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Improving use of the Stop and Watch Tool (INTERACT) to Decrease Rehospitalization of Nursing Home Residents

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Abstract

The purpose of this clinical quality improvement project was to determine if using the Stop and Watch tool (a tool used to identify change in resident condition) would improve communication between stakeholders and nurses, resulting in fewer re-hospitalizations. The evidence-based literature behind the problem of re-hospitalization shows that improving communication among stakeholders can positively affect long term care residents' quality of life and decrease events that could result in re-hospitalizations.

The design for this study includes process development on the use of the Stop and Watch tool (a communication component of the Intervention to Reduce Acute Care Transfers tool [INTERACT ®] Quality Improvement Program) to improve stakeholder communication, as well as data analyses on re-hospitalization rates, specifically determining if re-hospitalization was avoidable or un-avoidable. The studied facility administrator suggested addressing four conditions that they had identified as the major conditions for which past residents had been re-hospitalized (heart failure, respiratory distress, memory impairment, and residents at high risk for falls). Stakeholders were trained on how to use the tool for ten minute one-on-one sessions by an INTERACT ® Champion and during new hire orientation by a registered nurse educator. All stakeholders were encouraged to use the tool every shift when acute changes in condition were noted; the tool was monitored on how often it was used.

Before the training, the tool had been used three times in a 4-month period. After training, the usage increased to 77 times during the 4-month monitoring period. Stakeholders were instructed to report all changes in facility residents using the Stop and Watch tool criteria (INTERACT ®). For the four-month study period, the entries focused on six residents whose average age was seventy-seven. The studied facility's re-hospitalization rate for the full year of 2021was 42.8% (24 of 56 residents); for the first quarter of 2022, the rate was 2.8% (one in 35 residents). The one resident re-hospitalized required services not available at the facility; this re-hospitalization met the definition of un-avoidable. All entries into the Stop and Watch tool were from nursing assistants and nurses. Other stakeholders directly notified the unit nurse and did not document in the Stop and Watch tool (INTERACT ®). Anecdotally, an increase in the reporting frequency from non-nursing stakeholders was also noted.

Keywords: Intervention to Reduce Acute Care Transfers (INTERACT) tool, long term care facilities, Minimum Data Set (MDS), re-hospitalization costs, heart failure, chronic obstructive pulmonary disease, falls, avoidable re-hospitalizations, non-voidable re-hospitalizations, Stop and Watch Tool (INTERACT®), functional decline, improved communication

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Introduction

Improving use of the Stop and Watch Tool (INTERACT ®) to decrease re-hospitalization of nursing home residents is a result of the need to contain healthcare costs which is a large part of the 2010 Affordable Care Act (ACA) and the 2014 Improving Medicare Post-Acute Care Transformation (IMPACT) Act (Centers for Medicare &Medicaid Services, 2020). Both the ACA and IMPACT Acts include penalties on nursing facilities for avoidable re-hospitalizations within the first 30 days of hospital discharge (Centers for Medicare &Medicaid Services, 2020). Poor communication among stakeholders was found to be one cause of re-hospitalizations. The Stop and Watch tool (INTERACT ®) is a communication tool that can be used by all stakeholders in the long-term care setting to improve communication and decrease re-hospitalizations (Ouslander, et al., 2017).

Background

There are different definitions found for an avoidable re-hospitalization. Ouslander et al. (2011) defined avoidable as deficiencies in early assessment, early documentation, and early communication. Other definitions of avoidable readmissions are based on the diagnosis and complexity of the condition for which the resident is re-admitted, as well as the urgency of the problem, its relation to the previous admission, inadequate discharge planning, and inadequate follow-up care (Compass Clinical Consulting, 2017). Dr. Ouslander is the leading researcher for the INTERACT tool; therefore, his definition of avoidable re-hospitalization, deficiencies in early assessment, early documentation, and early communication, was used for this study (Ouslander, et al., 2011).

Medicare, the largest insurance carrier in the United States, estimated that re-hospitalization rates of 5.1 million patients with heart failure cost more than one billion dollars annually (Banoff, Milner, Rimar, Greer, & Canavan, Jul/Aug 2016). Medical costs for combined fatal and non-fatal falls were almost fifty billion dollars in 2015 (Pahor, 2019). The cost of re-hospitalization for patients diagnosed with COPD was 32.1 billion dollars in 2010 (Centers for Disease Control and Prevention, 2018). Memory impairment

has been shown as a factor in increasing re-hospitalization rates, but no total costs can be found. The cost of re-hospitalization rates continues to grow annually.

The payment penalties for avoidable re-hospitalization from nursing homes can involve up to two percent reduction of payment for services, depending on whether the re-hospitalizations were avoidable or un-avoidable (Ouslander, et al., 2011). Penalties for future years are based on performance from the prior years; for example, for the fiscal year 2019, 73% of skilled long-term-care facilities received a penalty on their Medicare payments for 30-day re-hospitalizations, based upon the 2018 fiscal year (Castellucci, 2018). In Kentucky, 75% of long-term care facilities received penalties (Rau, 2018). Money collected through re-hospitalization penalties was given to long-term-facilities that excelled at reducing re-hospitalizations, with over three hundred million dollars awarded (Rau, 2018). Penalties can significantly impact clinical practice in nursing facilities. Loss of revenue could result in fewer supplies and staff. There was no loss of revenue or penalties at the facility chosen for this study; however, there were also no rewards issued.

Re-hospitalization data is collected as part of the Minimum Data Set (MDS) and reported in the Quality Measure, part of the Five-Star Quality Rating System used by CMS to rate the performance of long-term care facilities. Functional decline is one of the Quality Measures addressed in the system for long stay residents (Medicare, 2018). Long stay residents (residents who have resided in the facility for 100 days or more) are tracked on decreased ability to move, increased need for assistance with activities of daily living, weight loss, depression, and the need for physical restraints (Medicare, 2018). All these factors can be negatively affected by re-hospitalization, as well as social isolation, another indicator of quality of life for the elderly (Saito, et al., 2018). In a study of 143 patients over the age of 50, a decline in muscle strength was noted during the first 48 hours of re-hospitalization; decreased muscle strength can affect patient balance, increase falls risk, and decrease health-related quality of life (Meriaa, et al., 2015).

Avoidable re-hospitalizations are usually the result of poor communication between the nurses and physicians (Ouslander, et al., 2017). Effective communication is vital for the healthcare team to develop the right plan of care for a resident (Ouslander, et al., 2017). Nationally, a state-by-state study showed that

in some states the re-hospitalization rates were over 20% (Ouslander & Maslow, 2012). In a systematic review, Alper, O'Malley & Greenwald (2020) found that the avoidable hospital readmissions average was 27 percent with a range of 5 to 79 percent in the thirty-four studies reviewed. The re-hospitalization rate for the facility in this study ranged from 33 (2018) to one (2021). This was not tracked at the study facility.

The quality improvement INTERACT® Program focuses on managing information on early warning signs of acute changes in residents and types of interventions that can be initiated earlier; as a result, many re-hospitalizations can be avoided. The INTERACT® Quality Improvement Program includes multiple tools: A Medication Reconciliation Worksheet; the Situation, Background, Assessment, Recommendation (SBAR)/Acute Change in Condition Progress Note; Root Cause Analysis tool; Stop and Watch/Early Warning tool (which can be used by all stakeholders to communicate changes in condition) and the Hospital Communication Tool (Ouslander, et al., 2011), all of which are dedicated to decreasing re-hospitalizations.

The leading cause of re-hospitalizations and top chronic disease in the United States (in people over the age of 65) is heart failure (Desai & Stevenson, 2012). More than 20% of heart failure patients were readmitted to the hospital within 30 days of discharge (O'Connor, 2017). Heart Failure contributed to one out of nine deaths in 2009; 50% of patients with heart failure died within five years of diagnosis (Center for Disease Control and Preventation, 2019). In 2017, the death rate for patients with heart failure increased, with one in eight patients dying from heart failure, with nine out of ten over the age of sixty-five (Kaiser Permanete, 2019).

Other chronic illnesses that require frequent re-hospitalizations nationally include chronic obstructive pulmonary disease (COPD) and cardiovascular disease (Prince, et al., 2015). Karstetter (2011) found that one out of five Medicare patients discharged from the hospital within 30 days was re-hospitalized because of COPD. Dupre, et al. (2018) found that one in six patients was re-hospitalized for cardiovascular disease within 30 days of hospital discharge and stated that the re-hospitalizations were due to lack of follow-up resources. Hoffman, et al. (2019) found the 30-day readmission rate for patient falls was

14.4%. Falls cost more than 50 billion dollars in 2015; causes include vision problems, lower body weakness, and difficulty with walking and balance (Center for Disease Control and Prevention, 2022).

The purpose of this clinical quality improvement project was to determine if using the Stop and Watch tool would improve communication between stakeholders and nurses, resulting in fewer re-hospitalizations. The diagnoses of heart failure, respiratory distress (including COPD), memory impairment or patients who are at risk for falls were identified and studied because they were the top four reasons for re-hospitalizations at the facility in this study for the previous years.

Evidence Review

Multiple studies conducted by Ouslander and team concluded that the INTERACT® Quality Improvement Program was effective in decreasing avoidable re-hospitalizations. The tool was effective in decreasing re-hospitalization by 23% to 25% when stakeholder training was present; that effectiveness decreased to 17% when no training was provided (Ouslander, et al. 2011; 2017; Ouslander & Maslow, 2012). The definition of avoidable re-hospitalizations used in these studies relied on the trained staff's perception regarding avoidable versus un-avoidable transfer, and whether Ouslander's definition of avoidable was met, that the staff failed to assess, document, or communicate changes early in the resident's condition.

The research varies in the results addressing re-hospitalization rates after using the INTERACT® program (Unroe, et al., 2013). Unroe, et al. found the INTERACT ® Quality Improvement Program to be 28% effective when using trained staff and only six percent effective when staff were not engaged(N=910). A large study by Kane, et al. (2017) found that when staff received training and support, there was no significant reduction in re-hospitalization rates (N=85). In the Kane study, there was no information given on how long educational training was given to the facility or if there was an INTERACT® Champion present in the facility.

Barriers to the use of INTERACT ® tool included lack of resources, staff resistance, and staff instability (Kane, et al., 2017). Enderlin (2012) compared the INTERACT® Quality Improvement Program to six other transitional models using fourteen different commonalities; Enderlin reported a 17%

reduction in rehospitalization rates when the tool was used. The INTERACT® Quality Improvement Program is the only model that looks at transition from hospital to skilled nursing facilities (SNF).

The Abate and Vangraafeiland (2019) study focused on the two communication tools of the INTERACT Quality Improvement Program. One of the communication tools is used for communication between the nurse and physician (SBAR). The Stop and Watch (INTERACT ®) communication tool is used for facility stakeholders to communicate with the nurse. The Stop and Watch tool (INTERACT ®) addresses twelve parameters for all stakeholders to monitor (Abate & VanGraafeiland, 2019). (Figure 1) These parameters include the terms: seems different than usual; talks or communicates less; overall needs more help; pain-new or worsening; ate less; no bowel movement in 3 days or diarrhea, drank less; weight change; swollen legs or feet; agitated or nervous more than usual; tired, weak, confused, or drowsy; change in skin color or condition and needs help with walking, transferring, or toileting. Mihaljevic and Howard (2016) found that when the Stop and Watch tool (INTERACT ®) was implemented into 25 long term care facilities, there was an estimated health cost savings of $125,000 through decreased re-hospitalizations (by 50%; N=25).

Synthesis of Evidence

The INTERACT® Quality Improvement Program is the only program that has been developed for transitioning hospitalized patients to nursing homes or skilled nursing facilities. Equipping staff with education over a 6-month period on how to use the INTERACT® Quality Improvement Program increased its effectiveness to 28%, versus only 6% when staff were not engaged (Unroe, et al., 2013). Ouslander et al. concluded that the use of INTERACT® champions increased the effectiveness from 17% to 25% (Ouslander, 35 al., 2011; 2017), but that in-depth education must be provided on all tools that make up the INTERACT® tool. These findings included residents with diagnoses of heart failure (HF) and respiratory distress that were re-hospitalized within a 30-day period. King et al. (2013) focused on communication as an important part of decreasing re-hospitalization. The Stop and Watch tool (INTERACT ®) aids facility stakeholders in providing communication on early warning signs of acute changes in resident condition (Ouslander, et al., 2011).

Theoretical Framework

The Middle Range Theoretical Framework used as the guiding principle for the capstone project was Christina Sieloff's Theory of Work Team/Group Empowerment (Sieloff, 2017). This theory focuses on multiple items such as teamwork, team communication, goals, and team empowerment. Teamwork is seen when all stakeholders use the Stop and Watch tool to identify early warning signs of acute changes in resident condition. Facility staff communication is demonstrated when notification of these acute changes in resident conditions is related to the nurses overseeing resident care (through the Stop and Watch tool (INTERACT ®). Goals are met when there is a significant increase in early recognition of resident changes and a consequent reduction in avoidable re-hospitalization rates. Empowerment is seen by stakeholders' involvement in improving the quality of life for the residents in their care.

Implementation process for use of Stop and Watch tool

Institutional Review Board (IRB#941, through the project director's university) approval was obtained on 8/17/21. The site chosen for the study is a 120-bed long-term care facility. In this facility, there is a computerized Stop and Watch tool available as part of their electronic charting program (PointClickCare) that has not been utilized on a regular basis. The Minimum Data Set (MDS) is a document required by the Center for Medicare and Medicaid System (CMS) that addresses changes in resident status at the time of admission and at 14 days, then 30, 60, 90 days, and again if there are acute changes in two resident assessment areas. Changes in condition that last more than 14 days can trigger the need for completion of a significant-change-in-condition MDS form. Implementation of the Stop and Watch tool for this study involved its use in all facility residents.

The INTERACT ® champion and project director is a Doctor of Nursing Practice student who has completed the INTERACT® champion certification course, has 30 years of MDS experience, 30 years of Quality Measures experience, and 30 years of long-term-care experience. The INTERACT ® champion role encouraged the stakeholders to use the Stop and Watch tool (INTERACT ®) (Figure 1) when communicating changes in resident condition, as well as encouraging charge nurses to be respectful and attentive to every report received through the Stop and Watch tool (INTERACT ®) system. The

stakeholders included nursing assistants, housekeeping staff, chaplain (there is only one chaplain), maintenance workers, therapists, dietary aides, RN Nurse Educator (provides training on use of Stop and Watch tool (INTERACT®) during new hire orientation) and nurses. Due to families having limited visitation as the result of COVID 19 restrictions, family members were not included in this study as stakeholders. Training will be provided on a continual basis. Due to staffing issues, training took place during all shifts on a one-on-one basis. Sessions lasted 10 minutes explaining how to interpret the STOP and WATCH tool®, including allowing for time to answer stakeholders' questions.

Monitoring use of the tool took place over a 4-month period. The project director met weekly with the RN Nursing Educator to collect data, provide encouragement to the stakeholders for using the tool, and review which re-hospitalizations were avoidable using the Stop and Watch tool (INTERACT ®). The number of Stop and Watch Tool entries for the 4 months prior to the project was compared to the number of entries for the 4-month period covered in the project. Avoidable re-hospitalizations were defined as admissions that could have been averted with early assessment of change in condition, documentation review, implementation of treatment (Ouslander, et al., 2011). Un-avoidable re-hospitalizations were defined as changes in condition that included an off-site evaluation/treatment by a clinician or family insistence that their family member be transferred to the hospital during a phone update on condition. These definitions were used when determining if the re-hospitalization was avoidable.

The project director was available daily either in person, by email, or phone. A chart review was conducted, which included a review of the Minimum Data Set (MDS) to determine the definition of avoidable or un-avoidable was met. The Stop and Watch tool (INTERACT ®) was already part of the Point Click Care electronic software used by the facility, and was accessible by stakeholders' computers, cell phones, and electronic medical record (EHR). The stakeholders were asked to document completed Stop and Watch tool (INTERACT ®) information into the computer system and report issues to the nurse assigned to the unit in real time, within one hour. If the stakeholders found the resident unresponsive, short of breath, or the resident had experienced a fall, they were instructed to report it to the nurse

immediately and complete a STOP and WATCH tool entry (INTERACT ®). The Assistant Director of Nursing (DON), Director of Nursing (DON), or shift supervisor reviewed the information during morning meetings during the week and project director on the weekends. Unit nurses were instructed to verbally report all status changes that were emergent in nature to the NP/physician on call. No resident identifiers (Table 1) were used in reporting the data. There was an ample number of computers (including cell phones) that stakeholders could access on the units for documentation.

Budget for cost of project

The project took place over a 4-month time frame. The total budget for this project was 3,400 dollars. This cost included donated 40 hours from the project director, hours meeting with the INTERACT® champion of the facility (Program Director), hours meeting with RN Nursing Educator. No supplies were needed due to the tool being electronic. Stakeholders' training hours and a reward for the facility in recognition of their project support was minimal (Table 1).

Facility for Study

The facility chosen was a long-term care facility in Kentucky. The facility has an overall 5-star rating, based on the 5-star nursing home rating system from the Centers for Medicare and Medicaid. Although the re-hospitalization rate was already below the national average, 0.57 per 1,000 long-stay resident days compared to 1.69 per 1,000 long-stay resident days, the study was conducted to determine if the re-hospitalization rate could be further decreased. This facility, which opened in 2017, does not have any short stay data available due to length of time it has been opened. There have not been any penalties at this facility for re-hospitalizations or re-hospitalization awards for meeting reward criteria. The total number of beds at the facility is 120. The highest census at the facility was 76 residents, in 2018. The census dropped to 74 in 2019 and to 56 in 2020. In 2021, the census dropped to 35 and is currently at 34 (first quarter, 2022).

Timeline for the Project

The timeline for completion of this capstone project was from mid-September 2021 to mid-January 2022.

Findings/Results

There were 35 residents at the beginning of the study and 34 residents at the end of the study. Stakeholders were asked to use the tool on all facility residents. Most residents had co-morbidities: fifteen residents had heart failure, 10 had COPD, 20 had memory impairment, and 15 were identified as having high falls risk (Table **2**). Demographically, all residents were white males, average age of 77, ranging between 71 and 90, and all had insurance (Table 3). All have been in the facility for more than 30 days (Table 3). All 35 residents had a least one of the focus diagnoses of heart failure, COPD, memory impairment, or were identified as having a high risk for falls (Table 4). Of the 35 residents, all documentation of changes in condition focused on six residents (Table 2). Of the six residents, two required a significant change per MDS definition assessment to be completed due to two changes in status that lasted more than 14 days. Early interventions included giving antibiotics and making medication dose changes to medications that the residents were already receiving (Table 2).

There were only three entries on the Stop and Watch tool in the 4-month period prior to starting training on the use of the tool. Stakeholder training began in the middle of September 2021 and continued until the middle of January 2022. During that period there were 77 entries in the Stop and Watch tool (INTERACT ®) due to changes in resident status. (Table 5) Chart check showed that all entries centered around 18% of the residents in the facility (6 of total number of 35 residents). The identified residents (N=6) either had treatment started in the facility or were transitioned to palliative care while in the facility; one resident passed away during the study (this was an expected death and the resident had already been transitioned to palliative care). Treatments included starting the residents on antibiotics, making medication adjustments, or being referred to therapy for rehabilitation, returning the resident to baseline function. Only one resident was re-hospitalized within the 30-day window; this visit was considered unavoidable. The resident needed an intervention that could not be performed at the facility. (Table 2)

The stakeholders who entered the most entries were nursing assistants (N=8) out of a total of 20 nursing assistants, followed by nurses (N=3) out of the 23 nurses on staff at the facility (Tables 6). The

three nurses that made entries were acting in the role of nursing assistants; therefore, all entries were made by staff members who were acting in the role of nursing assistants. Of the 43 total nurses and nursing assistants, only 25 % of the nursing staff utilized the tool. When examining the 77 entries, 26% of the entries were made by nurses acting in the nursing assistant role; 57 of the 77 entries were made by true nursing assistants. (Table 7) Other stakeholders seemed to prefer notifying the unit nurse when they noted an acute change; unfortunately, these verbal reports were not documented in a central location. The predominant entries documented in the Stop and Watch tool (INTERACT®) included "Ate Less" (N=12); "Seems different" (N=10), "Tired" (N=10), and "Agitated" (N=7) (Table 4). The computer program automatically generates "No bm (N=100)" "Ate less than 25% (N=72)", and "No Void" (N=25). (TABLE 8). Re-hospitalizations for the facility have been recorded as 46% (35/76) in 2018, 45.9% (34/74) in 2019, 46% (35/76) in 2020, 43% (24/56) in 2021, and 2% for the first quarter (1/35) in 2022. (Table 9). Unfortunately, the facility did not track whether the re-hospitalizations were avoidable or un-avoidable.

Discussion

There were obstacles and limitations to this quality improvement intervention during COVID-19 times. Obstacles included constant staff turnover, resulting in continuous training occurring throughout the 4-month period. The project director did not include travel in the original budget, and it became an added expense due to the facility requiring over 1 hour travel time. Low facility census (N=35; bed capacity 120) played a part in how often the Stop and Watch tool was used (N=77). Low census also resulted in fewer incidences that would require documentation in the Stop and Watch tool (INTERACT ®). Census declined from 76 (in 2018) to 74 (in 2019) to 56 (in 2020) and to 35 (in 2021). The census is now 34 (in the first quarter of 2022). (Table 10)

Consistent with the literature, the study results suggest that providing educational training and having an INTERACT® Champion in this facility appeared to be key to the INTERACT® tool's use. The INTERACT® Champion was available to provide training, answer questions on how to document in the tool, encourage the stakeholders to increase communication and answer questions on what next steps

were needed to get immediate assistance to residents that had experienced an acute change. The tool aided in reviewing documentation for signs of significant changes in status for the MDS during the data reviews, and empowered stakeholders to communicate when they witnessed resident changes. Use of the tool increased from three entries in the 4-months prior to study to 77 entries during the 4-month study. The nursing assistants and nurses acting as nursing assistants were the only stakeholders that documented in the tool. It appears that when a nurse is acting as a nurse, as well as stakeholders other than nurses, observe acute changes in condition, they report directly to the care team, then resulting in an intervention. This might be an area of further research, suggesting that the tool's use may be increasing communication awareness among the team; documentation of these verbal reports should be logged. Stakeholders other than the nursing staff did not document in the tool. Even though these verbal reports were not documented, anecdotally, there was a notable increase in these stakeholders communicating with the nurses on the unit when acute changes were noted. The project director's team suggested that possibly an alternative tool entry would involve a hard copy and a receptacle near the unit nurse's station.

Since only 25% of the nursing staff made entries into the Stop and Watch tool, there should be an increase in stakeholder use appreciation; stakeholders that use the tool should be recognized and rewarded for their entries, with subsequent changes in care interventions. Discussions should occur with non-nursing staff on their preference for recording changes, and their use of the Stop and Watch tool.

There was also a notable decrease in re-hospitalizations from 2021 (24 for 12-month period) to the first quarter of 2022 (1 for the four-month study period). Hopefully, this work will result in the facility knowing how to track avoidable and un-avoidable re-hospitalizations, as well as determining best practice methods for decreasing avoidable re-hospitalizations. Increased communication correlated to early interventions and decreased re-hospitalizations (Table 10). It must be noted, however, that other variables (nurse practitioner presence five days/week, eight hours/day; medical director presence twice weekly and both very interactive staff) could contribute to the improved re-hospitalization rate; however, these positions have been in effect for over five years. More likely the fear of hospitalizing a resident during

Covid-19 hospital infection rates, especially prior to vaccine access, was also a significant factor contributing to the decreased re-hospitalizations.

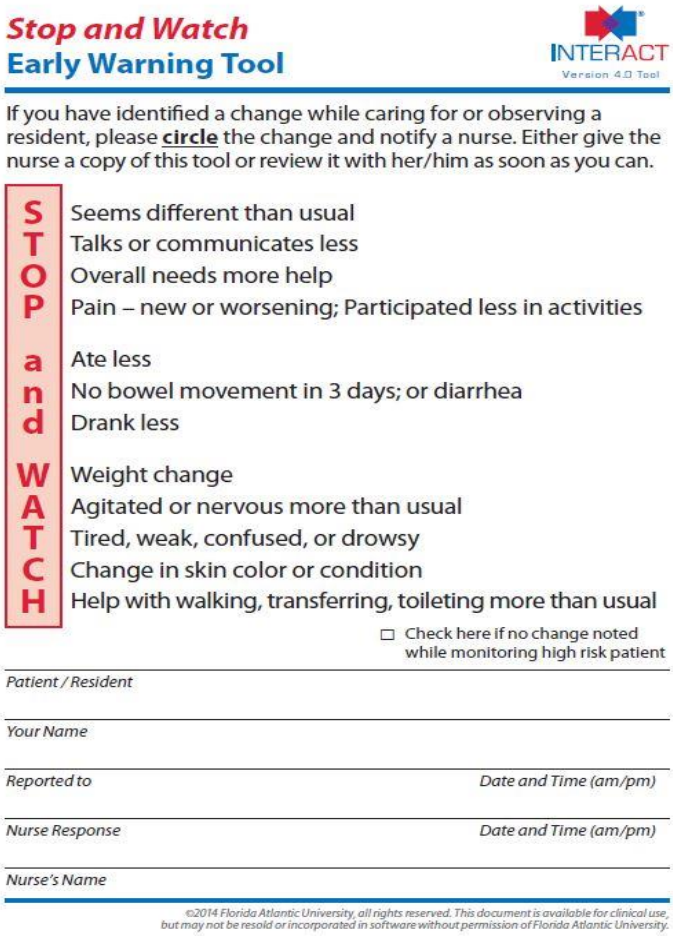
Conclusion

The purpose of this project was accomplished with increased communication among the stakeholders using the Stop and Watch tool (INTERACT ®) or communicating verbally to the nurse on the units within the first hour that an acute resident change was noted. Education and support on using an electronic tool (as well as positive recognition on use of the tool – the tool champions) made it easier for nursing staff to look at the data on a daily or weekly basis and determine which changes had occurred in residents. The INTERACT ® Champion did provide support in providing education, consulting, and empowering stakeholders to communicate when they noted changes in residents. The major implication to nursing practice in the long-term care setting is that communication is vital to early intervention and subsequent improvement in the outcomes of the residents; this is especially true because of high resident to nurse ratio. High staff turn-over shows that this training must be on a continual basis to be effective in increasing documentation and consequently decreasing re-hospitalizations. Although increased communication is not the only explanation for the decreased re-hospitalization rate, based upon current evidence, the study results suggest that the increased communication played a role in its decline. More research on how communication affects resident outcomes is needed.

TABLE 1-Budget

	Quantity	Rate	Total
DNP Donated Hours	40 hours	39/hour	1,560
Staff Training/Follow-up	35 hours	12/hour	420
Supplies	N/A	N/A	N/A
Nurse Educator hours	20 hours	25/hour	500
Facility awards	1	200/facility	200
Travel	weekly	45/week	720
Total for project			3,400

Figure 1. Stop and Watch Early Warning Tool (INTERACT)



Stop and Watch
Early Warning Tool

INTERACT
Version 4.0 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.

S Seems different than usual
T Talks or communicates less
O Overall needs more help
P Pain – new or worsening; Participated less in activities

a Ate less
n No bowel movement in 3 days; or diarrhea
d Drank less

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

☐ Check here if no change noted while monitoring high risk patient

Patient / Resident

Your Name

Reported to *Date and Time (am/pm)*

Nurse Response *Date and Time (am/pm)*

Nurse's Name

Source: Ouslander JG, Shutes J. INTERACT [website]. [cited 2016 Feb 10]. Boca Raton (FL): Florida Atlantic University. Available from Internet: http://interact2.net/index.aspx

Table 2 DNP Project Data Collection Sheet/Stop and Watch tool (INTERACT ®)

Non-Patient Identifier	Chart Review	Resident Diagnosis	MDS Review/ ? Stop and Watch Tool Used	Medical Intervention	Met definition of avoidable readmission	Did not meet definition of avoidable readmission
#1	Yes	Stroke, Prostate Cancer	Yes	Medication changes/ Therapy eval	n/a	n/a
#2	Yes	Parkinson's, CAD, MS, Lung CA	Yes, Significant Change-change in level of care needed	Changed to Palliative care/ Medication changed to comfort care	n/a	Yes
#3	Yes	CAD, CHF	Yes	Diuretic increased	n/a	n/a
#4	Yes	BPH, Stroke, COPD	Yes, Significant Change-change in level of care needed	Changed to Palliative Care/ Medications changed to comfort care	n/a	n/a
#5	Yes	Stroke, CAD	Yes	antibiotics	n/a	n/a
#6	Yes	CAD, BPH, HTN	Yes	antibiotics	n/a	n/a

Table 3 Demographic Data Collection Sheet

Stakeholders/ Demographics	Male/ Female/ Other	Age	Race	Medicare	Other Insurance	Length of Stay
#1	Male	76	White	Yes	Yes	More than 30 days
#2	Male	71	White	Yes	Yes	"
#3	Male	73	White	Yes	Yes	"
#4	Male	80	White	Yes	Yes	"
#5	Male	90	White	Yes	Yes	"
#6	Male	73	White	Yes	Yes	"

Table 4 Focused Requirements/Census During Study (requested by facility; these conditions had been identified as the major causes of re-hospitalizations in the facility's history)

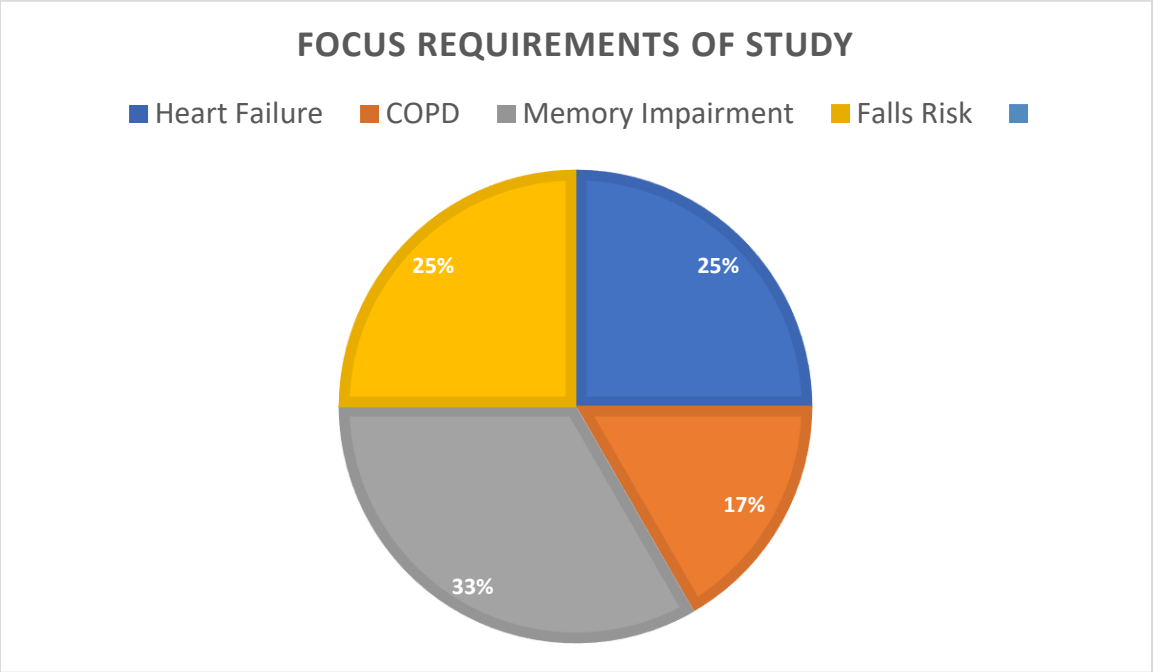


Table 5: Stop and Watch use prior to start of study and during study

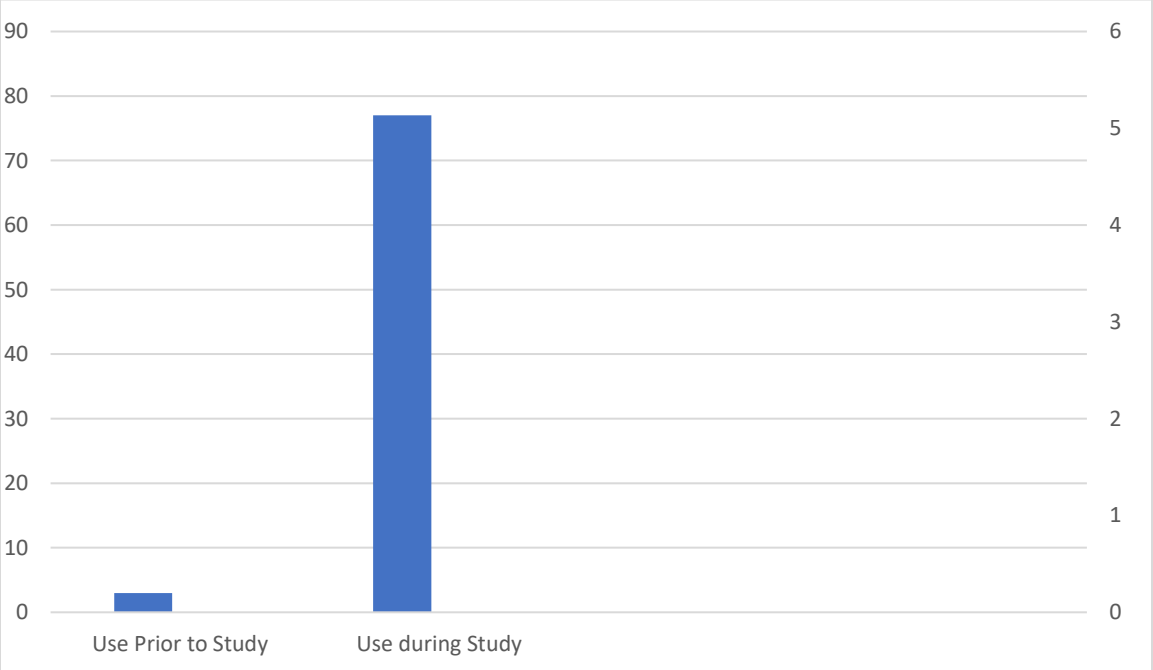


TABLE 6
Number of Stakeholders and their positions that were documented in the Stop and Watch Tool

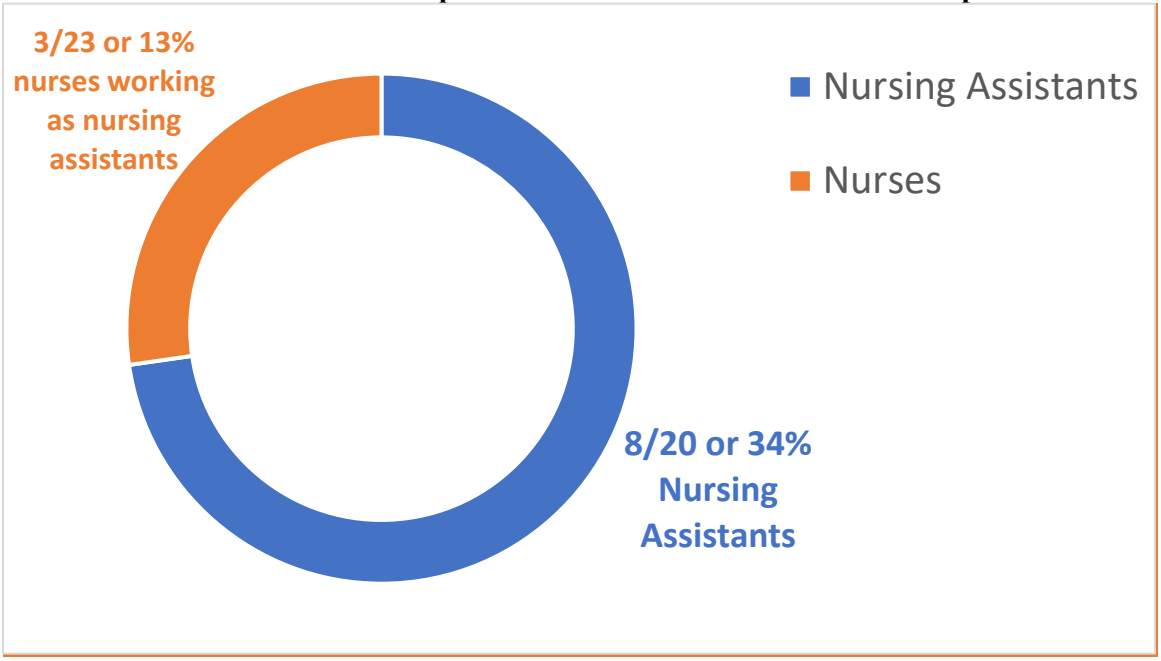


Table 7: Number of entries made into the Stop and Watch Tool during the study period

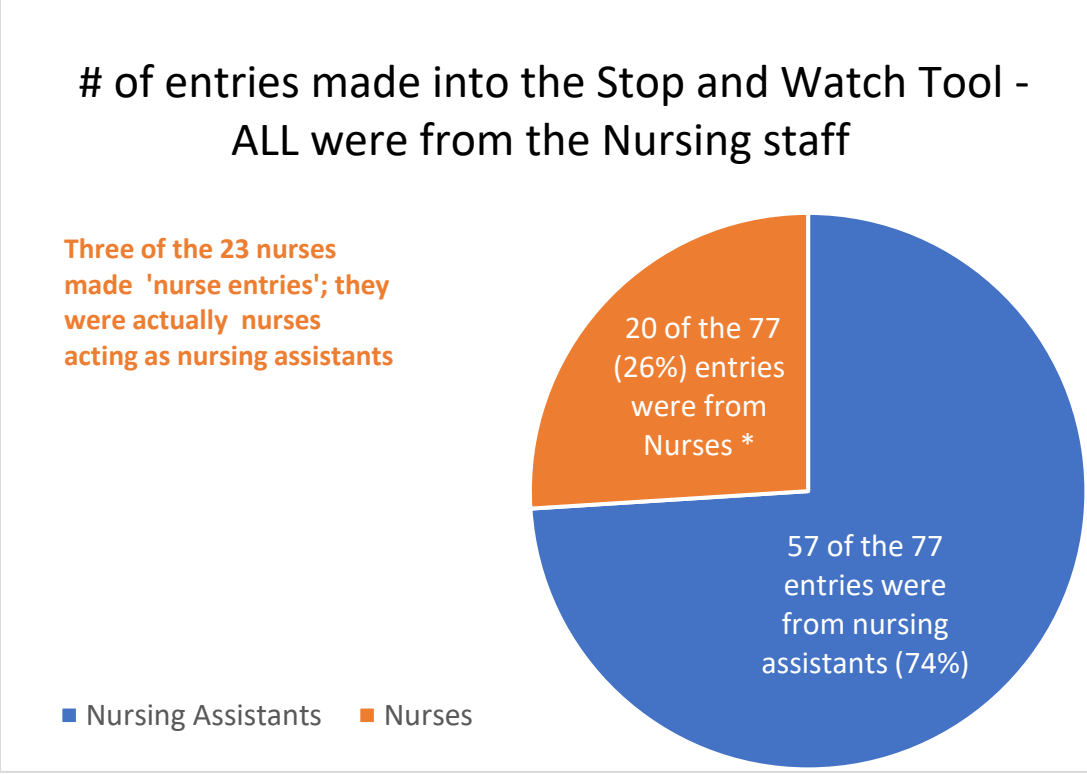


TABLE 8 Top Documented Items on the Stop and Watch Tool

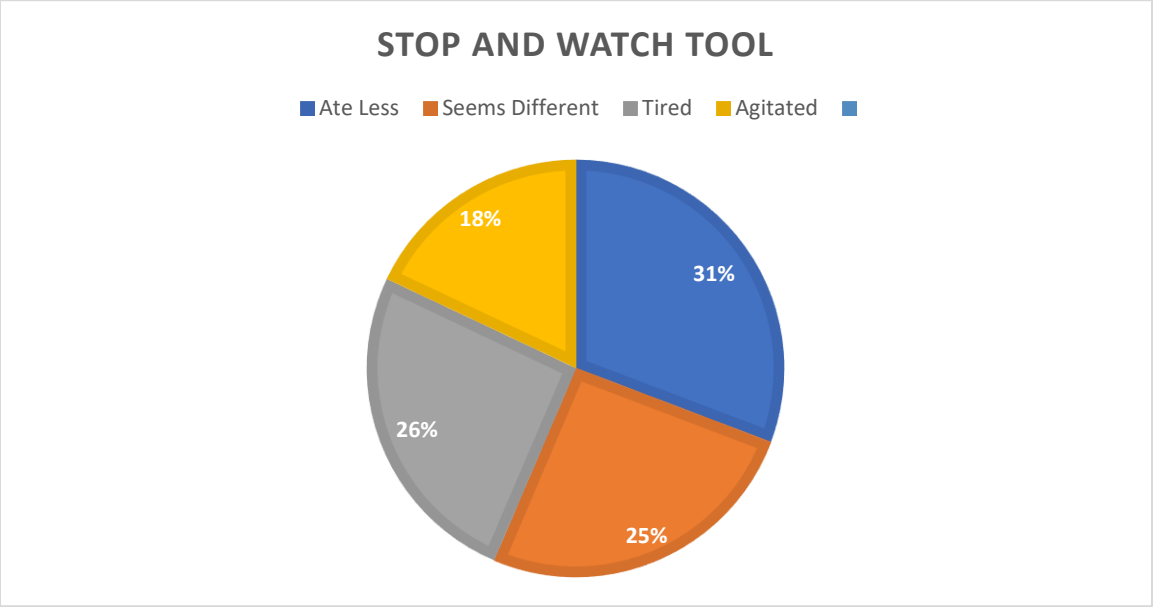


TABLE 9 Facility Census

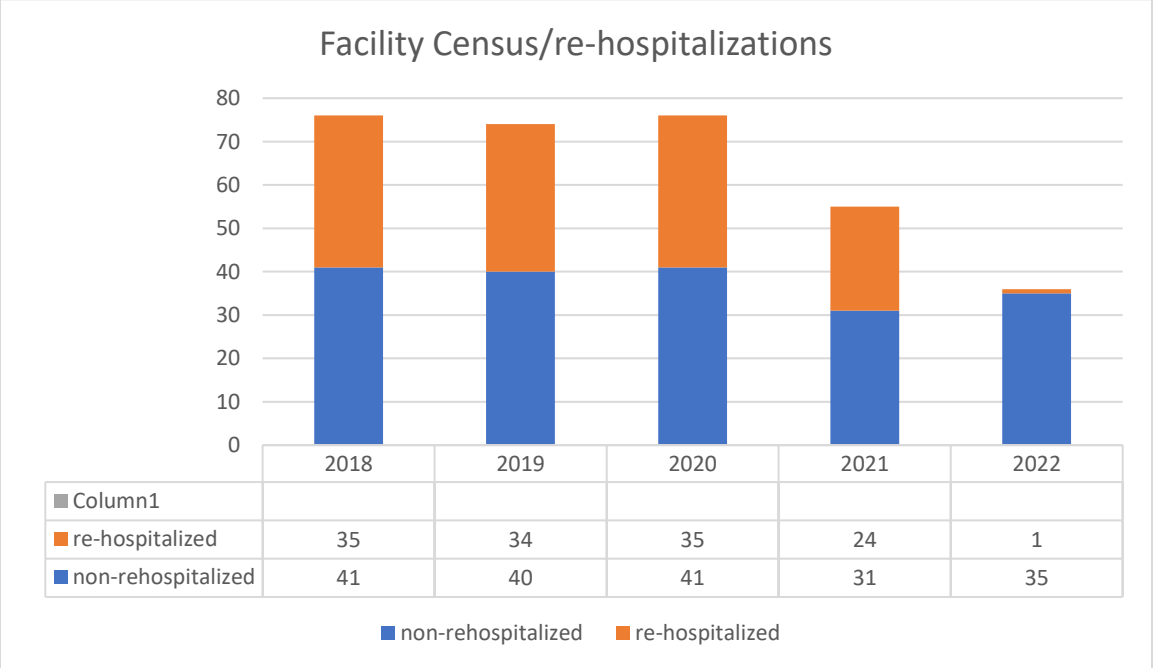
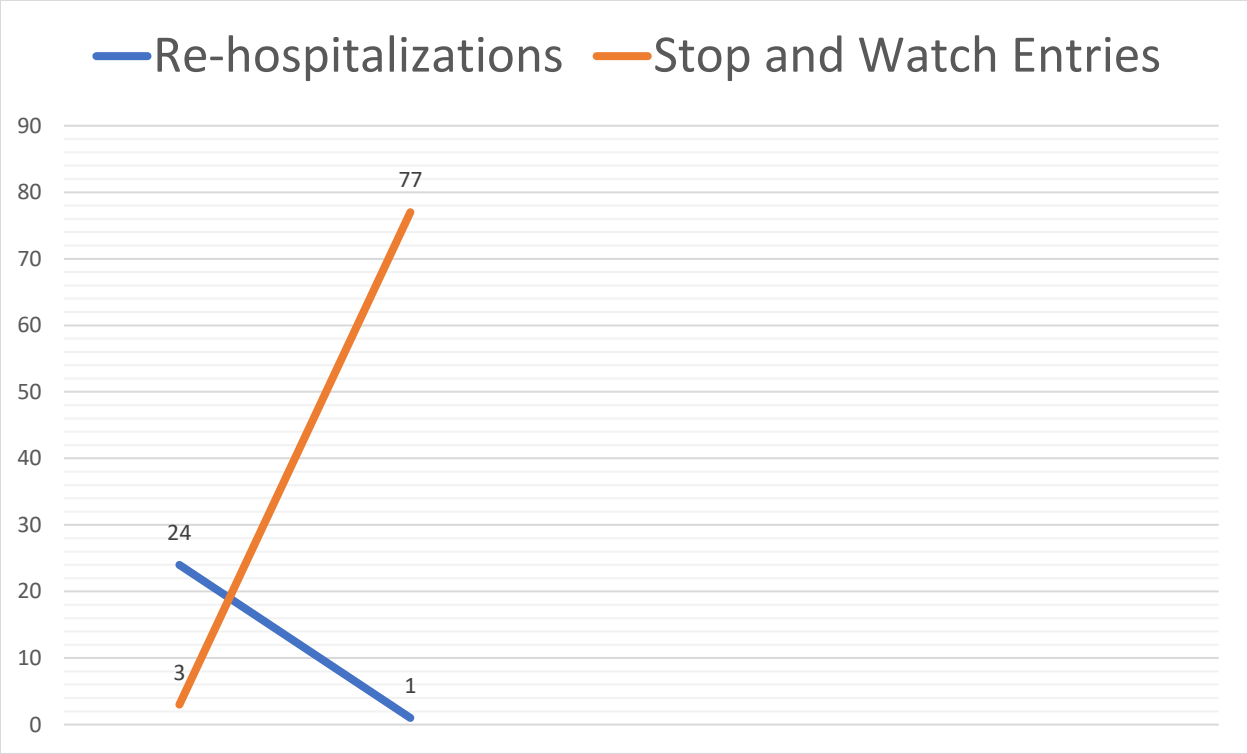


Table 10 Correlation Stop and Watch Entries to Re-hospitalization



References

Abate, B., & VanGraafeiland, B. (2019). Improving Education and Communication in an Assisted Living Facility to Reduce Avoidable Emergency Department Transfers: A Quality Improvement Project. *Journl of Gerontological Nursing*, 23-29

Alper, E., O'Malley, T., & Greenwald, J. (2020, October). *Hospital discharge and readmission*. Retrieved from Hospital discharge and readmission: https://www.uptodate.com/contents/hospital-discharge-and-readmission

Banoff, K. M., Milner, K., Rimar, J., Greer, A., & Canavan, M. (Jul/Aug 2016). Assessment of Novel Tool for Identifying Hospitalized Patients with Heart Failure at risk for 30 day readmission, high cost, and longer length of Stay. *Nursing Economics*, 172-181

Castellucci, M. (2018, November 28). *Modern Healthcare*. Retrieved from Most skilled-nursing facilities penalized by CMS for readmissions rates: https://www.modernhealthcare.com/article/20181128/NEWS/181129930/most-skilled-nursing-facilitieis-penalized-by-cms-for-readmission-rates

Center for Disease Control and Preventation (2019, January 8). *Heart Failure Fact Sheet*. Retrieved from Division for Heart Disease and Stroke Prevention: www.cdc.gov?chdsp/data_statistics_sheets/fsheartfailure

Center for Disease Control and Prevention (2022, March 30). *CDC*. Retrieved from cdc.gov/falls/facts/html: https://search.cdc.gov/?query=definition%20of%20falls%risk&dpage=1

Centers for Disease Control and Prevention (2018, February 21). *Chronic Obstructive Pulmonary Disease (COPD)*. Retrieved from CDC: cdc.gov/copd

Centers for Medicare &Medicaid Services (2020, July 30). *Skilled Nursing Facility(SNF) Quality Reporting Program(QRP) Public Reporting*. Retrieved from CMS: CMS.gov

Centers for Medicare and Medicaid Services Nursing Facility Demonstration Project (2014). *The America Geriatrics Society*, 165-169

Compass Clinical Consulting (2017). How to Identify Potentially Preventable Readmissions. *Case Management,Healthcare*

Desai, A., & Stevenson, L. W. (2012, July 24). *Circulation*. Retrieved from Rehospitalization for Heart Failure: http://circ.adajournals.org

Dupre, M., Hanzhang, X., Granger, B., Lynch, S., Nelson, A., Churchill, E., . . . Peterson, E. (2018). Access to routine care and risk for 30-day readmission in patients with cardiovascular disease. *American Heart Journal*

Enderlin, C. A., Mcleskey, N., Rooker, J. L., Steinhauser, C., D'Avolio, D., & Gusewelle, R. (2012). Review of Current conceptural models and frameworks to guide transitions of care in older adults. *Geriatric Nursing*, 47-52

Hoffman, G., Liu, H., Alexander, N., Tinetti, M., Braun, T., & Min, L. (2019). Posthospital Fall Injuries and 30-Day Readmissions in Adults 65 Years and Older. *JAMA Network Open*, 1-12

Kaiser Permanete (2019, November 1). *Epidemic of deaths due to heart failure*. Retrieved from Science News: https://www.sciencedaily.com/releases/2019/11/191101143949.htm

Kane, R., Huckfeldt, P., Tappen, R., Engstrom, G., Rojido, C., Newman, D., . . . Ouslander, J. (2017). Effects of an Intervention to Reduce Hospitalizations from Nursing Homes; A Randomized Implementation Trial of the INTERACT Program. *JAMA Internal Medicine*, 1-20

Karstetter, B. (2011). *Reducing Readmissions Rates from Skilled Nursing Center*. Retrieved from INTERACT tool: www.InteractTool

King, B., Gilmore-Bykovskyi, A., Roiland, R., Polnaszek, B., Bowers, B., & Kind, A. (Jul 2013). The consequences of poor communication during transitions from hospital to skilled nursing facility: A Qualitative Study. *Journal of America Geriatrics Society*, 1095-110

Medicare (2018, December 5). *Medicare.gov*. Retrieved from www.medicare.gov.

Medicare (2018, January 15). *Medicare.gov*. Retrieved from Medicare.gov/NursingHomeCompare: https://www.medicare.gov/NursingHomeCompare

Meriaa, D., Lavoura, P., Ferreira, D., Curiati, J. A., Lichtenstein, A., Carvolho, C., & Tanaka, C. (2015). *Impact of hospitalization in the functionality and quality of life of adults and elderies*. Retrieved from European Respiratory Journal: https://erj.ersjournals.com/content/46/suppl_59/PA3547

Mibaljevic, S., & Howard, V. (2016). Incorporating Interprofessional Evidence-Based Sepsis Simulation Eduation for Certified Nursing Assistants and Licensed Care Setting for Process and Quality Improvement. *Critical Cre Nurse*, 24-33

O'Connor, C. (2017). High Heart Failure Readmission Rates. *JACC Heart Failure*.

Ouslander, J. G., Lamb, G., Tappen, R., Herndon, L., Diaz, S., & Roos, B. (2011). Interventions to Reduce Hospitalization from Nursing Homes: Evaluation of INTERACT II Collaborative Quality Improvement Project. *The American Geriatrics Society*, 745-753

Ouslander, J. G., Naharci, I., Engstrom, G., Shutes, J., Wolf, D., & Alpert, G. (2017, Feb 12). *Analyses of Transfers of Skilled Nursing Facility Patients to Acute Hospitals: Lessons Learned for Reducing Unnecessary Hospitalizations*. Retrieved from www.Jamda.com.

Ouslander, J., & Maslow, K. (2012). *Measurement of Potentially Preventable Hospitalizations.* Boca Raton: Charles E. Schmidt College of Schiences

Pahor, M. (2019). Falls in Older Adults. *JAMA*, 2080-2081.

Prince, M., Wu, F., Robledo, G., O'Donnell, M., Sullivan, R., & Yusuf, S. (2015). The Burden of disease in older people and implications for health policy and practice. *The Lancet*, 549-562.

Rau, J. (2018, December 3). *Medice Cuts Payments to Nursing Homes Whose Patients Keep Ending up in the Hospital*. Retrieved from KHN News: https://KHN.org/news/medicare-cuts-payments-to-nursing-homes-whose-patients-keep-ending-up-in-hospital

Saito, H., Kagiyarma, N., Nagano, N., Matsumoto, K., Yoshioka, K., Endo, Y., . . . Matsue, Y. (2018). Social isolation is associated with 90-day rehospitalization due to heart failure. *Cardiovascular Nursing*, 16-18

Sieloff, C. (2017, March 22). *Theory of Work Team/Group Empowerment with Organizations*. Retrieved from google.com/therory of nursing group power.

Unroe, K., Holtz, L., Maurer, H., Miller, E., Hickman, S., & Sachs, G. (2013). Optimising Patient Transfers, Impacting Medical Quality and Improving Symptom: Transforming Institutional Care Approach: Preliminary Data from the Implementation of Centers for Medicare and Medicaid Services Nursing Facility Demonstration Project. *The American Geriatrics Society*, 165-169