SBAR IN LONG-TERM CARE:

A QUALITY IMPROVEMENT INITIATIVE

by

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GLOSSARY

EHR: Electronic Health Record

IR: Integrative Review

LTC: Long-Term Care

SBAR: Situation, Background, Assessment, Recommendation

SR: Systematic Review

ABSTRACT

Background: The Situation-Background-Assessment-Recommendation (SBAR) tool was adapted by hospitals from the United States Navy in the late 1990s to improve communication during critical situations. SBAR is regularly used in the hospital setting, but its applicability to long-term care is often underutilized. **Local Problem:** At a 135-bed long-term care facility, there is no institutionally endorsed standard of communication between nurses and providers. Providers receive instant-messaging style communications from nursing staff that often lack structure and pertinent clinical information. An incomplete clinical picture increases the need for clarification, causing delays to patient care. Communication barriers serve as a source of frustration for nurses and providers. **Methods:** An interdisciplinary approach was used to develop an educational template that was incorporated into the facility's nursing orientation material. Attendance at staff huddles and face-to-face discussions with floor nurses provided education and introduced SBAR as the standard for nurse-provider communication. The Jefferson Scale of Attitudes Towards Nurse and Physician Collaboration (JSAPNC) measured staff satisfaction regarding interdisciplinary collaboration. SBAR utilization was monitored through regular audits of patient progress notes. **Results:** No statistically significant change was found in JSAPNC scores pre- and post-intervention; post-intervention rates did not meet the long-term goal of 75% utilization of SBAR for nurse-provider communication. **Conclusion:** Introductory and regularly interval education fosters high-fidelity use of SBAR, but the impact of SBAR utilization on nurse and provider satisfaction with interdisciplinary communication was indeterminate and requires further study.

CHAPTER ONE

REVIEW OF THE LITERATURE

Introduction

Communication in healthcare is paramount to patient safety and quality of patient care, yet it remains one of the largest risks for patient harm (The Joint Commission, 2017). In 2014, The Joint Commission found communication partially responsible for 60% of sentinel events under review. Consequently, healthcare authorities strongly encourage the use of validated, standardized communication tools to synthesize crucial information and minimize confusion.

In the 1990's, the Situation-Background-Assessment-Recommendation (SBAR) tool was adapted from the United States Navy and incorporated into a California hospital system as an effort to improve both interprofessional communication and patient safety (Renz et al., 2013). Historically, SBAR has been used in acute care settings to communicate critical, time-sensitive clinical situations. In hospital environments studies suggest SBAR improves patient safety and inter-professional dialogue. However, current research lacks data concerning SBAR use in nursing homes. Long-term care (LTC) settings like nursing homes are particularly prone to incomplete handoff and communication due to factors including high staff turnover, high patient complexity, and sub-optimal administrative support (Ward & Rogan, 2021). Consequently, LTC environments frequently experience avoidable hospitalizations, higher rates of morbidity, and increased healthcare costs (Renz, 2017). Adoption of the SBAR tool to LTC settings could improve interprofessional communication and help address these issues.

Methods

The purpose of this scoping review sought to answer three questions: (1) Does existing literature support the use of SBAR communication to improve patient outcomes? (2) Is there evidence-based literature supporting the use of SBAR in LTC? (3) What are some of the identifiable barriers preventing the consistent use of the SBAR tool?

Search Strategy

With the guidance of the Montana State University research librarians, the search for systematic reviews, scoping reviews, or literature reviews enlisted CINAHL, Google Scholar, PubMed, and ProQuest databases. Key words used for this search included "reviews," "systematic reviews," "nursing home," "long-term care," "SBAR," and "communication." No restrictions were applied related to time.

Inclusion and Exclusion Criteria

The literature included satisfied the following criteria: (1) a review of any type, (2) the intervention in the review included the SBAR tool, (3) discussed the efficacy of the SBAR intervention, (4) published in English, (5) peer-reviewed, and (6) full text available. Reviews that used a communication tool different from SBAR were not included. The literature screening process was directed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline. The identification phase resulted in 161 total articles. Twenty-four duplicate articles were removed prior to screening. Of the 137 records screened, automation tools screening for English, full text, and peer-reviewed eliminated 113 articles. Twenty-four full-text articles were sought for retrieval, and only eighteen articles were accessible. After a full-

text review for each report, seven articles were included in this review. Figure 1 summarizes the PRISMA screening flowsheet.

Results

Three systematic reviews, two integrated reviews, one literature review, and one narrative review were enlisted for this scoping review. Themes developed from these articles included nurse-provider communication, training, and barriers. Table 1 provides an evidence summary of the included literature.

Nurse-Provider Communication

Nurse and provider communication styles can vary greatly due to differences in educational backgrounds; both professions may find different aspects of the clinical picture important which complicates interdisciplinary discourse and increases the need for clarification (Foronda et al., 2017; Renz & Carrington, 2016; Tan et al., 2017). The implementation of a standardized tool such as SBAR creates a consistent and templated method of communication that allows nurses and providers to overcome these differences, reduce frustrations, and correspond efficiently (Foronda et al., 2017). Lo et al. found that many nurses will not contact providers due to previous unpleasant interactions that made them feel rushed (2021). Additionally, nurses reported some issues they had encountered didn't seem worth "bothering" the provider for (Renz & Carrington, 2016, p. 35). Reluctance to collaborate between nurses and providers affects patient safety and negatively impacts workplace satisfaction rates. Providers and nurses that work to foster a trusting relationship report higher rates of satisfaction with workplace communication and improved patient outcomes, as increased confidence between

team members reduces hesitancy and encourages dialogue between professions (Lo et al., 2021; Renz, 2017; Tan et al., 2017).

Training

Routine education and competency help encourage effective use of the SBAR tool (Buljac-Samardzic et al., 2020; Foronda et al., 2017; Lo et al., 2021; Tan et al., 2017). One review found that nurses identify their own lack of skill in identifying pertinent information as a barrier to effective communication (Renz & Carrington, 2016). Enhancing nursing ability to identify critical information and synthesize this knowledge into an SBAR reduces provider dissatisfaction with nurse-provider encounters (Tan et al., 2017). Though the implementation of SBAR into the healthcare setting positively impacts patient safety and communication, continuous and intermittent monitoring should be encouraged to ensure the tool is used with high fidelity (Lo et al., 2021). The training in question should be tailored to an organization's unique work environment, however, the education must be systematic to ensure consistent dissemination of information to all staff members (Buljac-Samardzic et al., 2020).

Cultural Barriers

Four reviews found that cultural barriers significantly hinder effective communication (Buljac-Samardzic et al., 2020; Foronda et al., 2017; Renz & Carrington, 2016; Tan et al., 2017). Limited stakeholder investment, language barriers, staff attitudes, and weak nurse-provider relationships proved counterproductive to collaborative discourse. (Renz & Carrington, 2016; Tan et al., 2017). In Buljac-Samardzic et al.'s review of communication tools in healthcare, SBAR positively influenced workplace cultural safety, fostered mutual trust, and improved team performance (2020). Orienting all staff—regardless of discipline—to the same SBAR tool

reduces these difficulties by standardizing workplace interactions and allowing employees to transcend historically problematic cultural differences (Buljac-Samardzic et al., 2020; Renz & Carrington, 2016; Tan et al., 2017; Ward & Rogan, 2017).

Discussion

This scoping literature review sought to assemble existing evidence surrounding SBAR use and its effect on patient outcomes, its applicability to LTC settings, and perceived barriers to implementation. Though the content of these reviews varied between low and high levels of evidence (LOE), most of the literature found—at a minimum—a mild benefit to workplace satisfaction, patient safety, and applicability to nursing home care. Many studies highlighted the impact the nurse-provider relationship has on the quality of interprofessional communication and encourage organizational interventions to improve work culture.

SBAR was the primary tool of study for these reviews, but this should not deter organizations from using other verified instruments for communication. The evidence acknowledges that SBAR may not be as applicable to different healthcare settings, and tailoring of communication tools to each workplace setting is encouraged. Furthermore, if a communication tool currently exists, measures must be taken to ensure staff competency and compliance. The tool itself must be routinely offered to staff to boost relevance and fidelity.

Limitations

High quality systematic reviews were limited in this search. Many reviews and studies did not meet PRISMA guidelines and were omitted due to poor study structure. Studies with

larger samples and strong organizational framework should be studied over greater lengths of time to assess the impact of SBAR on workplace communication and outcomes.

Much of the selected literature is focused on acute care settings, which affects the generalizability of these results to the nursing home environment (Lo et al., 2021). More research must be conducted in LTC settings for researchers to appropriately gauge barriers specific to these environments.

Conclusions

A scoping review of the literature was performed to understand the applicability of the SBAR communication tool to LTC and potential barriers preventing the implementation of SBAR to the nursing home setting. More research must occur to assess the impact of SBAR in nursing home settings, as much of the existing literature focuses on the hospital environment. Consequently, it is difficult to draw conclusions on potential benefits to the nursing home environment (Renz & Carrington, 2016). Barriers to communication are consistently correlated with poor nurse-provider relationships, and more research must be done to study the impact of SBAR on this dynamic. Furthermore, a thorough assessment of the elements contributing to ineffective work culture such as the impact of stress, educational background, and existing hierarchies must occur to properly address barriers to nurse-provider dialogue. Fostering clear and quality dialogue in the long-term care setting is paramount for improving patient outcomes and encouraging a healthy work environment. Given the success the literature reviewed in this document has seen in acute care settings, the implementation of an SBAR tool in the LTC environment would likely produce more benefit than harm.

CHAPTER TWO

QUALITY IMPROVEMENT PROJECT PROPOSAL

Introduction

Communication is an essential and fundamental tool used to provide safe and quality patient care. In 2014, a large-scale analysis of sentinel events commissioned by the Joint Commission (JCAHO) found that communication breakdown was partially responsible for 60% of reviewed occurrences. Long-term care (LTC) facilities are particularly prone to communication-related adverse events due to high staff turnover, medical complexity of patients, high facility volumes, and inadequate administrative support (Ward & Rogan, 2021; Yoo et al., 2015). In a review of healthcare costs related to LTC hospitalizations, the Centers for Medicare & Medicaid Services (CMS) found that approximately $14.3 billion was spent in 2011— a nearly $10 billion increase when compared to data from 2006 (2013). Healthcare authorities endorse the utilization of a standardized communication tool to facilitate quality intra- and interdisciplinary communication to mitigate these risks. The Situation-Background-Assessment-Recommendation (SBAR) communication tool, a standardized report format that was adopted from the U.S. Navy, is a validated and reliable instrument that is often recommended by healthcare institutions (Renz et al., 2013).

Chapter One's analysis of existing literature reviews distinguished three themes contributing to communication breakdown. First, nurse and provider communication styles often differ due to differences in educational and training backgrounds—both professions may choose to focus on different aspects of the clinical picture—where one profession may find a detail

important, the other might find it noncontributory (Foronda et al., 2017; Renz & Carrington, 2016; Tan et al., 2017). Second, while staff may receive introductory training to communication tools during their workplace orientation, many institutions do not provide routine follow-up training opportunities, which leads to poor utilization and low fidelity (Buljac-Samardzic et al., 2020; Foronda et al., 2017; Lo et al., 2021; Tan et al., 2017). Finally, cultural barriers significantly influence staff comfort and confidence using communication tools. Poor stakeholder investment and attitude, weak nurse-provider rapport, and language barriers affect interdisciplinary dialogue (Renz & Carrington, 2016; Tan et al., 2017).

Aside from unanimous recommendations for continued research concerning the effect of SBAR in LTC settings, each systematic review supported the implementation of a standardized communication tool to improve workplace discourse and enhance patient safety and care.

Therefore, the proposed project seeks to create a purposeful reintroduction and reorientation of the SBAR communication tool within a large care facility that hosts long-term care, skilled nursing, and memory care patients.

Problem Statement

The existing problem at the proposed project site is low-fidelity utilization of SBAR for nurse-to-provider communication. The current variability in nurse-to-provider reports breeds confusion and creates longer waits for provider intervention due to the extra time needed to clarify the clinical picture.

Organization Microsystem Assessment

The 135-bed senior residence facility that provides assisted living, skilled nursing, and memory care services is the clinical project site. A team of two physicians, three nurse

practitioners, and one registered nurse (RN) oversee all residents requiring post-acute care services. There are twenty-nine registered nurses, five medication technicians, and seven certified nursing assistants staffed to provide direct nursing care. All participants were recruited on a voluntary basis; the primary stakeholders in this initiative include one physician and one registered nurse from the post-acute care team, the director of nursing, and the registered nurses employed in the skilled nursing and assisted living departments. The subject population for this project included both skilled nursing and assisted living residents.

During multiple observation shifts spent at the project facility, physicians, advanced practice providers, and nurses voiced concerns related to interdisciplinary correspondence. Post-acute care providers expressed frustrations with incomplete and informal dialogue sent through instant messaging features on the facility's charting system. Providers report that they receive daily notifications from staff with insufficient information and unformatted messaging. The providers discussed the challenges an incomplete clinical picture poses—the largest concern being the delay in patient care that poor communication creates. Conversely, the nursing staff voiced dissatisfaction with provider response time and intervention.

Quality Improvement Model

The Plan-Do-Study-Act (PDSA) framework serves as the quality improvement (QI) model for the purpose of this project. The PDSA cycle is a well-established QI process that is popular for its small-scale and repetitive approach to the implementation and assessment of a specific intervention. This cyclic process creates firstly a strategy for gathering data (plan), performs the intervention on a small scale (do), assesses the results (study), and then adjusts the intervention for the next cycle based on the findings (act). These short intervals foster flexibility

and adaptability between cycles, allowing project leaders to tailor interventions to their specific goals (Taylor et al., 2014).

A small team comprised of the director of nursing, lead physician, DNP student, and nurse lead plans to collaborate at regular intervals between PDSA cycles. Given the brief six-week duration of this project, small and frequent cycles are crucial for effectively monitoring change, using interdisciplinary feedback, and creating necessary adaptations to the intervention.

Purpose Statement

The purpose of this quality improvement initiative is to foster high-fidelity use of the SBAR tool for all patient-related nurse-to-provider communication. Although the SBAR tool is strongly encouraged by the providers at the project site, nurse utilization of the SBAR format is essentially nonexistent. Currently, there is no workplace education on the importance and efficacy of SBAR at this facility; nurses do not receive training during their orientation or annual skills fair on the use of SBAR for interdisciplinary communication. Messaging within the charting system's communication feature lacks consistency and sufficient detail, which inadvertently creates more problems: there is often need for clarification, increased frustration between nurses and providers, decreased patient satisfaction, longer time-to-intervention, and increased risk to patient safety.

A facility endorsed communication process creates a precedent for all caregivers and provides a reliable and validated procedure for sharing information in a safe and effective way. Current evidence supports the organizational adoption of a standardized communication process, as it is shown to improve work culture and improve patient outcomes (Lo et al., 2021; Renz, 2017; Tan et al., 2017). The process improvement will be executed in a step-by-step process

using short-, medium- and long-term goals to measure the project's progress over a six-week period. Within two weeks, 100% of staff nurses will receive a brief education on the use of the SBAR communication tool. After four weeks, SBAR communication will be integrated into the workplace orientation and skills fair education schedule. By this time, the aim is to have 50% of all nurse-to-provider communication in the form of SBAR. In six weeks, overarching long-term goal aims to reach 100% use of SBAR for all nurse-to-provider discourse.

Methods

Implementation Summary

The process improvement project will take place at a 135-bed long-term care center. The project will establish SBAR as the preferred tool for interdisciplinary communication using administration-approved education. The project lead will work with the facility's administration to create an SBAR education piece, then the content will be integrated into both the nursing orientation schedule and the site's annual nursing skills fair. The addition of SBAR education to nursing orientation will ensure all oncoming nursing staff understand the facility expectations for nurse-provider communication, while the addition of SBAR education to the annual nursing skills fair will create opportunity for the nursing staff to refresh their existing knowledge of the SBAR tool. Using the Institute for Healthcare Improvement's (IHI) PDSA framework (Appendix C), the process improvement team will review previous work and implement a new cycle every week to address barriers and tailor the intervention to the facility's needs. Within a six-week period, the goal is to foster high-fidelity, 100% use of SBAR for all nurse-to-provider communication.

Planning the Intervention

Project interventions will be executed in a specific sequence to foster the success of this QI initiative. Chapter One's review of the literature highlighted a strong correlation between standardized communication and nurse and provider workplace satisfaction (Lo et al., 2021; Renz, 2017; Tan et al., 2017). As workplace culture and attitudes significantly impact the utilization of communication tools, a baseline assessment of both nursing and provider satisfaction surrounding workplace communication will be gathered using the Jefferson Scale of Attitudes Toward Physician-Nurse Collaboration (JSAPNC). The same scale will be distributed to participants after completing the six-week project to assess the impact the SBAR communication tool has on caregiver attitudes towards interdisciplinary communication. Short-term goals will focus on educating all nursing staff to ensure a complete and thorough understanding of the utilization and use SBAR tool. Medium- and long-term goals establish annual SBAR education within the nursing orientation and skills fairs to assess and measure the percentage of SBAR use within all nurse-to-provider communication. To monitor progress and adjust interventions as needed, a new PDSA cycle will begin each week to assess the efficacy of the three following interventions.

Evaluating Caregiver Attitudes. Baseline and post-intervention surveys will be conducted to measure nurse and provider satisfaction with interdisciplinary communication. A baseline survey will be completed by week two of the project, and a post-intervention survey will be conducted at the completion of week six. The survey will be distributed and collected by nursing leadership during morning meeting huddles. The purpose of this intervention is to assess what impact standardized communication will have upon caregivers' perception of interprofessional collaboration and satisfaction with the SBAR tool.

Establishing Institutional SBAR Education. Although SBAR is strongly recommended by providers and administration, the facility hosting this QI project does not officially endorse SBAR as the preferred form of nurse-to-provider communication. To ensure the systematic dissemination of SBAR, project leaders will closely collaborate with the director of nursing to create institution-specific educational material that details the purpose and proper use of the SBAR tool. This educational material will be finalized by week two and will then be incorporated into both the nursing orientation curriculum and the annual skills fair agenda to ensure routine exposure to the educational material for both new and established nurses.

Introducing SBAR at Morning Huddles with Care Teams

Once the SBAR educational material has been approved by the director of nursing and project leaders, a concise, five-minute brief encompassing key educational takeaways will be performed by the DNP student at morning meeting huddles throughout the course of week two to ensure all nursing staff receives information about the course of the project.

Methods of Evaluation

To assess the impact of the intervention on both nurse and provider workplace satisfaction, the results of the pre-and post-intervention communication surveys will undergo a descriptive analysis with the help of a statistician. The JSAPNC is a well-established and validated 15-item Likert-scale style evaluation tool used to assess both nurse and provider attitudes towards interprofessional collaboration (Shields et al., 2022). A higher score on the JSAPNC scale indicates greater caregiver satisfaction towards nurse-to-provider communication. A dependent t-test will be performed to assess statistical significance of caregiver attitudes pre-

and post-intervention, as the analysis studies the effect of the intervention on two groups: providers and nurses (Parab & Bhalerao, 2010).

The incidence of SBAR tool utilization will be tracked with a simple tally system. For each shift, the participating providers and nurse lead will record how many nursing messages are received for the duration of the shift. The tally system will track three items: the number of messages received that day, if the message is in SBAR format, or if the message is not in SBAR format. Week one of the project will utilize the tally system prior to the implementation of the QI intervention to quantify a baseline for SBAR use. At the beginning of week two, the SBAR tool interventions will be disseminated throughout the facility, and the tally will begin to gather data reflective of the intervention's efficacy. Data sheets for each shift will be gathered at the end of every week and will be factored into the next PDSA cycle adjustments. Each week's tallies will be translated into percentages, which will then be used to assess for change from the facility's baseline data.

Ethical Issues/Safety and Confidentiality

The participation of staff and key stakeholders enlisted in this process are involved on a voluntary basis and were informed that they were free to opt out of the project at any time. Additionally, the identities of participating staff will be represented by initials or job titles to protect confidentiality. Participants will also be informed that their identities will remain confidential for the entirety of this project. To reduce psychological, social, or legal harm, participants will be provided with information delineating the process to report workplace harassment or lateral violence.

As the purpose of this QI process seeks to measure the use of the SBAR tool itself, no patient-specific information will be gathered. Statistics related to the number of times SBAR is used to communicate a change in patient status will be gathered using a tally system and will not be patient specific. Messages will be reviewed alongside the RN lead using facility-approved and secured devices to access the charting system.

CHAPTER THREE

QUALITY IMPROVEMENT MANUSCRIPT

Contribution of Authors and Co-Authors

Manuscript in Chapter 3

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Contributions: Provided manuscript edits.

Manuscript Information

Alyshia G. van Houte

Status of Manuscript: [Put an x in one of the options below, then delete instruction in brackets]
☒ Prepared for submission to a peer-reviewed journal
☐ Officially submitted to a peer-reviewed journal
☐ Accepted by a peer-reviewed journal
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Clinical Problem

The project site is a 135-bed senior residence facility that provides assisted living, skilled nursing, and memory care services to its community in Western Montana. A contracted team of rotating physicians, two nurse practitioners, and one registered nurse provide post-acute care services to the residents at the project facility. Twenty-nine registered nurses and licensed practical nurses provide direct patient care and fifteen nurses to staff traditional floor care shifts. Other nurses in the facility's employ focus on more specific tasks such as wound management and care coordination. Primary communication between nurses and providers occurs through an electronic health record (EHR) in the form of an instant-messaging chat feature. Although the post-acute care team prefers the Situation-Background-Assessment-Recommendation (SBAR) tool for communicating patient information, the project site does not have a facility-endorsed communication tool. Post-acute care team members report they receive EHR messages from nursing staff that often lack organization and pertinent clinical information. An incomplete clinical picture creates challenges, the most important being a delay to patient care that is caused by the need for clarification. Both providers and nurses report frustration and dissatisfaction due to the increased length of discussion and interruption to care.

Review of the Literature

A scoping review of the literature focused on the applicability and efficacy of standardized communication tools—particularly SBAR—in the long-term care (LTC) setting. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline directed the criteria used for literature screening. The databases CINAHL, Google Scholar,

PubMed, and ProQuest were solicited with the assistance of a Montana State University librarian. Key words used in the search included “reviews,” “systematic reviews,” “nursing home,” “long-term care,” “SBAR,” and “communication.” Three systematic reviews, two integrated reviews, one literature review, and one narrative review met criteria for the purpose of this review.

Three themes resulted from the evidence provided in the qualifying literature. The first theme surrounded nurse-provider communication: due to differences in educational and clinical training, nurses and providers may find different aspects of a patient’s clinical picture important, creating discrepancies in pertinent information and increasing the need for clarification. The second theme highlighted the importance of training and education surrounding communication. Foundational education about communication tool use, routine refreshers, and intermittent monitoring enhances staff competency and encourage high fidelity use of the SBAR tool. Lastly, cultural barriers—professional, environmental, and ethnic—influence interdisciplinary communication. Limited stakeholder investment, language barriers, staff attitude, and weak nurse-provider relationships hinder professional discourse. The introduction and use of the SBAR tool in the long-term care environment showed to have a mild benefit to workplace satisfaction and patient safety.

Conceptual Framework

The Plan-Do-Study-Act (PDSA) framework provided the structure for this quality improvement (QI) project. Known for its flexibility and applicability to small-scale interventions, the PDSA cycle is a well-established QI process. The cyclic process creates a

process for gathering data (plan), performs the intervention on a small scale (do), assess the results (study), and adjusts the intervention for the next cycle based on the findings (act). As this project primarily focused on change at the microsystem level, the PDSA framework provided key stakeholders with a platform that fostered engagement and facilitated interdisciplinary collaboration.

Aims and Purpose

The purpose of this quality improvement initiative sought to foster high-fidelity use of the SBAR tool for all patient-related nurse-to-provider communication. The process improvement was planned in a step-by-step process using short-, medium- and long-term goals to measure the project's progress over a six-week period. At week one, 100% of staff nurses would receive a brief education on the use of the SBAR communication tool. After four weeks, SBAR communication would be integrated into the workplace orientation and skills fair education schedule. By this time, the aim was to reach 50% of all nurse-to-provider communication in the form of SBAR. At six weeks, the overarching long-term goal aimed to reach 75% use of SBAR for all nurse-to-provider discourse.

Methods

Context

The project was conducted at a 135-bed long-term care facility in Western Montana. The facility provides skilled nursing, long-term, and memory care services to its residents. An independently contracted team of internal medicine physicians and advanced practice providers oversees medical treatment. Care delivery is provided by staff directly employed by the facility,

which includes twenty-nine nurses, five medication technicians, and seven certified nursing assistants. Fifteen core staff nurses provide direct patient care. To accommodate large influxes of patient admissions, travel nurses are hired through a third-party agency to supplement the veteran nursing staff. When a change in patient status occurs, nurses are expected to communicate pertinent information to the provider through the EHR in SBAR format.

Interventions

Three interventions took place at the project site to implement SBAR as the facility endorsed communication tool. First, collaborative efforts with the director of nursing were used to determine the best practice for implementing educational material into the facility's current nursing orientation. An infographic detailing the background, importance, and proper use of the SBAR tool was created and placed into the facility's nursing orientation binders. Second, the Doctor of Nursing Practice (DNP) student attended nursing huddles to introduce the project and provide SBAR education to onboarded staff. Thirdly, a pre- and post-intervention survey was provided to ten nursing staff members at week one and week six of the project to evaluate caregiver attitudes towards interdisciplinary collaboration.

Measures

With the permission of Thomas Jefferson University, the Jefferson Scale of Attitudes Toward Physician-Nurse Collaboration (JSAPNC) was used to evaluate caregiver attitudes. The JSAPNC is a well-established and validated 15-item Likert-scale tool used to assess nurse and provider outlooks surrounding interprofessional collaboration with 1 indicating "strongly disagree" and 4 indicating "strongly agree." The maximum score of the JSAPNC is 60 points, which indicates a positive disposition toward nurse-provider cooperation (Shields et al., 2022).

The scale was provided to the staff for completion at week one of the SBAR program, and six weeks post-intervention.

Evaluation of the SBAR utilization was completed through a simple tally system that tracked three items: the number of nurse-to-provider messages sent each day, if the message was in SBAR format, or if the message did not use SBAR. Four weeks of data was gathered prior to the implementation of the project to establish a baseline of the facility's current SBAR utilization. Weekly clinical site visits occurred for regular audits of the EHR. Upon completion of the dialogue, all nurse-provider communication at the project facility is saved under the progress note section of the patient chart, creating a reliable method for chart review.

The participation of staff and key stakeholders enlisted in this process remained voluntary; participants were routinely informed that they were free to opt out of the project at any time. Staff members were represented by job titles to protect confidentiality. No patient identifiers were recorded during chart audits to protect sensitive health information.

Analysis

A total of ten JSAPNC surveys were completed at week one and another ten surveys were completed at week six of the project. Table 2 provides a summary of demographic information collected from the JSAPNC survey. A Cronbach's alpha was attempted to assess internal consistency of the JSAPNC tool; however a measure could not be computed due to small sample size and low variability of the JSAPNC item scores (Intellectus Statistics, 2024). In consideration of the sample size, a two-tailed paired t-test was performed to assess for statistical significance between week one and week six JSAPNC scores. SBAR completion rates were calculated by

dividing the number of notes using SBAR into the weekly total of nurse-to-provider notes audited.

Results

Week one JSAPNC scores averaged 53.45 out of 60, and week six scores averaged 53.9 out of 60, indicating that staff had a positive attitude towards nurse-provider prior to the project's intervention. A paired *t*-test calculated a p-value of 0.484, indicating no statistically significant difference between week one and week six JSAPNC scores (Intellectus Statistics, 2024). The results are presented in Table 1. During the pre-intervention phase, recorded SBAR utilization averaged 26%. The project's short-term goal aimed for 100% SBAR education at staff huddles within the first two weeks of the project; this aim was not met. A total of thirteen staff nurses received face-to-face education regarding SBAR, while two nightshift staff nurses were provided SBAR education materials to review during their shift. The mid-term goal to fully integrate SBAR educational material into the orientation program was not met by week four. The second mid-term goal of 50% of SBAR utilization was successfully met; week three's chart audits revealed 64% of recorded nurse-provider notes included the SBAR tool. The long-term aim of increasing SBAR utilization to 75% by the end of six weeks was not met. At week six, the utilization rate of the SBAR tool was recorded at 65% (Figure 1). The number of nurse-provider communications reviewed over the course of the six-week intervention period totaled 104.

Discussion

Over the course of the QI project, SBAR utilization rates steadily increased, but the long-term goal of 75% SBAR utilization was not met (Figure 1). Evidence found during Chapter

One's literature review surmised that high-fidelity use of SBAR in LTC had a mild benefit to workplace satisfaction and patient safety (Buljac-Samardzic et al., 2020; Foronda et al., 2017; Lo et al., 2021; Tan et al., 2017). Consistent with evidence from previous studies, data from this QI initiative suggests that educational sessions and planned reviews of the SBAR importance and use improved staff utilization rates of the SBAR tool (Buljac-Samardzic et al., 2020; Foronda et al., 2016; Lo et al., 2021). Unlike evidence provided in previous studies, the absence of statistical significance within the JSAPNC suggests that the introduction and reinforcement of the SBAR tool had minimal effect on caregiver attitudes towards collaboration. However, the average of 53.45 on the pre-intervention JSAPNC scores suggest that a positive collaborative environment may have a clinically significant impact on a workplace's receptivity to change.

Limitations

Incidentally, during week two of the intervention, an unforeseen EHR update provided a new SBAR template for the instant-messaging feature used by the facility's nurses and providers. The SBAR template was not anticipated, nor was it included during the planning and initial implementation of this QI process and contends as the largest confounding variable within the project. Due to the relative ease of use of this template, nursing staff was likely more inclined to use the SBAR tool in their nurse-provider communication, as they simply had to click a button to start an SBAR template instead of manually formatting SBAR each time they needed to send a message. Consecutive outbreaks of COVID-19, influenza, and norovirus occurred in the middle of the project; increases in acuity of care on an already limited staff may have exacerbated time barriers affecting SBAR utilization in the messaging system.

As this project was proposed to the nursing staff as a voluntary process, the resulting sample size of participants were smaller than the project anticipated, affecting the reliability of the data analysis. Uncontrolled variables impacted the collection of data and the overall sample of SBAR utilization: Post-acute care providers only work business days and are unavailable on nights and weekends for immediate patient needs. Nursing staff utilizes a third-party telehealth provider that is not affiliated with the facility; consequently, weekend nurse-provider communications were not included in the data collection for this project. Chart audits were limited when a patient expired or discharged, as their records are then removed the EHR. Furthermore, the project solely used notes recorded in the patient EHR and did not account for possible phone or face-to-face interactions between nurses and providers, minimizing the data sample. Finally, an increase in admission rates and a concurrent influx of travel nurses occurred during the last three weeks of the intervention; as travel nurses receive a different orientation from core staff, they did not receive pertinent SBAR orientation and education, which likely affected SBAR utilization rates.

Recommendations

Further study is recommended to evaluate the efficacy of regularly scheduled SBAR education on long-term utilization rates and workplace satisfaction. A larger sample size and length of study are paramount for assessing the clinical significance of high-fidelity SBAR use in the long-term care setting. Dissemination of educational material must occur for both core staff and contracted travelers must be considered, as fluctuations of resident volumes and acuity were shown to affect staffing needs and subsequent gaps to onboarding education. As cultural barriers were identified as a potential barrier in the literature review, more robust qualitative assessment

such as age, gender, educational background, first language, and ethnicity are recommended for future study to help analyze the impact of sociocultural influence on standardized communication. Lastly, a stringent and systematic audit of all nurse-to-provider communication—including phone and face-to-face visits—would bolster data collection for analysis.

Conclusion

The Joint Commission strongly encourages standardized communication tools in the acute care setting but does not definitively discuss the effect of communication tools in the long-term healthcare setting (2017). The purpose of this QI project aimed to improve education and awareness of SBAR to foster high-fidelity use of the tool, as it has shown to improve delivery of care, promote patient safety, and improve satisfaction rates surrounding nurse-provider collaboration (Buljac-Samardzic et al., 2020; Foronda et al., 2017; Lo et al., 2021; Tan et al., 2017). Although the proposed SBAR utilization goal of 75% was not accomplished, the efforts of the QI initiative revealed an upward trend of percentages when compared to baseline average of 26% utilization. Given the small sample size of participating staff, the project did not reveal any significant impact on nurse and provider views towards collaboration. As communication errors are traditionally tied to sentinel healthcare events, researchers must continue to study the impact of communication tools in the long-term care setting (JCAHO, 2014). Effective communication reduces delays to patient care and ultimately improves patient safety, which is paramount for a vulnerable population such as the elderly.

CHAPTER FOUR

ADVANCED NURSING ESSENTIALS REFLECTION

The past three years of the Doctor of Nursing Practice (DNP) Family Nurse Practitioner (FNP) program have been challenging. The transition from registered nurse (RN) to advanced practice RN (APRN) illuminated personal and professional insecurities and strengths.

Overall Experience and Growth

The largest area of growth I have observed surrounds transformation into a leadership role at both the practitioner and project level. My largest source of discomfort stemmed from the transition to practitioner; I am becoming a member of the healthcare team that has the final say in the decision-making process and the responsibility is daunting. During my career as an RN, I felt confident in providing care recommendations for care and found comfort in knowing the decision and accountability would ultimately fall on the provider. My journey through the DNP-FNP program offered ample opportunities to push myself out of my comfort zone and practice critical judgment skills. Though I still feel anxious about stepping into the practitioner role, the hours I have amassed during my clinical experience have taught me how to approach this responsibility respectfully and carefully.

Essentials and Competencies

Unsurprisingly, many of the essentials and competencies I developed over the past year parallel my undergraduate nursing education and career. The American Association of Colleges of Nursing (AACN) echoes these parallels by building advanced practice competencies off

foundational nursing essentials, stating, “Each competency statement has multiple sub-competencies written at two levels to reflect learner expectations for entry-level and advanced nursing education” (p. 15, 2021). As a DNP student, the expectations to build off fundamental nursing essentials and integrate advanced competencies progressed naturally with course content and clinical experiences.

Knowledge for Nursing Practice

Domain one builds on the understanding of nursing theory and practice. APRNs build from this knowledge, incorporating components of nursing science into broader facets of medicine and blending them into advanced practice (AACN, 2021). I practiced this synthesis of nursing care and allopathic treatment throughout my clinical rotations. Applying the first domain’s core competencies felt most apparent during my internal medicine and geriatric clinical rotation.

In healthcare there is a medical workflow or protocol for most medical conditions and illnesses. Core nursing doctrines may interfere with medical protocols, leading to a deviation from algorithmic allopathic practice. I often experienced this phenomenon during my geriatric clinical rotation. During one clinical shift, I conversed extensively with a long-term care patient about his poorly controlled type 2 diabetes mellitus. In this resident’s situation, medical authorities such as the American Diabetes Association (ADA) recommend daily blood glucose monitoring, oral hyperglycemic agents, and initiation of both regular and long-acting insulin therapy (2023). However, the patient’s personal care goals do not align with the medical algorithm; he wished to reduce the amount of blood sugar checks and oral medications. Nursing care is always patient-centered, and we understand that we risk treatment failure without

stakeholder engagement. Therefore, the patient and I collaborated to create a treatment plan reflecting his goals and wishes. Blending nursing theory with standard medical practice, we made a compromise allowing us to treat this resident's diabetes in a way he found conducive to his quality of life.

Population Health

The third domain of the AACN's DNP essentials expects graduate-level nursing students to manage population health and engage in partnerships to provide equitable healthcare outcomes for all patients while considering socioeconomic constraints (2021). During my clinical experience, acknowledgment of financial limitations proved paramount to treatment success—especially with patients of low socioeconomic status. For example, during a discussion with a low-income patient about his hyperlipidemia, the patient expressed concerns regarding the expense of healthier food options. This patient often eats canned soups and lunch meats as they are more affordable. We discussed feasible substitutes like chicken noodle soup instead of beef chili to help lower his cholesterol.

During my QI project, fiscal limitations strongly influenced the delivery of my proposed intervention; nursing homes typically receive poor financial reimbursement from government and private agencies. Therefore, any proposed intervention had to avoid any cost burden to the facility. Though they were initially considered, third-party SBAR education modules would have been costly for the project site. After facilitating collaboration with RNs, the DON, APRNs and MDs, we crafted a simplified infographic introducing the SBAR tool and its use to educate the nursing staff. The infographic effectively disseminated the necessary information to the facility's nurses without creating a financial burden for the institution.

Interprofessional Partnerships

Using their knowledge of healthcare roles, advanced-level nursing students must communicate, perform, and collaborate with other interdisciplinary team members to promote mutual learning and respect (AACN, 2021). Numerous events exemplifying domain six competencies arose during my doctoral QI project. Domain 6.1g, specifically, sat at the heart of my QI initiative; its purpose is to "evaluate the effectiveness of interprofessional communication tools and techniques to support and improve the efficacy of team-based interactions" (AACN, p. 42, 2021). My initiative sought to understand the barriers to SBAR communication in a long-term care (LTC) facility and create an intervention facilitating consistent SBAR use to foster quality patient care and improve workplace satisfaction.

With only inpatient hospital work to inform my personal nursing experience, I could not effectively comprehend barriers to communication in the LTC environment without firsthand knowledge. I spent multiple shifts at the project facility shadowing individual nursing staff members to understand the patient care workflow and subsequent barriers to interdisciplinary communication and patient care. Intentional engagement with the nursing staff helped build rapport and inform my quality improvement proposal; I was able to tailor my interventions to the unique needs of the facility's healthcare workers. The synthesis of my individual experience—combined with the staff nurses' knowledge and expertise—allowed me to bring forth my suggestions as a leader to propose interventions for effective change.

Systems-Based Practice

Advanced-level nursing practice requires a proficient understanding of healthcare systems and their impact on healthcare delivery and efficacy. Doctorate-prepared nurse

practitioners visualize complex healthcare problems through the lens of macro-, meso- and microsystems and strategize where interventions will influence on healthcare delivery most (AACN, 2021).

To evaluate my clinical problem, I spent many hours assessing my clinical site's meso- and microsystem. The project was not intended to influence the practice of the healthcare organization that owns the long-term care facility. Therefore, a macrosystem evaluation was not prioritized. In the fall of 2023, I spent a clinical rotation with the facility's advanced practice providers. During that time, I also spent multiple shifts shadowing the nursing staff. During my time with both the providers and the nurses at the project site, I informed my assessment of facilitators and barriers to the clinical problem. In addition, my time spent meeting with the facility's director of nursing broadened my understanding of the site's decision-making process at the mesosystem level. Analyzing these system-wide processes directed the delivery of my QI intervention to maximize efficacy and bolster stakeholder engagement at a multisystem level.

Conclusion

The multidimensional approach of my DNP-FNP program facilitated growth in areas of my knowledge, practice, and decision-making in ways I had not originally anticipated. The transition from an undergraduate nurse to a doctoral-prepared nurse practitioner forced me to strengthen and elevate my fundamental nursing skills, especially in nursing practice, population health, interprofessional collaboration, and systems-based practice. As my final semester ends, I look forward to using what I have learned as a doctoral-prepared nurse to navigate my career and accept the challenges that accompany the advanced-practice role.

REFERENCES CITED

American Association of Colleges of Nursing. (2021). The essentials: Core competencies for professional nursing education. Retrieved January 25, 2024, from https://www.aacnnursing.org/Portals/0/PDFs/Publications/Essentials-2021.pdf

Buljac-Samardzic, M., Doekhie, K. D., & van Wijngaarden, J. D. H. (2020). Interventions to improve team effectiveness within health care: A systematic review of the past decade. *Human Resources for Health*, *18*(1), 1–42. https://doi.org/10.1186/s12960-019-0411-3

Centers for Medicare & Medicaid Services. (2013). *Medicare nursing home resident hospitalization merit additional monitoring* (OEI # 06-11-00040). Retrieved from http://oig.hhs.gov/oei/reports/oei- 06-11-00040.asp

El Sayed, N. A., Aleppo, G., Aroda, V. R., et al. (2023). Introduction and methodology: Standards of care in diabetes—2023. *Diabetes Care*, 46, S1–S4. https://doi.org/10.2337/dc23-Sint

Foronda, C., MacWilliams, B., & McArthur, E. (2016). Interprofessional communication in healthcare: An integrative review. *Nurse Education in Practice*, *19*, 36–40. https://doi.org/10.1016/j.nepr.2016.04.005

Institution for Healthcare Improvement. (2023). Quality improvement essentials toolkit. Retrieved October 25, 2023, from: https://www.ihi.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx

Intellectus Statistics. (2024). Intellectus Statistics [Online computer software]. Retrieved from http://analyze.intellectusstatistics.com/

Lo, L., Rotteau, L., & Shojania, K. (2021). Can SBAR be implemented with high fidelity and does it improve communication between healthcare workers? A systematic review. *BMJ Open*, *11*(12), e055247. https://doi.org/10.1136/bmjopen-2021-055247

Müller, M., Jürgens, J., Redaèlli, M., Klingberg, K., Hautz, W. E., & Stock, S. (2018). Impact of the communication and patient hand-off tool SBAR on patient safety: A systematic review. *BMJ Open*, *8*(8), e022202. https://doi.org/10.1136/bmjopen-2018-022202

Parab, S., & Bhalerao, S. (2010). Choosing statistical test. *International journal of Ayurveda research, 1*(3), 187–191. https://doi.org/10.4103/0974-7788.72494

Park, M. S., Lee, S. J., Choi, Y. R., & Chang, S. O. (2021). Exploring a nursing home-specific, interdisciplinary, function-focused, communicative framework based on situation, background, assessment, and recommendation. *Journal of Nursing Research*, *29*(3), e151–e151. https://doi.org/10.1097/jnr.0000000000000428

Renz, S. M., Boltz, M. P., Wagner, L. M., Capezuti, E. A., & Lawrence, T. E. (2013). Examining the feasibility and utility of an SBAR protocol in long-term care. *Geriatric Nursing*, *34*(4), 295–301. https://doi.org/10.1016/j.gerinurse.2013.04.010

Renz, S. M., & Carrington, J. M. (2016). Nurse-physician communication in long-term care: Literature review. *Journal of Gerontological Nursing*, 30–37. https://doi.org/10.3928/00989134-20160615-04

Renz, S. M. (2017). Exploring nurse to physician communication in nursing homes [Ph.D., The University of Arizona]. In *ProQuest Dissertations and Theses*. https://www.proquest.com/docview/2001258009/abstract/3AF17C0547994B05PQ/1

Shahid, S., & Thomas, S. (2018). Situation, background, assessment, recommendation (SBAR) communication tool for handoff in health care: A narrative review. *Safety in Health*, *4*(1), 7. https://doi.org/10.1186/s40886-018-0073-1

Shields, H. M., Pelletier, S. R., & Zambrotta, M. E. (2022). Agreement of nurses' and physicians' attitudes on collaboration during the covid-19 pandemic using the Jefferson Scale of Attitudes Toward Physician-Nurse Collaboration. *Advances in Medical Education and Practice*, *13*, 905–912. https://doi.org/10.2147/AMEP.S370912

Tan, T.-C., Zhou, H., & Kelly, M. (2017). Nurse–physician communication: An integrated review. *Journal of Clinical Nursing*, *26*(23–24), 3974–3989. https://doi.org/10.1111/jocn.13832

The Joint Commission. (2014). Sentinel event data: Root causes by event type 2004–2014. http://www.tsigconsulting.com/tolcam/wpcontent/uploads/2015/04/TJC-Sentinel-Event-Root_Causes_by_Event_Type_2004-2014.pdf

The Joint Commission (2017, September 12). Hand off communication. *Sentinel Event Alert*, *58*, 1-6. https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/sentinel-event/sea_58_hand_off_comms_9_6_17_final_(1).pdf

APPENDICES

APPENDIX A

TABLES

Table 1. JSAPNC Results.

JSAPNC_1		JSPANC_6				
M	*SD*	*M*	*SD*	*t*	*p*	*d*
53.45	3.58	53.90	4.07	-0.73	.484	0.23

Note. n = 10. Degree of freedom for the *t*-statistic = 9. *d* represents *Cohen's d.*

Table 2. JSPANC Survey Demographics.

JSPANC Survey Demographics

Gender	n=	%
Male	3	30
Female	7	70
Age		
30-45	7	70
46-60	3	30
Education		
BSN	9	90
ASN	1	10

APPENDIX B

FIGURES

Figure 1. SBAR utilization rates pre- and post-intervention.

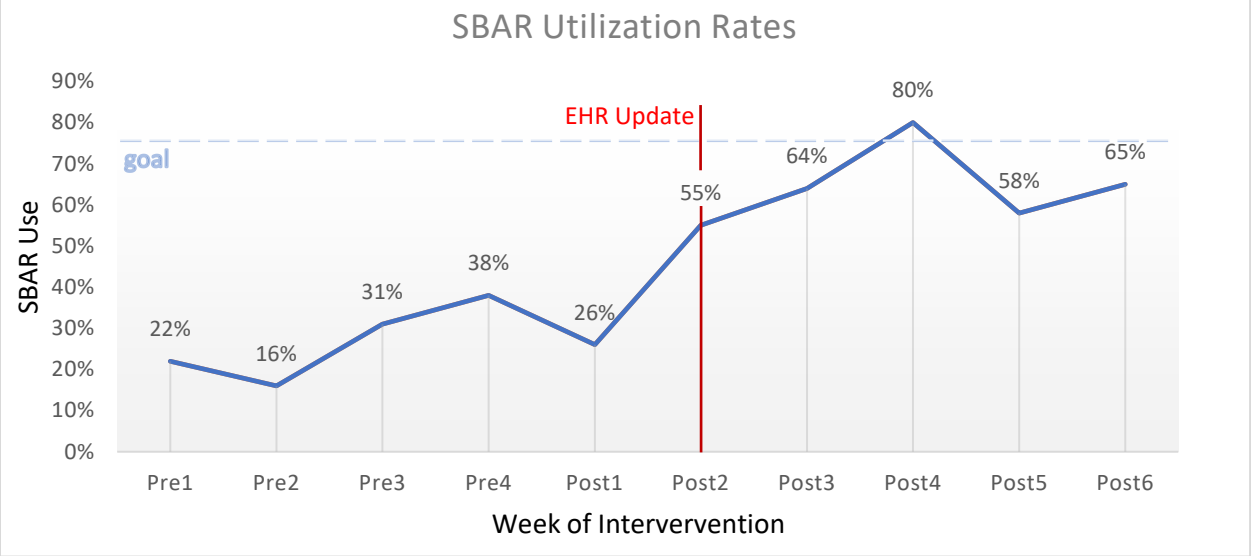

Figure one provides visualization of SBAR utilization rates in respect to time both pre- and post-intervention. The red line on the graph signifies the time at which the electronic health record received an update providing nurses with the options to use an SBAR template within the instant messaging feature. The dashed blue line signifies the long-term goal of 75% utilization.