospitalizations can be grouped under two headings: health-related consequences and financial-related consequences (USDHHS, 2013b). Health-related consequences have been defined in the literature as being iatrogenic, involving not just the period of inpatient admissions but also the process of transferring frail elderly SNF residents between healthcare facilities (Intrator et al., 2007; Ouslander et al., 2010). Evidence reveals that hospitalization of SNF residents does not necessarily improve health outcomes. Residents become at risk for decline in health status resulting from complications during transitions of care. These complications include medication errors and hospital-acquired infections (Givens, Selby, Goldfeld, & Mitchel, 2012; Ouslander et al., 2010). Moreover, hospitalization becomes more complicated for residents with dementia and lead to increased confusion, anxiety, and fall risks due to change in familiar environment and caregivers (Givens, Selby, Goldfeld, & Mitchel, 2012; Ouslander et al., 2010).

The financial consequences of avoidable hospitalizations of SNF residents have been reported (Grabowski, O'Malley, & Barhydt, 2007; Walsh et al., 2012). A national study conducted by Walsh et al. (2012) to investigate the burden of potentially avoidable hospitalizations of SNF Medicare/Medicaid beneficiaries in 2005 revealed more than a third of
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SNF residents (1 million hospitalizations) were admitted to the hospital, costing a total of $3 billion. Of this amount, 20% to 60% of the hospitalizations were deemed avoidable, evidencing a missed cost saving between $625 million and $1.9 billion. In New York State, Grabowski, O’Malley, and Barhydt (2007) conducted a study in SNFs to examine the costs and potential savings associated with potentially avoidable hospitalizations. Results revealed that between 1999 and 2004, total hospitalization cost increased from $608 million in 1999 to $971 million in 2004, a 29.2% increase.

Interventions to Reduce Potentially Avoidable Hospitalizations

In 2012, CMS released “Action Plan for Further Improvement of Nursing Home Quality” (CMS, 2012a). It outlined three goals that included improving individuals’ care experiences, improving health of populations, and reducing per capita cost of care (CMS, 2012a). One of the main objectives of this action plan is to reduce potentially avoidable hospitalizations of SNF residents in order to improve quality of care and reduce cost. CMS reported that hospitalization of SNF residents is not only detrimental to their health but very costly (CMS, 2012a). For these reasons, CMS challenged the public to design evidence-based interventions that would help reduce hospitalization of SNF residents (CMS, 2012b). The goals of the intervention included reduction of potentially avoidable hospitalizations and re-hospitalization of SNF residents, improvement in the process of care transition between hospitals and SNFs, and reduction in healthcare cost without compromising quality of care (CMS 2012a).

Quality improvement initiatives have been proposed as an intervention to improve quality of care of individuals and populations. In 2001, the IOM summary report, “Crossing the Quality Chasm,” asserted that the current health care system is functioning at a level lower than it should and put forth six goals for the health care system. The health care system must be safe, effective,
patient-centered, timely, efficient, and equitable (IOM, 2001). Of these six, effective and safety goals are to be obtained by measuring care processes and assessing whether healthcare providers perform evidence-based processes that lead to desired outcomes (Hughes, 2008).

INTERACT is a quality improvement program based on evidence that has been demonstrated to reduce hospitalization of SNF residents (CMS, 2013b). The original INTERACT was developed in Georgia SNFs by Joseph Ouslander and Mary Perloe, sponsored by CMS and the Georgia Medical Care Foundation (GMCF) as a quality improvement program to reduce hospitalization of SNF residents and improve care (Ouslander et. al., 2011). The program included an early-warning sign (STOP and WATCH) tool, a SBAR (Situation, Background, Assessment, Recommendations) tool, and advanced care planning.

The current version of this quality improvement program is in its third phase. The second version, INTERACT II (see Appendix E for STOP and WATCH, second version), was tested in 25 SNFs in three states (Florida, Massachusetts, and New York) over a 6-month period. Results revealed a 17% reduction in hospital admissions as compared to the previous year. In group comparisons, SNFs that were considered engaged in the program saw a 24% reduction in hospitalization rates as compared to a 6% and 3% reduction in groups considered not engaged in the use of INTERACT tools (Ouslander et al., 2011).

Lamb, Tappen, Diaz, Herndon, and Ouslander (2011) investigated the perceptions of SNF staff on avoidable hospital transfers. Results revealed that facilities that were engaged in the use of INTERACT II tools rated 76% of their hospital transfers as unavoidable, 4% as avoidable, and 20% as possibly avoidable. These data support the evidence that facilities engaged in using INTERACT tools are able to reduce their rate of avoidable hospitalizations by caring for their residents within the facility, thereby reducing healthcare cost and improving quality of life.
Recently, a third version of the INTERACT tool was released (INTERACT, 2013). Changes between the second and third version on the STOP and WATCH tool include pain and bowel assessments plus nurse response and follow-up. The other major changes between the two versions were made in the areas of the SBAR communication, advanced care planning, and medication reconciliation during care transitions between health care settings (Galoustian, 2013).
Chapter 3

Methodology

This section presents the project design and describes the setting and participants. The data collection process, as well as ethical considerations, is included.

Design and Aims

An outcomes research design was used. Outcomes research according to the AHRQ (2000) examines the end result of a healthcare intervention or practice. The purpose of outcomes research is to improve quality of care (AHRQ, 2000). In this project, the purpose was to examine the outcomes on both residents and staff as a result of implementing the STOP and WATCH tool. The Plan-Do-Study-Act framework structured the project.

The long-term goal of this project is to reduce potentially preventable hospitalizations and re-hospitalization of SNF residents. The aims of this translational project were threefold: (a) to implement the STOP and WATCH tool, the main tool designed to identify and communicate early warning signs of change in condition of residents; (b) to raise staff awareness and empowerment of their key role in reducing preventable hospitalizations and re-hospitalization of SNF residents; and (c) to reduce the overall hospitalization and re-hospitalization rates of residents.

Setting

This project took place in a SNF located in northwest Georgia and owned by one of the leading providers of skilled nursing and rehabilitation services in the United States. It is a 118-bed facility, dually certified to accommodate both Medicare and Medicaid customers. It also offers services to veterans, commercial insurance residents, and private-pay residents.
Participants

This project was developed to include all facility staff. At the time of project implementation, the SNF had in its employ approximately 114 staff members that included administrative, direct-care, and non-direct care staff, including full-time, part-time, and per diem employees.

Description of the Data Collection Process

Educational Sessions

Project implementation started immediately after IRB approval from the agency and the university. Data collection ended July 31, 2014. The foundation of this project was centered on intense educational sessions aimed at achieving project goals of raising staff awareness and empowerment of their key role in preventing avoidable hospitalizations through implementation of the STOP and WATCH tool. Following approval of the proposal by Genesis’s Healthcare Internal Research Review Committee and Georgia College’s Institutional Review Board, a formal meeting was held with the SNF leadership team to discuss the project. According to facility policy, all employees are required to attend mandatory quarterly education, and this project was scheduled as part of the second quarter educational requirement. After this meeting, flyers were placed in strategic places in the building (time clock, nursing stations, staff restrooms, and break room) to inform and sensitize the staff about the project and the oncoming educational sessions. The flyers contained information about the purpose of the project, educational session times and venue, and sign-up sheet for preferred attendance time (see Appendix F). Educational sessions were scheduled to occur during all shifts (days, evenings, and nights) and during weekdays and weekends to accommodate staff working off shifts and weekends only. The plan was to hold 2-hour sessions with a maximum of 20 participants in each
session. In collaboration with the facility's Nurse Practice Educator, phone calls were made to employees as an added incentive and encouragement to attend the educational sessions.

Educational sessions took place between June 17 and June 23, 2014. The data on days, times of sessions, and number of attendees are in Table 1.

Table 1

_Educational Sessions Data_

<table>
<thead>
<tr>
<th>Session Date</th>
<th>Time of Session</th>
<th>Number of Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 17</td>
<td>11:30am – 1:30pm</td>
<td>5</td>
</tr>
<tr>
<td>June 19</td>
<td>1pm – 3pm</td>
<td>5</td>
</tr>
<tr>
<td>June 19</td>
<td>3:30pm – 5:30pm</td>
<td>22</td>
</tr>
<tr>
<td>June 19</td>
<td>10pm – Midnight</td>
<td>0</td>
</tr>
<tr>
<td>June 22</td>
<td>5pm – 7pm</td>
<td>17</td>
</tr>
<tr>
<td>June 22</td>
<td>7:30pm- 9:30pm</td>
<td>8</td>
</tr>
<tr>
<td>June 23</td>
<td>1pm – 3pm (makeup session)</td>
<td>6</td>
</tr>
</tbody>
</table>

Sixty-one of the 63 attendees completed the descriptive data form. At least one employee from each of the eight employee role categories attended the educational sessions and completed the data form. The percentages of those employees who completed the data form ranged from 7.1% (one of 14 nutritional services department employees) to 83.3% (five of six RNs). See Table 2 for a breakdown of class participants.
Table 2

Descriptive Data Class Participants

<table>
<thead>
<tr>
<th>Employee Role</th>
<th># Employed</th>
<th># who completed the descriptive data form during educational sessions</th>
<th>% of total employees by category who completed the descriptive data form during educational sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Administration: Director of Nursing Services (DNS); Assistant Director of Nursing (ADON); Unit Manager (UM); Nurse Practice Educator (NPE); Clinical Case Manager (CCM); MDS Coordinator</td>
<td>7</td>
<td>4</td>
<td>57.1</td>
</tr>
<tr>
<td>Registered Nurses (RNs): Supervisors, Charge Nurses</td>
<td>6</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>Licensed Practical Nurses (LPNs): Charge Nurses</td>
<td>13</td>
<td>7</td>
<td>53.8</td>
</tr>
<tr>
<td>Certified Nursing Assistants (CNAs)</td>
<td>39</td>
<td>26</td>
<td>66.7</td>
</tr>
<tr>
<td>Administrative Staff: Administrator (ADM); Health Information Manager (HIM); Central Supply/Scheduler; Business Office Manager; Benefits/Payroll Coordinator; Receptionist; Admissions/Marketing Director; Social Services; Activities</td>
<td>15</td>
<td>8</td>
<td>53.3</td>
</tr>
<tr>
<td>Nutritional Services Department: Registered Dietitian, Food Service Director, Chef, Cook, Dietary Aides</td>
<td>14</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td>Therapy Department: Therapy Program Manager, Physical Therapist, Occupational Therapist, Speech Therapist</td>
<td>9</td>
<td>5</td>
<td>55.5</td>
</tr>
<tr>
<td>Plant Operations Department: Maintenance Staff, Housekeeping and Laundry</td>
<td>11</td>
<td>5</td>
<td>45.5</td>
</tr>
<tr>
<td>Totals</td>
<td>114</td>
<td>61</td>
<td>53.5</td>
</tr>
</tbody>
</table>
The RAND educational material (modules 1 and 2) published by AHRQ (2012) was used as a guide for session content. Module 1 dealt with detecting changes of condition in a resident, while module 2 dealt with communicating the information of the change detected (see Appendices G and H). Sample scenarios and role-play activities were included. Question and answer sessions followed each module. A consent form was given during each educational session to those who were willing to participate in a post project survey (see Appendix I). The STOP and WATCH tool was implemented at the end of formal educational sessions. A final survey was administered 2 months after project implementation to evaluate and obtain feedback of the initial phase of this ongoing project. After initial education, the center’s nurse practice educator, who is responsible for all staff education at the center, became responsible for educating new hires on the STOP and WATCH tool.

Participants in the educational sessions were provided with snacks and drinks. Throughout the project, pens and t-shirts with team-work logos (see Appendices J and K) were distributed to participants who attended the educational sessions, actively participated in the project, and completed the post project survey. Appendix L contains information on the project’s budget.

**Instruments**

Three tools were used in the data collection process. These instruments were the STOP and WATCH tracking tool (see Appendix M), a hospitalization tracking form (see Appendix N), and a post project evaluation. Descriptive data obtained from participants included department, gender, age group, educational level, and length of employment (see Appendix O).

The STOP and WATCH tracking tool measured the total number of STOP and WATCH forms that were completed, date of completion, department of the staff member completing the
form, whether it was completed during a weekday or weekend, shift when it was completed, whether the identified problem was reported to the nurse, and if the nurse responded. Plastic form holders containing STOP and WATCH forms were placed in various locations throughout the building for easy staff access. Forms were available at both nursing stations, in the therapy department, and at the administrative front offices. The holders were placed in areas that were highly trafficked. The forms were, therefore, visible and served as a reminder for use. In addition, collection folders with dividers for each day of the week were placed at each nursing station to collect completed STOP and WATCH forms. Nurses were responsible for putting the completed forms in the folders after following up on the problem reported. Information on the forms included the name of resident, staff member filling out the form, the staff member the early warning sign was reported (usually the charge nurse), and response or follow-up.

The hospitalization tracking tool was used to measure the total number of hospitalizations that occurred during the study period, the date hospitalization occurred, whether it was weekday or weekend, the shift hospitalization occurred, and reason or symptoms triggering transfer to hospital. Hospitalization data were obtained from the facility’s electronic data-base and medical chart records; data were collected from April 17 to July 31, 2014.

Finally, the staff participated in a post survey evaluation of the project. The investigator created a survey tool using a Likert 5-point scale (strongly agree, agree, neutral, disagree, and strongly disagree) questionnaire based on questions that sought to examine staff thoughts on implementing the project. The tool also provided a section where staff could write down their thoughts to each question. The questions on the tool were formatted based on research conducted by Weng et al. (2013) to measure awareness of the attitudes of healthcare professionals on barriers to implementation of evidence-based practice.
Observations by the Project Director and Interactions with the Staff

Throughout the project, the project director interacted with the staff, was present at the center, and was available by phone to answer questions. During these interactions, the project director reinforced project education, encouraged participation, and met with facility management weekly for updates, to help boost enthusiasm for participation. Most questions revolved around what should be reported on the form and what constituted an early warning sign or change of condition of a resident. Some interactions revolved around boosting participants’ morale, especially those who felt frustrated that not everyone was getting involved in the project.

Ethical Considerations

The project proposal was approved by the Georgia College and State University Institutional Review Board (IRB) (see Appendix P) and by the Genesis Healthcare Research Review Committee (see Appendix Q). Participation on the educational component of this project was mandated by the facility as a quality improvement project; however, participation in the post project survey was voluntary. All data were collected through paper and pen method. Only two forms had names of participants: the consent form signed by those who wished to participate in the post project survey and the STOP and WATCH forms that technically belonged to the center. The consent form informed participants that names were not required to complete survey forms and that information provided was confidential and would not be divulged except when required by law. All other forms included only demographic data without names. All data collection forms except for the STOP and WATCH forms were kept by the researcher in a locked cabinet inside a personal office within the facility; access was available only to the researcher. All forms were destroyed after completion of data collection and analysis. The STOP and WATCH forms with names of residents and staff members belonged to the facility.
RAISING AWARENESS FOR INTERACT TOOLS

A major threat to anonymity and confidentiality was the fact that the researcher, prior to project implementation, was the nursing director at the center and had managerial authority that could influence project outcomes. During project implementation, however, the researcher was no longer a member of the facility management team and therefore had no authority to influence project outcome except through interaction with participants.
Chapter 4

Findings

Chapter 4 includes the description of data analysis procedures and results.

Data Analysis Procedures and Presentation of Results

There were three project objectives. Both quantitative and qualitative data were used to evaluate whether the objectives had been met. Quantitative analysis of data was conducted using the Statistical Package for the Social Sciences (SPSS) for Windows, version 22.0. Descriptive statistics including percentages, means, medians, and standard deviations were used to examine staff characteristics (department, gender, age group, and length of employment). Qualitative data were derived from observations of the principal investigator, interactions between the principal investigator and staff, and comments from staff participants on the post project survey.

Objective 1

Objective 1 was to implement the STOP and WATCH tool, the main tool designed to identify and communicate early warning signs of change in condition of residents. The primary approach used to evaluate the extent to which the STOP and WATCH tool was implemented was the data collected from staff use of the tool (Tables 3-7).

Of the 39 days in the data collection period, completed STOP and WATCH forms were submitted on 31 of those days, for a total of 137 forms collected. On eight dates, no forms were collected. On two dates, the number of collected forms was greater than 10 (11 and 13). CNAs submitted 83.9% of the completed forms. No forms were submitted from employees in the Nursing Administration, Nutritional Services, or Plant Operations departments. Most forms were completed during the week (95.6%) while 4.4% were completed on weekends. The day shift staff completed the highest number of forms (80.3%), followed by evening shift staff (19.0%),
and finally night shift staff (0.7%). Of the 137 completed forms, 97.1% stated that the identified problem was reported to the nurse, while 2.9% of the forms had no information on whether the nurse was notified or not. A total of 77.4% of the forms had information that the nurse responded to the problem while 22.6% had no information regarding nurse response.

Table 3

STOP and WATCH forms completed by department

<table>
<thead>
<tr>
<th>Department</th>
<th>STOP and WATCH forms (#)</th>
<th>STOP and WATCH form (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNs</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>LPNs</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>CNAs</td>
<td>115</td>
<td>83.9</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>6</td>
<td>4.4</td>
</tr>
<tr>
<td>Therapy</td>
<td>13</td>
<td>9.5</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4

STOP and WATCH forms completed represented by day of the week

<table>
<thead>
<tr>
<th>Day of the Week</th>
<th>STOP and WATCH forms (#)</th>
<th>STOP and WATCH form (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday</td>
<td>131</td>
<td>95.6</td>
</tr>
<tr>
<td>Weekend</td>
<td>6</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 5

STOP and WATCH forms completed by shifts

<table>
<thead>
<tr>
<th>Shift</th>
<th>STOP and WATCH forms (#)</th>
<th>STOP and WATCH form (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>110</td>
<td>80.3</td>
</tr>
<tr>
<td>Evening</td>
<td>26</td>
<td>19.0</td>
</tr>
<tr>
<td>Night</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 6

STOP and WATCH forms completed and problem reported to nurse

<table>
<thead>
<tr>
<th>Reported to Nurse</th>
<th>STOP and WATCH forms (#)</th>
<th>STOP and WATCH form (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>133</td>
<td>97.1</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 7

STOP and WATCH forms completed with response from nurse

<table>
<thead>
<tr>
<th>Response from Nurse</th>
<th>STOP and WATCH forms (#)</th>
<th>STOP and WATCH form (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>106</td>
<td>77.4</td>
</tr>
<tr>
<td>No</td>
<td>31</td>
<td>22.6</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>100</td>
</tr>
</tbody>
</table>
Objective 2

Objective 2 focused on raising staff awareness and empowerment of their key role in reducing preventable hospitalizations and re-hospitalizations of SNF residents. The approaches used to evaluate the extent to which staff awareness and empowerment were raised included (a) educational sessions on raising staff awareness; (b) interactions between the principal investigator and staff; and (c) the post project survey.

Educational sessions.

Staff awareness began with scheduled educational sessions. Of the 114 staff members employed at the time, only 63 (55.3%) attended. The second day of scheduled educational sessions saw the arrival of a Georgia Department of Community Health surveyor for complaint survey. Any SNF that participates in the Medicare/Medicaid program is subjected to annual, unannounced surveys from federal/state surveyors for compliance purposes (CMS, 2014). Complaint surveys are allegations of noncompliance with federal or state requirements. These are investigated through unannounced, onsite visits by a state’s delegated entity to substantiate allegation (CMS, 2014). This occurrence prevented many from attending. As a result, a makeup session was added to the originally scheduled sessions (see Table 1). Emphasis was placed on staff importance on their key role in reducing hospitalizations and re-hospitalizations. Emphasis was also placed on the importance of teamwork in order to accomplish project goals. Awareness education continued during new-hire orientation by the nurse practice educator and throughout project implementation.

Interactions.

The PDSA framework structured the project. This approach encourages education and learning, staff involvement and engagement, and process validation and recommendations within
a short period of time throughout implementation. The researcher constantly interacted with staff during project implementation, reminding and encouraging their participation efforts. Weekly dissemination of project progression with center management staff was initiated to not only keep them informed but also to help promote engagement in the project. Pens with teamwork inspirational logos were distributed to participants who attended the educational sessions and extras were given to staff who fully embraced the project. T-shirts advertising the project were given first to those who initially embraced the project by completing the STOP and WATCH forms, and the rest were given to those who completed the final post project survey.

**Post project survey.**

A survey was administered 2 months post implementation of the STOP and WATCH tool. Questions were rated using a Likert 5-point scale (strongly agree, agree, neutral, disagree, and strongly disagree). The Likert 5-point scale was dichotomized for further analysis. A rating of either “strongly agree” or “agree” was viewed as a favorable answer, while the other three options (“neutral,” “disagree,” and “strongly disagree”) were viewed as an unfavorable answer. Frequency calculation was used for data analysis.

A total of 53 staff members completed the post project survey. CNAs completed the highest number (39.6%) followed by LPNs (20.8%). No surveys were obtained from the Nutritional Service and Plant Operation departments. The highest percentage of survey participants (32.1%) reported 1 to fewer than 3 years of employment, while the smallest percentage (5.7%) came from those who reported 10 or more years of employment (Table 8).
Table 8

Survey Questions and Responses

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>(Favorable Response)</th>
<th>(Unfavorable Response)</th>
<th>Comments &amp; Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have changed the way I communicate change of condition of resident.</td>
<td>48 (90.6%)</td>
<td>5 (9.4%)</td>
<td>▶ “Very efficient for staff to communicate with nursing” (Admin).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “STOP AND WATCH create an increase response time in nursing” (Therapy).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “I really think this is a great program. It helps alert changes and involves all staff” (LPN).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “It seems the nurses are more receptive to our observations” (CNA).</td>
</tr>
<tr>
<td>I am fully engaged in using the STOP and WATCH tool.</td>
<td>47 (88.7%)</td>
<td>6 (11.3%)</td>
<td>▶ “Good tool to make staff aware of changes” (Nsg Admin).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “I think staff is more aware when they see changes in their residents and now have a way to communicate these concerns” (RN).</td>
</tr>
<tr>
<td>I have seen a change in the follow up on change of condition of residents.</td>
<td>46 (86.8%)</td>
<td>7 (13.2%)</td>
<td>▶ “I love the STOP AND WATCH forms! It helps assure nothing slips my mind and falls through the cracks, because face it, I am just human. The STOP AND WATCH helps” (LPN).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “Interventions are implemented immediately and is hard to forget what was reported” (RN).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “It encourages team work and no issues of residents are ignored” (LPN).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “Response varied among nurses as to level of follow up triggered by form” (Therapy).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “It is a good reminder for me to address issues if CNAs have multiple concerns on a busy day” (LPN).</td>
</tr>
<tr>
<td>I do believe implementation of the STOP and WATCH tool was a success in identifying change of condition,</td>
<td>44 (83.0%)</td>
<td>9 (17.0%)</td>
<td>▶ “Not sure about front hall since hospitalizations have not decreased” (Admin).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ “Strongly agree because STOP AND WATCH facilitates interventions, this leading to early recognition pf changes in patient condition hence reducing hospitalization” (RN).</td>
</tr>
</tbody>
</table>
Objective 3

The primary approach used to evaluate the extent to which hospitalization rate was reduced from 2 months prior to project implementation to end of data collection (Objective 3) was the hospitalization tracking form.

Hospitalization data were obtained from the facility’s electronic database and medical chart records. The study period ranged from 2 months before project implementation and 1.5 months during which project implementation occurred (April 17 to July 31, 2014). Information obtained included date of hospital transfer, time of day, and symptoms triggering transfer.
The facility has a capacity of 118 beds. The monthly census during the study period ranged from 112 to 114. A total of 78 hospital transfers occurred during the study period. Forty-two residents were transferred in the 2 months preceding project implementation while 36 residents were transferred during the project implementation period. The percentage of re-hospitalization that was within 30 days of admission as compared to total re-hospitalizations was 50% for both the pre-project period and project period (21/42 and 18/36, respectively) (Table 9).

Table 9

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre-project period</th>
<th>Project period</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transferred</td>
<td>42</td>
<td>36</td>
<td>78</td>
</tr>
<tr>
<td>Transferred to hospital within 30 days of admission to the SNF</td>
<td>21</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>Percentage of re-hospitalization within 30 days of admission</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

During the study period, 58 transfers (74.4%) occurred during weekdays, while 20 (25.6%) occurred during the weekends. Hospital transfers between weekdays and weekends showed no significant differences on daily averages. Weekdays averaged 11.6 (58/5) hospital transfers daily while weekends averaged 10 (20/2) daily. Looking at shift comparisons, the day shift had the highest number of transfers 40 (51.3%), followed by the evening shift 29 (37.2%) and then the night shift 9 (11.5%).
Table 10

Hospitalization Transfer Information by Day of the Week

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Pre-project period</th>
<th>Project period</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekdays</td>
<td>29</td>
<td>29</td>
<td>58</td>
</tr>
<tr>
<td>Weekends</td>
<td>13</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>36</td>
<td>78</td>
</tr>
<tr>
<td>Days</td>
<td>24</td>
<td>16</td>
<td>40</td>
</tr>
<tr>
<td>Evenings</td>
<td>11</td>
<td>18</td>
<td>29</td>
</tr>
<tr>
<td>Nights</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>36</td>
<td>78</td>
</tr>
</tbody>
</table>

The top symptoms triggering transfers were behavioral problems (n=12; 15.4%), followed by conditions classified as new or worsening (n=11; 14.1%), abnormal vital signs (n=9; 11.5%), abnormal labs (n=8; 10.3%), conditions classified as other diagnoses (n=7; 9.0%), and chest pain (n=6; 7.7%) (See Figure 2).
Figure 2: Symptoms triggering transfers

The agency's software program for recording hospitalization data allows for responses only in broad categories. For example, "abnormal vital signs" could indicate abnormally high or low blood pressure or pulse. "Other diagnoses" might include skin conditions, vague complaints, or family request. It was therefore difficult to compare the primary reasons for rehospitalization of SNF residents with those reported in the literature. According to the literature, pneumonia, urinary tract infection, dehydration, and congestive heart failure are the top reasons for hospitalizations (Ashcraft & Champion, 2012, Ouslander et al., 2010). Urinary tract infection
was reported only once, and pneumonia and congestive heart failure were not reported at all. Another top diagnosis reported in the literature as a leading cause for hospitalization is behavioral problems (Cohen-Mansfield & Lipson, 2006; Ouslander et al., 2010; Perry et al., 2010). Behavioral problems (such as suicide ideation, disruptive to self and others, verbally and physically combative) were the top diagnosis triggering transfer during the study period.
Chapter 5

Summary, Limitations, Implications, Recommendations

Chapter 5 presents the discussion of major findings. Limitations of the study are discussed. Conclusions, implications for nursing, and recommendations for further research are included in this chapter.

Discussion of Major Findings

Challenges in meeting the healthcare needs of the aging population has led to an increased rate of preventable hospitalizations, which are reported to be costly and detrimental to the health of the elderly, especially for those in SNFs. Quality improvement initiatives have been proposed as an intervention to improve quality of care of individuals and populations. This was a quality improvement project with three specific aims: (a) to implement the STOP and WATCH tool, the main tool designed to identify and communicate early warning signs of change in condition of residents; (b) to raise staff awareness and empowerment of their key role in reducing preventable hospitalizations and re-hospitalizations of SNF residents; and (c) to reduce the overall hospitalization and rehospitalization rates of residents. The first and second goals were met while the third was not met.

The first aim was to implement the STOP and WATCH tool at the center. A total of 137 forms were completed during the study period and as many as 13 in a single day. The CNAs completed the highest number of forms. This was expected since CNAs spend the majority of time with the residents, and also make up the largest number of employees.

The building is a 118-bed facility, consisting of four halls with two nursing stations. Each nursing station serves two halls with the same number of beds (59 each). One nursing station (named 100 hall) serves mostly long-term care residents while the other nursing station (named
200 hall) serves mostly short-term stay residents. Of the 115 (83.9%) STOP and WATCH forms completed by CNAs, 109 came from the 200 hall (94.8%) while 6 came from the 100 hall (5.2%). The type of residents served may be a contributing factor to the vast difference; however, the project was not well embraced by the staff on the 100 hall despite the researcher’s frequent interactions and encouragement. The nursing staff demographic between the two halls was different. The 100 hall nursing staff (CNAs and charge nurses) was made up of employees who have been at the facility the longest, while the 200 hall nursing staff had newer employees, recently graduated, and most currently enrolled in colleges. They showed more enthusiasm in embracing the project and were fully engaged.

The CNAs were the most involved in the project; they asked most of the questions and wanted to learn more. Most of the CNAs felt that the tool gave them an opportunity to voice their opinion about patient care. As one of them reported on the survey, “It seems the nurses are more receptive to our observations.” However, the CNAs became more frustrated when they thought that nurses were ignoring the STOP and WATCH form just completed. To overcome this obstacle, some started making copies of the form given to the charge nurse to use as proof and to make sure something was done about the problem reported. As one CNA reported on the post project survey, “Sometimes it is hard when nurses get irritated with you.” Unfortunately, although some nurses embraced the project, some saw it as extra work or another piece of paper to take care of. The administrative staff, especially nursing administration, did not fully embrace the project as expected. Their participation was weak, and they did not help facilitate project implementation. Despite the fact that one person from the Nutritional Services department and five in Plant Operations department attended the educational sessions, no STOP and WATCH forms were received from any employee in those two departments.
The project did not realize a decrease in hospitalization rate during study period. According to the literature, most residents are hospitalized within 30 days of admission into a facility (Mor, Intrator, Feng, & Grabowski, 2010). This was not true during the project period. Of the total number of residents who were hospitalized, 50% were those who had been in the facility less than 30 days. This percentage did not change between 2 months pre-project and during project implementation. This can be attributed to the limited time frame allotted for data collection. To fully realize what impact such a project can have on hospitalization rates, a longer time frame of at least six months should be used to collect data. The longer time frame will help minimize the impact of other variables that influence hospitalizations.

**Limitations**

Limitations to this project included time allotted to project implementation, lack of technology in the use of data collection, and external variables. The way these limitations impacted the project are discussed in the following section.

A major limitation to this project was the short time frame (6 weeks) for project implementation and data collection. For example, comparison of hospitalization data was limited to 2 months prior to project implementation and 6 weeks during project implementation. Most studies on hospitalizations are longer, allowing for sufficient time to collect data. Also, in regards to the objective to reduce the overall hospitalization and rehospitalization rates of residents, the comparison time frame was unequal: 2 months prior to project implementation and 6 weeks during project implementation. This may have led to inaccurate observations.

The use of paper and pen for data collection was also a limitation. Errors can easily be made in spelling, grammar, and transcription of data and information. Also, incomplete information provided by participants can easily occur. For example, 63 staff members attended
the educational sessions, and descriptive data information was available from only 61 participants.

Competing tasks at the center posed challenges for the project. During project implementation, the facility underwent a total change in its electronic health record system. This took focus away from the project, since staff had to learn the new system. Educational sessions for the new electronic health record system were scheduled during the project implementation period and during the time educational sessions for the project were being held. The presence in the facility of a state surveyor for an investigation on a complaint allegation on the second day of education impacted the educational sessions by limiting the number of staff signed up to attend that day. Most of them did not attend the makeup session that was later scheduled.

During the same period, the facility experienced a changed in nursing leadership. The director of nursing services resigned, thereby destabilizing the nursing administration department, which was supposed to be a major player in the project. This may be one of the reasons the nursing administration had a low participation rate. For example, none completed any of the STOP and WATCH forms during the data collection period. During weekly dissemination meetings, most time was spent soliciting nursing administration help for support of the project.

The Likert scale questionnaire used was developed by the researcher, based on a study done by Weng et al. (2013) to measure awareness of attitudes on barriers to implementation of evidence practice. This was a limitation in regards to validity and reliability of the instrument, since it has not been used or tested before.

Not all departments responded to the project as predicted. The Nutritional Service department which plays a major role in the quality of life of SNF residents, especially in regards
to nutritional health, did not participate in the project. One employee from that department attended the educational session; none filled out a STOP and WATCH form; and none participated in the post project survey. Members of the Plant Operations department also were not active participants in the project. None filled out a STOP and WATCH form or survey, despite the fact that they have multiple opportunities to interact with residents either in their rooms or common areas.

Implications for Nursing

Nursing staff make up the bulk of the employees employed in SNFs, and most with little or no advanced education and training in gerontology. Targeting interventions that work on improving staff skills and competency level should go a long way to improving care experience in these settings. Competency development should therefore begin in schools, with nursing education targeting competencies in gerontology and training in SNF environments. The IOM (2008) reported that the healthcare profession is not currently equipped to handle the needs of the growing geriatric population, especially those in SNFs. Nurses should take the challenge and set the lead for improving care in this sector of the healthcare industry.

The nursing implications identified in this project are many as evidenced by the following quotes from participants:

- “The CNAs are excited because they feel like they have a voice in the residents’ health condition and they help keep the residents from going to the hospital” (CNA).
- “Very efficient for staff to communicate with nursing” (Administrative Staff).
- “STOP and WATCH create an increase response time in nursing (Therapy Department).
- “I think staff is more aware when they see changes in their residents and now have a way to communicate these concerns” (RN).
RAISING AWARENESS FOR INTERACT TOOLS

- “I love the STOP AND WATCH forms! It helps assure nothing slips my mind and falls through the cracks, because face it, I am just human. The STOP AND WATCH helps!” (LPN).

**Implications for Health Care**

This quality improvement project was aimed at raising staff awareness and engagement in their key role in reducing potentially preventable hospitalizations through interventions made possible by early identification, assessment, documentation, and communication about changes in condition of residents. The goal was to improve care experience through staff competency. SNFs, therefore, should engage in quality improvement projects, especially those that build on staff competency and skills. Regulations should be put in place that encourage and enable SNFs to engage in quality improvement projects. Incentives that award SNFs with quality improvement projects will go a long way to encourage participation and compliance.

Skilled nursing facilities should promote a culture of education and change in their staff. Among all the departments involved in this project, the CNAs who were recent graduates or in school were the ones who showed the most participation and engagement. The CNAs and nurses with longevity resisted participation. As stated by one CNA, “We already know what we are doing and do not need any new initiatives.” Activities, therefore, that involve education and implementation of evidence-based practices should be part of a SNF’s culture.

**Recommendations**

Initiating quality improvement projects in SNFs not only has the goal of improving care experience, but also are a requirement of regulatory agencies (CMS, 2013c). INTERACT is one of those initiatives that has been reported in the literature to be successful in not only reducing preventable hospitalizations but also improving staff competency in patient care. To improve the
strength of such a project, 100% staff involvement would be required with full management involvement and a longer period of data collection for better data analysis. Also the use of lead CNAs who show high level of engagement in such projects will help increase staff engagement.

To be successful, INTERACT education should not be limited to mandatory quarterly educational sessions. It should be incorporated in the culture of the facility on a daily basis. INTERACT education should also be included in new hire educational onboarding process in order to not only ensure their participation in the program, but also to help instill a culture of quality improvement right at the beginning of employment. The use of the PDSA framework is ideal in implementing this initiative since it encourages education and learning, staff involvement and engagement, and process validation and recommendations within a short period of time throughout implementation. The RAND educational material was an appropriate module to use for this project since it focused on implementing only part of the INTERACT program (the early warning signs tool STOP and WATCH). To implement all of the INTERACT program, it will be beneficial to use the actual INTERACT educational modules that include in addition to early warning signs tools, communication and advanced care planning tools.

Conclusions

This was a quality improvement project aimed at improving care experience through implementation of the INTERACT tool, STOP and WATCH, an intervention that has been reported in the literature as effective in reducing avoidable or preventable hospitalizations of SNF residents. The project succeeded in implementing the use of the tool at the center through educational sessions aimed at raising staff awareness and engagement on their key role in preventing avoidable hospitalizations. The researcher presented this project at the Alabama/Georgia Genesis regional meeting in September 2014. The researcher has been invited
by other facility administrators to come help implement the project in their centers. As reported by a CNA, "It is a great tool. It enforces that what you have to say is listened to and taken care of." Despite the fact that the actual hospitalization rates revealed no change between project implementation period and the 2 months preceding project implementation, participants believed that the tool is capable of preventing hospitalizations: "Strongly agree because STOP AND WATCH facilitates interventions, this [sic] leading to early recognition of changes in patient condition hence reducing hospitalization" (RN).
RAISING AWARENESS FOR INTERACT TOOLS

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RAISING AWARENESS FOR INTERACT TOOLS


RAISING AWARENESS FOR INTERACT TOOLS


Appendix A

STOP and WATCH (current version)

**Stop and Watch**
**Early Warning Tool**

If you have identified a change while caring for or observing a resident, please circle the change and notify a nurse. Either give the nurse a copy of this tool or review it with her/him as soon as you can.

- Seems different than usual
- Talks or communicates less
- Overall needs more help
- Pain - new or worsening; Participated less in activities
- Ate less
- No bowel movement in 3 days; or diarrhea
- Drank less
- Weight change
- Agitated or nervous more than usual
- Tired, weak, confused, or drowsy
- Change in skin color or condition
- Help with walking, transferring, toileting more than usual

---

Name of Resident: __________________________

Your Name: ________________________________

Reported to: ______________________________ Date and Time (am/pm)

Nurse/Response: __________________________ Date and Time (am/pm)

Nurse's Name: ____________________________

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Appendix B

Trends in Rehospitalization Rates from Skilled Nursing Facilities: 2000-2006

Source: Authors' calculations using Medicare inpatient and skilled nursing facility claims and eligibility data and the Minimum Data Set, Centers for Medicare and Medicaid Services.
### Appendix C

**Types of Employees**

<table>
<thead>
<tr>
<th>Employee Role</th>
<th>Number</th>
<th>Educational Requirement/Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Administration: Director of Nursing Services (DNS); Assistant Director of Nursing (ADON); Unit Manager (UM); Nurse Practice Educator (NPE); Clinical Case Manager (CCM); Minimum Data Set (MDS) Coordinator</td>
<td>7</td>
<td>RN, ASN, BSN, Certified Legal Nurse Consultant, LPN, Post-HS Diploma</td>
</tr>
<tr>
<td>Registered Nurses (RNs): Supervisors, Charge Nurses</td>
<td>6</td>
<td>RN, Post-HS Diploma</td>
</tr>
<tr>
<td>Licensed Practical Nurses (LPNs): Charge Nurses</td>
<td>13</td>
<td>LPN, Post-HS Diploma</td>
</tr>
<tr>
<td>Certified Nursing Assistants (CNAs)</td>
<td>39</td>
<td>GA Certification, HS Diploma or equivalent</td>
</tr>
<tr>
<td>Administrative Staff: Administrator (ADM); Health Information Manager (HIM); Central Supply/Scheduler; Business Office Manager; Benefits/Payroll Coordinator; Receptionist; Admissions/Marketing Director; Social Services; Activities;</td>
<td>15</td>
<td>State Federal Licensure Requirement (LNHA), HS Diploma or equivalent; AA business management; Georgia Certified Nursing Assistant</td>
</tr>
<tr>
<td>Nutritional Services Department: Registered Dietitian, Food Service Director, Chef, Cook, Dietary Aides</td>
<td>14</td>
<td>BS in Nutrition, Licensed Registered Dietician, Board Certified Geriatric Specialist in Nutrition, Licensed with American Culinary Federation, AA Culinary Arts, ServSafe Certified, HS Diploma or equivalent</td>
</tr>
<tr>
<td>Therapy Department: Therapy Program Manager, Physical Therapist, Occupational Therapist, Speech Therapist</td>
<td>9</td>
<td>MS Speech and Language Communication, ST/PT/OT/PTA/COTA, MS, BS, AS</td>
</tr>
<tr>
<td>Plant Operations Department: Maintenance Staff, Housekeeping and Laundry</td>
<td>11</td>
<td>HS Diploma or equivalent</td>
</tr>
</tbody>
</table>
RAISING AWARENESS FOR INTERACT TOOLS

Appendix D

Post-project Implementation Evaluation

(Please Check or Circle Appropriate Answer)

A. I have changed the way I communicate change of condition of residents

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

Please use the box below for additional comments

B. I am fully engaged in using the "STOP AND WATCH" TOOL

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

Please use the box below for additional comments

C. I have seen a change in the follow up on change of condition of residents.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

Please use the box below for additional comments
D. I do believe implementation of the “STOP AND WATCH” tool was a success in identifying change of condition, reducing hospitalization, and improving care experience.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

Please use the box below for additional comments

E. I plan to continue to use the tool.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

Please use the box below for additional comments

Descriptive Information

Department
RAISING AWARENESS FOR INTERACT TOOLS

1. Nursing Administration,
2. Registered Nurses (RNs),
3. Licensed Practical Nurses (LPNs),
4. Certified Nursing Assistants (CNAs),
5. Administrative Staff,
6. Nutritional Services Department,
7. Therapy Department,
8. Plant Operations Department

Length of employment at this facility
1. Less than one year
2. One to less than three years
3. Three to less five years
4. Five to less than ten years
5. Ten years plus

Level of education,
1. No high school diploma or less
2. High school diploma
3. Associate degree or equivalent
4. Bachelor's degree
5. Graduate degree
6. Post graduate work

Gender
1. Female
2. Male

Age group
1. 18 to 24 years
2. 25 to 30 years
3. 31 to 39 years
4. 40 to 50 years
5. 51 years plus

Usual shift worked
1. Day
2. Evening
3. Nights

Scheduled days
1. Weekdays only
2. Weekends only
3. Both weekdays and weekends

Employment status
1. Full-time
2. Part-time
3. Per diem
Appendix E

Stop and Watch (previous version)

EARLY WARNING TOOL
"Stop and Watch"

If you have identified an important change while caring for a resident today, please circle the change and discuss it with the charge nurse before the end of your shift.

Name of Resident

Seems different than usual
Talks or communicates less than usual
Overall needs more help than usual
Participated in activities less than usual

Ate less than usual (Not because of dislike of food)

N

Drank less than usual

Weight change
Agitated or nervous more than usual
Tired, weak, confused, or drowsy
Change in skin color or condition
Help with walking, transferring, toileting more than usual

Staff

Reported to

Date _____/_____/_______  Time __________

Source: Copyright INTERACT
Appendix F

Project Advertisement Flyer

Working Together to Enhance Quality of Care and Prevent Re-Hospitalizations!

A 3rd quarter educational offering that you will not want to miss!

All employees are invited to attend!

The two-hour session will provide content on:

1. Detecting changes in our customers, and
2. Communicating those changes.

This educational session is part of a project through Genesis Healthcare to implement the INTERACT STOP and WATCH tool.

The time schedule for the classes will be posted soon!

Project Director: Gladys Sone, AGPCNP-BC; doctoral student, Georgia College & State University
Appendix G
RAND Module 1

Improving Patient Safety in Long-Term Care Facilities, Module 1

Learning Objectives: Knowledge and Performance Objectives

Knowledge Objectives

Participants will learn:

- Why detecting change is important.
- How to get to know a resident’s normal (baseline) condition.
- How to watch for change.
- How the Early Warning tool STOP AND WATCH works.
- How to follow up at the first sign of change.

Performance Objectives

Participants will be able to:

- Use the Early Warning tool STOP AND WATCH.

Session 1

Introduction

The following section will talk a lot about nursing assistants and licensed nurses. However recognizing change is the job of all of us who interact with the residents in one way or another. Please take note that the example below applies to all of us. We will use “change of condition” form in the place of SBAR tool.

Case Study: Ms. A
Ms. A is a mentally intact 79-year-old frail (in a weakened condition) woman who arrived at the Manor Nursing Center after a hip fracture at home. After a stay at an acute rehabilitation center, she is still not able to manage by herself. Ms. A walks with difficulty with a walker and needs help with daily living activities. Ms. A also has several other medical problems. She has high blood pressure, diabetes, and arthritis. She is also being treated for depression. Her family visits her regularly on weekends. She rarely participates in activities of the Manor Nursing Center; at mealtimes she tends to avoid conversation. Recently she had diarrhea, was incontinent of liquid stool, was placed in adult briefs, and nursing assistants had to change her adult briefs once or twice per shift. She began taking meals in her room. Stool tests showed that she had a bowel infection with Clostridium difficile. An antibiotic was started. Even with the antibiotic, her bowel movements continued to be liquid and frequent over the next week, and she was eating less. Her blood pressure had been normal for her at 130/80, but her pulse rate was higher than her usual 70-75 at 90-100. Yesterday, she had a fever of 102.5 and was transferred to the acute hospital, where she was admitted to the Intensive Care Unit.

How did Ms. A get so sick with only diarrhea? What changes might you have noticed about Ms. A? When might you have decided to do something about it? What could you have done?

We've all been in difficult situations that might have been avoided if we had noticed a problem early and dealt with it right away, before it got worse. These situations may happen when a person is ill, and even more so if that person is frail. When one thing goes wrong, it seems to lead to another thing going wrong, and that can continue until the person is dangerously ill. So noticing changes that might signal or lead to a serious condition is important. Often, the sooner something is done, the better it is for the person who is ill.

Key Lessons:
RAISING AWARENESS FOR INTERACT TOOLS

- Learn to notice a change early.
- Not reporting a change can lead to other things going wrong.
- The sooner something is done, the better.

Role of Nursing Assistants and Licensed Nurses

As nursing assistants and licensed nurses, your role in a long-term nursing center is very important. At home, people know each other well and notice changes in a friend or family member's condition or behavior. In a hospital or clinic, registered nurses, nurse practitioners, and doctors are there almost all the time, and they are trained to look for signs of illness and to be sensitive to changes in a patient. In nursing centers and other types of long-term care, NPs and doctors are there for much less time.

The providers who most often see the residents are the nursing assistants, and the ones who see them some of the time are the occupational and physical therapists and the licensed nurses. Unit administrators, clerks, and volunteers may also be there. Residents in long-term nursing centers depend on nursing assistants and these other providers to be the ones who notice change.1

Nursing assistants, in particular, become the eyes, ears, and hands of the care team. Residents depend on you to be alert and interested. They depend on you to talk with your team members so everyone is “tuned-in.” They also expect you to respond if something comes up. Nursing assistants are very busy and have many tasks, but detecting change is one of the most important. Leaders and advocates in nursing center care believe that having the same staff consistently assigned to the same residents leads to better care for the resident and higher staff satisfaction.2

Role of Nursing Assistants and Licensed Nurses
RAISING AWARENESS FOR INTERACT TOOLS

- Your role in a long-term nursing center is important.
- Nursing assistants see the residents most often.
- Residents in long-term care depend on nursing assistants to notice changes.
- Nursing assistants are the eyes, ears, and hands of the care team.

Detecting Change

Know the Resident's Normal (Baseline) Condition

When you first meet residents you are responsible for, you should talk with other members of your team to find out everything you can about the residents. Your coworkers may have learned things you need to know from other care providers or from family members and visitors. This can help you establish what's normal and may be called "baseline" information. Try to stay with each new resident as long as possible, just getting to know him or her, so that changes don't get overlooked because you don't have enough baseline information. Establish a conversational relationship with the resident and family and stay in touch every day you are with the resident so that you are more "tuned in" to how he or she normally is and how long he or she has been at that baseline. A change of shift report is another good way to gather baseline information.

Be sure to note a resident's ability to move around; their usual method for getting from, say, bed to chair; and how they do with activities of daily living. For example, do they need to sit while they are in the shower? It helps to know their preferences for activities, eating, dressing, and so on. Changes from the baseline in a resident's routines or enjoyable parts of the day can signal a medical change. In addition, be aware if the resident seems to be uncomfortable. Many older adults will not be willing to talk about pain or discomfort unless you ask them about their pain.

When you learn these important things about residents, make sure that you share the information with your coworkers.
Some care providers, such as the float nurse or new hires, don't know all they need to about the residents. Help them out by sharing relevant information and tips.

Detecting Change

- Know the resident's normal (baseline) condition.
- Note the resident's ability to move around.
- Know how the resident does with activities of daily living.
- Know the resident's preferences for activities, eating, and dressing.
- Changes from the resident's normal condition can signal a medical change.

Recognizing Change

When something about a resident seems to have changed, you should always observe and document the following things:

- Look back at the previous shift notes and make a shift-to-shift comparison.
- Make sure that needed equipment is available—the blood pressure cuff and stethoscope, the pulse oximeter, and the thermometer.
- See if a change occurred in any of the resident's vital signs—blood pressure, pulse rate, breathing rate, and/or temperature.
- Check the resident's records of urination and bowel movements—a quick check by the licensed nurse of the resident's bladder with a physical examination (percussing or tapping over the bladder area to see if it sounds like it is full), or with an ultrasound if one is available, can be very helpful for the resident who has not urinated and may need a catheter. If your nursing center has a hand-held ultrasound, make sure it is present too.
When you have collected all the information you can, be sure to share it with a licensed nurse. The licensed nurse may then decide to do a full assessment by reviewing the resident’s condition to see if a different treatment is required.

Recognizing Changes

- Do a shift-to-shift comparison.
- Make sure the needed equipment is available.
- See if a change occurred in any other resident's vital signs.
- Check the resident's records of urination and bowel movements.

Noticing change is not limited to the nursing staff. Employees in every department interact with residents in one way or the other. Therefore the task of noticing and reporting change is not limited to the nursing staff only.

Role of Therapy staff:

- Therapy staff spend a lot of time with residents providing rehabilitation services
- They are therefore in an important position to notice changes in health and function
- Monitor changes in function and report to nurse
- Observe for mood and comfort level and report changes
- Report even non clinical concerns of residents to the nurse

Administrative Staff:

- Administrative staff interact with residents during rounds, care plan meetings and customer first programs
- Report all concerns and changes observed to the nurse

Plant staff and nutritional services:

- Plant staff interact with residents mostly in their rooms when cleaning their rooms
RAISING AWARENESS FOR INTERACT TOOLS

- Report all changes in habits observed to the nurse
- Nutritional staff may interact with residents in the dining room or when obtaining meals preferences
- Report changes in things such as interest in meals or disinterest in food choices that deviates from resident's usual preferences.
Session 2
Changes That Matter

It's a challenge for nursing assistants and licensed nurses to notice changes that matter because so many things might matter.

We all know from our own lives that it can be hard to know when to react to a possible concern. For example, on the one hand, sometimes we worry too soon that our second sneeze might be a sign of a cold and, on the other hand, sometimes we ignore too long our bad cough and get sinusitis or even pneumonia.

The signs and symptoms of illness in older adults may be mild or different than in younger people. Older people have slower responses and less response to change. Sometimes mild symptoms and behaviors like feeling or acting tired are the only clue to an illness. In a younger person, the same illness would cause a fever or something more recognizable. So, it is important to notice and report changes in a resident sooner than for a younger person.

Things to watch for in residents include physical and non-physical changes. The top 12 changes to watch for are described here.

Top 12 Changes in Residents

Physical Changes

• Walking.
• Urination and bowel patterns.
• Skin.
• Level of weakness.
• Falls.
• Vital signs.
RAISING AWARENESS FOR INTERACT TOOLS

Non-Physical Changes

• Demeanor.
• Appetite.
• Sleeping.
• Speech.
• Confusion or agitation.
• Resident complaints of pain.

Physical Changes

1. Walking

A change in walking is important to notice, and there may be many different signs. You may notice the resident has trouble getting started or poor balance. He or she may seem to take smaller or shuffling steps or walk with the feet wider apart. The resident may favor one side more than another. These kinds of changes put the resident at risk for falling and also may signal an underlying problem. The resident may have had a fall and may have a broken bone or have worsening arthritis with increased pain and stiffness. Perhaps a small stroke occurred, or the resident has another new medical problem that is contributing to confusion and unsteadiness. Medications can also make the resident unsteady, lightheaded, or stiff. A more complete assessment is usually needed if a resident's walking changes.

Physical Changes

• Walking—e.g., how much assistance the resident needs with walking.
• Urination and bowel patterns—e.g., the resident is urinating less frequently.
• Skin—e.g., the resident's skin is puffy.
RAISING AWARENESS FOR INTERACT TOOLS

- Level of weakness—e.g., the resident is having difficulty lifting his or her arm.
- Falls risk—e.g., the resident reaches for objects when in a wheelchair.
- Vital signs—e.g., the resident is breathing faster than normal.

2. Urination and Bowel Patterns

People can be incontinent of urine for a number of reasons, including medications, infection, and many medical conditions. New urinary incontinence (lack of bladder control) should always be assessed medically. Decreased or absent urination is also important to notice. In addition to dehydration or kidney failure causing decreased urine production, people can retain urine and their bladder can fill and stretch and back up, damaging the kidneys and causing other problems. Constipation and diarrhea are common among older people and need early attention, both to manage the condition if there is no serious problem, and to detect a problem requiring new treatment. Constipation (slowing of the bowel movements) can worsen over time and progress to serious problems resulting from impaction (stool left in the colon). Sometimes liquid stool can come out around retained stool and appear to be diarrhea, so it is important to check for impaction. Diarrhea (watery, liquid stool) can also be a side effect from a medication, a symptom of a viral illness, or a serious bacterial infection that requires specific treatment.

3. Skin

Skin is the largest organ in the body and is usually kept mostly covered to everyone except the nursing assistant. It is very important to notice and report changes in skin. Reddened or darkened skin near a pressure point, or skin breakdown in those areas, can lead to a full pressure ulcer (bed sore) if not responded to promptly. Swollen, puffy, or red skin might be a sign of a skin infection, of a blood clot deep inside, or of excess fluid that needs medical attention. Dry or cracked lips can be a sign of dehydration or of an oral infection such as thrush (yeast). New
rashes (bumps, blisters, or red marks) over any part of the body should be reported because they can be a sign of an allergic reaction, another illness needing treatment, or an infection that could be spread to others.

4. Level of Weakness

Weakness can be a symptom of many kinds of illnesses. It can be general weakness (all over the body, fatigue) or local (in just one area of the body). Weakness that comes on suddenly might be a sign of a stroke or a serious medical illness. Weakness that happens gradually could be part of almost any other illness. Small changes in level of weakness that are different from the baseline pattern should be noted and followed over time; assessment will depend on where the change is located and how quickly it is changing.

5. Falls Risk

A fall is defined as "involuntarily coming to rest on a lower surface," whether it is an observed and assisted transition to the floor or an unwitnessed event that results in an injury. There are many things that can cause a fall, including things in the environment (like lighting, slippery floors, objects in the way) and things about the person who fell (like medications, medical conditions, and state of mind). Because falls often involve many factors, they should always be reported to determine what changes can be made to keep the resident safe.

6. Vital Signs

Vital signs include temperature, respiratory rate, blood pressure, and pulse rate. Some vital signs are collected using equipment, and some (respiratory rate) are done through observation. Vital signs are measured on a routine basis in nursing homes and help to monitor the resident's status and response to certain therapies. When there is suspicion of clinical change, vital signs must be obtained and should always be compared to baseline vital signs. Sometimes a resident will be
observed to have an abnormally high or low respiratory rate, and that will be the first sign of a clinical change that requires further assessment. For example, a high respiratory rate with fever and a high heart rate could signify an infection in the lungs or bloodstream, while a low respiratory rate could be a sign that the person has had too much pain medication.

Non-Physical Changes

Many of the non-physical changes described here may be present when the resident has delirium. Delirium is confusion that comes on suddenly and is related to another condition. Delirium can result in increased activity (hyperactive) or decreased activity (hypoactive).

Non-Physical Changes

- **Demeanor**—e.g., the resident is socializing less than normal.
- **Appetite**—e.g., the resident is not interested in his or her food.
- **Sleeping**—e.g., the resident falls asleep in unusual places.
- **Speech**—e.g., the resident's speech is slurred.
- **Confusion or agitation**—e.g., the resident is talking a lot more than usual.
- **Resident complaints of pain**—e.g., the resident grimaces or winces when he or she moves.

7. Demeanor (Appearance or Way of Acting)

Illness can affect a person's mood or behavior by changing the way the brain works. This can be caused by a bloodstream infection, a stroke, or simply not doing well with the social setting. A resident may become more withdrawn or passive or not want to get out of bed, socialize with others, or participate in usual activities. He or she may not be as talkative or may seem to be inattentive. Getting clues about what a change in demeanor may mean comes from doing an assessment, usually starting with an assessment by the registered nurse. The registered nurse's
assessment might include administration of the MDS PHQ-9 (go to Additional Tools and Resources section) to compare to previous results.

8. Appetite

Changes in appetite may signify many conditions and should always be reported. Sometimes medications change the way things taste or smell. The sense of taste can also be affected by a cold, chronic sinus congestion, or problems with stomach acid. Dental problems or pain in the mouth may make people not want to eat. Some medical conditions cause people to feel full faster or to feel nauseous all the time. People who are depressed or delirious may lose their appetite. Some people with dementia or confusion may have decreased initiative or interest in food. A more complete assessment, usually starting with assessment by a registered nurse, is needed if a resident loses his or her appetite.

9. Sleeping

Poor sleep is a problem for everyone, and residents deserve an assessment to allow them good sleep if at all possible. Changes to watch for include the resident complaining about not feeling rested, falling asleep in unusual settings, and being hard to rouse from sleep. Some residents with dementia or delirium have their sleeping and waking times mixed up, and after being up talking all night, they finally fall asleep in the morning hours. Poor sleep may also be a sign of something else, such as pain, anxiety, or depression. Some residents have difficulty breathing at night due to chronic lung problems, snoring, or pneumonia and may never fall into a deep sleep. Some medications and alcohol at night can also change sleeping patterns and interrupt normal sleep.

10. Speech
RAISING AWARENESS FOR INTERACT TOOLS

Speech problems are noted when residents have newly slurred or garbled speech, problems speaking loudly enough, or problems with chewing or swallowing food. Sometimes they might have problems finding the right words to say. Changes like this that happen suddenly might be related to their medication, or they may signal a stroke. Sometimes residents may simply be sleep-deprived. Usually new difficulties with speech mean that an assessment is needed.

11. Confusion or Agitation

Older people living in long-term nursing centers are often confused at baseline, but new levels of confusion or delirium can mean many things. Changes to watch for include behaviors such as talking a lot more or less than usual, talking loudly, or talking in ways that don't make sense, as well as refusing or resisting care. Some residents with confusion see or hear things or people that are not there. These changes can mean that the resident is in pain, that medications need adjustment, or that another illness has begun—anything from pneumonia or urosepsis to dehydration or a stroke. A nursing center resident's normal (baseline) mental status is evaluated on admission using the MDS BIMS assessment (go to Additional Tools and Resources), and this baseline can provide helpful information if there is a change. The licensed nurse may assess change using a tool such as the CAM assessment from the MDS, which will provide helpful information. New confusion or delirium should be reported and addressed clinically.

12. Resident Complaints of Pain

Residents know their own body sensations. It may be hard for them to convey that something new is happening or something has gotten worse. But even residents with dementia may be able to express something. Listen to the resident to see if he or she can tell you more about what hurts or feels different or bothersome.
RAISING AWARENESS FOR INTERACT TOOLS

Chronic pain is often due to arthritis or some other condition that is not likely to cause quick changes in the resident's condition. It still needs to be reported and evaluated, but it may be less urgent than new pain. New pain can be a symptom of many things, for example a heart attack, a dangerous weakening in one of the major blood vessels, or a weakening in the bowel wall that has worn through. New pain needs to be brought to the attention of the licensed nurse right away.

Watching for Change

The key to watching for change is to always be watching. But that is hard to do. No one can be perfectly aware all the time, but if we have a good baseline for what is normal, it is almost automatic to notice change. Try to watch residents wherever they are, and not just in specific places or times (such as medication hour), as much of the time as possible. The more comfortable and familiar the relationship with the resident, the easier it is to see change. Check in with residents often, ask how they are, and watch them during their daily living activities. Take special care with residents with dementia to get to know their baseline and watch them because changes for these residents can be sudden, and they may not be able to tell you what's wrong.

Always talk with others who provide care for your residents. When you see what might be a change it is especially important to talk with your team members and see if they noticed it and when they think it started.

Here are some examples of how the interdisciplinary team can watch for the Top 12 changes.

Physical changes:

- Walking—If the resident needs assistance, watch how much assistance he/she needs with walking. You can watch to see if the resident changes mode of transportation (walking to
RAISING AWARENESS FOR INTERACT TOOLS

wheelchair). You can watch the resident when they walk down the hall to see if he/she uses the guard rails more than usual.

- Urination and bowel problems—Be sure to notice if the resident is incontinent of urine or stool, or if urination is more frequent, urine smells different, or if bowel movements are rare or change to diarrhea.

- Skin—While bathing and dressing the resident, look to see if the resident's skin is discolored or puffy.

- Level of weakness—Watch when the resident raises his or her arms while eating, during activities, or while performing personal hygiene to see if the resident has more difficulty than usual.

- Falls—Watch the resident when doing things that could result in a fall (e.g., reaching for objects when in a wheelchair).

- Vital signs—Record the resident's blood pressure and heart rate and look for any changes in breathing and temperature.

Non-physical changes:

- Demeanor—Observe the resident to see if he or she socializes less or participates in activities less than usual.

- Appetite—Observe the resident during meals (and the tray after meals) to see if the resident is not interested in his or her food.

- Sleeping—Observe during the day to see if the resident falls asleep in unusual places.

- Speech—Talk to the resident to see if speech is slurred.
RAISING AWARENESS FOR INTERACT TOOLS

- Confusion or agitation—Watch the resident for new fidgeting. When approaching the resident to give normal care, ask the resident structured questions to see if he/she talks more or less.

- Resident complaints of pain—When transferring a resident or when the resident is moving, look to see if the resident is grimacing or wincing.

Watching for Change

- The key is to always be watching.

- Residents should be watched wherever they are, as much of the time as possible.

- Check in with residents often.

- Talk with others who provide care for your residents.

What Should Be Reported

What is important enough to report? If you only reported things that turned out to be a problem, you would probably have missed some. If you reported so many things that few turned out to be a problem, over time you might not get the attention you need when it matters.

As a general rule, the care team member who reports about three to five changes to the supervising licensed nurse for every one that the registered nurse responds to with a full assessment is probably getting it right. But this is only a "rule of thumb," and it can vary from resident to resident and from day to day, depending on the resident's needs. It also varies from staff member to staff member. In general, the process of reporting should allow each provider level to pick out the most important information from a somewhat larger amount of possibly important information.

It is more important to report anything that might matter than to get the amount of reported information perfect. Experience and training help when deciding on how much to report; team
members with less training or less experience should not hesitate to report more rather than less. So, if in doubt, report your concern to your supervisor.

When starting out with a new situation or a new resident, it can be overwhelming to think about how many things can go wrong and how much you have to watch for. But once you're familiar with daily patterns, you'll be aware of the things that happen often and those that are changes.

What is important enough to report?

- For about every three to five reports, one full assessment is done.
- It is more important to report anything that might matter than to get the amount of reported information perfect.

Following Up on the First Sign of Changes

Sometimes it is hard to know when a change is really a change and that it should be reported.

Here are some things you can do to be confident that you are looking at a real change and also that you are not waiting too long to decide that it is a real change that should be reported.

How to Follow Up on the First Sign of Changes

- Shift-to-shift comparisons.
- Are there any changes that should be watched for or reported?
- Early Warning tool:
  - Form that nursing assistants can use to write down what they have noticed about a resident's condition.
  - Use the tool anytime a resident has had a change.
  - The nurse will fill out a change of condition form and follow up with the NP or physician.

Shift-to-shift Comparisons
RAISING AWARENESS FOR INTERACT TOOLS

Your nursing center probably has a place to record your resident's blood pressure, urination and bowel information, temperature, activities of daily living, and behaviors. Be sure to use this to record information from your shift, and be sure to read what was written from the shifts before yours so you can make comparisons. Always ask yourself: 'Are there any changes that should be watched or reported?' If you feel there is something that needs to be watched, write it in your shift notes. If you feel something has changed that needs to be reported, do so.

Early Warning Tool "STOP AND WATCH"

The Early Warning tool is a form that nursing assistants and other staff members can use to write down what they have noticed about a resident's condition. It is a brief guide through all of the early changes that can be signs of illness. It is meant to help you communicate about the change with the nurse. The form should be completed any time a resident has had a change by the direct staff member who noticed the change.

Take a look, and if you have not used one before, try filling it out, say, for the resident you have taken care of most recently. If any changes are noted on the Early Warning tool, report that to the licensed nurse before the end of your shift.

The Early Warning tool should not take the place of talking to the nurse, but it can help the nursing assistant remember everything he or she wants to tell the nurse about the resident's change in condition.

Responsibility for Observation and Reporting

Team members have to pull their own weight, but they also rely on other team members. Front-line providers are the eyes and ears for the team. Medical personnel have to make decisions based on the information that comes to them through the chain of command, including nursing
assistants, licensed nurses, and other staff. Keep this in mind when reporting changes in residents; part of helping the team perform best is sharing information.5

Receptionists, clerks, occupational therapists, chaplains, volunteers, and members of the transport, dietary, and housekeeping staff are also important observers. They get to know the residents and should feel encouraged to report changes to a clinical member of the team. Visitors can be very important observers too. If they make any comments about changes, ask them what they see that is different and when it seems to them to have changed.

Observing and Reporting

• Who is responsible?

• Front-line providers are the eyes and ears of the team.

• Part of helping the team perform best is sharing information.

• Receptionists, occupational therapists, chaplains, volunteers, housekeeping staff, other staff members, and visitors are important observers.

Creating a Safe Environment

Reporting changes helps keep residents as safe as possible. Residents are safest—protected from harm or injury—when everyone expects to openly report anything that might affect the residents’ well-being.

Learning and experience help providers to keep residents safe. Learning and experience involve getting information and seeing how things work, noticing when they aren't working right, understanding how to prevent those things from happening, and knowing how to recover when things do go wrong.
An experienced care team has seen sick people get well with good care. They have also seen things go wrong in the care system. They have learned how to avoid those situations and to fix them as well as they can.

A Safe Environment

- Reporting changes helps keep residents as safe as possible.
- Learning and experience help providers to keep residents safe.
- Open communication among team members helps to keep residents safe.
- Team members must move beyond blaming someone.
- Those who care will speak up.

Perhaps most importantly, care team members have learned to communicate openly with each other when something happens that might affect a resident's well-being. This may not be easy if the change seems to be serious. When things go wrong or look as if they are about to (near-misses), we tend to feel embarrassed, and worry that if we report the problem, our job performance could be questioned or we might get punished. And we don't want to get anyone else in trouble. This is particularly true if a supervisor needs to be involved. As a result, things that might affect a resident's safety may go unreported or not be discussed. This puts the resident at risk for a bad outcome.

Not being able to talk about how things did or could go wrong holds back our own learning. Learning is much harder if we can't see what happens when things go wrong for others, or we can't get feedback when it happens to us. Everyone—residents and staff—benefits from an environment that supports discussion and learning from near misses and adverse events.

This teaching session should be a chance for you to talk about reporting change in a way that is safe for you and your colleagues (that is, you should feel confident that no one will blame you
and your team) as well as good for the residents. If you feel safe to report change, say so. If you don't, say so; you should be able to feel safe when reporting change.

We all care about the residents in our nursing center. To make sure they stay safe, we have to move beyond blaming anyone, to being able to openly share experiences—good and bad. It is true that you may come across a situation in which a care provider's actions are not well-intended; that person may have to be identified and possibly removed from the setting. But that is very unusual. Usually, when things go wrong it is because a provider was too tired, distracted, didn't know the system, or the communication or teamwork was not smooth. Sometimes systems create "an accident waiting to happen." These kinds of problems can be fixed best if discussion is encouraged by the leadership (or administration), and the care team can work together to figure out a solution.

Remember, caring means speaking up. Residents expect and deserve a safe environment and often cannot speak for themselves, so it is up to members of their care team to speak for them.

While that's easier for some of us than others—especially on sensitive matters that we think might cause blame—it's something we all have to learn to do.

Conclusion

In Summary

The ability to detect change in a resident's condition is important because it can prevent illness from getting worse. Nursing staff know the residents best; therefore they are the best qualified to notice when there is a change in a resident's condition. Detecting change depends on all nursing staff (nursing assistants/licensed nurses) being alert to changes and ready to share their observations and respond to the changes.
In order to properly assess a change, it is necessary to know the resident's normal (baseline) condition, assess the change and compare it with the baseline, and know which changes might be signs of illness. When there is a change in condition in an older person, it usually is less obvious than it would be in a younger person, and it could mean many different things.

Changes to watch for include those affecting the way a resident walks, urination and bowel patterns, skin changes, level of weakness, falls, vital signs, demeanor, appetite, sleeping, speech, confusion or agitation, and resident complaints of pain. It may be necessary to report a change repeatedly.

Pearls and Pitfalls

Pearls

1. The best way to detect a change in a nursing center resident is to get to know what is normal for that particular resident.

2. You can learn to be observant, and to make a habit of being "tuned in" to residents.

3. Older people have less response to change, so the signs and symptoms of illness they exhibit may be milder or different from those seen in younger people.

4. A safe environment supports open reporting of resident changes and doesn't find fault with reporters.

5. When in doubt, report a change.

Pitfalls

1. Feeling that it is hard to report a change because someone might be blamed is a barrier to safe care.

2. Forgetting to use reporting tools makes it harder for the care team to be alerted to changes once these are detected.
RAISING AWARENESS FOR INTERACT TOOLS

3. Expecting someone else to take action when change is detected does not help residents stay safe.

4. Assuming someone else knows the resident better or knows more than you can get in the way of your desire to report what you think might be a change.

Summing Up:

- Detecting changes can prevent an illness from getting worse.
- Nursing staff know the resident best.
- Nursing staff must be alert to watch for changes.
- The need to share observations and respond to changes is very important.
- Staff must know what's normal for the resident so it can used for comparison when there is a change.
- Staff must know the different changes they need to watch for.
Appendix H

RAND Module 2

Improving Patient Safety in Long-Term Care Facilities, Module 2

Learning Objectives: Knowledge and Performance Objectives

Knowledge Objectives

Participants will understand:

- Why communicating changes in a resident's condition is an important safety issue.
- Why communication lapses are a major risk factor for resident safety.
- Key principles of effective communication.
- Typical obstacles to effective communication and how to overcome them.
- What to communicate about changes in a resident's condition.
- How to communicate a resident's change in condition using the change of condition form

Performance Objectives

Participants will be able to:

- Demonstrate good communication techniques.
- Practice good communication skills.
- Effectively communicate a change in a resident's condition.

Session 1

Introduction

Case Study: Mrs. C

Mrs. C is 85 years old; she has lived at the Manor Nursing Center for about a year. Lisa and Anne are the nursing assistants on duty on Mrs. C's unit today on the evening shift, and Linda is
the licensed nurse. Lisa and Anne know that Mrs. C has recently learned that her daughter, who lives in another State, is seriously ill. After the evening meal, Lisa notices that Mrs. C is not her normal self. Usually talkative, she is suddenly not talking much. She is also limping for an unknown reason and seems very upset and angry. Lisa tries to talk to Mrs. C but doesn’t get much response. When she arrives to help Mrs. C prepare for bed, she finds Mrs. C already asleep on her bed, still in her clothes. When she wakes Mrs. C up to help her change and wash before bed, Mrs. C seems disoriented and says something rude to her.

What needs to be communicated? By and to whom? How? When? Where? How do you know when the communication has worked?

Mrs. C

• What needs to be communicated?
• By and to whom?
• How?
• When?
• Where?
• How do you know when the communication has worked?

In answering these questions, think about specific things that specific people should do: What should Lisa do next? What can Anne do? What can Linda do? Should Linda call Mrs. C’s attending doctor? What should they tell the night shift licensed nurse and nursing assistant when they come on duty?

Detecting and reporting changes in a resident’s condition are the centerpiece of high quality care, and they are key to making sure residents are as well as they can be. In your work you probably
notice changes in, for example, a resident's behavior or ability to do certain things. This is very important. Often, changes can be detected just because you notice something out of the ordinary. The next important step is knowing how and when to report such changes. Reporting changes is necessary for quality resident care, and that means working with others.

Reporting changes involves a number of skills, including:

- Communicating what you have noticed to other members of your care team.
- Working together with team members to identify what the change might mean.
- Working with team members to take action to make sure residents are safe and getting the care they need.

A Safe Environment

- Reporting changes helps keep residents safe.
- Learning and experience are what make safety possible.
- Openly reporting anything that might affect a resident's well-being is essential for a safe environment.

- Change in a resident's condition should be reported openly, whenever it happens.

Front-line workers often know the resident better than anyone else, even—in some situations—the resident's family. As the "eyes and ears" of the entire care team, your skills in recognizing and communicating changes in the resident's condition are extremely important. For these reasons, using your skills to communicate changes across the care team may be the most important thing you can do for residents.

Learning to effectively communicate changes in a resident's condition also depends on the care team working well together. So being a good team member and helping others to be good team members are also important when it comes to communication.
RAISING AWARENESS FOR INTERACT TOOLS

When team communication is poor, people often say they don’t feel they are heard, especially by their supervisors. So pay attention to them if there are people who report to you. Make sure you are listening and that they are heard and feel heard.

Good communication skills help team members work with others toward the goals they share for good resident care, and this is how things get done. Communication about care is one important way for team members to learn about their roles on the team, as well as the goals and ways of working on the team. Communication teaches team members how to come to agreement and how to achieve common goals. Team communication has to occur from the leader of the team to all team members and also among all team members. Research shows that teams with better communication provide better care.

Working Toward a Safe Environment

Reporting changes helps keep residents as safe as possible. Residents are most safe—protected from harm or injury—when it is normal and accepted that care providers openly report anything that might affect a resident’s well-being.

Reporting Changes in a Resident’s Condition

- Detecting and reporting change is essential to patient care.
- Reporting changes is necessary for quality resident care.
- Reporting involves the following skills:
  - Communicating what you have noticed to the care team.
  - Working together to identify what the change might mean.
  - Working with the care team to take action to make sure the resident is safe.
Sometimes people worry about reporting a change because they feel that something has gone wrong, and they wish it was not so. But, you must report the change, since the resident cannot be helped if no one knows there might be a problem.

Learning and experience are what make safety possible. This involves getting information and seeing how things work, noticing when they aren't working right and understanding how to prevent that from happening, and knowing how to recover when things do go wrong. So an environment where people openly report anything that might affect a resident's well-being, and where they are supported for reporting openly, is a safe environment.

An experienced care team has seen sick people get well with good care. They have also seen things go wrong in the care system. Team members have learned how to avoid those situations, and when they can't be avoided, to fix them as well as they can. But they can only do so if they have the information that comes from reporting. You can help everyone work toward having a safe environment by reporting resident change openly, whenever it happens.

Communicating About Unwanted Events

One of the most important ways that experienced care team members have learned to improve safety is by learning to communicate openly with each other when something happens. This may not be easy. When things go wrong or look as if they nearly did, we tend to feel embarrassed and worry that if we report the problem, our job performance could be questioned or we might be punished; and, we don't want to get anyone else in trouble. This is particularly true if a supervisor needs to be involved. As a result, things that might affect a resident's safety may go unreported or not be discussed.

Not being able to talk about how things did or could go wrong holds back our own learning. Learning is much harder if we can't see what happens when things go wrong for others or can't
get feedback when it happens to us. Everyone—residents and staff—benefits from an environment that supports discussion and learning from unwanted events that happened or nearly happened.

We all care about the residents in our nursing center. To make sure they stay safe, we have to move beyond blaming anyone, to being able to openly share experiences—good and bad. It is true that you may come across a situation in which a care provider’s actions are not well-intended; that person may have to be identified and possibly removed from the setting. But that is very unusual.

Usually, when things go wrong it is because a provider was too tired, distracted, didn’t know the system, or the teamwork was not smooth. Sometimes systems create “an accident waiting to happen.” These kinds of problems can be fixed best if discussion is encouraged, and the care team can work together to figure out a solution.

Communicating About Unwanted Events

• Learn to communicate promptly and openly when something happens that might affect a resident’s well-being.

• Move beyond blaming anyone to being able to openly share experiences.

• Show you care by speaking up.

Caring means speaking up. Residents expect and deserve a safe environment but often cannot speak for themselves, so it is up to members of their care team to speak for them. While that’s easier for some of us than for others—especially on sensitive matters that we think might cause blame—it is something we all have to learn to do.

It helps to have tips and tools for speaking up. In particular, it helps to be familiar with:

• What information you need to share with the rest of the team.
RAISING AWARENESS FOR INTERACT TOOLS

- Who you need to share the information with.
- How to best communicate with that person or those people.

Communication: A Skill You Can Learn

What is communication? It helps to think about it in three parts: communication is made up of a giver, a message, and a receiver.

Communicating well involves:

- Expressing yourself (the sender) in a way that you will be "heard" (understood) by other people.
- "Hearing" how other people (the receivers) answer. Really listening will let you know if you have gotten your message across.

One kind of communication is "verbal." Verbal communication involves speaking and listening to speech. With verbal communication, things can sometimes get in the way of your message. Certain words may mean one thing to you and something else to the other person. Sometimes one person uses "jargon"—words that are specific to what they do—that other people may not know. How quickly we speak, or what kind of accent we have, can also affect how the other person receives what we say.

A second kind of communication is "non-verbal." This has to do with our facial expression, how we move our hands, if we look the other person in the eye, how close we stand to the other person, etc. This kind of communication can either help get a verbal message across or get in the way.

Who is responsible for communicating change in a resident's condition? We all are. Good communication is part of a safe environment. Good communication is a skill you can learn.

Stages of Communication: Giving and Receiving
RAISING AWARENESS FOR INTERACT TOOLS

Three Parts of Communication

Giver of Information.

- Prepare the message.
- Find a suitable setting.

Message

- Deliver a clear message.
- Deliver a usable message.

Receiver of Information

- Listen:
  o Actively.
  o Without judgement.
  o Focus on the main point.

There are three stages for giving information.

Get ready—What information do you want to give and to whom? Is it an emergency, urgent, or routine?

Give your information—Keep it short, clear, and to the point. Sometimes, depending on how the other person seems to be receiving it, you may have to change your presentation while it is happening, or repeat it in a different way.

Check to see if it worked—Follow up to make sure that your message is understood.

There are also three stages for receiving communication.

Listening—Focus on the person you are listening to. Let him or her know you are paying attention. You may want to ask questions to be sure you understand correctly.
RAISING AWARENESS FOR INTERACT TOOLS

Responding—It can be helpful to repeat, in different words, what the other person said to you to show them that you understood. Think about how to give information back to that person in a give-and-take until you are both sure that you heard it right.

Following up—The next step is being clear about what will happen after the message is given and received. What do you need to do or need the other person to do? How soon? Does everyone agree on the plan?

Barriers to Communication

Sometimes communication may not go well or may break down completely.

What gets in the way of good communication? People may be afraid to speak up. They may not know who should be getting the information. They may be shy, or find it hard to communicate when they are under stress or talking with a superior. They may worry that the receiver does not think what they have to say is important.

We all have different ways of communicating. It is important to understand how differences can become barriers that keep our message from getting through.

Gender differences—Many people believe that there are differences between men and women in the ways that they communicate.

Generational differences—Our age (i.e., the generation we grew up with) also influences our communication. This is because language changes over time, and each generation may use different words to say the same thing (e.g., new words come into general usage, while others fall by the wayside and may even become unacceptable as time goes by).

Language differences—This can be about speaking in different languages, such as English or Spanish, or using jargon. When people are not speaking in their first language it can be hard to communicate. Jargon can also be a barrier, since it is not always understood by the listener.
Cultural differences—These can be our beliefs about other groups of people, our values, or what we think is acceptable or unacceptable behavior. Getting to know how our coworkers communicate in their own way—how they talk, what they feel uncomfortable saying—is important, but it can be difficult to achieve.

Status differences—When licensed nurses and doctors are valued as equal professionals, communication is better. But when licensed nurses are seen as people who "take orders" from doctors, communication is more difficult. The same holds true for communication between nursing assistants and licensed nurses.

Interpersonal issues—Sometimes team members have differences that have led to negative feelings between them, and they may prefer to avoid communicating with each other. When this happens, communication about patient care issues may be compromised.

Environmental or system barriers—More attention needs to be given to the very detailed processes through which licensed nurses and doctors communicate. In long-term nursing centers, many of these exchanges take place over the phone, complicating things even more.

Workload issues—If you (or another member of the team) are overwhelmed with work, it may be hard for you to find the mental energy necessary to communicate well. You may feel that you can't spare the time to follow good communication practices.

Sometimes we face several communication barriers at the same time. For example, two groups of professionals who often face communication difficulties are licensed nurses and doctors. While all the barriers listed above may be involved, those related to "status" and "systems" are most likely to come into play at the same time.

Barriers to Communication

- Differences in:
RAISING AWARENESS FOR INTERACT TOOLS

- Gender.
- Age/generation.
- Language.
- Culture.
- Status.
- Interpersonal issues.
- Environmental or system barriers.
- Workload issues.

We may face several communication barriers at the same time.

In summary, early recognition of changes in a resident's conditions is essential to his or her safety and well-being. Appropriate action can't be taken if team members notice the changes but are not able to communicate about them. For good communication:

- Be aware of and have ideas about how to work around barriers.
- Give clear messages.
- Focus your attention on what the other person says by actively listening.
- Be aware of nonverbal signals, both given and received.
- Give and ask for feedback—this makes a positive outcome for the resident more likely and can improve future communication.

Session 2

Communication Tools

In health care organizations, the main source of information about residents is the medical record. In practice, however, care teams communicate about residents in many ways. These include whiteboards (with lists of residents that may change every day), notes that one caregiver
leaves for the next, and instructions for various caregivers (24 hour report), and change of
condition form. Now we will use STOP AND WATCH tool too.

What Should Be Communicated

Types of Change to Be Reported

A list of changes to watch for in residents was described in detail in the preceding module,
"Detecting Change in a Resident's Condition." These include:

Physical changes:

• Walking.
• Bowel and urination patterns.
• Skin.
• Level of weakness.
• Falls.
• Vital signs.

Non-physical changes:

• Demeanor (appearance or way of acting).
• Appetite.
• Sleeping.
• Speech.
• Confusion or agitation.
• Resident complaints of pain.

Information to Be Communicated

• Top physical and non-physical changes to watch for in residents.
• Nursing assistant communication tasks.
RAISING AWARENESS FOR INTERACT TOOLS

• Licensed nurse communication tasks.

Who Should Report About What

Each type of nurse (e.g., nursing assistant to licensed nurse) has his or her own set of information to communicate. The next two sections present communication action steps for nursing assistants and licensed nurses.

Communication Action Steps for Nursing Assistants

In the case of nursing assistants, the important information is: what just happened and what was it like before that is now different. For example, that information may include:

• The nursing assistant’s observations and concerns about the changes in the resident’s condition.

• Any communication among nursing assistants about the resident’s changing condition.

• Any previous communications between the nursing assistant and the licensed nurse, as well as any previous communication with a supervisor.

Communication Action Steps for Licensed Nurses

Licensed and especially charge nurses have communication action steps that go in several directions:

• In communications with nursing assistants, licensed nurses can summarize communication between nursing assistants, keep nursing assistants up-to-date on the nursing assessment of the situation, and respond to a nursing assistant’s concerns about a resident.

• In communications with other licensed nurses, they should provide a shift-to-shift report and communicate with a supervisor about changes in a resident’s condition.

• In communications with primary care providers (nurse practitioners or doctors), they could use the change of condition form
RAISING AWARENESS FOR INTERACT TOOLS

Conclusion

Four Points to Remember

Noticing changes in a resident's condition is important, but by itself, it is not enough to ensure resident safety and well-being. Changes must be detected early and communicated promptly across the multidisciplinary team and within the nursing team.

A safe environment is based on good communication. Everyone is responsible for speaking up about safety concerns and changes in a resident's condition, and everyone's input should be welcome. In a safe environment, no one is trying to place blame; rather, everyone is working to determine what is best for the resident and the institution.

Communication skills can be learned. These include preparing to communicate, presenting information, and getting feedback. All team members must listen carefully when a message is being presented, respond to it, and follow up.

We all face barriers to communication. In a health care setting, differences in level of authority and environmental or system barriers are often the hardest to get past. However, good communication between team members who have different roles, such as nursing assistants and licensed nurses, is essential to good outcomes for residents.

In Summary

- Noticing changes in a resident's condition is important, but it is not enough to ensure resident safety and well-being.
- Changes must be detected early and communicated promptly.
- A safe environment is based on good communication.
- Everyone is responsible for speaking up.
- Communication skills can be learned.
RAISING AWARENESS FOR INTERACT TOOLS

- We all face barriers to communication.

Pearls and Pitfalls

Pearls

1. Caring means communicating.

2. Communication happens in many directions and among many other disciplines.

3. Communicating effectively means speaking up in a way that will be "heard" and listening for feedback.

4. Effective communication means speaking and listening.

5. We often face barriers to communication, and frequently there are multiple barriers at the same time.

Pitfalls

1. Assuming that someone knows what is happening just because they have a higher position is often incorrect.

2. Saying something does not mean you have been heard, so assuming that you have been heard can be a mistake.

3. Assuming that someone from a different culture who speaks your language understands you may not be correct.

4. Forgetting to listen can be as much of a problem as not speaking up.
RAISING AWARENESS FOR INTERACT TOOLS

Appendix I

IRB Consent Form

I, ________________________________, agree to participate in the research:

Raising Awareness for Interventions to Reduce Acute Care Transfers (INTERACT): Implementation of “STOP AND WATCH” Tool, which is being conducted by Gladys Sone, MSN AGPCNP-BC, who can be reached at 678 438 1972. I understand that my participation is voluntary; I can withdraw my consent at any time. If I withdraw my consent, my data will not be used as part of the study and will be destroyed.

The following points have been explained to me:

1. The purpose of this study is to raise awareness and set the foundation for staff engagement and empowerment in their key role in reducing preventable hospitalizations and the use of INTERACT tools.

2. The procedures are as follows: you will be asked to participate in an educational session where the importance of preventing avoidable hospitalizations will be explained and how to use the INTERACT “STOP AND WATCH” Tool. At the end of the project intervention you will be asked to fill out an evaluation form concerning the main aspects of the project.

3. You will not list your name on the data sheet. Therefore, the information gathered will be confidential.

4. You will be asked to sign two identical consent forms. You must return one form to the investigator before the study begins, and you may keep the other consent form for your records.

5. You may find that some questions are invasive or personal. If you become uncomfortable answering any questions, you may cease participation at that time.
6. You are not likely to experience physical, psychological, social, or legal risks beyond those ordinarily encountered in daily life or during the performance of routine examinations or tests by participating in this study.

7. Your individual responses will be confidential and will not be release in any individually identifiable form without your prior consent unless required by law.

8. The investigator will answer any further questions about the research (see above telephone number).

9. In addition to the above, further information, including a full explanation of the purpose of this research, will be provided at the completion of the research project on request.

Signature of Investigator Date

Signature of Participant Date

Signature of Parent or Guardian Date

(If participant is less than 18 years of age)

Research at Georgia College & State University involving human participants is carried out under the oversight of the Institutional Review Board. Address questions or problems regarding these activities to Mr. Marc Cardinalli, Director of Legal Affairs, CBX 041, GCSU, (478) 445-2037
Appendix J

Picture of Project Promotion Pens

" Alone we can do so little; together we can do so much. " — Helen Keller

" Working together is a necessity. Working side by side creates progress. Working together is success. " — Henry Ford

" Teamwork; Simply stated, it is less me and more we. " — Unknown

" Teamwork divides the task and doubles the success. " — Unknown
Appendix K

Picture of Project Promotion T-Shirts

T-Shirt Front

cartersville Heights

working together to
enhance quality of care
and prevent
rehospitalizations

T-Shirt Back

T - together
E - everyone
A - achieves
M - more
### Appendix L

#### Budget

<table>
<thead>
<tr>
<th>Project material</th>
<th>Cost</th>
<th>Source of funding</th>
<th>Running total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snacks and drinks for educational sessions</td>
<td>$60.68</td>
<td>Personal</td>
<td>$60.68</td>
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<tr>
<td>Form collection folders and other stationeries</td>
<td>$19.24</td>
<td>Personal</td>
<td>$79.92</td>
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<tr>
<td>Trinkets for participants (pens)</td>
<td>$99.96</td>
<td>Personal</td>
<td>$179.88</td>
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<tr>
<td>Project T-shirts for participants</td>
<td>$310.50</td>
<td>Personal</td>
<td>$490.38</td>
</tr>
<tr>
<td>Copying materials</td>
<td>not calculated</td>
<td>Facility</td>
<td></td>
</tr>
<tr>
<td>&quot;STOP AND WATCH&quot; forms</td>
<td>not calculated</td>
<td>Facility</td>
<td></td>
</tr>
</tbody>
</table>
Appendix M

Data Collection Tool for STOP and WATCH Form

<table>
<thead>
<tr>
<th>Date</th>
<th>STOP &amp; WATCH Y/N</th>
<th>Department</th>
<th>Day of the week weekday/weekend</th>
<th>Shift day/evening/night</th>
<th>Reported to nurse Y/N</th>
<th>Response from nurse Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Key:

Date – written as mm/dd/year

Department
1. Nursing Administration,
2. Registered Nurses (RNs),
3. Licensed Practical Nurses (LPNs),
4. Certified Nursing Assistants (CNAs),
5. Administrative Staff,
6. Nutritional Services Department,
7. Therapy Department,
8. Plant Operations Department

Day of the week initiated
1. Weekday
2. Weekend

Shift initiated
1. Day
2. Evening
3. Nights

Reported to nurse as indicated on the STOP and WATCH tool
1. Yes
2. No

Response from nurse as indicated on the STOP and WATCH tool.
1. Yes
2. No
## Appendix N

### Hospitalization Tracking Form

<table>
<thead>
<tr>
<th>Case #</th>
<th>Date</th>
<th>Day of the week</th>
<th>Shift Day/Evening/Night</th>
<th>Reason/Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Week day/Weekend</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key:**

- Date – written as mm/dd/year
- Day of the week transfer occurred
  1. Weekday
  2. Weekend
- Shift transfer occurred
  1. Day
  2. Evening
  3. Night
- Reason/Symptoms:
  - List from company’s documented list
Appendix O

Staff Descriptive Data Form

(This information is for research purpose only and will be kept confidential by the researcher).

Directions: please circle or check the category that fits you.

If you do not feel comfortable providing any part of this information please mark DECLINE beside the category.

Department
1. Nursing Administration,
2. Registered Nurses (RNs),
3. Licensed Practical Nurses (LPNs),
4. Certified Nursing Assistants (CNAs),
5. Administrative Staff,
6. Nutritional Services Department,
7. Therapy Department,
8. Plant Operations Department

Length of employment
1. Less than one year
2. One to less than three years
3. Three to less five years
4. Five to less than ten years
5. Ten years plus

Level of education,
1. No high school diploma or less
2. High school diploma
3. Associate degree or equivalent
4. Bachelor’s degree
5. Graduate degree
6. Post graduate work

Gender
1. Female
2. Male

Age group
1. 18 to 24 years
2. 25 to 30 years
3. 31 to 39 years
4. 40 to 50 years
5. 51 years plus

Usual shift worked
   1. Day
   2. Evening
   3. Nights

Scheduled days
   1. Weekdays only
   2. Weekends only
   3. Both weekdays and weekends

Employment status
   1. Full-time
   2. Part-time
   3. Per diem
Appendix P

GCSU IRB Approval Letter

Bradley Koch <no-reply@irbnet.org>  

Jun 13

Please note that Georgia College IRB has taken the following action on IRBNet:

Project Title: [610102-1] Raising Awareness for Interventions to Reduce Acute Care Transfers (INTERACT): Implementation of “STOP AND WATCH” Tool

Principal Investigator: Gladys Sone, MSN, AGPCNP-BC

Submission Type: New Project

Date Submitted: May 24, 2014

Action: APPROVED

Effective Date: June 13, 2014

Review Type: Expedited Review

Should you have any questions you may contact Bradley Koch at bradley.koch@gcsu.edu.

Thank you,

The IRBNet Support Team

www.irbnet.org
To: Gladys Epote Sone, MSN, AGPCNP-BC

From: GHC Internal Research Review Committee

Date: May 23, 2014

Subject: Research Proposal – Implementation of Stop N Watch Tool

We are pleased to inform you that your proposal to raise awareness for the INTERACT tools, specifically the Stop n’ Watch, at Cartersville Heights Center in GA has been approved. The Committee had requested that any feedback regarding the implementation of this important tool be shared with GHC, as appropriate. When you receive approval or IRB documentation from the Georgia College & State University, please forward these for our records. We look forward to hearing about your research. Please let us know if we can assist in any way.