The Impact of Increased Interdisciplinary Communication on Hospital Admission Rates in the Geriatric Population: An Integrative Review

An Integrative Review

Submitted to the

Faculty of Liberty University

In partial fulfillment of

The requirements for the degree

Of Doctor of Nursing Practice

By

Molly Kirby Langston

Liberty University

Lynchburg, VA

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Scholarly Project Chair Approval:

Dr. Vickie Moore, RN, DNP, FNP-C Date

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Abstract

The medical complexity of geriatric residents puts them at an increased risk of hospital readmissions related to coronary artery disease, myocardial infarction, chronic obstructive pulmonary disease, and diabetes, along with other chronic diseases. Geriatric residents of assisted living, skilled nursing, and memory care facilities should hold a particular interest to stakeholders, as the simple intervention of increasing early communication and correspondence regarding chronic diseases can have a great impact on quality improvement outcomes as well as financial burden of the institution. Additionally, interdisciplinary communication can be individualized to meet the needs of each geriatric resident in order to reduce the risk of unnecessary hospital readmissions. This integrative review includes a discussion of key concepts that can increase a resident's risk of needing to be admitted to the hospital or visit the emergency department, stakeholder prioritization needs, and the importance of interdisciplinary communication.

Keywords: geriatric, hospital readmission, assisted living facility, skilled nursing facility, memory care facility, interdisciplinary communication, quality improvement

Acknowledgments

First and foremost, I would like to thank my professors and colleagues who have been there for me throughout the course of this program. I did not expect these people to become such integral parts of my life, and I am truly blessed to have had the opportunity to work alongside them and create relationships that will last a lifetime. Dr. Moore, I specifically would like to thank you for always being a call away through project transitions, topic changes, revisions, and everything in between. I would also like to extend a heartfelt thank you to Jamie Smith, Bradley Goad, and the entire Premier Geriatric Solutions crew for allowing me to be such an integral part of your team. I hope that the work we have done together creates a meaningful and lasting change in your organization, as it certainly has made an impact on me.

Last, but absolutely not least, I have to thank my wonderful and supportive husband who has studied with me, proofread my papers, listened to my joys and concerns, and rubbed my feet when he could see that it was all getting to be a little too much for me. Your unmatched love and encouragement have meant the world to me through this journey and all of the crazy journeys that I have put our family through. I promise this is the last degree you will deserve an honorary diploma for. I love you endlessly.

The Impact of Increased Interdisciplinary Communication on Hospital Admission Rates in the Geriatric Population: An Integrative Review

In the United States, there is an increasing need for health services, care facilities, and social supports that are specifically tailored to the needs of geriatric people. Geriatric individuals make up a significant portion of the overall population, accounting for 16% of United States citizens in the year 2019. By the year 2040, this percentage is expected to increase to about 21.6% (Administration for Community Living, 2020). The geriatric population presents with a complex range of health care priorities and concerns that must be assessed and managed in a purposeful manner. The complexity of this population stems from the prevalence of chronic health conditions in its members, such as coronary artery disease, myocardial infarction, chronic obstructive pulmonary disease, and diabetes.

Hospital readmission reduction is a priority intervention, as the Centers for Medicare and Medicaid (CMS, 2021) link their payment and reimbursement rates to the quality of care provided and increased rates of unplanned hospital readmissions is indicative of poorer quality of care. Under the Hospital Readmissions Reduction Program (HRRP), there are limits as to what constitutes a readmission. According to CMS (2021) guidelines, unplanned readmissions happening within 30 days of discharge of the initial admission or readmissions to the same or another applicable acute care hospital for any reason within 30 days are considered as readmissions. Excess readmission ratios are calculated for acute myocardial infarction, chronic obstructive pulmonary disease, heart failure, pneumonia, coronary artery bypass graft surgery, and elective primary total hip and/or knee arthroplasty procedures, chronic health conditions the geriatric population is often faced with.

Background

Assisted living facilities (ALFs) and other areas housing a majority geriatric population have a hefty responsibility to manage prevalent geriatric chronic conditions. Ultimately, despite these facilities' best attempts, factors such as decreases in staffing and increases in medical complexity contribute to frequent geriatric hospital visits and admissions from these care settings. With the number of older adults in the United States increasing, the geriatric population will continue to account for a large majority of emergency department visits and hospital admissions in years to come. According to the National Center for Health Statistics (2020), the emergency department visit rate for those over the age of 60 is 43 visits per 100 persons, and the incidence increases with age, reaching as high as 86 visits per 100 patients aged 90 and over. Additionally, the National Center for Health Statistics (2020) reported that about 7% of these emergency department visits were made by residents of nursing home facilities.

In response to the increased rates of geriatric emergency department visits, stakeholders should prioritize interventions that assist in keeping the geriatric population healthy and safe in their living environments. Maintaining this type of environment becomes a pressing concern as the population grows older and the need for geriatric care becomes more apparent. Additionally, by managing these patients in a purposeful manner, facilities can benefit financially through increased CMS reimbursement. This integrative review will discuss the impact of increased communication between certified nurses' aides (CNAs) and other members of the interdisciplinary team on overall hospital readmission rates in this population. When facilities effectively utilize the knowledge that CNAs contribute to the team, geriatric patients in assisted living and other nursing facilities can avoid hospital readmissions and emergency department visits.

The provider group that is interested in understanding the impact of communication on hospital readmissions provides medical care to geriatric patients residing in ALFs, skilled nursing facilities (SNFs), and memory care centers across Southwest Virginia. According to the staff, hospital readmission rates for residents of these facilities have been increasing in recent years. Because of this realization, these facilities have sought a way to decrease readmission rates in their patient population. It is hypothesized that insufficient communication between CNAs, licensed practical nurses (LPNs) or registered nurses, and the provider group is a major culprit in the increase in hospital readmissions.

Defining Concepts and Variables

For the purposes of this integrative review, a *hospital readmission* is considered to be any instance in which a resident at a nursing facility is required to leave their facility to be seen in the hospital setting, whether they endure an overnight stay or are treated in the emergency department and return home. This definition is slightly different than the CMS (2021) guidelines' definition of a readmission, which states that unplanned readmissions happening within 30 days of discharge from the initial admission or readmissions to the same or another applicable acute care hospital for any reason within 30 days are considered readmissions. The primary reason for including all hospital visits in the number of readmissions for the purpose of this project is because the recent COVID-19 pandemic has caused fewer overnight hospitalizations to occur. It would do the project a disservice if patients who were treated in the emergency department then sent back to the facility due to a lack of beds, staffing, exposure risk, etc. were not included in overall rates. Additionally, communication amongst staff will be a major variable of the review. Specifically, the factors that contribute to increased rates of hospital readmissions will be examined.

Rationale for Conducting the Review

As previously stated, there appears to be a link between communication amongst staff and hospital readmissions in the geriatric population. Part of the rationale for this study is the need to determine if there is any previously established support for increasing interdisciplinary communication, as well as the need to narrow down individual concepts that contribute most to readmissions. Through the review, it was found that there are clear, evidence-based benefits to increasing communication within the interdisciplinary team. A study conducted by Abate and VanGraafeiland (2019) specifically evaluated the use of a communication tool amongst ALF staff to reduce emergency department admissions and showed positive results. Additionally, the literature showed that five issues were common in geriatric patients who were readmitted: weight changes, appetite changes, hydration imbalances, changes from baseline, and events that occurred over the course of a shift.

Purpose of the Integrative Review

The purpose of this integrative review is to enhance communication between CNAs and providers in order to reduce hospital readmissions in the patient population. CNAs have the unique opportunity to not only spend the majority of their time engaging in direct patient care, but also to recognize key changes in their patients before other members of the interdisciplinary team are able to. By utilizing them to their fullest potential and increasing communication efforts between CNAs, LPNs/registered nurses, and providers, there is hypothesized to be an improvement in patient care and satisfaction and a reduction in the rate of hospital readmissions and emergency department visits.

Broken communication between nursing staff and providers negatively contributes to hospital readmission rates among patients followed by the provider team. By increasing

communication between the members of the interdisciplinary team, CNAs' assessments of their patients can be easily, adequately, and efficiently shared with the nursing staff. As a result of increased communication, the care plan can be individualized to meet specific needs and early interventions for changes in the primary areas that lead to hospitalization can be initiated.

A variety of factors should be considered when determining a patient's risk of readmission. Typically, social determinants of health, including steady transportation and family members to aid in follow-up appointments or activities of daily living relate to lower risks of readmission whereas low health literacy or low-income patients are considered at high risk (LexisNexis Risk Solutions, 2018). Many of these factors are addressed when a patient is admitted to a long-term care facility, as staff can care for the majority of the resident's social determinant needs. When these needs are met, communication within the facilities can become the next area of focus. In a study completed by Abate and VanGraafeiland (2019), use of a communication tool as a strategy to reduce unnecessary emergency department transfers in ALF residents showed measurable success and effectiveness.

Clinical Question

The clinical question for this integrative review is: In the geriatric population of a nursing home facility, what is the impact of utilizing a communication tool to address key indicators on the rate of hospital readmissions? To further develop the clinical question, two sub questions were identified: (1) Is there evidence to support the utilization of a communication tool in caring for the geriatric population in care facilities? (2) What key indicators should be included in a staff communication tool used in this capacity?

Formulate Inclusion and Exclusion Criteria of the Literature

Peer-reviewed journal articles and research studies that had been published within the last

five years met the inclusion criteria and were eligible for use in the project. Because of the wide variety of topics that were researched to determine key indicators and understand the importance of communication in the clinical field, hundreds of articles were yielded using the keywords geriatric, hospital readmission, assisted living facility, skilled nursing facility, memory care facility, interdisciplinary communication, quality improvement, and narrowed with inclusion criteria. Reviews of the abstracts of these articles helped to narrow the articles to those with the most relevance and applicability to this project. Exclusion criteria included articles published more than five years ago, publications written in languages other than English, studies that were not conducted in health care settings, articles that were not peer reviewed, and articles that did not have full-text electronic versions available for use.

Conceptual Framework

Whittemore and Knafl's (2005) conceptual framework guided this integrative review. This framework provides a systematic approach that is composed of five stages: identifying a problem, searching the literature, evaluating data, analyzing data, and presenting results of the search and review (Toronto & Remington, 2020). These steps were followed and will be described throughout this document. First, the problem was identified through the combined efforts of the members of the provider group and the project lead. The provider group and the project lead determined potential reasons the problem has arisen, suggested potential solutions, and used a literature review process to support the proposed solutions through evidence-based practices. During evaluation of the data, Melnyk's Levels of Evidence hierarchy was used to provide a framework for a thorough analysis. After review of the data, findings and results were compiled and dispersed in the form of this integrative review.

Section Two: Information Sources and Search

A literature review was conducted to determine the factors that most strongly impact hospital readmission rates in the geriatric population. An investigation was also conducted on the impact of communication in the clinical setting on patient outcomes. The literature review for this project was conducted using various databases through the Jerry Falwell Library, including EBSCOhost, MedLine Plus With Full Text, CINAHL Plus With Full Text, and more. Key terms were utilized to perform the search, most of which were related to factors that have been noted to cause increases in hospital readmissions in the geriatric population. Key terms included but were not limited to *communication/communication tool, weights/daily weights/weight loss, hydration/thirst/fluid intake, elderly/geriatric/assisted living/nursing home, interdisciplinary team communication, appetite/oral intake/feeding, changes/baseline,* and *wounds/falls/procedures.*

Inclusion criteria for this integrative review included peer-reviewed journal articles and research studies that had been published within the last five years. Exclusion criteria included articles published more than five years ago, publications written in languages other than English, studies that did not take place in health care settings, articles that were not peer reviewed, and articles that did not have full-text electronic versions available for use.

Quality Appraisal

Ultimately, a total of 25 articles met the inclusion criteria outlined in the above section and were also deemed beneficial to this project's purpose. As discussed, only articles that were peer reviewed and published within the last five years were included to maintain clinical relevance and scholarly caliber. The articles that were deemed most impactful were compiled into a literature synthesis matrix, which can be viewed in Appendix A. Information included in

this synthesis includes the article purpose, sample, methods, results, and limitations. Additionally, the Melnyk Level of Evidence score is included in the matrix.

Through the evaluation of the literature matrix, it became apparent that this integrative review could be beneficial for improving patient care. First and foremost, the literature review proved that there is substantial evidence supporting that communication in the clinical environment leads to improved patient outcomes. Furthermore, the literature review contributed to the student researcher's ability to identify the most critical assessment concepts. For example, the literature revealed that the health of the geriatric population can be greatly impacted by hydration. Various articles discussed specific medical ailments that could occur as a result of dehydration and clinical staff overlooking early signs of poor oral intake.

Melnyk's Levels of Evidence form a table that allows researchers to systematically evaluate study designs int the clinical field. The levels of evidence according to this table are as follows (Melnyk & Fineout-Overholt, 2015):

- Level 1: Systemic review and meta-analysis of randomized controlled trials
- Level 2: One or more randomized controlled trial
- Level 3: Controlled trial (no randomization)
- Level 4: Case-control or cohort study
- Level 5: Systematic review of descriptive and qualitative studies
- Level 6: Single descriptive or qualitative study
- Level 7: Expert opinion

The literature review is compiled of articles with varying levels of evidence according to Melnyk's table. Included were three Level 1 articles, one Level 2 article, two Level 3 articles, four Level 5 articles, and five Level 6 articles. A limitation that was common throughout the

articles included in the review was a small sample size, leading to less generalizable results. Additionally, it was difficult to find articles that specifically pertained to geriatric patients in ALFs. This served as a second main limitation of the literature review.

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) reporting guidelines were also utilized in this literature review. This system allows for the sample to be reviewed after initial screening of titles and abstracts is completed according to inclusion and exclusion criteria (Toronto & Remington, 2020). The PRISMA flow diagram is included in Appendix D of this work. Because this integrative review consisted of multiple search themes including communication, weight, appetite, thirst, etc., it was not possible to complete one PRISMA flow diagram for the entire review. The diagram displayed is not a representation of the tens of thousands of articles that were reviewed regarding the key indicators and impact of communication impact in this setting; rather, it is an example of one search.

Terminology

A hospital readmission is defined, for the purposes of this integrative review, as any event in which the resident of a facility is required to leave their facility to seek medical attention at a hospital. Hospital visits were considered readmissions whether the resident was treated in the emergency department and returned to their facility or admitted for an overnight stay in the hospital. The recent COVID-19 pandemic has caused hospitals to have issues with bed unavailability, staffing concerns, and other problems that contribute to more patients being sent home after emergency department evaluation. To understand the concepts that contribute to hospital readmissions in the geriatric population, it would not do the project justice if these situations in which the patient would likely have endured an overnight stay in other circumstances were not included.

Synthesis

Through the literature review, certain assessment concepts were found to be most impactful in improving patient care. Additionally, it was found that the utilization of a communication tool and increased clinical communication in general were beneficial in reducing hospital readmission rates. Key assessment concepts include strict monitoring and communication of patient weight, appetite, hydration, events that occurred over the course of a shift, and recent changes from the patient's baseline. These indicators are supported by evidence found in the articles of the literature review. A summary of these articles can be found within the Melynk's Level of Evidence Table in Appendix A.

Summary

In summation, the purpose of the literature review was not only to prove the importance of effective communication in patient outcomes, but also to determine what specific factors are most likely to contribute to geriatric hospital readmissions. Findings supported the use of a communication tool to address various assessment components as an effective method of reducing hospital readmissions. Individual concepts endorsed through this review include communication regarding weight, appetite, thirst pitcher evaluations (hydration), changes from baseline, and recent events. In light of these findings, facilities should endeavor to enhance communication between nurses' aides and providers, specifically around the reported concepts, in order to reduce hospital readmissions in the geriatric population.

Section Three: Results

Thematic Data Analysis

During the review of the literature, core themes were identified to best answer the previously stated clinical question. The first key theme centers on the impact of increased

communication between members of the interdisciplinary team on reducing overall hospital readmission rates in this population. The impact of communication is further broken down into two crucial subthemes: key indicators that lead to increased readmission rates and beneficial clinical communication designs. With increased communication, staff can identify key risk factors and indicators that should be addressed to avoid hospitalization. For this integrative review, the focus was brought to the benefit of increased communication as a whole, communication of events that occurred over the course of a shift, and communication regarding patient factors such as weight, appetite, and thirst/hydration status. Another theme that was noted was the stakeholders' need to prioritize interventions that assist in keeping the geriatric population healthy and safe in their living environments. These interventions are beneficial as they not only increase the quality of care delivered but also play a major role in reducing financial strain on the institution.

Impact of Communication: Identifying Key Indicators

Various studies support the finding that increased interdisciplinary communication reduces hospital readmissions and emergency department visits after discharge. Increased communication in general is key; however, in the geriatric population there are particular indicators that have been identified as contributing to an increased risk of hospital readmission. Communication on these vital findings gives the clinician the valuable opportunity to address root cause issues before hospital staff need to be involved.

According to Kerminen et al. (2021), age, admission from home vs. an acute care hospital, Alzheimer's disease diagnosis, unsteady gait, fatigue, unstable medical conditions, low body mass index, frailty, bowel incontinence, and poor self-rated health were variables that contributed to increased rates of readmission. These concepts can be generalized into factors that

put geriatric patients at most risk or are the top contributors to hospital readmission diagnoses. These categories include infection, falls, fractures, cardiac issues, transient ischemic attacks, and strokes (Connolly et al., 2018). Nutritional status has a great impact on functional, cognitive, affective, and sensory function as well as muscle mass, grip strength, and injury prevention, making the communication of these factors vital to quality patient care (Albutt et al., 2020; Birkan et al., 2019; Engleheart & Brummer, 2018). With the number of factors that are shown to decrease resilience in the elderly, interdisciplinary communication must be optimal to ensure that each patient is given the best opportunity to be well after discharge. The failure for interdisciplinary members to communicate critical information during handoff is one of the leading causes of medical errors that result in serious yet preventable adverse events in health care facilities across the United States (Ashutosh Sule et al., 2020). For the purposes of this integrative review, the key factors that contribute to an increased risk of hospital readmission can be organized into to three broad categories: weight/appetite, thirst/hydration, and communication of events.

Weight/Appetite. Frail patients are more likely to have unplanned readmissions compared to nonfrail patients (Gregersen et al., 2020). Therefore, it is important for communication regarding changes in weight or appetite to be prioritized amongst the interdisciplinary team early on to decrease the likelihood of geriatric patients becoming frailer due to malnourishment. In fact, studies have shown that malnutrition alone is an independent predictor of both length of stay and hospital mortality if a readmission does occur (Orlandoni et al., 2017). According to Liang et al. (2021), the risk of frailty in malnourished patients is 3.381 times higher than in nourished patients. Additionally, data suggests that up to 71 percent of geriatric patients are at nutritional risk or are currently malnourished (Ritchie & Yukawa, 2021).

Nurses' aides in particular have a key role to play in starting communication regarding a patient's change in appetite, as they are typically the team member that is most integral in providing meals to residents. Education should be given to all staff members regarding the importance of recognizing these changes. Progressive, involuntary weight loss often is seen in conjunction with serious medical or psychiatric issues in the adult patient (Gupta & Evans, 2021). In a study conducted by van der Meij et al. (2017), participants with a poor appetite had a significantly lower consumption of protein and fiber, solid foods, protein rich foods, whole grains, fruits, and vegetables and a higher consumption of dairy, fats, oils, sweets, and soda. Encouraging a well-rounded and substantial diet and recognizing residents who are not able to sustain this level of nutrition are key points to note in interdisciplinary communication to reduce geriatric hospital readmissions.

Thirst/Hydration. Geriatric patients are at risk for hydration and electrolyte imbalances as a result of the physiological changes that occur in advanced age. Residents being cared for in ALFs, SNFs, and memory care centers typically receive lab work on a regular basis, which would show any hydration imbalances that may occur. Dehydration is often measured by hematological and urinary markers, signs, and symptoms; however, serum osmolality markers tend to be more reliable than either these indicators or noninvasive fluid assessments (Bak et al., 2017). It is also important to note that clinical and laboratory data have good specificity and poor sensitivity for the early diagnosis of dehydration in this population (Betomvuko et al., 2018). Therefore, it is crucial that day-to-day changes in hydration or fluid status are recognized and communicated by the interdisciplinary team in order to avoid the need for hospitalization.

While there is some discussion regarding the optimal fluid intake for the geriatric population, the newest research supports the consumption of no less than 1.5 and no more than

two liters of collective fluid in a 24-hour period (Masot et al., 2020). Willingness to drink, diuretic use, kidney function, underlying heart disease, weight monitoring, and urine output are among many topics that are crucial to be addressed and communicated in order to best facilitate thirst and hydration needs. From a basic care standpoint, there are some practical approaches that can be integrated into daily care, including providing larger fluid cups, offering fluids regularly, and giving attention to level of assistance needed for dining (Gaspar et al., 2019). Additionally, it is important to note that up to 20% of daily fluids may be consumed in food (Masot et al., 2020). Ultimately, communication regarding thirst and hydration is key in the early recognition and avoidance of various clinical variables including hypotension, disorientation, confusion, electrolyte imbalances, and urinary tract infections in geriatric residents (Masot et al., 2020).

Communicating Daily Events. Lastly, regular communication regarding events that occur over the course of a shift can be of great use to the interdisciplinary team in providing anticipatory guidance and avoiding unnecessary hospital readmissions in this population. Two proven ways to improve patient outcomes are to (a) promote interprofessional teamwork as well as build interdisciplinary capabilities by involving health care professionals and (b) present effective and relevant strategies for communication improvement (Rönnerhag et al., 2019). This will be further discussed in the next section, as the conclusion can be drawn that a communication tool that addresses these events and factors is beneficial in the clinical setting.

Additionally, research has shown that the completion and communication of a comprehensive assessment, especially one completed by health care providers with geriatric training and background, decreases the incidence of hospitalization in the geriatric population (Shepperd et al., 2021). According to Sentinel Event data collected by the Joint Commission, ineffective communication regarding shift events was identified as the root cause of error or

event in 66% of reported cases (Agency for Healthcare Research and Quality, 2017). In short, communicating the events that occurred over the course of a shift can greatly decrease adverse events and hospital readmission risk. As part of this communication, the interdisciplinary team should be made aware of any changes from the patient's baseline that occurred over the course of a shift. Having an initial assessment completed by an adult geriatrician can be beneficial to ensure the keen recognition of change.

Impact of Communication: Clinical Communication Aids

Communication in the clinical setting has been shown to have a major impact on hospital readmission rates, especially for patients in the geriatric population. In a quality improvement study completed by Abate and VanGraafeiland (2019), the use of training and communication tools as a strategy to reduce unnecessary emergency department transfers of ALF residents was proven to be beneficial, with 78% adherence by staff members to the use of the tool. Additionally, consultant geriatrician-led teams performing assessments contributed to a reduction of hospital readmission rates (Jay et al., 2017). Treacy and Stayt (2019) discussed the importance of identifying factors that influence the recognition of and response to adult patient deterioration, including the key themes that were established in the prior section. This pinpointing of indicators contributes to the knowledge and understanding of clinical deterioration, organizational factors that may impact hospital readmission rates, and the importance of prioritizing interprofessional communication in reducing unintentional hospital readmissions. In relation to communication itself, themes that prevailed in the literature included clinician preparation for the round, timing of the round, and the use of a communication tool to efficiently relay information and interventions amongst all team members (Verhaegh et al., 2017).

A variety of clinical communication designs that have been implemented in an attempt to

increase communication exist, including bedside reporting, changes in end-of-shift documentation, and the application of communication tools. Some established and clinically verified tools include the SBAR Nurse Communication Tool, Stop and Watch tool, and BATHE protocol, along with other strategies such as technological communication tools, HIPAA-compliant text messaging, self-check checklists, and more. Regardless of the method of communication, studies show that interdisciplinary communication efforts enhance factors impacting patient resilience, ultimately contributing to decreased hospital readmissions (Gabay, 2021). One study on the impact of implementing a health team communication redesign yielded a decrease in 30-day readmission rates from 18% to 12% during the study period (Opper et al., 2019). Additionally, the implementation of a standardized Inpatient Setting Accelerating Safe Sign-outs program resulted in a 23% reduction in overall error rates in six out of nine hospitals tested, allowing for the standardization of data collection and review and therefore contributing to quality improvement (Ashutosh Sule et al., 2020).

Stakeholder Prioritization: Quality Improvement & Financial Burden

Stakeholders should prioritize reducing hospital readmissions for a variety of reasons, including not only increasing patient satisfaction and quality of care but also better managing the financial burden associated with hospital readmissions. When considering these factors, Shaw et al. (2022), specifically stated, “Unplanned hospital readmissions can profoundly affect older adults’ quality of life and the financial status of skilled nursing facilities” (p. 1). Their study included a scoping review displaying findings that early coordination of care and early identification of patient needs were common parallels with favorable hospital readmission rates (Shaw et al., 2022). This finding further justifies the need for communication methods that are specifically tailored to the needs of the geriatric population.

Alternately, when discussing the financial implications of prioritizing hospital readmission reduction, it is important to understand that hospital profitability is directly correlated with patient care expenses. The Affordable Care Act established the HRRP, causing hospitals to be penalized financially if they have higher than standard 30-day readmission rates for certain indicators including pneumonia, heart failure, and myocardial infarction (McLivennan et al., 2015). According to studies completed by Albutt et al. (2020), Birkan et al. (2019), Connolly et al. (2018), and Engleheart and Brummer (2018), as described in the previous section, these factors are common in geriatric hospital readmissions. In relation to financial burden, hospital readmissions relate the expenses incurred from readmissions on a per patient operational cash flow (Upadhyay et al., 2019). In short, increased hospital readmissions lead to decreased governmental funding of the SNF or other geriatric living facility.

Synthesis of Results

The stated purpose of this integrative review is to determine if communication between nurses' aides and other members of the interdisciplinary team impacts, and improves, rates of geriatric hospital readmissions. The literature review established that there is concrete evidence that increased communication in the clinical setting does result in improved patient outcomes and, in turn, reduced hospital readmissions. Additionally, the literature review was able to bring light to specific assessment factors that should be prioritized to avoid hospital readmissions in the geriatric population. Instituting a communication tool, preferably one that integrates these factors into the assessment, could be beneficial to improving patient care in this arena.

Along with the importance of interdisciplinary communication in the clinical setting, stakeholders' prioritization of communication and ability to view increased communication as a contributor to quality performance and financial success was a key finding of this review. The

Affordable Care Act established programs causing health care institutions to be financially penalized for preventable hospital readmissions. Studies also confirm that early intervention and coordination of key indicators can be crucial in reducing the instance of readmissions.

Ethical Considerations

This integrative review does not involve the research of human subjects; rather, it examines the literature on the topic of interest. Still, the student researcher did take precautions to ensure that ethical considerations were made throughout the integrative review process. The researcher completed ethics training through the Collaborative Institutional Training Initiative (CITI), and a certificate of completion can be viewed in Appendix C. Through this training, the student researcher was able to understand the importance of maintaining privacy and confidentiality maintenance through the process of the review. The project chair has also completed this training and has assessed the integrative review for appropriateness. Lastly, the integrative review was deemed appropriate through the Institutional Review Board (IRB) at Liberty University (see Appendix B).

Timeline

Milestone	Deliverable	Description	Estimated completion date
CITI training	CITI training certificate	CITI training modules will be completed, and certificate will be obtained	Spring 2022 B Term (NURS 947)
Initial defense	PowerPoint Presentation	Oral presentation and written PowerPoint presentation will be shown to the chairperson, Dr. Moore.	Spring 2022 D Term (NURS 948)
IRB submission	IRB submission application and approval	IRB Submission will be completed, and approval will be obtained.	Spring 2022 D Term (NURS 948)
Sections I–III draft/final	Sections I–III of integrative review document.	Sections I–III will be drafted, revised, and completed.	Spring 2022 B Term/Spring 2022 D Term (NURS 949/950)

Sections IV–V draft/final	Sections IV–V of integrative review document.	Sections IV–V will be drafted, revised, and completed. Final defense date will also be discussed at this time.	Summer 2022 B Term/Summer 2022 D Term (NURS 949/950)
Appendix materials	All appendices will be completed and present on integrative review document.	Appendix materials completed.	Summer 2022 D Term (NURS 950)
Final defense	PowerPoint presentation	Oral presentation and written PowerPoint presentation will be shown to the Liberty University defense panel.	Summer 2022 D Term (NURS 950)

Section Four: Discussion

Summary of Evidence

The evidence presented in this integrative review can be summarized by one main concept: Interdisciplinary communication in the clinical setting contributes to a reduction of unplanned hospital readmissions for patients residing in long-term care, skilled nursing, and memory care facilities. The data also show that the use of communication aids to enhance the efficacy of communication is beneficial in ensuring positive outcomes (Gabay, 2021). A variety of clinical communication tools have been established as a part of routine care; however, in order for the best communication to take place, key indicators must be included on the tool. The evidence shows that the indicators of weight, appetite, thirst/hydration, events occurring over the course of shift, and recent changes from baseline are priority points of conversation for the geriatric population.

Weight is a major predictor for hospital readmissions, as frail patients tend to have more unplanned readmissions than the nonfrail (Gregersen et al., 2020). Additionally, malnutrition is an independent predictor of length of stay and mortality if a patient is readmitted to the hospital (Orlandoni et al., 2017). Appetite and thirst/hydration are key in maintaining the equilibrium of a patient's fluid and electrolyte status, which can greatly impact readmission risks. Not only does

poor appetite contribute to a reduced consumption of critical nutrients such as protein, fiber, grain, etc., but inadequate hydration can contribute to hypotension, disorientation, confusion, and urinary tract infections (Masot et al., 2020; van der Meij et al., 2017). Lastly, communicating recent events and changes from baseline is a primary way to reduce hospital readmissions and adverse events. According to the Agency for Healthcare Research and Quality (2017), 66% of sentinel events can be directly associated with a breakdown in communication. Interdisciplinary teams who have a geriatric provider to complete an initial assessment have the benefit of a reliable baseline for staff to use to recognize early changes and patient needs.

Stakeholders should prioritize increased interdisciplinary communication in the geriatric population as a way to reduce hospital readmissions for several reasons. The main motives discussed in this integrative review include quality improvement and financial burden reduction. Unplanned hospital admissions have been found to greatly impact the quality of life of residents and the financial status of facilities. Additionally, the HRRP financially penalizes institutions with high rates of unplanned readmissions. In order to combat these negative impacts, early coordination of care and identification of patient needs should occur in the clinical setting.

Implications for Practice/Future Research

While this integrative review supports the need for increased communication to reducing hospital readmissions clinically, future research projects should be completed to determine what type of communication tool may be most beneficial and to what extent. The provider group who expressed interest in this topic initially is also interested in completing future research projects utilizing a newly developed clinical communication tool, the WATER tool, in hopes of reducing hospital readmissions, improving quality of care, and allowing facility members to communicate with each other in an orderly and effective manner. Additionally, the National Association of

Health Care Assistants has expressed interest in partnering with the mentioned provider group to support and complete a research project. This integrative review not only supports the idea that increased communication in the clinical setting is beneficial to reducing hospital readmissions, but also provides valuable input regarding specific indicators that should be communicated regularly. The WATER tool encompasses the indicators of weight, appetite, thirst/hydration, events that occurred over the course of a shift, and recent changes from baseline. These indicators are in line with the factors that have been discussed in this review.

Limitations

Some limitations of this integrative review should be acknowledged. The first is the difficulty of finding research studies that specifically target the geriatric population residing in ALFs, memory care centers, or SNFs. The majority of the information that is included in this review is generic and can be applied to a wide range of clinical scenarios. It would be beneficial if the review was able to specifically address articles that only studied this particular population; however, the literature search did not yield enough articles for a robust review with this stipulation. Additionally, for the literature search, it was difficult to find information that was published within the past five years and was relevant to the review.

The articles included in the literature review had several general limitations. First and foremost, small sample sizes were typical of research studies that were conducted. Additionally, many of the studies did not draw clear conclusions or compile enough evidence to make concrete connections between cause and effect. In short, many of the articles can be applied to a variety of general topics, as the results of the initial studies are vague. Lastly, testimonials and data reviews without actual implementation of a research project were included in the literature synthesis. While these works contributed crucial information, the information is more hypothetical in

nature, as there were no actual tests to draw conclusions from.

Dissemination Plan

This integrative review will be presented to a board of faculty members from the Liberty University School of Nursing initially, then submitted to the university's Scholars Crossing website for future review. It will also be presented to the provider group and National Association of Health Care Assistants representatives, who have supported and expressed interest in the topic since its initial development. This review will serve as a foundation for later research projects, as stated above, in order to best improve patient outcomes and increase patient satisfaction by decreasing hospital readmissions in the geriatric population. Additionally, this integrative review is intended to be disseminated to any party who is interested in better understanding the link between increased interdisciplinary communication and reduced hospital readmissions in this patient group.

Summary

In summation, this integrative review discusses the results of a variety of articles supporting the prioritization of interdisciplinary communication among providers and nurses' aides in the ALF, SNF, and memory care settings to reduce the instance of unplanned hospital readmissions for the geriatric population. While increased communication alone does greatly impact hospital readmission rates, the geriatric population also presents with particular needs that should be addressed to best meet their needs. Stakeholders should prioritize this practice, as there are not only quality improvement but also financial benefits that are supported by the literature.

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Appendix A: Evidence Table

Name: Molly K. Langston
Clinical Question: In the geriatric population of a nursing home facility, what is the impact of utilizing a communication tool to address key indicators on the reduction of hospital readmissions?

Article Title in APA Format	Study Purpose	Sample	Methods	Study Results	Level of Evidence *	Study Limitations
Abate, B., & VanGraafeiland, B. (2019). Improving education and communication in an assisted living facility to reduce avoidable emergency department transfers: A quality improvement project. *Journal of Gerontological Nursing, 45*(5), 23–29. https://doi.org/10.3928/00989134-20190404-01	Determine the effectiveness of training and communication tools as a strategy to reduce unnecessary emergency department transfers of ALF residents.	31 LPNs employed at an ALF of 200 residents.	Quality improvement study.	Significant increase in mean knowledge score in geriatric syndromes postintervention, adherence was > 78%, LPNs do not have significant increased satisfaction with using the tool.	Level 6: Single qualitative study.	Small sample size, not randomly selected, all eligible participants were used, short study.
Albutt, A., O'Hara, J., Conner, M., & Lawton, R. (2020). Involving patients in recognizing clinical deterioration in	To identify methods of involving patients in recognizing deterioration, develop and	Phase 1: 21 health care staff Phase 2: Eight health care assistants and	A mixed-methods design.	This study developed and proved the importance of using a measure that routinely collects patient reported wellness and observation to detect early	Level 4: Correlational design.	Small number of patients in one single hospital, mostly "well" sample without significant comorbidities, not

hospital using the patient wellness questionnaire: A mixed-methods study. *Journal of Research in Nursing*, *25*(1), 68–86. https://doi.org/10.1177/1744987119867744	evaluate an identified method of patient involvement in practice, and explore its feasibility and acceptability from the perspective of the patient.	patient representatives. Phase 3: 30 patients from three hospital wards.		deterioration.		generalizable as the sample was mostly from similar demographic groups.
Bak, A., Tsiami, A., & Greene, C. (2017). Methods of assessment of hydration status and their usefulness in detecting dehydration in the elderly. *Current Research in Nutrition and Food Science*, *2*(5), 43–54. https://doi.org/10.12944/CRNFSJ.5.2.01	To better describe the pros and cons of various hydration status tools in determining the hydration status of the elderly population.	No sample in this article.	A diagnostic review comparing methods of fluid assessment status.	Dehydration is typically measured by hematological and urinary markers, signs, and symptoms however when comparing these clinical indicators with non-invasive fluid assessment status and serum osmolality markers, osmolality markers tend to be more reliable and superior.	Level 4: Correlational design.	No implementation phase to determine method superiority, simply a correlational article discussing different hydration status markers and options for assessment.
Betomvuko, P., De Saint-Hubert, M., Schoevaerdts, D., Jamart, J., Devuyst, O., & Swine, C. (2018). Early diagnosis of dehydration in hospitalized geriatric patients using clinical	Test clinical and laboratory criteria for the early diagnosis of dehydration in the elderly population.	112 geriatric patients in an acute geriatric unit.	Prospective study.	Clinical and laboratory data have good specificity and poor sensitivity for the early diagnosis of dehydration in the population.	Level 4: Correlational design.	Medications were not considered as factors in dehydration, reproducibility can vary.

and laboratory criteria. *European Geriatric Medicine, 9*(5), 589–595. https://doi.org/10.1007/s41999-018-0100-0						
Birkan, I., Erdogan, B., Kilic, T., & Karan, M. (2019). Anorexia is independently associated with decreased muscle mass and strength in community dwelling older adults. *The Journal of Nutrition, Health, and Aging, 2*(23), 202–206. https://doi.org/10.1007/s12603-018-1119-0	To understand the association between anorexia and sarcopenia with negative health impacts in community dwelling older adults.	442 community dwelling older adults admitted to the Istanbul Medical School Geriatrics outpatient clinic.	Cross sectional study using the Short National Assessment Questionnaire and European Working Group on Sarcopenia in Older People criteria.	Poor appetite assessed by Short National Assessment Questionnaire was independently associated with lower muscle mass, skeletal muscle mass index, and hand grip strength.	Level 3: Quasi-experimental design.	Cross sectional design could not provide definite cause and effect relationship despite the use of national criteria and a large sample size for implementation.
Connolly, W., Healy-Evans, S., McCarthy, C., Butt, H., Benicio, T., Keating, T., Power, D., Duggan, J., & Wei Fan, C. (2018). What are the main reasons for hospital admissions in nursing home patients? *Journal of Geriatric Medicine*	Examine the reasons for admission of residents to help develop alternative clinical pathways involving early community intervention which may help avert hospital	356 residents that had 498 hospital readmissions over the course of a 12-month period.	Data review.	Common reasons for admission included infection, falls, fractures, cardiac issues, gastrointestinal issues, and stroke/transient ischemic attack.	Level 6: Descriptive design.	Strictly data collection, no intervention. Heavily relies on electronic health record completion and accuracy.

and Gerontology, 4(1). https://doi.org/10.23937/2469-5858/1510039	admissions.					
Engelheart, S., & Brummer, R. (2018). Assessment of nutritional status in the elderly: A proposed functional drive model. *Food & Nutrition Research, 62*, Article 1366. https://doi.org/10.29219/fnr.v62.1366	Explore the use of a nutritional status model that presents nutrition from a comprehensive and functional perspective, allowing visualization of the issue in the elderly population.	No sample in this article.	Diagnostic review of the use of a nutritional status model as part of a comprehensive geriatric assessment.	Nutritional status is multifaceted and involves physical function and capacity, health and somatic disorders, food and nutrition, and cognitive, affective, and sensory function. Optimal function involves addressing all of these aspects.	Level 6: Descriptive design.	No implementation on human subjects, gives information and statistics regarding each concept's impact on overall health.
Gabay, G. (2021). From the crisis in acute care to post discharge resilience – the communication experience of geriatric patients: A qualitative study. *Scandinavian Journal of Caring Sciences, 35*(1), 123–133. https://doi.org/10.1111/scs.12826	Explore the role of communication pathways between clinicians with geriatric patients post discharge resilience.	10 geriatric patients who were readmitted several times in the past year.	Narrative interviews.	Communication in acute care that enhanced various factors contributed to resilience.	Level 5: Systematic review of study	Testimonials are influenced by personal opinions, interpretations, life experience, and mental/cognitive state of the patient.

Gaspar, P., Scherb, C., & Rivera-Mariani, F. (2019). Hydration status of assisted living memory care residents. *Journal of Gerontological Nursing, 45*(4), 21–29. https://doi.org/10.3928/00989134-20190213-02	Describe the hydration status of residents in their facility, promote adequate hydration, and establish approaches to enhance hydration status.	32 residents from four assisted living memory care units with a variety of functional and cognitive abilities.	Quality improvement project.	Practical approaches can be integrated into daily care including providing larger fluid cups, offering regularly, and giving attention to level of assistance needed for dining.	Level 3: Quasi-experimental design.	Small sample size with a short observational period.
Gregersen, M., Hansen, T. K., Jørgensen, B. B., & Damsgaard, E. M. (2020). Frailty is associated with hospital readmission in geriatric patients: A prognostic study. *European Geriatric Medicine, 11*(5), 783–792. https://doi.org/10.1007/s41999-020-00335-w	To examine the predictive value of the MPI on unplanned hospital readmission in geriatric patients.	1,467 patients with the mean age of 84.2 years.	Prognostic study.	Frail patients are more likely to have unplanned readmissions in comparison to nonfrail.	Level 6: Descriptive design.	Instrument was developed and validated for outcomes at one year of follow up, follow up period was only 30 days.
Gupta, R., & Evans, A. (2021). Approach to the patient with unintentional weight loss. *UpToDate*.	Define unintentional weight loss, cachexia, and sarcopenia and	No sample for this article.	A literature review and compilation of information	Recommendations were provided based on information found in the literature review.	Level 1: Systematic review and meta-analysis,	No intervention, simply a review of material.

Retrieved August 2, 2021, from https://www.uptodate.com/contents/approach-to-the-patient-with-unintentional-weight-loss	discuss epidemiology, assessment, treatment, and their impacts on health outcomes. Provides recommendations drawn from information obtained in the literature review.		on the subject.		clinical guidelines based on systematic reviews.	
Jay, S., Whittaker, P., Mcintosh, J., & Hadden, N. (2017). Can consultant geriatrician led comprehensive geriatric assessment in the emergency department reduce hospital admission rates? A systematic review. *Age and Ageing*, *46*(3), 366–372. https://doi.org/10.1093/ageing/afw231	Assess the extent to which performing comprehensive geriatric assessments in the emergency department can reduce admission rates.	28,434 participants meeting inclusion criteria in a systematic review.	Systematic review.	Consultant geriatrician led teams performing assessments an reduce readmission rates.	Level 5: Systematic review of descriptive or qualitative study.	No randomized studies included in review, no patient characteristics reported, specifically geared toward emergency department assessment.
Kerminen, H. M., Jäntti, P. O., Valvanne, J. N. A., Huhtala, H. S. A., & Jämsen, E. R. K.	To identify risk factors for readmission after geriatric hospital care.	1,167 community dwelling patients > 70 years old who	Retrospective cohort study.	Age, admission from home vs acute care hospital, Alzheimer's, unsteady gait, fatigue, unstable conditions, body mass	Level 4: Case control or cohort study.	Multifactorial findings make it difficult to fully determine an answer to the study purpose.

(2021). Risk factors of readmission after geriatric hospital care: An interRAI-based cohort study in Finland. *Archives of Gerontology and Geriatrics, 94*, Article 104350. https://doi.org/10.1016/j.archger.2021.104350		were hospitalized and discharged over a three-year period.		index, frailty index, bowel incontinence, and poor self-rated health were variables in readmission rates.		
Liang, H., Li, X., Lin, X., Ju, Y., & Leng, J. (2021). The correlation between nutrition and frailty and the receiver operating characteristic curve of different nutritional indexes for frailty. *BMC Geriatrics, 21*(1), Article 619. https://doi.org/10.1186/s12877-021-02580-5	Explore the correlation between nutrition and frailty and compared the receiver operating characteristic curve of different nutritional indexes for frailty.	179 inpatients > 65 years old.	Cross sectional study.	Risk of frailty in malnourished patients was 3.381 times higher than that of nourished patients.	Level 4: Case control or cohort study.	Cross sectional design, study samples from one center, limited to university patients.
Opper, K., Beiler, J., Yakusheva, O., & Weiss, M. (2019). Effects of implementing a	Improve health team communication and collaboration about hospital	Health team members from two surgical units from an academic	Questionnaires regarding experiences were completed	Readmissions decreased from 18% to 12% and emergency department visits decreased from 4.4% to 1.5%.	Level 4: Correlational design.	Small sample size, less generalizable results as it was only completed on one unit.

health team communication redesign on hospital readmissions within 30 days. *Worldviews on Evidence-Based Nursing, 2*(16), 121–130.	discharge, improve patient experience of discharge, readiness for discharge, and post discharge coping difficulty, and reduce readmissions and emergency department visits post discharge.	medical center, 105 preintervention and 95 postintervention.	and evaluated in pre and post format.			
Orlandoni, P., Venturini, C., Jukic Peladic, N., Costantini, A., Di Rosa, M., Cola, C., Giorgini, N., Basile, R., Fagnani, D., Sparvoli, D., & David, S. (2017). Malnutrition upon hospital admission in geriatric patients: Why assess it? *Frontiers in Nutrition, 4*, Article 50. https://doi.org/10.3389/fnut.2017.00050	Assess prevalence of malnutrition in geriatric patients to determine how malnutrition impacts hospital length of stay and mortality.	284 hospitalized geriatric patients in an Italian geriatric research hospital.	Retrospective data analysis.	Malnutrition was an independent predictor of both length of stay and hospital mortality.	Level 5: Systematic review of descriptive and qualitative studies.	Retrospective in nature. Only investigated malnutrition on hospitalization. Could have included hospital acquired malnutrition.

Ritchie, C., & Yukawa, M. (2021). Geriatric nutrition: Nutritional issues in older adults. *UpToDate*. Retrieved August 2, 2021, from https://www.uptodate.com/contents/geriatric-nutrition-nutritional-issues-in-older-adults	Defines criteria for malnutrition and establishes various screening tools that can be used for early detection and intervention.	No sample for this article.	A literature review and compilation of information on the subject.	Recommendations were provided based on information found in the literature review.	Level 1: Systematic review and meta-analysis, clinical guidelines based on systematic reviews.	No intervention, simply a review of material.
Rönnerhag, M., Severinsson, E., Haruna, M., & Berggren, I. (2019). A qualitative evaluation of healthcare professionals' perceptions of adverse events focusing on communication and teamwork in maternity care. *Journal of Advanced Nursing, 75*(3), 585–593. https://doi.org/10.1111/jan.13864	To explore health care professionals' perception of adverse events with a focus on communication and teamwork.	Interprofessional team of health care providers from one hospital, comprise of 22 total health care professionals.	A descriptive study.	Promoting interprofessional teamwork and building capabilities by involving health care professionals and elucidating relevant strategies were the two themes that emerged as crucial in facilitating communication and teamwork.	Level 6: A descriptive or qualitative study.	Based in maternity care versus geriatric care, however the concepts of communication can be applied to various fields. Small sample size of 22 health care professionals.

Shaw, A., Talero Cabrejo, P., Adamczyk, A., & Mulcahey, M. J. (2022). Reducing hospital readmissions of older adults pursuing post-acute care at skilled nursing facilities: A scoping review. *The American Journal of Occupational Therapy, 76*(1), Article 7601180130. https://doi.org/10.5014/ajot.2022.049082	To explore clinical practices aimed at reducing hospital readmissions of older adults pursuing post-acute care at SNFs and describe how they align with occupational therapy's scope of practice.	Scoping review of 13 peer reviewed articles.	A scoping review.	Comprehensive, multipronged clinical practices encompassing care coordination and early identification and management of acute conditions are critical in reducing preventable readmissions.	Level 1: Systematic review and meta-analysis of randomized controlled trials, clinical guidelines based on systematic reviews or meta-analyses.	Written from a occupational therapy standpoint, only covers patients who are completing a hospital to SNF transition.
Shepperd, S., Butler, C., Cradduck-Bamford, A., Ellis, G., Gray, A., Hemsley, A., Khanna, P., Langhorne, P., Mort, S., Ramsay, S., Schiff, R., Stott, D. J., Wilkinson, A., Yu, L., & Young, J. (2021). Is comprehensive geriatric assessment admission avoidance hospital at home an	To assess the effectiveness of admission avoidance by using a comprehensive assessment for geriatric population.	Nine hospital and community sites in the UK.	Multisite randomized trial.	Comprehensive assessment usage decreased the incidence of hospitalization in the geriatric population.	Level 2: One or more randomized controlled trials.	Applicable to older patients from a hospital short stay, delirium may have been undetected.

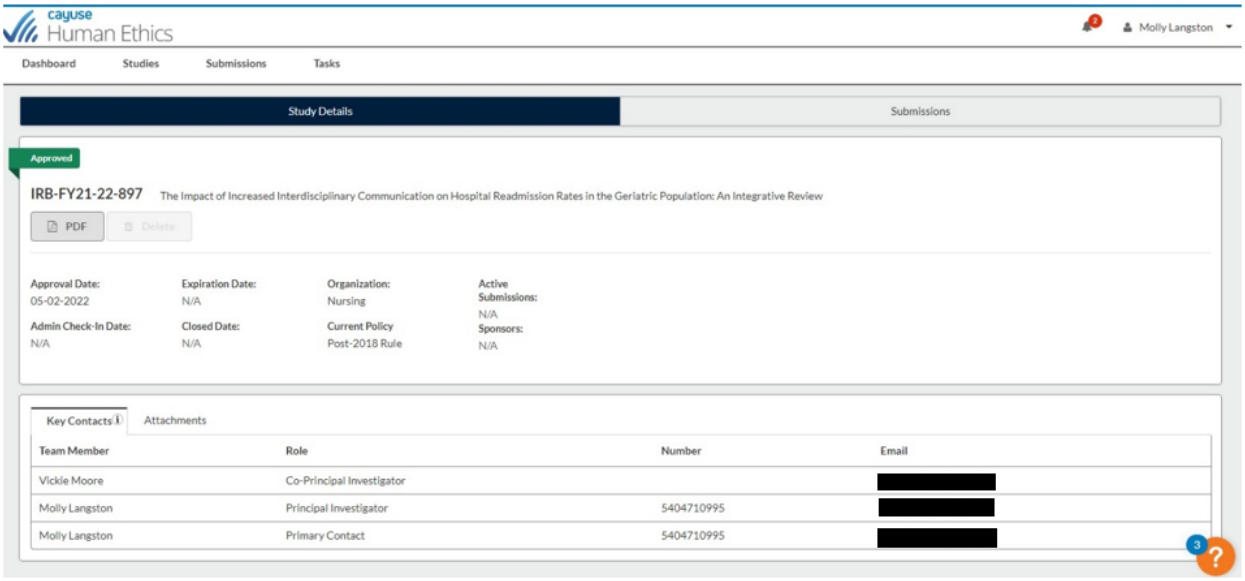
alternative to hospital admission for older persons? A randomized trial. *Annals of Internal Medicine, 174*(7), 889–898. https://doi.org/10.7326/M20-5688						
Treacy, M., & Stayt, L. C. (2019). To identify the factors that influence the recognizing and responding to adult patient deterioration in acute hospitals. *Journal of Advanced Nursing, 75*(12), 3272–3285. https://doi.org/10.1111/jan.14138	To identify factors that influence recognition and response to adult patient deterioration.	13 studies meeting inclusion criteria narrowed from a total list of 354 studies.	A mixed studies systematic review.	Three main themes were identified: Knowledge and understanding of clinical deterioration, organizational factors, and interprofessional communication.	Level 1: A systematic review or meta-analysis.	Not specific to patients in the outpatient setting; however, it is geared toward the geriatric population.
Upadhyay, S., Stephenson, A., & Smith, D. (2019). Readmission rates and their impact on hospital financial performance: A study of Washington hospitals. *PubMed Inquiry, 56*, 1–10. https://doi.org/10.117	Examines whether readmission rates affect hospital financial performance.	98 hospitals in the State of Washington.	Longitudinal study.	Readmission rates can be considered as a measure of quality and hospital financial performance measures along with length of stay, cost of care, and mortality rates.	Level 4: Longitudinal study.	Only considers hospital from the state of Washington, small sample size, possible endogeneity in case of altered mental status, inpatient and outpatient revenues and expenses combined, differences in hospital operating

7/0046958019860386						efficiency.
van der Meij, Wijnhoven, H. A., Lee, J. S., & Houston, D. K. (2017). Poor appetite and dietary intake in community-dwelling older adults. *Journal of the American Geriatrics Society, 65*(10), 2190–2197.	Examine the differences in food intake among community dwelling older adults with different reported appetite levels.	2,597 patients aged 70–79.	Cross sectional analysis of data from a longitudinal prospective study.	Participants with a poor appetite had significantly lower consumption of protein and fiber, solid foods, protein rich foods, whole grains, fruits and veggies with a higher consumption of dairy, fats, oils, sweets, and sodas.	Level 5: Systematic review of descriptive and qualitative studies.	Only community dwelling geriatric patients were evaluated. Self-reporting could have caused skewed results.
Verhaegh, K. J., Seller-Boersma, A., Simons, R., Steenbruggen, J., Geerlings, S. E., de Rooij, S. E., & Buurman, B. M. (2017). An exploratory study of healthcare professionals' perceptions of interprofessional communication and collaboration. *Journal of Interprofessional Care, 31*(3), 397–400.	To identify interprofessional team members' perception of an ideal rounding process.	Three residents, 27 nurses, five medical specialists, and 13 hospital staff members from a 1,024-bed university teaching hospital.	An exploratory study.	Themes that prevailed as important in the population sampled included preparation for the round, timing of the round, and the use of a communication tool to efficiently relay information and interventions.	Level 6: A descriptive or qualitative study.	Not specifically geared toward geriatrics and their unique issues. Would have been more applicable if it focused more on the use of a communication tool for rounding.

https://doi.org/10.1080/13561820.2017.1289158						

*Note: Melnyk's Level of Evidence (LOE) Pyramid is required for appraising the level of evidence.

Appendix B: IRB Approval Documentation



Appendix C: CITI Certificate

CITI PROGRAM

Completion Date 07-Jan-2022
Expiration Date 06-Jan-2025
Record ID 46533675

This is to certify that:

Molly Langston

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Biomedical Research - Basic/Refresher
(Curriculum Group)
Biomedical & Health Science Researchers
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

Liberty University

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w6490b0c2-7562-4870-8bb6-958d9500509b-46533675

Appendix D: PRISMA Flow Diagram