Effective Communication: Reducing Error and Improving Safety

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Student has no known conflict of interest to disclose.

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Abstract

Ineffective communication in healthcare is a major contributor to medical errors and patient injury worldwide. Current use of SBAR alone has proven inadequate as it fails to promote communication competence, assertiveness, and clarity. These unresolved factors contribute to poor team communication, leadership, trust, and client outcomes. This contributes to the 1.7 billion dollars in lost profit as well as preventable deaths. To address this need for change, a literature review was performed to investigate how to best improve communication among nurses and providers to reduce error and improve client satisfaction. This resulted in the proposal of an evidence based intervention. The purpose of this evidence based project was to assess the impact of SBAR and Assertiveness Training (AT) as an intervention for improving poor communication among health care staff at a skilled nursing facility in the southwestern United States. Ten participants completed a demographic survey, and pre/post Intensive Care Unit Nurse-Physician Questionnaire. Descriptive statistics was used to describe sample outcome variable. A two-tailed Wilcoxon signed-rank test was performed to compare pre and post communication training scores. The overall post communication training score (*Mdn= 247.20*) was not significantly lower than over all pre communication training score (*Mdn= 260.50*), V= 37.00, Z= -0.97, p= .333, p<0.05). In this group of healthcare staff (HCS), the SBAR and AT did not have a significant effect on improving poor communication. These outcomes could possibly be explained by limited sample size (N=10), and possibly small effect size. Recommendations for improving the current study include performing the SBAR and AT with a larger sample size of at least 30, and asking further questions to assess staff knowledge of the evidence.

Keywords: sbar, skilled nursing facility, assertive training, snf, staff communication, and patient safety

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Improving patient safety begins with communication. Poor communication in healthcare was identified as one of the leading causes of medical errors and patient injury. In identifying and implementing more ways to effectively communicate, health care staff are best able to provide better care to meet patient needs and decrease the likelihood of medical errors.

Problem Statement

Poor communication in healthcare has led to serious clinical consequences and patient outcomes. The Risk Management Foundation of the Harvard Medical Institutions Incorporated (CRICO Strategies) did an investigation of 23,000 medical malpractice lawsuits and discovered more than 7,000 cases were the results of communication failures amongst healthcare staff (HIPAA Journal, 2023). These failures resulted in 1.7 billion dollars in malpractice costs and almost 2,000 preventable deaths (Tulane University, 2023). In addition, according to the Journal of Healthcare Management (JHM) US hospitals lost approximately 12 billion dollars annually due to inefficient communication among health care providers (Dean, 2022). When HCS fail to effectively communicate this has resulted in patients receiving the wrong procedures, being given incorrect medication and have also result in delays in essential tests and treatment that may delay their recovery and extend their stay in the skilled nursing setting (HIPAA Journal, 2023). The most frequent communication failures among HCS (physicians and nurses) has involved miscommunication of pertinent information regarding patient symptoms, conditions, and poor documentation of patient information (HIPAA Journal, 2023). Identifying methods to improve clinical communication will enable facilities to report 27 percent fewer patient safety incidents, and minimize procedure and test complications by 25 percent (Gonzalez, 2018). These are

essential components that may improve patient safety and enhance improvement in clinical workflow (Gonzalez, 2018).

Purpose and Rationale

The purpose of this paper is to increase patient safety through greater awareness regarding the high prevalence of medical errors, health care costs and poor patient outcomes that occur due to poor communication and to provide treatment through assertiveness training. There is a great deal of evidence that indicate that healthcare providers who communicate well with patients are more likely to achieve positive outcomes for patients, themselves and others (Bekkink et al., 2018; Murphy et al., 2022; Campbell et al., 2019). They are also more likely to make accurate and comprehensive diagnoses, detect emotional distress in patients, have clients who are more satisfied with care and have less anxiety, and greater self-confidence (Gultekin et al., 2018). HCS providing care to patients without effective communication skills caused negative clinical outcomes such as treatment non-compliance, failing to cope with their own or another's illness, psychological damage, physical harm, litigation or, at worst, death (Ghezeljeh et al., 2020).

Background and Significance

The Institute of Medicine (IOM) is well known for their 2000 publication To Err is Human. Within this publication it was identified that between 44,000 and 98,000 people have died annually in U.S hospitals because of medical errors (NIH, 2023). Improvement in these critical areas of care rely on effective communication amongst all members of the clinical team. Ineffective communication amongst HCS has created opportunities for medical errors to occur (NIH, 2023). Researched data supports the benefits of effective communication and health outcomes for patients and HCS (NIH, 2023). The connection that a patient feels as a member of

the clinical team has played a role in preventing medical error, improve safety through increased participation in care, adherence to treatment and patient self- management (NIH, 2023).

Population

It was estimated that approximately one quarter of the 1.5 million clients who are discharged yearly from US hospitals to post-acute care facilities (SNFs) are re-hospitalized or die within 30 days (Ryskina et al., 2020). Adults age 65 years and older are at increased risk for adverse events throughout their length of stay (Okpalauwaekwe & Tzeng, 2021). Roughly 33 percent of older adults admitted to a SNF have experienced an adverse event within the first 35 days of their stay (Okpalauwaekwe & Tzeng, 2021). Adverse events such as falls, falls with injuries, medical errors, and care that is below standards are common among older adults (Okpalauwaekwe & Tzeng, 2021). It is also possible during delivery of care for adverse events to result in preventable harms such as healthcare-acquired infections, adverse drug events, malnutrition, pressure ulcers, and medication errors (Okpalauwaekwe et al., 2023). The IOM Report on Health Professions and Training have discovered that doctors and fellow HCS lack adequate training in communication as well as providing high quality care to patients (IHC, 2023). This paper will be focusing on healthcare staff and how to improve communication that will result in reduced medical error, improved safety, and greater clinical outcomes.

Interventions

Interventions that were reviewed which can increase the effectiveness of staff communication and improve patient safety include: Situation-Background-Assessment-Recommendation (SBAR), Online Virtual Clinical Simulation, Nurse Handover, I'M SAFE Checklist, BATHE Protocol (Background, Affect, Trouble, Handling, Empathy), Interprofessional Communication

Training Simulation, Assertiveness Communication Training Programs, and Acknowledge-Introduce-Duration-Explain-Thank (AIDET) (HIPAA Journal, 2023).

SBAR

SBAR is a common communication tool used by nurses and other HCS to relay patient information. The letters in each section of the briefing tool represent situation, background, assessment, and recommendation (HIPAA Journal, 2023). In a study by Lo (2021) the author found that teaching the SBAR technique to healthcare providers can improve clarity of communication in classroom and clinical settings. During handover report communication failures were recognized as one of the main causes of adverse events (HIPAA Journal, 2023; Dalky et al., 2020; Park et al., 2021; Campbell et al., 2019). SBAR was created to enhance hand over quality between nurses and physicians, and is recognized for its role in increasing patient safety (Muller et al., 2018; Dalky et al., 2020; Campbell et al., 2019; Park et al., 2021).

Online Virtual Clinical Simulation

The use of an online virtual clinical simulation (CliniSpace) was evaluated in a pilot study for the effectiveness of improving communication skills of baccalaureate nursing students (Ryskina et al., 2020). Since medication errors, delay in treatment outcomes and sentinel events have been connected to miscommunication, use of technology may be helpful in facilitating effective communication within a healthcare organization to improve patient care and satisfaction (Ryskina et al., 2020).

Nurse Handover

The handover process is an important aspect of client care and is used in daily delivery to provide continuity of patient care (Ghosh et al., 2021; Ryskina et al., 2020). In 2006 The Joint Commission (TJC) ordered that a standardized approach to handovers become a patient safety

goal (Methangkool et al., 2019). Through mandating consistency in communication between HCS, checklists were identified and showed benefits in decreasing morbidity and mortality in both medical and surgical settings (Methangkool et al., 2019). In a study conducted by Ghosh (2021) it was identified that standardizing clinical handover in combination with SBAR is effective in improving nurse handover process, patient satisfaction, and health professional's acceptance. Nurse handover has shown to be effective in improving patient safety, patient satisfaction, and health professional's acceptance of its benefits in helping to decrease harm and improve patient treatment outcomes (Ryskina et al., 2020; Ghosh et al., 2021).

Safety Protocols and Checklists

Communication and teamwork has played an important role in the culture of patient safety. Due to communication failures being a leading cause of accidental patient harm and delay in treatment outcomes, various protocols and checklists have been generated to improve patient safety. In a study by Thomas (2019) the author identified that implementing the BATHE technique can be a useful tool to help enhance patient and provider communication, increase patient satisfaction, identify unmet patient needs, and strengthen the application of appropriate treatment or support for self-management. No direct study was identified that showed great significance between safety protocols and checklists, but the I'M SAFE checklist was a tool often used by airplane pilots and can be helpful to HCS in identifying factors which may interfere with their ability to keep themselves and patients safe. Any disturbance in any of these categories can cause danger to provider health and patient safety resulting in ineffective communication. Communication that is safe and effective cannot occur if HCS are not mentally and physically stable (AHRQ, 2021).

Interprofessional Communication Training

Breakdown in communication among members of the healthcare team are common sources of error that contribute to adverse events (AHRQ, 2021; Bekkink et al., 2018). Interprofessional communication (IPC) involves different members of the care team sharing information albeit intentionally or unintentionally to benefit patient care positively (Bekkink et al., 2018; AHRQ, 2021). In a study by Li (2018) the author found that the Interprofessional Teamwork Innovation model (ITIM) improved staff communication and overall time savings. ITIM promoted a collaborative environment in which patients and their family caregivers, physicians, nurses, pharmacists, and case managers could work and share in caring for the patient (Li et al., 2018). ITIM was not associated with variance in average total direct costs or average cost per patient day (Li et al., 2018).

Assertiveness Training

Effective communication increases the influence of the nursing profession (Gultekin et al., 2018; Bekkink et al., 2018; Lee at al., 2022). Assertiveness is the ability to express yourself in an open and honest way, and when HCS are trained to be assertive it helps to build confidence, trust, and promotes safer delivery of care (Gultekin et al., 2018; Bekkink et al., 2018; Lee et al., 2022). The implementation of culturally appropriate assertive training programs can be instrumental in improving patient safety, information sharing and healthy relationships (Omura et al., 2019). In a study conducted by Yoshinaga (2018) the author identified that Modified Brief Assertiveness Training (MBAT) was feasible, effective in developing an environment where open communication thrived and lead to greater job satisfaction, improved nursing care, and greater patient safety.

AIDET

In addition to the previous interventions presented, AIDET is the acronym for Acknowledge, Introduce, Duration, Explanation and Thank You. As a communication tool designed by the Studer Group for health care professionals, AIDET's main objectives are to enhance patient communication, increase compliance, and improve clinical outcomes (Register, 2020). Register (2020) performed a study and identified the use of simulation based refresher education for AIDET as an effective means of enhancing patient understanding and retention of procedures. AIDET simulation based refresher education could have a positive effect on healthcare team communication skills and amplify patient care and satisfaction (Register, 2020).

Current Practice

Effective communication between HCS is necessary for patient and facility success (Rivier University, 2023; HIPAA Journal, 2023; AHRQ, 2021). The most widely used communication tool in healthcare settings is SBAR. In a study done by Muller (2018) it was identified that the use of SBAR may only directly impact the communication among staff members, this may or may not affect staff conduct, which may then result in altered patient outcomes (Muller et al., 2018). While there is some evidence on the benefits of SBAR on patient outcome, it is limited to specific situations such as communicating over the phone (Muller et al., 2018). Frequent and repetitive SBAR use can potentially contribute to loss of effectiveness (Ablison, 2023). Additionally because SBAR depends on the interpretation of the individual receiving the information, if they fail to understand the terminology or context being used, miscommunication can occur resulting in errors and delay in patient treatment (Ablison, 2023). It is pertinent to use SBAR only when necessary to establish that both parties comprehend the information being relayed (Ablison, 2023).

Outcome(s)

The ability of HCS to effectively communicate can make all the difference in patient's length of stay and treatment outcomes (Noh et al., 2021). Positive outcomes of effective communication yield greater trust between members of the clinical team, increased client satisfaction, improved safety, increased job satisfaction, reduced errors that may cause injury or death, and lowered healthcare costs (Noh et al., 2021; HIPAA Journal, 2023). In a study done by Noh (2018) it was identified that the combination of assertiveness training and SBAR exhibited improvement in communication clarity, notable reduction in clinical training stress, and greater competence when compared to the group that received SBAR alone (Noh et al., 2021). All of these factors contribute to improving patient safety, staff communication, and clinical outcomes.

Internal Data

A post-acute rehabilitation center providing 24/7 skilled nursing and therapeutic services for adults was visited for review. This facility is marketed as a luxury post-acute center. Recovering from injuries, illness and surgical operations can be stressful, and often once patient's transition from the hospital, they need additional time to recover before going home. The facility's mission is to provide an upscale restorative environment for patients who need high acuity care. Their mission is to nurture through compassionate care and personalized service in an environment that offers privacy and tranquility. Ineffective communication in this facility has led to frequent nurse turnover, medication errors, unnecessary patient transfers to the hospital, and late call backs from providers resulting in delayed intervention. Soft data gathered from talking to administrative staff and a few floor nurses have resulted in the push for change to improve communication to enhance nurse-provider rapport which can assist in improving nurse turnover and late call backs from providers. In reviewing the evidence to identify what communication practices best support

a culture of safety to enhance staff communication use of SBAR and Assertiveness Training together were found to produce the best patient outcomes.

PICOT Question

A review of the literature led to the clinically relevant PICOT question: "In a skilled nursing facility how does Situation Background Assessment and Recommendation combined with Assertiveness Training compared to Situation Background Assessment and Recommendation affect staff communication and patient safety?" which led to the following exhaustive search.

Search Strategy

An exhaustive search was performed in three databases PubMed, EBSCOhost, and ProQuest. The searches were performed using relevant terms to address the PICOT question and their applicability to the topics of effective communication among health staff and patient safety. These databases were used because they contain articles from current biomedical journals, in addition they are known for being credible, reliable, and continue to share the best data to advance the health industry.

The databases was searched combining the following key terms to address the PICOT question: *skilled nursing facility, snf, sbar, assertive training, staff communication,* and *patient safety*. Inclusion criteria included full text, peer-reviewed journals written in English, and published from 2018-2023. Articles that did not contain statistically relevant data, low level of evidence, high attrition count, exploratory information, and invalid data were not included.

Keyword Selection

Pertinent search terms was combined using Boolean operators to filter results. MeSH terms, e.g. *SBAR*, *AT*, and *communication* was used with Boolean connectors "or" and "and" to expand or minimize search based on previous yields. The initial database search using key terms and

communication AND patient safety without inclusion criteria resulted in the following: 14,928 in PubMed, 536 in EBSCOhost, and 4,676 in ProQuest. Combining search terms *staff communication* and *sbar* and *assertive training* and *safety* with inclusion criteria resulted in a yield of 272 articles in PubMed, 132 in EBSCOhost, and 268 in ProQuest. Integrating key terms used in the PICOT question *staff communication* and *sbar* and *safety* and *assertive training* with inclusion criteria resulted in 16 articles in PubMed, 10 in EBSCOhost, and 12 in the ProQuest database. Grey literature from government publications from the Agency for Healthcare Research and Quality were also searched.

Initial and Final Search Yields

Reviewing the titles and abstracts of the articles identified in the database searches resulted in a final yield of 35 articles. The reference list for these articles was also reviewed to identify 10 other essential studies. Full text copies of the 45 relevant studies was attained and reviewed. Rapid critical appraisal checklists in addition to outlined inclusion and exclusion criteria was used to filter the supportive articles down to the 10 most relevant to support the PICOT.

Critical appraisal of references and articles was analyzed for strength of methodology, data accuracy, clinical relevance and statistical value in supporting the PICOT question. The final results yielded 10 articles meeting criteria for higher levels of evidence. These include one randomized control trial (RCT), one non-equivalent quasi- experimental (NEQ), one non-randomized control (NRC), one descriptive study (DS), one detailed interviews (DI), two quasi-experimental (QE), two systematic review (SR) and one scoping review (SR).

Inclusion, Exclusion, and Limitation Criteria

Inclusion criteria was based on staff and setting which was able to achieve improvement in communication and patient safety with use of SBAR and Assertiveness Training. Articles

selected to be included in the table was based on data and analysis indicating that supporting SBAR with Assertiveness Training can yield the best outcomes in improving staff communication, patient safety, and clinical outcomes. Articles excluded from study was older, or ones that did not support SBAR and Assertiveness Training outcomes, and those not included in the population of study.

Critical Appraisal and Synthesis of Evidence

A total of 10 articles was selected for review. Evidence quality and strength was identified by the Fineout-Overholt and Melnyk's (2018) guide to best practice. All studies included the use of SBAR in various settings and the resulting improvement in patient safety and staff communication. There was minimal bias throughout the included articles, and only two of the 10 studies did not report their funding source. Article outcomes demonstrated a moderate degree of homogeneity (Appendix B). Participants included nurses, nursing and university students, advanced practice providers, social workers (SW), physical therapists (PT), occupational therapist (OT), nutritionist, care helpers. The average age of participants ranged from 20 to 46 years. Professional work experience ranged from one year to over ten years (Appendix A). Samples included 11 to 230 participants. Although sample sizes may have varied they were appropriate and reflective of the inclusion criteria and specification of the measurement tool used. Demographic data reflected diverse ethnic samples (Appendix A). Study origins include the US, Asia, Middle East, and Europe (Appendix A).

Identification of the independent and dependent variables was clearly identified (Appendix A). The use of SBAR or SBAR and Assertive Training (SBAR-AT) supported evidence across studies for improved patient safety and staff communication among participants (Appendix B).

Intervention time frames varied from 90min to 4 weeks (Appendix B). Study results that were statistically significant included improvement in staff communication and competence, nurse assertiveness and performance, greater trust, and improved patient safety and satisfaction scores (Appendix B). Finally outcome measures were valid, reliable, and robust (Appendix A).

The evidence suggests that in conjunction with SBAR, Assertive Training can have a significant impact in reducing negative patient outcomes resulting from poor communication and medical errors. In addition greater teamwork, staff competence, and patient satisfaction scores are accompanying results. Use of SBAR and Assertiveness Training was an effective intervention and treatment approach to improve patient safety and prevent harm and poor care outcomes which result from ineffective staff communication.

Discussion

Ineffective communication among health care staff poses significant threat to patient safety, clinical outcomes and satisfaction with care. Since the data reflecting the damage caused poor communication has been presented, implementing the best strategy to improve staff communication and increase patient safety should remain a national priority. Additionally in providing safer care to clients healthcare staff fulfill their promise to do no harm while enhancing the patient-staff relationship and promote the urgency behind implementing interventions. The literature review identifies the range of evidence being studied to address improving patient safety in healthcare, and it starts by having more effective communication. While there are multiple numerous strategies to improving staff communication, current evidence suggests that SBAR combined with Assertiveness Training is an essential and effective addition to any program intended to improve communication amongst clinical staff (Appendix

B). The studies in this literature review also present evidence that support additional intervention outcomes such as staff performance, competence, and greater assertiveness can contribute to safer patient care and decrease preventable injury caused by ineffective communication (Appendix B).

Theory/Theoretical Framework Application

Healthcare organizations are complex adaptive systems where change is a complex process with varying degrees of complexity and agreement among disciplines (OJIN, 2023). Lewin's Three-Step Model for Change highlight that complex adaptive systems require organizations to maintain equilibrium and survive, in addition the organization must respond to an ever-changing environment (OJIN, 2023). Lewin's Change Theory was said to be a common theory used across various specialties for quality improvement to transform care at the bedside (OJIN, 2023). Change was necessary for the longevity and success of any organization, and successful change must be managed (OJIN, 2023). Change management includes unfreezing, changing, and refreezing in order to turn new behaviors into an organization's new behaviors (Appendix C, Figure B1). During the unfreezing step of this process the reason for change was identified. Communication during this initial stage was pertinent so that employees can be informed of the need for change, logic behind it, and how it will benefit each employee (Hartzell, 2021). The more initial buy-in there was to the need for change, the more motivated staff will be to accept it. During second step of the model known as changing/transitioning, change was implemented. There was likely to be resistance as staff struggle to accept the new reality, in addition people begin to learn new behaviors, processes and ways of thinking (Hartzell, 2021). The more prepared staff was for this step, the less challenging it was to complete (Hartzell, 2021; OJIN, 2023). Education, communication, support, and time are identified as critical for staff as

they become familiar with the change (Hartzell, 2021; OJIN, 2023). During the final stage known as refreezing, the reinforcement, stabilizing and solidifying of the state after the change occurs (Hartzell, 2021; OJIN, 2023). The changes made to the organization's processes, goals, structure, offerings or people was accepted and implemented as the new norm (Hartzell, 2021; OJIN, 2023). The goal of this theory was to identify, initiate, and sustain change. This theory can be extended to patient safety and ineffective communication to reduce harm caused by medical errors and poor treatment outcomes. By making changes to improve communication staff can maximize adaptation towards delivering safer care and thereby promote greater competence, satisfaction, and trust among patients.

Implementation Framework

The Iowa Model of Evidence-Based Practice to Promote Quality Care provides a clinical framework that was specific to clinical nursing practice (Green, 2020). Developed to be used within clinical health organizations it identifies problem-focused and knowledge-focused triggers which are required for change to occur (see Appendix C, Figure B2; Green, 2020). For this project, ineffective staff communication between nurses and providers at a skilled nursing facility was identified as the problem focused trigger. This problem was a primary concern for the organization because without effective staff communication patients are at greater risk of poor care transitions and fragmentation of care which can conclude in decreased quality of care and satisfaction (Green, 2020; Farrell et al., 2022). Furthermore, poor communication has also been associated with greater job dissatisfaction and staff turnover (Green, 2020; Farrell et al., 2022). Facility leadership and staff acknowledgement of this issue was recognized and they will work together to foster this change into practice. In implementing the knowledge acquired from the evidence into practice, greater staff communication and patient outcomes can result. If

successful, SBAR and assertiveness education training can be dispersed to influence interventions and policy change among one of the newest skilled nursing facilities in Arizona.

Implications for Practice Change

Many research studies have identified the importance of SBAR and AT program to best improve staff communication and patient care outcomes. Currently, the organization has had numerous staff turnover and were motivated to make needed change to transform their current practice and best serve their clients. The goal of this project was to provide education on SBAR and AT to enable better staff communication, decreased medical errors, and greater patient satisfaction. Key stakeholders include organization leadership, nurses, providers, and the patients. Intervention plan included a 45minute educational PowerPoint on SBAR and AT with a 15 minute question answer session. The training class improved communication clarity, clinical competence, and knowledge of evidence based practice. The successful training program met the goal to improve staff communication which positively impacted client treatment outcomes, patient safety, and for organizational integration the new practice change was maintained.

Methods

Ethical Considerations

This evidence based project was granted approval by the Institutional Review Board associated with Arizona State University (Appendix D) in collaboration with site support before implementation of improving patient safety and staff communication project. Facility Director of Nursing recruited potential participants using staff meetings, project flyer, and sending emails to staff who met criteria but was unable to attend staff meeting. Informed consent (Appendix E) was received prior to participant engagement in training. To protect confidentiality when gathering data for this evidenced based project all pre/post surveys and questionnaires had a

unique Project Identification Number (PIN) being the last four digits of participant's cell number. No participant identification information was required. All project data was stored in a locked cabinet only accessible by Co-Investigator and Principal Investigator.

Setting and Participants

The project site was at a 70-bed short-term post-acute inpatient rehabilitation facility located in Phoenix Arizona. HCS voluntarily attended the training. They were not paid for their participation. Inclusion criteria for this project required participation from project site staff which include nurses and doctors who are willing to participate. Participants must have more than one year healthcare experience, be able to read and understand English and sign informed consent to participate in the intervention for this project. There was not any participants under the age of 18, adults unable to give consent, prisoners, or economically or educationally disadvantaged individuals who participated in this DNP project.

Intervention

This education training consisted of a pre-post design method. HCS attended a 45-min SBAR and Assertiveness Training (Appendix G). Co-Investigator used a Power Point for visual purposes to disseminate data to staff. Written materials provided included Nurse Physician Pre/Post Questionnaires (NPQ), and Rathus Assertiveness Schedule (RAS) pre/post. Co-Investigator followed up with staff six weeks after initial training to complete post NPQ Questionnaire and RAS assessment. The approximate time to complete these surveys was approximately 15-20 minutes each.

Data Analysis Plan

At the conclusion of the training project data was analyzed using Intellectus software. Descriptive statistics were used to describe the sample and outcome variable. Inferential statistics

were used to analyze the data of the outcome variables of interest. The statistical analysis was performed using a two-tailed Wilcoxon signed-rank test with the critical value set at $p<0.05$.

Instruments/Outcome Measures

Nurse Physician Questionnaire Pre/Post. Staff communication was measured using the NPQ Pre/Post (Appendix G) from the National Center for Interprofessional Practice and Education. Permission to use this tool was granted by creator. Training outcomes were evaluated by comparing pre and post training communication scores. Examples of questions that was asked using the NPQ included: Is it easy for me to talk openly with the nurses of this snf? In matters pertaining to patient care, nurses call physicians in a timely manner? And SNF physician leadership often makes decisions without input from unit nurses?

Rathus Assertiveness Schedule. Staff assertiveness was measured using the RAS (Appendix H). This measuring tool is a 30-item self-report measure. The RAS was selected because it demonstrated good internal consistency ($\alpha = .87$) in addition to good test-retest reliability ($r = .87$) (Noh et al., 2021).

Demographic Survey. A demographic survey was incorporated into the NPQ (pre version only) (Appendix G). The survey contained 9 questions and was created to collect staff data regarding ethnicity, gender, age range, current role, years of professional experience, highest level of education, and if a military veteran or service member.

Budget

The preparation, implementation, and evaluation phases of the project was used as a resource for preparing a reasonable budget (Appendix I). The total cost was approximately $240.50 USD. The participants were not paid for their time. The project was not funded by any grant or external sources.

Results

This project explored the efficacy of assertiveness training alongside SBAR to improve communication among HCS at a skilled nursing facility. Ten staff members (5 Males and 5 Females) participated in the voluntary training. Participants completed pre/post intervention measures for assertiveness and communication effectiveness. Wilcoxon signed rank test was used to explore if there was an important difference between Pre communication and Post Communication. Descriptive statistics was used to describe the sample outcome variable. The results for the Pre communication had an average score of 264.00, Post communication average was 251.00. Wilcoxon signed rank was used to analyze the data. Two tailed test ran and critical value set at $p<0.05$, $V=37.00$, $z=-0.97$, $p=.333$. These values show that the contrasts between Pre communication and Post communication can be understandable by random variation. Intellectus statistics package was used to store, manage, and analyze the data. Nurses and provider completed the data (n=10).

The average age of the sample was 40 (SD=12.61). The ages ranged from 24-66 years of age. The average years of experience was 13 (SD=10.33). The average years of staff experience was 2-31 years. Half of the sample was male and female. The majority were white (50%), Black (30%), and of mix race (20%). Staff education included Technical school 1 (10%), Bachelor's 6 (60%) and Graduate 3 (30%). Staff roles included nurses 8 (80%), NP 1 (10%), MD 1 (10%). The majority of the sample had no military experience 6 (60%) and 4 (40%) served in the past. Eight (80%) were not of Spanish origin and 2 (20%) reported that they were. Finally married staff were 6 (60%), and 4 (40%) were not.

The impact of the project on staff, patients, and health policy hold potential. The results of the study reflects how hard it is to bring about change in healthcare and that it requires

complete buy-in with the right attitude and commitment to allow sustainability to occur. While this task poses a challenge, the project intervention can be sustained through its cost effectiveness and through further studying to find methods to improve staff communication and also through staff education and exploring ways to strengthen staff relationships.

Summary of Findings

The Assertiveness Training did not show a statistically significant increase in communication outcomes, which was unexpected. Qualitative data reflected 80% of HCS had increase in their Assertiveness post training. Some staff comments were “Good presentation I feel more assertive and will try harder to communicate better with the team”, and “I think this information can be useful to get us to communicate better and get in the right direction”. A number of factors potentially contributed to project findings. Some of these limitations included staff attitude and moral, high turnover, new facility, buy-in readiness from all staff and leadership and small sample size. The literature identified use of AT alongside SBAR to be of potential benefit to healthcare organizations. In cohesion with what was identified in literature staff competence did increase in post assessment but further study will need to be done to discover additional ways to improve staff communication.

Conclusion

Good communication is a hallmark of effective teams and remains a national patient safety goal (Farrell et al., 2022). Communication in nursing home settings are often suboptimal and numerous reports have identified poor or ineffective communication between team members, residents, and their families (Farrell et al., 2022). When effectively distributed strong team communication can contribute to improved patient safety, outcomes and staff self-efficacy when communicating with colleagues (Farrell et al., 2022).

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Appendix A

Evaluation and Synthesis Tables

Table A1

Evaluation Table for Quantitative Studies

Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
Noh et al., (2021). Effectiveness of assertiveness training, SBAR, and combined SBAR and assertiveness training for nursing students undergoing clinical training: A quasi-experimental study **Country**: Republic of Korea **Funding**:Research Grant from Kangwon University	Bandura Self-Efficacy	**Design**: Non-Equivalent Quasi-experimental **Purpose**: Aim of this study are to develop and assess a practical program for improving communication skills, clinical practice stress, and clinical competence among nursing students undergoing clinical training.	**N**= 93 **Demographics:** Average age of nursing and university students is 23**.** 18% Male, 82% Female. **IC**- third year Nursing Student Complete one semester Clinical Training in General Hospital No experience of prior Communication Related Programs. **EC**- Prior Communication Related Program experience	**IV1=** Assertiveness Training **IV2=**SBAR **IV3=** Assertiveness Training+SBAR **DV1=** Communication Competence **DV2=** Assertive Behaviors **DV3=** Communication Clarity **DV4**= Clinical Training Stress **Definitions:** SBAR is a type of handoff	**Tools:** Global Interpersonal Communication Competence Scale. Rathus Assertiveness Schedule Communication Skills Questionnaires Beck Anxiety Inventory Six-dimension Scale **Validity/ Reliability:** Global Interpersonal Communication Competence Scale-Good validity and	**Statistical Tests Used:** ANCOVA test Bonferroni test Paired t-test	**DV1- >** Communication Competence scores using SBAR and AT. **DV2-** > improvement in assertive behaviors with SBAR and AT. **DV3-** Combining SBAR+ AT showed ↑ improvement in CC	**LOE**: III **Strengths**: > generalizability+ external validity. **Weakness**: Randomization is not used, limiting the study's ability to conclude a causal association between an intervention and an outcome. **Feasibility**: ↑ utilization on clinical practice, ↓ cost, and require < resources.

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
Bias: Potential due to < group randomization.			Inability to participate in intervention program, and missing any 4 program sessions. **Setting:** 2 University Nursing School **Attrition:** 3 due to invalid responses, not able to provide consent.	tool used in healthcare to facilitate communication between staff**.**	reliability (Cronbach's alpha= 0.85) Rathus Assertiveness Schedule- Good validity and reliability (Cronbach's alpha= 0.87) Communication Skills Questionnaire= Good validity and reliability (Cronbach's alpha= 0.76) Beck Anxiety Inventory= Good validity and reliability (Cronbach's alpha= 0.86) Six-dimension Scale= Good validity and reliability (Cronbach's alpha= 0.93)		**DV4-** Combined SBAR+ AT group showed reduced clinical training stress when compared to the other groups.	**Application**: Study results can be implemented in workplace and staff training programs.

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
Dalky et al., (2020). Evaluation of the situation, background, assessment, and recommendation handover tool in improving communication and satisfaction among Jordanian nurses working in intensive care units **Country**: Jordan **Funding**: Department of Quality and Continuing Education **Bias**: SBAR only used in one setting.	Culture Theory	**Design**: RCT **Purpose**: To evaluate the impact of implementing SBAR as handover tool among ICU nurses on collaboration components such as relationship, communication, and level of job satisfaction.	**N**= 71 M- 39 (55%) F- 32 (45%) SBAR pre-test group- 71 SBAR post-test group- 69 **Demographics:** 71 Jordanian nurses, 65% were age 22 and 32, who work in the ICU and Coronary Care units. 59 participants had a bachelor's degree, 12 had a master's degree. 51% had 1-5 years' experience in nursing profession. **Setting**: ICU, CCU at university hospital. **IC**: Jordanian RN's with 1 year of experience and working in ICU or CCU at assigned hospital, approval from institutional review	**IV1-** ICU Nurse-Physician Questionnaire **IV2**- Multiple Choice Knowledge Test **DV**1: > knowledge regarding SBAR implementation. **DV2:** improvement in staff Relationships and Communication. **DV3**- ↑ Teamwork and Leadership. **DV4**- ↑ job satisfaction. **Definitions:** ICU-NPQ- clinical tool used to measure the degree and quality of communication and collaboration within and between groups, unit	**Tools:** ICU NPQ Multiple Choice Knowledge Test **Validity/Reliability**: ICU Nurse- Physician Questionnaire= Good reliability and validity (Cronbach's alpha= 0.78). Multiple Choice Knowledge Test= Good reliability and validity (Cronbach's alpha= 0.72).	**Statistical Test Used:** Paired Sample T-test	**DV1-** ↑ SBAR knowledge among ICU nurses after SBAR knowledge posttest implementation. P value= .172 **DV2-** Increased Relationships and Communication between ICU nurses and physicians after SBAR knowledge posttest implementation. P value= .05 **DV3-** ↑ T+L after SBAR	**LOE:** II **Strengths:** ↓ selection bias and < confounding due to unequal distribution in a chosen population. **Weaknesses:** ↑ cost, small sample size. **Feasibility**: > likelihood of use in practice due to ↑ in staff knowledge, relationships, communication, teamwork and leadership. **Application:** Study results can be implemented in workplace and staff training programs to ↑staff communication +

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
			board, voluntary/signed consent form. **EC**: < than a year experience, not signing consent to participate. **Attrition**: 2 for unknown reasons.	effectiveness, and job satisfaction.			knowledge posttest implemented. P value= .112	positively affect patient outcomes.

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
Citation: Lee et al., (2022). Effectiveness of speak-up training programs for clinical nurses: A scoping review **Country**: United States, Egypt ,India, Canada, Korea, Japan, Taiwan, Switzerland **Funding**: Basic Science Research Program **Bias**: Speak up Training not consisting of real clinical situations, Some inconsistent and mixed results.	The JBI Model of Evidence-based Healthcare	**Design:** Scoping Review Nonrandomized Control Study = 10 Group Intervention Study = 6 Randomized Control Trial = 5 **Purpose**: Identify the effectiveness of Speak Up Training programs for Clinical Nurses focusing on program content and outcomes.	**N**=21 General Ward =11 Special Care Setting =10 **Demographics:** Clinical Nurses: RN/LPN providing direct care for patients in hospitals or long term care facilities. Mixed populations considered if nurses made up more than 50% of the study sample. Medical Residents. **IC**: RN/LPN in Long Term Care facilities. All types of Speak Up Training Programs. English Language Articles, Korean Language Articles Published/unpublished database studies reviewed regardless of study design and program outcomes. Interventions limited to	**IV1-** Multi Session Lecture and Practice **IV2-**Simulations **IV3-** Online Learning **IV4**- Applied Assertiveness Training consisting of two 90-min sessions. **DV1-** ↑ assertiveness**,** psychological well-being , and work engagement **DV2- >** speak up behavior and nurse performance. **Definitions-** Speak Up Training: training to ↑ assertiveness, build confidence, and improve communication ability.	**Tools:** Kirk Patrick Training Evaluation Rathus Assertiveness Schedule **Validity/Reliability:** Kirk Patrick Training Evaluation- Good validity and reliability (Cronbach's alpha= 0.83) Rathus Assertiveness Schedule- Good validity and reliability (Cronbach's alpha= 0.87)	**Statistical Test Used:** Correlational	**DV1-** AT program leading to > improvement in: nurse assertiveness, psychological well-being and work engagement **DV2-** SUT for nurses can ↑ Speak Up Behavior leading to more positive organization performance.	**LOE:** II **Strengths:** Great for synthesizing research evidence, aims to identify the nature and extent of research evidence, identify gaps in existing literature. **Weakness:** Usually does not include risk of bias or other assessment of included studies, typically broad**.** **Feasibility**: > likelihood to use review results in practice as SUT showed effectiveness in ↑ nurse level of assertiveness. ↑ patient safety, communication

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
			only speak up training programs focused on patient safety. **EC**: Less than 50% of nurses in the study population. Review articles excluded, but reference lists examined to identify potentially relevant studies. Studies reporting insufficient data to conduct analysis. Programs targeting Socialization Bullying and Workplace Violence. **Setting**: Various Clinical Settings (General Ward, Special Care Settings) **Attrition**: 45 studies retrieved and assessed for eligibility, 24 excluded (wrong intervention=9,					and organizational performance. **Application**: SUT is beneficial to healthcare settings as it has proven capable of ↑ staff level of assertiveness, psychological well-being, and positive organizational performance.

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
			insufficient data=7, wrong population= 4, wrong setting= 2, unavailable= 2)					
Omura et al., (2019). Design and evaluation of an assertiveness communication training programme for nursing students **Country**: Japan **Funding**: Research Training Program scholarship **Bias**: Lack of culturally aware Assertive Communication Training Program	Reason's Swiss Cheese Model	**Design:** Descriptive Study **Purpose:** To outline the design and implementation of an Evidenced Based Assertive Communication Workshop for Japanese students, and report on the evaluation of nursing students' satisfaction with the workshop using the Satisfaction with Assertiveness Communication	**N**= 111 **Demographics**= Participants were recruited from a third-year cohort of nursing students from a Japanese University and a nursing school. Majority of participants were female, aged 20-21 with no prior exposure to assertiveness training. 3rd yr Nursing Students, 3rd yr University Students **Setting**: 2 Japanese Higher Educational Institutions **IC:** any type of independent assertiveness communication training	**IV1-** Reflective Thinking Questions for students **IV2-** Audio Visual Recordings of authentic scenarios **IV3-** Didactic Instruction and Assertiveness Communication Training programs 30-45 min. **IV4-** Power Point Slides **IV5-** Organizational Support **IV6-** Role play **DV1**- ↑ nurse Overall Mean Speak Up Scores. **DV2-** ↑ Workshop Experience Satisfaction	**Tools:** Likert Scale Revised Standards for Quality Improvement Reporting Excellence Satisfaction with Assertiveness Communication Training Program Survey **Validity/Reliability**: Likert Scale- Good reliability and validity (Chronbach's alpha 0.77-0.89) Revised Standards for Quality Improvement Reporting Excellence - Better reliability than currently available assessment tools (Chronbach's alpha= 0.74)	**Statistical Tests Used**: Chi-square Correlational	**DV1**- Nurses were satisfied with the workshop and believed it was well designed and structured. **DV2**- ↑ in Workshop Experience Satisfaction, many students agreeing the information presented at the workshop was relevant to their clinical practice.	**LOE:** VI **Strengths:** Descriptive Study; assists in answering what/when/how regarding certain population or groups, level of research is extremely valuable. **Weakness:** Unable to determine a cause and effect relationship, must be careful of reactivity; low level of evidence. **Feasibility:** > level of feasibility as Assertive Communication

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
		Training Program Survey.	program, programs with AT as core component of team skills for health professionals and students, regardless of healthcare setting and level of qualifications. **EC:** Not being 3rd yr Nursing Student or University Student, participant's subjective views on different aspects of the workshop. **Attrition**: 39 students did not participate in study for unknown reasons.	**DV3- >** Cultural Awareness **DV4-** Formation of Peer Support Groups **Definitions:** Bloom's Taxonomy - A classification system used to define and distinguish different levels of human cognition.	Satisfaction with Assertiveness Communication Training Program Survey- Good reliability and validity (Chronbach's alpha 0.88).		**DV3**- > Cultural Awareness **DV4**- Formation of Peer Support Groups resulting from ↑ support and confidence.	can assist in improving patient safety, information sharing, and positive relationships. **Application:** Use of appropriately designed Assertive Communication Workshop ↑ staff communication, help participants transfer learnt skills to practice, potentially prevent adverse incidents and ↑ patient safety. Training nursing students in AC skills with realistic scenarios helps them to prepare for clinical practice.

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
Lo et al., (2021). Can SBAR be implemented with high fidelity and does it improve communication between healthcare workers? **Country**: United States **Funding**: Not reported. **Bias**: Studies were too heterogeneous to test for publication bias.	Deming's Theory for Quality Improvement	**Design:** Systematic Review **Purpose:** To determine the extent to which users performed SBAR as intended and the extent to which SBAR improves clarity of communication. Study also looked for examples of interventions using SBAR showing impacts on other quality-related measures.	**N**= 28 studies 3 RCT's 6 controlled before and after studies 19 uncontrolled before and after comparisons **Demographics**: Most studies occurred in clinical settings and focused on communication involving nurses, nurse-physician, nurse-nurse and nurse-allied health communication (17/24; 71%). **Setting**: Clinical Setting, Classroom **IC**: Eligible studies consisting of controlled trials and time series **EC:** Studies with no control group	**IV1:** SBAR training sessions 30-60min. **IV2:** Reminder aids such as pocket cards and posters to facilitate SBAR uptake. **DV1:** Increased fidelity with SBAR implementation **DV2:** Moderate to large improvement in clarity of communication. **DV3**: Significant improvement in safety climate and teamwork. **Definitions**: Hawthorne Effect- Study participants behaviors change when	**Tools**: Global Rating Scale Conversational Skills Rating Scale Risk of Bias Tool **Validity/Reliability:** Global Rating Scale: Good validity and reliability (Cronbach's alpha= 0.83) Conversational Skills Rating Scale: Good validity and reliability (Cronbach's alpha= 0.85) Risk of Bias tool= Good validity and reliability (Cronhbach's alpha= 0.66-0.80).	**Statistical Tests Used:** Multiple Regression	**DV1**: SBAR use in healthcare setting resulted in > fidelity uptake among staff. P<.001 **DV2**: Use of SBAR in healthcare setting resulted in > clarity of communication in clinical practice. P= .003 **DV3**: SBAR education and implementation positively ↑ safety culture and staff teamwork. P<.001	**Level of Evidence:** I **Strengths:** Often conducted by experts in the field; Utilize rigorous methods which aim to ↓ bias in the review of evidence from individual studies; comprehensive in search strategy; relied upon for decades as a source of evidence based answers to questions that critically affect the practice of researchers, clinicians, or practitioners. **Weakness**: take several months to complete; authors may have preconceived

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			Outcomes obtained from incident reporting, and reflects reporting behavior and safety culture. Studies from the grey literature or published used solely as conference abstracts as they offered too few details about SBAR training and implementation. **Attrition**: 6 articles excluded due to critical risk of bias 1 scored 'some concerns' 5 had serious risk of bias (18%).					notions or biases and may over estimate the value of some studies. **Feasibility:** > cost; Recommended for use in practice due to reliable and accurate results **Application:** Can be implemented in health care facilities to ↑ staff fidelity and communication clarity which translates to safer care delivery.

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Citation	**Theoretical/ Conceptual Framework**	**Design/ Method/ Purpose**	**Sample/Setting**	**Variables**	**Measurement/ Instrumentation**	**Data Analysis**	**Results/ Findings**	**Level of Evidence; Application to practice; Generalization**
Muller et al., (2018). Impact of the communication and patient hand-off tool SBAR on patient safety: A systematic 4 review. **Country**: Canada, Europe **Funding:** Gotfried und Julia Bangerter-Rhyner-Foundation **Bias:** Publication bias could not be assessed.	Social Learning Theory	**Design:** Systematic Review **Purpose**: The purpose of the studies were to improve team communication, patient hand-offs and communication in telephone calls from nurses to physicians.	**N=** 11 **8-** before and after intervention design. **2**- Non- RCT **2-** RCT **Demographics:** Nurses Physicians **Setting:** Hospital Rehab centre Nursing home **IC**: SBAR implementation in clinical routine, at least one patient outcome reported **EC:** Articles that only describe the SBAR tool but provide no evaluation data on patient outcome.	**IV1:** SBAR training (38-155 participants) **IV2:** Organizational/human support **DV1:** Improve team communication **DV2:** Improve hand off with nurses and providers. **DV3.** Improve communication such as over the phone between nurses and physicians, or in case of patient deterioration**.** **Definition:** Sentinel Event**-** A patient safety event that results in death, permanent harm, or severe temporary harm.	**Tools:** Quality Assessment Tool for Quantitative Studies **Validity/Reliability:** Quality Assessment Tool for Quantitative Studies (Crohnbach's alpha= 0.78- 0.90)	**Statistical Test Used:** Cohen's d	**DV1:** Significant improvement in team communication appeared to positively affect patient outcomes. <Critical Incidence from 0.31 to 0.11. **DV2:** Patient hand-offs between physicians and nurses reported an improvement in patient safety and related outcomes. < unexpected patient deaths/1000 admissions from 0.99 to 0.34.	**LOE:** I **Strengths:** Often conducted by experts in the field; Utilize rigorous methods which aim to ↓ bias in the review of evidence from individual studies; comprehensive in search strategy; relied upon for decades as a source of evidence based answers to questions that critically affect the practice of researchers, clinicians, or practitioners**.** **Weakness:** take several months to complete; authors may have preconceived

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			Studies that report a larger project in which SBAR was not the main intervention under investigation. Studies that only report survey outcomes or team perceptions. **Attrition:** 607 articles were excluded after reviewing the titles and abstracts.	Critical Incidence Reporting System- A fundamental component of risk management in healthcare which is expected to be useful because it allows for the identification of weak spots, hazards, and critical situations such as near misses.			P<0.001) **DV3**: Moderate evidence for improved patient safety through SBAR implementation wen used to structure communication over the phone. P=0.007	notions or biases and may over estimate the value of some studies. **Feasibility:** > cost; Recommended for use in practice due to reliable and accurate results. **Application:** Hospital, rehabilitation centers, and nursing home settings.

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
Murphy et al., (2022). Implementing a standardized communication tool in an intensive care unit. **Country:** United States **Funding**: American Association of Critical Care Nurses **Bias**: Possible experience bias	Cognitive Learning Theory	**Design:** Quasi-Experimental **Purpose:** To implement a standardized communication tool to improve communication between nurses and Advanced Practice Providers in the ICU.	**N=** 224 Advanced Practice Providers= 24 Nurses= 200 **Demographics:** 5 Advanced Practice Providers and 35 nurses had <3 yrs experience. 5 Advanced Practice Providers and 33 nurses had 4-6 yr experience. 3 Advanced Practice Providers and 32 nurses had > 7 yr experience 42% of participants had 4-6 years' experience. **Setting:** ICU	**IV1:** Staff education on SBAR pre/post 3 months. **IV2:** Project champion to reinforce SBAR education and serve as a role model. **IV3:** "Badge buddies"/Educational flyers **DV1: >** before and after SBAR education scores for nurses and Advanced Providers. **DV2:** ↑ in General Perception and Open Communication **DV3:** >Team Collaboration **Definitions:** General Perception- A belief or opinion often held by many people based on how things seem.	**Tools:** Surveys SBAR tool kit **Validity/Reliability:** Surveys: Good validity and reliability (Chronbach's alpha= 0.65-0.80) SBAR tool kit: Good validity and reliability (Chronbach's alpha= 0.85-0.95**)**	**Statistical Test Used:** Fisher exact test Independent sample t-tests	**DV1:** SBAR use post SBAR education for staff ↑ from 62% to 82%, (p= .39). **DV2:** > improvement in General Perceptions subscale, p=.04 for Advanced practice providers), (p=.007 for nurses). Improvement in Open Communication (p=.03). **DV3:** Improvement in Team Collaboration (p=.58)	**Level of Evidence:** III **Strengths: >** generizability; provide a high LOE without randomization; can be used when there are practical or ethical reasons why participants can't be randomized. **Weakness:** Risk of bias; risk of inaccurate data; risk of ↓ internal validity. **Feasibility**: < expensive; ease of administration; potential effectiveness. **Application:** results can be implemented in workplace and staff training programs to ↑ staff communication which can positively affect patient outcomes.

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			IC: Implementation of SBAR guidelines in ICU that lacked standardized communication protocol. **EC:** None. All ICU nurses and Advanced Practice Providers were eligible to participate in this study. **Attrition:** None noted.	Open Communication- Readily sharing information between people in a transparent, honest, consistent, and dependable way.				

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Citation	Theoretical/ Conceptual Framework	Design/ Method/ Purpose	Sample/Setting	Variables	Measurement/ Instrumentation	Data Analysis	Results/ Findings	Level of Evidence; Application to practice; Generalization
Ghosh et al., (2021). Impact of structural clinical handover protocol on communication and patient satisfaction. **Country**: India **Funding**: None reported **Bias:** Possible due to the number of exclusions in non-randomized studies being unclear.	Lewin's Change Theory	**Design:** Non-Randomized Control **Purpose**: This study was done to assess the effect of standardized nursing handover protocol implementation on overall bedside nursing handover, patient satisfaction, and nurses' acceptance.	**N=** 62 **Patients-** 52 **Nurses-** 10 2696 nursing handover processes obtained over 5 months was included in the study. **Demographics:** 1226 handover processes was observed in the pre-intervention period. 1226 handover processes observed in the post-intervention period. 122 handover processes observed in the 2nd and 3rd month audits. 5 nurses had 0-5 yr experience.	**IV1:** SBAR handover training. **IV2:** Lecture cum discussion **IV3:** Self-instructional materials **DV1:** Increase SBAR hand over compliance in the post-intervention group. **DV2:** Increase in patient satisfaction scores. **DV3: ion.** Increase handover scores due to SBAR protocol utilization. **Definitions:** Clinical Handover- The effective transfer of professional responsibility and accountability for some or all aspects of care for a patient to another	**Tools**: SBAR Handover Protocol Observation checklist Single Part Questionnaire Content Validity Index Test Retest Method **Validity/Reliability:** SBAR has Good validity and reliability (Cronbach's alpha= 0.85-0.95) Observation checklist has Good validity and reliability (Cronbach's alpha= 0.86) Content Validity Index (0.74) Test Retest Method reliability (0.8).	**Statistical Test Used:** Wilcoxon signed-rank test Mann-Whitney U test; P<.05.	**DV1:** There was significant difference in the median scores between the pre-intervention and post-intervention. (P<.05). **DV2:** Patient satisfaction ↑ after the implementation of a standardized handover protocol (SBAR) (P<.05). **DV3:** Results are statistically significant (P<.05)	**Level of Evidence:** II **Strengths:** study objectives and interventions are clearly described, statistical analysis is detailed and appropriate for intended objectives **Weakness:** Study conducted in only 1 ward, findings may not be generizable, possibility of Hawthorne effect which can affect study results. **Feasibility: <** expensive; ease of administration; potential effectiveness. **Application:** Hospital, rehabilitation centers, and nursing home settings.

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			5 nurses had 6-12 years' experience. 26 patients included in the pre-intervention period and post-intervention period. **Setting:** Surgical Gastroenterology ward **IC:** SBAR handover training, signed consent, compliance with standardized protocol. **EC:** Those unwilling to give consent to participate. **Attrition:** None stated	person/professional group. The Joint Commission-Healthcare organization responsible for accrediting more than 22,000 health care organizations and whose mission is to continuously improve health care for the public.				

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Citation	**Theoretical/ Conceptual Framework**	**Design/ Method/ Purpose**	**Sample/Setting**	**Variables**	**Measurement/ Instrumentation**	**Data Analysis**	**Results/ Findings**	**Level of Evidence; Application to practice; Generalization**
Campbell et al., (2019). Implementing bedside handoff in the emergency department: A practice improvement project. **Country**: United States **Funding:** Agency for Healthcare Research Quality **Bias**: Misinterpreted Questions, Hawthorne effect.	Lewin's Theory of Planned Change	**Design:** Quasi-Experimental **Purpose:** Purpose of this practice improvement project is based on improving nursing communication, developing a standardized handoff process, and recognizing that bedside handoff can decrease errors.	**N=** 230 230 Emergency Room nurses **Leadership:** Managers- 4 Charge nurses- 8 Clinical specialist- 1 Professional Nursing Council Rep- 10 bedside nurses **Demographics:** Ages 19-65 Majority female Associates degree- 39 Bachelor's- 99 Masters'- 4 Years of experience- New grad to 16 years. **Setting:**	**IV1:** SBAR in-service **IV2:** Short Power Point Presentation **DV1:** > acceptance of SBAR use at the bedside **DV2:** Significant ↓ in nurse related incidences which contributed to poor patient outcomes. **DV3:** Improved transfer of patient care information between problematic shift changes and lost patient information which contributed to greater patient safety. **Definitions:** Ineffective communication- A disruption of failure	**Tools:** SBAR Communication Tool Nursing Handoff Questionnaire Patient Safety Survey Research and Quality Checklist **Validity/Reliability:** SBAR communication tool has Good validity and reliability (Cronbach's alpha- 0.85-0.95). Nursing Handoff Questionnaire has Good validity and reliability (Cronbach's alpha= 0.78). Patient Safety Survey has moderate	**Statistical Tests:** Simple Linear Regression	**DV1:** 62% of nurses preferred bedside handoff to other communication methods. **DV2:** 84% of nurses post SBAR training agreed to not having an incident which contributed to poor patient outcomes (versus 43% pre- SBAR training). **DV3: Pre-implementation:** Patient care information- 50% Patient information lost during shift change- 39% **Post-implementation:**	**Level of Evidence:** III **Strengths: >** generizablity; provide a ↑ LOE without randomization; can be used when there are practical or ethical reasons why participants can't be randomized. **Weakness:** Risk of bias; risk of inaccurate data; risk of ↓ internal validity. **Feasibility: <** expensive; ease of administration; potential effectiveness. **Application:** results can be implemented in health care facilities, staff training programs to ↑ communication which can positively affect patient outcomes.

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			Emergency Department **IC:** Nurses in ER, able to understand and give consent **EC**: Younger than 18, not able to understand or give consent**.** **Attrition:** 10 resulting from resistance to change/ staff turnover during implementation.	in the process of communication. Handoff- The transfer and acceptance of patient care.	to strong validity and reliability (Cronbach's alpha= >0.7) Research and Quality Checklist has Good validity and reliability (Cronbach's alpha >0.7).		Patient care information- 62% Patient information lost during shift change- 47%	

Table A2

Evaluation Table for Qualitative Studies

Citation	**Theory/ Conceptual Framework**	**Design/ Method/ Sampling**	**Sample/ Setting**	**Major Themes Studied/ Definitions**	**Measurement/ Instrumentation**	**Data Analysis**	**Findings/ Themes**	**Level/ Quality of Evidence; Decision for/ Application to practice; Generalization**
Park et al., (2021). Exploring a nursing home-specific,	The Collaborative Learning Theory	**Design:** Detailed Interviews **Purpose:** The purpose of this	**N**=28 staff members **7** Nurses **6** Social Workers	1. Does the Interdisciplinary Approach to care improve resident quality	**Data Collection:** Purposive Sampling Method	Directed Content Analysis	**Findings:** Q1. Improving nursing home interdisciplinary communication	**Level of Evidence:** V **Strengths**: Flexible, probing

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Citation	Theory/ Conceptual Framework	Design/ Method/ Sampling	Sample/ Setting	Major Themes Studied/ Definitions	Measurement/ Instrumentation	Data Analysis	Findings/ Themes	Level/ Quality of Evidence; Decision for/ Application to practice; Generalization
interdisciplinary, function-focused, communicative framework based on situation, background, assessment, and recommendation. **Country:** Republic of Korea **Funding:** Basic Science Research Program **Bias:** Small study reducing generalizability.		study is to explore nurses' and related practitioners' communications about the clinical care necessary to maintain function in nursing home residents and to explore the characteristics of SBAR flows in nursing home settings.	**5** Physical Therapists **1** Occupational Therapist **4** Nutritionists **5** Care Helpers **Demographics:** Average age- 46 Ages ranged from 27-63 Average Length of Experience providing care- 6yr **Setting:** 4 nursing homes of different size categories **Attrition:** None identified	of life by managing their functions? 2. Can function focused care improve patient care delivery? 3. What are the 4 stages of SBAR and how do they improve nursing home flow? **Definitions:** Communication- The imparting or exchanging of information or news.	Semi structured Questionnaires, 1:1, Audio Recordings Open Ended Questions **Data Dependability:** Researchers were experienced in Qualitative Research on older adults. Familiar with Nursing Home Facilities. Had long term contacts with practitioners in Nursing Homes.	SBAR-based Case Analysis. Data collected via Audio Recording. Double checking transcripts with other researchers. Use of Constant Communication to avoid bias.	with SBAR enables nurses to > identify problems underlying a resident's current state which can best aid in managing their functions, ↑ practitioner's ability to communicate to identify and treat patient problems before they occur. Q2. Function focused care can help to improve care delivery by ↑ nurse awareness of abnormal circumstances, -Facilitates continuous relationships among interdisciplinary practitioners.	questions can be asked, and the order of questions changed, depending on the participant and how structured or unstructured the interview is. Quick way to collect data. **Weakness:** Small N; Questions must be worded carefully to reduce response bias; population demographic limits generalizability. **Feasibility:** Likely to use results of this study in practice due to the importance of Function Focused Intervention to

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Citation	Theory/ Conceptual Framework	Design/ Method/ Sampling	Sample/ Setting	Major Themes Studied/ Definitions	Measurement/ Instrumentation	Data Analysis	Findings/ Themes	Level/ Quality of Evidence; Decision for/ Application to practice; Generalization
							Q3. The 4 stages of SBAR: Situation, Background, and Communication improve nursing home flow by - being a clear and safe communication method for problem solving among different disciplines. -simple way of sharing patient information.	problem solve and improve patient care delivery. **Application:** Results of this study can be applied to health care settings to > facilitate communication and collaboration between all team members**.**

AC Assertive Communication**, AT** Assertive Training, **CC** Communication Clarity **DV** Dependent Variable, **EC** Exclusion Criteria, **SBAR** Situation Background and Recommendation, **IC** Inclusion Criteria **IV** Independent Variable, **LOE** Level of Evidence, **NPQ** Nurse-Physician Questionnaire, **SUT** Speak Up Training, **T+L** Teamwork and Leadership

Table A3

Appendix B

Synthesis Table

Study (Author, year)	Noh et al., 2021	Dalky et al., 2020	Lee et al., 2022	Omura et al., 2019	Park et al., 2021	Lo et al., 2021	Muller et al., 2021	Murphy et al., 2022	Ghosh et al., 2021	Campbell et al., 2019
Design LOE	III	II	II	VI	V	I	I	III	II	III
Sample										
n subjects	93	71	21	111	28	28	11	224	62	230
M-Age	23	27	32	20.5	46	28	38	33	30	42
Other variable	18% male 82% female	59 participants had Bachelor's degree, 12 had Master's degree.	RN/LPN who provide direct care for patients in hospitals or long term care facilities.	Majority of participants were female with no prior exposure to AT.	Average Length of Experience providing care is 6 years.	SBAR use showed significance in improving clarity of communication and patient safety.	SBAR training needed to be included in at least one patient outcome reported.	Advanced Practice Providers- 24 Nurses- 200 42% of participants had 4-6 years' experience.	52 patients 10 nurses	Majority female Associates degree- 39 Bachelor's- 99 Masters- 4 Years of experience- New grad to 16 years
Setting										
variable	2 university nursing schools	Intensive Care Unit and Coronary	General Ward	2 Higher Educational Institutions	Nursing Home	Clinic Classroom	Hospital Rehab Centre Nursing home	ICU	Surgical Gastroenterology Ward	Emergency Dept.

Sample Key: **SBAR** Situation Background Assessment and Recommendation, **AT** Assertiveness Training, **M** Male, **F** Female

Study (Author, year)	Noh et al., 2021	Dalky et al., 2020	Lee et al., 2022	Omura et al., 2019	Park et al., 2021	Lo et al., 2021	Muller et al., 2021	Murphy et al., 2022	Ghosh et al., 2021	Campbell et al., 2019
		Care Unit at a University Hospital	Special Care Settings							
Interventions										
Sample	Assertiveness Training	ICU Nurse-Physician Questionnaire	Multi Session Lecture and Practice	Reflective Thinking Questions for students	Use of Interdisciplinary Approach based on SBAR.	SBAR training	SBAR training	Staff education	SBAR handover training	SBAR in-service
Sample	SBAR	Multiple Choice Knowledge Test	Simulations	Audio Visual Recordings of authentic scenarios	Applying Function Focused care based on SBAR	Reminder aids	Organizational/human support	Project champion to reinforce SBAR education and serve as a role model	Lecture cum discussion	Short Power Point Presentation
Sample	Assertiveness Training + SBAR		Online Learning	Didactic Instruction and Assertiveness Communication Training programs	Using SBAR to improve nursing home communication flow.			Badge buddies/Educational flyers	Self-instructional materials	
Sample			Applied Assertive Training	Power Point Slides						
Sample				Organizational Support						
Other facet				Role Play						
Outcomes/ Themes										

Sample Key: **SBAR** Situation Background Assessment and Recommendation, **AT** Assertiveness Training, **M** Male, **F** Female

Study (Author, year)	Noh et al., 2021	Dalky et al., 2020	Lee et al., 2022	Omura et al., 2019	Park et al., 2021	Lo et al., 2021	Muller et al., 2021	Murphy et al., 2022	Ghosh et al., 2021	Campbell et al., 2019
Variable/finding	Increase Communication Competence with AT + SBAR	Improved knowledge regarding SBAR implementation	Increased assertiveness, psychological well-being, and work.	Increase nurse Overall Mean Speak Up Scores	Nursing home interdisciplinary communication based on SBAR framework enabled nurses to better: identify problems underlying a resident's current state which assisted in managing their functions. Increased practitioner's ability to identify and treat patient problems before they occur.	Increased fidelity with SBAR implementation. Moderate to large improvement in clarity of communication.	Improved team communication Improvement in handoff between nurses and providers	Improved before and after SBAR education scores for nurses and Advanced Providers Improvement in General Perception and Open Communication	Increase SBAR compliance in post-intervention group Increase in patient satisfaction scores	Greater acceptance of SBAR use at the bedside Significant reduction in nurse related incidences which contribute to poor patient outcomes Improved transfer of patient care information between problematic shift changes and lost patient informati

Sample Key: **SBAR** Situation Background Assessment and Recommendation, **AT** Assertiveness Training, **M** Male, **F** Female

Study (Author, year)	Noh et al., 2021	Dalky et al., 2020	Lee et al., 2022	Omura et al., 2019	Park et al., 2021	Lo et al., 2021	Muller et al., 2021	Murphy et al., 2022	Ghosh et al., 2021	Campbell et al., 2019
Variable/finding	Greater improvement in Assertive Behaviors with application of SBAR + AT	Significant improvement in staff relationships.	Improve speak up behavior and nurse performance.	Increase Workshop Experience Satisfaction Greater Cultural Awareness	Function Focused Care based on SBAR framework can improve care delivery by ↑ nurse awareness of abnormal circumstances and facilitate continuous relationships among practitioners.	Significant improvement in safety climate and teamwork	Improved communication such as over the phone between nurses and physicians, or in cases involving patient deteriorate	Improvement in Team Collaboration	Increase in SBAR handover scores due to SBAR protocol utilization	on which contribute to greater patient safety.
Variable/finding	Significant improvement in Communication Clarity with use of SBAR + AT			Formation of Peer Support Groups	The SBAR framework can increase nursing home communication flow by being a clear and safe communication method for problem solving					

Sample Key: **SBAR** Situation Background Assessment and Recommendation, **AT** Assertiveness Training, **M** Male, **F** Female

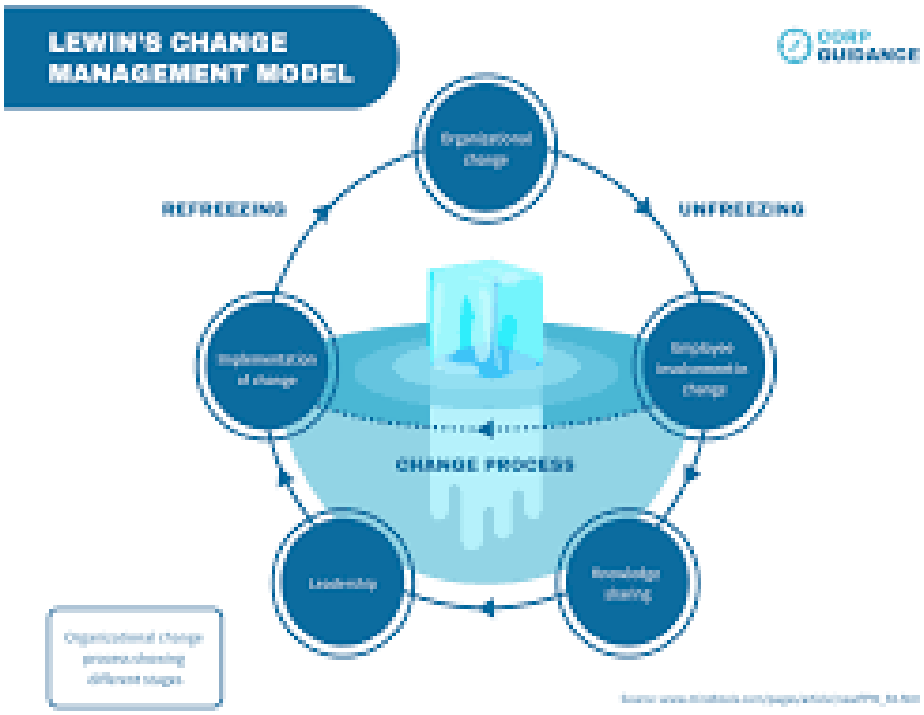
Study (Author, year)	Noh et al., 2021	Dalky et al., 2020	Lee et al., 2022	Omura et al., 2019	Park et al., 2021	Lo et al., 2021	Muller et al., 2021	Murphy et al., 2022	Ghosh et al., 2021	Campbell et al., 2019
					among different disciplines. Providing a simple way of sharing patient information with other health care staff.					

Sample Key: **SBAR** Situation Background Assessment and Recommendation, **AT** Assertiveness Training, **M** Male, **F** Female

Appendix C

Lewin's Change Model

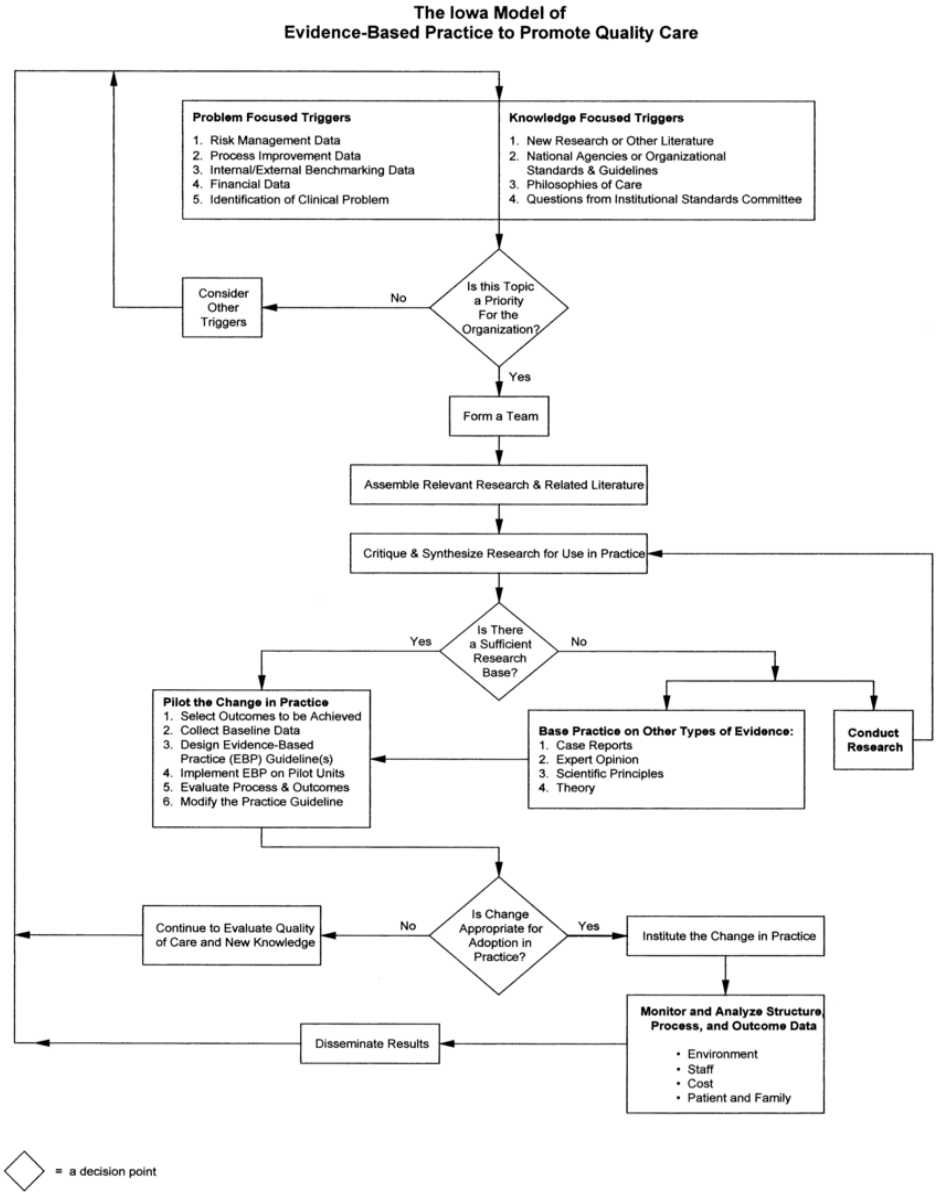
Figure B1



(Venngage, 2023)

Figure B2

Iowa Model of Evidence-Based Practice to Promote Quality Care



(Research Gate, 2023)

Appendix D

Institutional Review Board Approval

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Ann Guthery
EDSON: DNP
602/496-0794
Ann.Guthery@asu.edu

Dear Ann Guthery:

On 8/15/2023 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	The Benefits of Effective Communication on Reducing Error and Improving Client Safety and Satisfaction
Investigator:	Ann Guthery
IRB ID:	STUDY00018347
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• CITI Training, Category: Other; • Informed Consent, Category: Consent Form; • IRB Project Power Point Presentation, Category: Other; • IRB Social Behavioral Protocol, Category: IRB Protocol; • Post Questionnaire, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Pre Questionnaire, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Quality Improvement Project Letter of Support, Category: Other; • RAS , Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Recruitment Email, Category: Recruitment

	Materials; • Recruitment Flyer, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(ii) Tests, surveys, interviews, or observation (low risk) on 8/7/2023.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Mark Campbell
Ann Guthery
Mark Campbell

Appendix E

Informed Consent

Informed Consent Form

The Benefits of Effective Communication on Reducing Error and Improving Client Safety and Satisfaction

Dear Participant,

I am a graduate student under the direction of Dr. Ann Guthery PhD, PMHNP-BC in the Edson College of Nursing and Health Innovation at Arizona State University. I am conducting a quality improvement project to improve staff communication and assertiveness at Diamondback Healthcare.

I am inviting your participation, which will involve completing pre/post project ICU NP Questionnaire and Rathus Assertiveness Schedule which will take approximately 15-20 minutes each to complete, attendance at a 45min Power Point Presentation about SBAR and Assertiveness Training, followed by a 15min post education question and answer session as a part of data collection activities. A brief post intervention survey will be provided to determine the impact of the project on staff communication, assertiveness, satisfaction, and patient safety. This will take less than one minute to complete. You have the right not to answer any question, and to stop participation at any time.

Your participation in this project is voluntary. If you choose not to participate or to withdraw from the project at any time, this will not affect your employment at the facility. At the end of the project those who have participated will enter a number into a drawing for the chance to win a $20 gift card. To participate in this project you must be 18 or older, have more than one year healthcare experience as a nurse or provider, speak and understand English, and be able to sign the Informed Consent form.

Benefits of participating in this evidence based project is improved ability to effectively communicate with peers using acquired knowledge from SBAR and Assertiveness Training. In addition you will be contributing to keeping patients safer, increasing care outcomes, reducing medical error, and assisting in decreasing care cost related to preventable healthcare incidents. There are no foreseeable risks or discomforts to your participation.

Your responses will be anonymous and stored in a locked filing cabinet. Pre and post-questionnaire, and brief survey responses will be linked using the last four digits of participant cell phone number. The results of this project may be used in reports, presentations, or publications but your name will not be used. De-identified data collected as a part of the current study will be shared with other investigators for future research purposes'. In addition no audio record or video recording will be conducted during this project.

If you have any questions concerning this quality improvement project, please contact the research team at:

Dr. Ann Guthery PhD, PMHNP-BC at 602-496-0794

Mark Campbell, BSN, RN, DNP Student at 480-343-4845

If you have any questions about your rights as a participant in this quality improvement project, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the quality improvement project.

Appendix F

SBAR and Assertive Curriculum

Improving Patient Safety in Healthcare: The Benefits of Effective Communication on Reducing Error and Improving Client Satisfaction

Summary of Improving Patient Safety Curriculum

Phase 1: Interaction 1	Introduction	Introduction and explanation of project. Recruitment flyer provided.
Phase 2: Interaction 2	Base Knowledge Assessment	EBP Consent Form distributed Completion of pre surveys and demographics
Phase 3: Interaction 3	SBAR and Assertiveness Training	45min Power Point presentation providing quality improvement data/education on the Effectiveness of SBAR and AT
Phase 4: Interaction 4	Closing and Knowledge Re-assessment	15 min Question and Answer session Review that in incorporating SBAR alongside AT staff can improve communication, increase client safety, and improve treatment outcomes.

Appendix G

Nurse Physician Pre/Post Questionnaire

Subject ID_____ (last 4 digits of your phone number) Date _____
1

NURSE PHYSICIAN PRE Questionnaire

Demographics: We would like to know a little more about you, please answer the following questions.

Age- ___ (years)

Please put a ***check mark*** to the following that best applies to you.

Gender- ___ Male ___ Female __ Other _____ (Specify)

Are you of Latino, Hispanic, or of Spanish Origin? Yes __ No __

How would you describe yourself? White __ Black__ African American __ American Indian __ Native American __ Asian __ Pacific Islander, Alaska Native, Native Hawaiian or Other Pacific Islander___ Other/mix race _____

What is your marital status? Single, never married __ Married or domestic partnership __ Widowed __ Divorced __ Separated __

What is you highest level of education? High school or equivalent __ Vocational or Technical school __ Bachelor's Degree __ Master's Degree __ Doctoral Degree __

What is your current role? Staff Nurse___ PA__ NP__ MD__

Years of professional experience? - ____ (years)

Do you identify as a military veteran or service member? Yes __ No __

SECTION ONE: RELATIONSHIPS AND COMMUNICATIONS WITHIN THE SNF

I. For each of the following statements, please ***circle*** the number under the response that best reflects your judgment.

Statement	Disagree 1	Strongly Disagree 2	Agree 3	Neither Disagree Nor Agree 4	Strongly Agree 5
Nurse-to-Nurse Relationships: These statements refer to relationships between nurses.					
1. It is easy for me to talk openly with the nurses of this snf.	1	2	3	4	5
2. I can think of a number of times when I received incorrect information from nurses in this unit.	1	2	3	4	5
3. Communication between nurses in this unit is very open.	1	2	3	4	5

Data Entry _____ Data Validation _____ Data Analysis _____

Subject ID_____ Date _____ 1

NURSE PHYSICIAN POST Questionnaire

SECTION ONE: RELATIONSHIPS AND COMMUNICATIONS WITHIN THE SNF

I. For each of the following statements, please ***circle*** the number under the response that best reflects your judgment.

Statement	Disagree 1	Strongly Disagree 2	Agree 3	Neither Disagree Nor Agree 4	Strongly Agree 5
Nurse-to-Nurse Relationships: These statements refer to relationships between nurses.					
1. It is easy for me to talk openly with the nurses of this snf.	1	2	3	4	5
2. I can think of a number of times when I received incorrect information from nurses in this unit.	1	2	3	4	5
3. Communication between nurses in this unit is very open.	1	2	3	4	5
4. It is often necessary for me to go back and check the accuracy of information I have received from nurses in this unit.	1	2	3	4	5
5. I find it enjoyable to talk with other nurses of this unit.	1	2	3	4	5
6. When nurses talk with each other in this unit, there is a good deal of understanding.	1	2	3	4	5
7. The accuracy of information passed among nurses of this unit leaves much to be desired.	1	2	3	4	5
8. It is easy to ask advice from nurses in this unit.	1	2	3	4	5
9. I feel that certain snf nurses don't completely understand the information they receive.	1	2	3	4	5
Nurse-to-Physician Relationships: These statements refer to relationships between nurses and physicians.					
10. It is easy for me to talk openly with the physicians of this snf.	1	2	3	4	5
11. I can think of a number of times when I received incorrect information from physicians in this unit.	1	2	3	4	5

Data Entry _____ Data Validation _____ Data Analysis _____

Appendix H

Rathus Assertiveness Schedule

The Rathus Assertiveness Schedule

Subject ID _____ (last 4 digits of cell phone #)

Directions: Indicate how well each item describes you by using this code: 3 very much like me, 2 rather like me, 1 slightly like me, -1 slightly unlike me, -2 rather unlike me, -3 very much unlike me.

1. Most people seem to be more aggressive and assertive than I am.*

2. I have hesitated to make or accept dates because of "shyness."*

3. When the food served at a restaurant is not done to my satisfaction, I complain about it to the waiter or waitress.

4. I am careful to avoid hurting other people's feelings, even when I feel that I have been injured.*

5. If a salesperson has gone to considerable trouble to show me merchandise that is not quite suitable, I have a difficult time saying "No."*

6. When I am asked to do something, I insist upon knowing why.

7. There are times when I look for a good, vigorous argument.

8. I strive to get ahead as well as most people in my position.

9. To be honest, people often take advantage of me.*

10. I enjoy starting conversations with new acquaintances and strangers.

11. I often don't know what to say to people I find attractive.*

12. I will hesitate to make phone calls to business establishments and institutions.*

13. I would rather apply for a job or for admission to a college by writing letters than by going through with personal interviews.*

14. I find it embarrassing to return merchandise.*

15. If a close and respected relative were annoying me, I would smother my feelings rather than express my annoyance.*

16. I have avoided asking questions for fear of sounding stupid.*

17. During an argument, I am sometimes afraid that I will get so upset that I will shake all over.*

18. If a famed and respected lecturer makes a comment which I think is incorrect, I will have the audience hear my point of view as well.

19. I avoid arguing over prices with clerks and salespeople.*

20. When I have done something important or worthwhile, I manage to let others know about it.

21. I am open and frank about my feelings.

22. If someone has been spreading false and bad stories about me, I see him or her as soon as possible and "have a talk" about it.

23. I often have a hard time saying "No."*

24. I tend to bottle up my emotions rather than make a scene.*

25. I complain about poor service in a restaurant and elsewhere.

26. When I am given a compliment, I sometimes just don't know what to say.*

27. If a couple near me in a theater or at a lecture were conversing rather loudly, I would ask them to be quiet or to take their conversation elsewhere.

28. Anyone attempting to push ahead of me in a line is in for a good battle.

29. I am quick to express an opinion.

30. There are times when I just can't say anything.*

Appendix I

Budget

2

Budget

Phase	Activities	Direct Cost	Indirect Cost
Preparation	Created Project recruitment email for staff	$0	1 hour
	Developing SBAR and Assertiveness Training Intervention DNP Student Hours	$0	40 hours research, Power Point development and time spent contacting owner of intellectual property
	Travel Expenses Round trip from Glendale to PHX, Arizona	$100 (gas)	10 hours time (trips to date), wear and tear on vehicle
	Create Pre/Post Education Materials and Questionnaires	$20	2 hours time
	Purchase Gift card for project participation	$20	Wear and tear on vehicle
	DNP Mentor Guidance	$0	6 hours time (total to date)
	DNP project flyer $0.61/50 Cell phone bill	$30.50 $70.00	2 hours time Time spent talking to site champion, wear and tear on phone.
	Potential Funding Sources		
	Grants Private funds from student (student able to fund)	$0 $240.50 total	
	Potential Savings/Revenue Facility Contracted Service (consultant)	 $80K annually	Successful project implementation can save facility money by decreasing consultancy services.
Delivery	Quality improvement project announcement	$0	Time

	and intervention purpose delivered at staff meeting.		
Evaluation	Coding and analyzing data DNP student hours ASU Statistics Professor consult Intellectus Software	$0 $0 $0	2 hours time 1 hour time 1-2 hours time inputting data
	ICU-NPQ Tool Rathus Assertiveness Scale	Public Domain/$0 $0	2 hours time modifying tools to meet project standards.

Budget Justification total: $240.50