

Improving Nurse-Nurse Communication to Reduce Patient Bounce-Back

by

Natalie A. Marchione

Under Supervision of

Bridgitte Gourley, DNP, FNP-BC

Second Reader

Rosemarie D. Satyshur, PhD, RN

A DNP Project Manuscript
Submitted in Partial Fulfillment of the Requirements for the
Doctor of Nursing Practice Degree

University of Maryland School of Nursing
May 2020

Abstract

Problem & Purpose: A deficit in nurse communication was identified, causing 2-5% of patients bounced-back (readmitted) to the emergency department (ED) from the psychiatric emergency services (PES). No report tool was currently used. This suboptimal communication contributed to a lack of rapport, poor workflow, and reduced patient safety, making implementation of a communication tool for the receiving nurse in PES essential. The purpose of this project was to implement and evaluate a psychiatric SBAR tool (PSYCH) utilized by PES nurses when receiving report on patients from the ED. The goal was to reduce the current rate of 2-5% patient bounce-back in PES to 0% through improvements in nurse communication.

Methods: The theoretical framework used was Kurt Lewin's Change Theory, guided by the MAP-IT model. Subjects included were all PES nurses. Data was collected using the AHRQ TeamSTEPPS T-TAQ Communication Scale, Random Observations, and Patient Bounce-Back Audit Form. The T-TAQ communication scale was identified to collect data on nurse perception of communication between PES and the ED, analyzed by Independent samples *t*-tests.

Results: Pre-T-TAQs found the ED perception of communication ($M = 24.25$) was hypothesized to be lower than PES's perception ($M = 25.75$). This difference was found to be significant, $t(30) = -1.85$, $p = 0.04$. Post- T-TAQ scores were not found to be significant. Patient bounce-back reduced to 0.8% throughout implementation.

Conclusion: This project showed the feasibility of a PSYCH tool used during report between two emergency units to improve communication. It allowed nurses to comprehend information gathered, enhancing efficiency by reducing redundancy. The project reduced patient bounce-back and identified security concerns impacting patient and staff safety. The results reinforced

the importance of gathering all pertinent data using a standardized tool for furthering effective communication.

Implementation of Psychiatric SBAR Tool to Improve Nurse-Nurse Communication

Introduction

Patient care is often transferred between health care clinicians (HCC) necessitating frequent handoff communication. Handoff is defined as communication transferring care and responsibility of a patient from one HCC to another to maintain patient safety (Abraham, Kannampallil, Almoosa, B. Patel, & V. Patel, 2014; Briones, 2016; Martin, & Ciurzynski, 2015). Efficient nurse communication can provide the benefits of improved workflow, nurse satisfaction, and patient safety, often preventing a delay in care (Mariano, Brooks, & DiGiacomo, 2016; Martin et al., 2015; Renz, Boltz, Wagner, Capezuti, & Lawrence, 2013). The Joint Commission (TJC, 2019) continues to include improving handoff communication among HCCs as a National Patient Safety Goal.

Despite available research supporting the use of a handoff tool, it was often not implemented by the receiving nurse within psychiatry. Research identified poor communication within psychiatry as a major contributor to elopements, restraints, and suicide related events (Mariano, et al., 2016). A deficit in nurse communication causing 2-5% patient bounce-back (i.e., readmissions) from the psychiatric emergency services (PES) to the emergency department (ED) was identified at a large hospital in Maryland from April - August 2019. Nurses within PES frequently received a 15 second report from the ED without asking pertinent information. Less than 10% of PES nurses visually assessed patients prior to transfer, causing patients to be triaged inappropriately, bounce-back, and a delay in care of both medical and psychiatric needs. This furthered a lack of rapport between both units, making implementation of a communication tool essential. Majority of PES nurses believed that the current state of receiving report from the ED was not appropriate and that a change was needed; however, were unsure of how this could

occur. The evidenced-based situation, background, assessment, recommendation (SBAR) tool is well documented as best practice for communication in health care, and was modified to fit PES (i.e., psychiatric SBAR tool [PSYCH]).

The psychiatric SBAR tool (PSYCH) is significant within nursing because it is the responsibility of nursing staff to maintain communication in order to preventing patient harm. Close to 180,000 patients die each year due to medical errors related to poor communication (Martin et al., 2015). A PES nurse can maintain patient safety by ensuring adequate report is received. Enhanced nurse communication leads to improvement in patient safety, nurse satisfaction, teamwork and accountability (Patton et al., 2017). Patients with mental health disorders are a vulnerable population within the communication process due to their increased risk for harm, so appropriate assessment is key (Slemon, Jenkins, & Bungay, 2017). This made implementation of a psychiatric SBAR (PSYCH) tool necessary to improve nurse communication. The purpose of this quality improvement (QI) project was to implement and evaluate the effectiveness of the PSYCH tool for a PES nurse receiving report from the ED; fulfilling TJC recommendation of improved communication, and reducing patient bounce-back.

Literature Review

A literature review was conducted with the selection of six articles to support the proposed QI project. SBAR was originally developed by the United States Navy to improve communication on nuclear submarines and later adopted by Kaiser Permanente to improve patient safety (Renz et al., 2013). Utilizing a SBAR communication tool improves not only nurse-nurse communication and satisfaction (Mariano et al., 2016; McAllen et al., 2018; Renz et al., 2013; Richards, 2016; Sand-Jecklin et al., 2014; White-Trevino et al., 2018), but also improves patient safety (McAllen et al., 2018; Sand-Jecklin et al., 2014).

SBAR is often modified into a handoff tool best fitting of the desired unit (Mariano et al., 2016; McAllen et al., 2018; Richards 2016). McAllen et al. (2018) implemented a QI project utilizing a modified SBAR tool: ISBARQ (i.e., introduction, situation, background, assessment, recommendation, and questions). Mariano et al. (2016) conducted a QI project to improve resident-resident communication through the modification of SBAR to encompass the needs of PES. A meeting of key stakeholders (i.e., resident supervisor, attending physicians, medical director, and team leader) was held who developed the mnemonic PSYCH from SBAR to help guide residents in identifying key information needed during handoff. Richards (2016) also conducted a QI project within psychiatry utilizing the psychiatric SBAR tool (PSYCH).

Improved nurse satisfaction with communication during patient handoff is often a desired outcome through the implementation of a SBAR tool. Several QI projects were implemented showing improved nurse perception and satisfaction with communication (McAllen et al., 2018; Renz et al., 2013; Richards, 2016; Sand-Jecklin et al., 2014; White-Trevino et al., 2018). Marino et al. (2016) showed an improvement in staff confidence in the handoff process, along with a decrease in the omission of information. Richards (2016) showed improved workflow after implementation of the psychiatric SBAR (PSYCH) tool. Renz et al. (2013) showed that 87.5% of nurses found SBAR useful in improving communication. Statistical significance in efficient communication and accountability when implementing SBAR was also found (Sand-Jecklin et al., 2014), improving the reliability of information exchanged (White-Trevino et al., 2018). Improvements in communication were measured through pre- post-implementation Likert scales (McAllen et al., 2018; Renz et al., 2013; Sand-Jecklin et al., 2014; White-Trevino et al., 2018).

Improved patient safety is an additional desired outcome. A decrease in patient falls (McAllen et al., 2018; Sand-Jecklin et al., 2014) in addition to a clinically significant decrease in

medication errors (Sand-Jecklin et al., 2014) was found through the implementation of an SBAR tool during nurse-nurse communication. Nurse perception of reduced safety risks through the improvement in communication was found (White-Trevino et al., 2018), increasing patient safety and a less likelihood of patient bounce-back (Marino et al., 2016). This shows implementation of the psychiatric SBAR tool (PSYCH) can improve efficiency and accuracy in communication within psychiatry, improving patient safety through the reduction of omitted information during report. This reduces patient bounce-back and any delay in patient care.

In summary, a general consensus was found between all articles reviewed demonstrating improvement in nurse-nurse communication and workflow within patient care processes when implementing SBAR and the psychiatric SBAR tool (PSYCH) (Mariano et al., 2016; McAllen et al., 2018; Renz et al., 2013; Richards, 2016; Sand-Jecklin et al., 2014; White-Trevino et al., 2018). Improvement in patient safety was also found (Mariano et al., 2016; McAllen et al., 2018; Sand-Jecklin et al., 2014; White-Trevino et al., 2018). Through the supporting evidence it can be noted that implementation of a psychiatric SBAR tool (PSYCH) displayed improvements in clinician communication causing reductions in patient safety risks.

Theoretical Framework

The theoretical framework used to guide this QI project was Kurt Lewin's Change Theory (1947), a three-stage model also known as the unfreezing-change-refreezing model. Lewin believed that in order for change to be maintained the population's prior learning must be rejected and replaced (Lewin, 1947). The Change Theory consists of three major concepts: driving forces, restraining, and equilibrium. Driving forces are considered to be elements that further push a change to occur. Nurses within this QI project were influenced to implement a report tool while receiving report due to poor nurse communication during transfer. This

ineffective process had the effect of increasing patient bounce-back, which led to a higher nurse workload and poor nurse satisfaction. The increasing workload further pushed nurses in the desired direction of change. Restraining forces are the opposite and often hinder innovation. To create change the driving forces need to be greater than the restraining forces. This was done by furthering the current motivation from nurses for a change in the report process. Despite the PSYCH tool being supported through the literature the implementation of this practice change had not been initiated. Adoption of a handoff tool in the past had been met with reluctance from staff due to unclear benefits. Education provided through supporting literature of the benefits for nurses of the PSYCH tool gave clear understanding of changes, outcomes, and compatibility of the project; increasing nurse knowledge on how the tool influenced and improved nurse communication, lessening the workload on nurses by reducing patient bounce-back rates. This caused driving forces to become greater than restraining forces, influencing change in PES.

Methods

This QI project was designed to target nurse communication between the ED and PES to improve patient safety through a reduction in patient bounce-back from utilization of the PSYCH tool. Prior to the project, an audit of nurse charge sheets was conducted to collect bounce-back rates during August 2019 of patients transferred into PES and identified: (a) number of patients transferred, (b) number of patients bounced-back, and (c) number of patients not bounced-back. The setting took place within PES at an academic hospital in Maryland, which assesses all patients with a mental health complaint 18 years or older. Patients are first triaged in the ED, then transferred to PES. Subjects included were all PES nurses employed at the hospital (n = 21).

Due to two pre-education classes offered, improvements in nurse knowledge on efficient communication was anticipated. The lesson plan is found in Appendix B, Form B1 (AHRQ,

2019). Champions were trained as super-users to assist in training of current and new staff for sustainability. A reference card of the PSYCH tool was given to nurses to place with their badge, Form B2. The tool was posted to ED triage and reminders were posted to PES nurse computers. Implementation occurred over an 8-week period from October through November 2019. PES nurses utilized the PSYCH tool when receiving report from the ED; acquiring omitted information, Form B3. Once complete PES nurses were responsible for visually assessing medically complex or challenging patients in the ED prior to transfer. PES nurses determined if the patient was to be transferred to locked PES (safety concerns), unlocked PES (no safety concerns), or was inappropriate for PES, Figure B1.

The TeamSTEPPS® Teamwork Attitudes Questionnaire (T-TAQ) communication scale (AHRQ, 2017) was identified to collect data on the impact this QI project had on pre- and post-nurse perception of communication. The communication scale consists of a 6-item Likert scale, having a reliability coefficient of .74 Cronbach's Alpha, Appendix C (Form C1). Consent to use the tool was retrieved from the AHRQ, Form C2. Pre-and post-T-TAQ scores were analyzed using the statistical program Excel and measured using the independent samples *t*-test due to comparing two sets of data with $p < .05$ identifying statistical significance. Total possible points from the survey were 30 with each question receiving up to a total of 5 points (1 = strongly disagree; 5 = strongly agree). For additional measurement, the mean and standard deviation were calculated. This statistical method was chosen to effectively show whether nurse perception of communication significantly improved between the ED and PES. Nurse compliance to pre-education was tracked using a sign-in form, Form C3. PES nurse compliance with utilization of the PSYCH tool and visualization of patients was monitored through random observations conducted bi-weekly at various times by the team leader, recorded in an observation audit form

(Form C4), and then analyzed through Excel software to track non-compliant nurses. PES tracks patient bounce-back within nurse charge sheets under the “dispo” section, Form C5. Bounce-back was audited weekly and recorded within a patient bounce-back audit form, Form C6, and analyzed through a run chart, allowing patterns throughout the project to be visualized and a comparison to baseline data to be made.

This QI project had minimal risks to human subjects due to no patient personal identifiers being collected. All information was de-identified prior to data analysis. To further protect confidentiality all results and data collected were maintained on a password protected computer. Approval for the QI project was obtained from the hospital’s Clinical Practice and Professional Development Manager. A Non-Human Subjects Research determination was received from the University of Maryland Baltimore Institutional Review Board due to the low risks and informational aspect of no subject participation within the project.

Results

Convenience sampling was used to select participants. The sample consisted of all twenty-one ($n = 21$) PES nurses. Four of the participants were male ($n = 4$) and seventeen were female ($n = 17$). Races of the sample consisted of non-Hispanic Caucasian ($n = 11$), African American ($n = 9$), and Asian or Pacific Islander ($n = 1$). Participant nursing experience ranged from one to 46 years, while nurse ages ranged from 26 to 70 years.

Independent t -tests were conducted to compare PES and ED nurse perceptions of communication pre- and post- PSYCH tool implementation, using the T-TAQ communication scale. Pre- T-TAQ surveys found ED nurses’ perception of communication ($M = 24.25$, $SD = 2.22$, $n = 12$) to be lower than PES nurses’ perception of communication ($M = 25.75$, $SD = 2.22$, $n = 20$). This difference was significant, $t(30) = -1.85$, $p = 0.04$ (1 tail). The post-survey found

ED nurses' perception of communication ($M = 24.62$, $SD = 1.80$, $n = 13$) to now be higher than PES nurses' perceptions ($M = 24.33$, $SD = 1.68$, $n = 15$); however, this difference was not found to be significant. Overall nurse pre-implementation perception of communication ($M = 25.19$, $SD = 2.31$, $n = 32$) showed no improvement when compared to post-implementation nurse perception of communication ($M = 24.46$, $SD = 1.71$, $n = 28$), shown in Figure D1. Findings showed PES nurse perceptions of communication to decrease from pre- to post-survey, while ED perceptions of communication improved. This difference was not significant, $t(58) = 1.36$, $p = 0.09$. Three of the six T-TAQ items showed a positive post-survey mean score improvement, see Figure D2.

Twenty-four percent of PES nurses ($n = 5$) attended the formal education classes, and through the addition of one-on-one education sessions a total of 90% of PES nurses ($n = 19$) received education to improve their knowledge on efficient nurse communication. ED nurses were also invited, resulting in 0% attending the formal education class, and 14% receiving one-on-one education sessions ($n = 7$). A major barrier within the project was a lack of receptiveness from ED nurses and the high nurse turn-over within the ED. Several of the ED nurses present at the beginning of the project were no longer working within the ED by project completion. PES nurse compliance to PSYCH tool use and visually assessing medically complex or challenging patients prior to transfer reached 100% by project end. Nurse desire to improve the communication process between the ED and PES assisted in maintaining compliance throughout the project. Compliance can be seen in Figure D3. The PSYCH tool allowed nurses to improve efficiency and comprehend information gathered, allowing for the appropriate triage of patients, reducing bounce-back from an average of 3% to 0.8%, shown in Figure D4.

Discussion

This QI project was conducted to address the poor of communication between nurses during report prior to the transfer of patients from the ED into PES. The poor perception of communication and patient bounce-back rate of approximately 3% confirmed that there is a lack of efficient report between PES and the ED. Inadequate communication has been recognized by researchers as being a major contributor to poor patient outcomes, quality of care, and nurse satisfaction (Mariano et al., 2016; Martin et al., 2015; Patton et al., 2017; Renz et al., 2013; Slemon et al., 2017). The PSYCH tool utilized by PES nurses was found to be effective in reducing patient bounce-back, and improving nurse communication between ED and PES nurses.

Despite the initial resistance from the ED for complaints of extended report times, many nurses reported improved satisfaction in the report process. ED nurses found communication to improve more than PES nurses. This improvement in nurse communication is reflected within the literature through the use of a standardized SBAR report tool (McAllen et al., 2018; Renz et al., 2013; Richards, 2016; Sand-Jecklin et al., 2014). The communication process had to slow down for ED nurses, causing them to be more aware, improving efficient communication and their perception between both units. Participation from ED nurses with filling out the T-TAQ was voluntary resulting in only thirteen nurses choosing to participate.

One limitation is the small sample size within PES ($n = 21$), which allowed for a narrow number of T-TAQ answers to be analyzed and compared to the ED, limiting the results. Nurse turnover within the ED was high causing different nurses to fill out the survey from pre- to post-implementation. This caused experimental mortality, affecting the internal validity of the project. New staff within the ED during project implementation were not provided education, causing difficulty with ED compliance and imprecision to project design. The high compliance of PES

nurses was due to project participation being mandatory from PES leadership; however, backing from ED leadership was weaker, allowing for lower participation from ED nurses. Low ED compliance could also be contributed to the high ED turnover, and competing variable of training new staff and staff who were leaving knowing they did not have to participate due to resignation.

It is difficult to determine causality of the bounce-back reduction; whether from PSYCH tool implementation or the variability of patients coming into the ED. The variability of patient volume and medical comorbidity during the project is a limitation. The consistent decrease in patient bounce-back could be more attributed to the lack of medically complex or challenging patients coming into the ED. It was reported patients bounced-back to the ED were not visualized by a PES nurse prior to transfer. This may be from not qualifying as a medically complex or challenging patient, which would require PES nurse visualization.

Security concerns were also identified, consisting of inadequate patient searches, and further inquiry into these security and safety risks should be examined. A low number of patients not visualized by PES nurses prior to transfer were found to have hidden weapons (knives taped to their skin or hidden in crevasses) or major medical problems (broken arm) once on the unit. Future projects may want to consider visualizing all patients prior to transfer or more in depth skin searches. While this is a recommendation, it was deemed unnecessary and time consuming by the ED and narrowed to 'medically complex and challenging patients' for this project. In addition, the completeness of the PSYCH tool during each report was not evaluated. Future QI projects could evaluate actual clinical assessment conducted by the nurse, and track omitted information obtained during report. This QI project design prevents generalization of findings to other settings due to being based between two emergency units within one facility; however, the

knowledge gained on the importance of efficient communication may be used for other QI projects within other facilities.

Conclusion

The success of the PSYCH tool in reducing patient bounce-back displays that it can be considered a useful instrument within the report process between nurses. It represents how it can continue towards improvements in nurse communication and a reduction in patient bounce-back. Feasibility of the PSYCH tool allows for nurses to easily communicate patient needs within their demanding work schedules. The tool enables nurses to obtain pertinent information and avoid erroneous content. In order to show more causality of patient bounce-back future projects including organizational measures and consistency from PES and ED staff are necessary, such as costs associated with bounce-back. This QI project focused on changing an immediate process within PES over a short time period; however, maintaining sustainability of practice change has shown to be challenging. In this QI project Lewin's Change Theory was applied to ease the change process, allowing nurses to use their own perceptions of the poor communication between units to drive the change to occur and be maintained. In addition, new nurses within PES are being trained on PSYCH tool utilization during report from the ED. This allows nurses to see PSYCH tool usage as a standard of practice within the unit. To further obtain sustainability education on the importance of efficient communication and PSYCH tool use should be incorporated in new and annual employee training for all PES and ED nurses. The psychiatric SBAR tool (PSYCH) is a valuable tool available to all nurses within psychiatry that can positively effect a patient's care. By maintaining usage rates and having further ED utilization of the PSYCH tool with methods such as increased education, the vulnerable

psychiatric population may have their medical and psychiatric needs appropriately addressed improving their quality of care.

References

- Abraham, J., Kannampallil, T. G., Almoosa, K. F., Patel, B., & Patel, V. L. (2014). Comparative evaluation of the content and structure of communication using two handoff tools: Implications for patient safety. *Journal of Critical Care, 29*(2), 311.e1-311.e7. doi:10.1016/j.jcrc.2013.11.014
- Agency for Healthcare Research and Quality. (2017, April). TeamSTEPPS® teamwork attitudes questionnaire manual. Retrieved from <https://www.ahrq.gov/teamstepps/instructor/reference/teamattitudesmanual.html>
- Agency for Healthcare Research and Quality. (2019, March). TeamSTEPPS fundamentals course: Module 3 communication. Retrieved from <https://www.ahrq.gov/teamstepps/instructor/fundamentals/module3/igcommunication.html>
- Briones, A. A. (2016). *Admission handoff between emergency department and inpatient units* (Doctoral dissertation, University of San Francisco). Retrieved from <https://repository.usfca.edu/capstone/460/>
- Lewin, K. (1947). Frontiers in group dynamics: Concept, method, and reality in social science; equilibrium and social change. *Human Relations, 1*(1), 5-41. Retrieved from <https://journals-sagepub-com.proxy-hs.researchport.umd.edu/doi/pdf/10.1177/001872674700100103>
- Mariano, M. T., Brooks, V., & DiGiacomo, M. (2016). PSYCH: A mnemonic to help psychiatric residents decrease patient handoff communication errors. *The Joint Commission Journal On Quality and Patient Safety, 42*(7), 316-320. doi:10.1016/s1553-7250(16)42043-x
- Martin, H. A., & Ciurzynski, S. M. (2015). Situation, background, assessment, and

recommendation – guided huddles improve communication and teamwork in the emergency department. *Journal of Emergency Nursing*, 41(6), 484-488.

doi:10.1016/j.jen.2015.05.017

McAllen, E. R., Stephens, K., Swanson-Biearman, B., Kerr, K., & Whiteman, K. (2018). Moving shift report to the bedside: An evidence-based quality improvement project. *OJIN: The Online Journal of Issues in Nursing*, 23(2). doi:10.3912/OJIN.Vol23No02PPT22

Patton, L. J., Tidwell, J. D., Falder-Saeed, K. L., Young, V. B., Lewis, B. D., & Binder, J. F. (2017). Ensuring safe transfer of pediatric patients: A quality improvement project to standardize handoff communication. *Journal of Pediatric Nursing*, 34, 44-52.

doi:10.1016/j.pedn.2017.01.004

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

Richards, K. L. (2016). *Improving quality and efficient communication between providers and nursing - A psychiatric SBAR tool (PSYCH)* (Doctoral dissertation, University of San Francisco). Retrieved from

<https://repository.usfca.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1450&context=capstone>

Sand-Jecklin, K., & Sherman, J. (2013). Incorporating bedside report into nursing handoff.

Journal of Nursing Care Quality, 28(2), 186-194. doi:10.1097/ncq.0b013e31827a4795

Sand-Jecklin, K., & Sherman, J. (2014). A quantitative assessment of patient and nurse outcomes of bedside nursing report implementation. *Journal of Clinical Nursing*, 23(19-20), 2854-2863. doi:10.1111/jocn.12575

Slemon, A., Jenkins, E., & Bungay, V. (2017). Safety in psychiatric inpatient care: The impact of risk management culture on mental health nursing practice. *Nursing Inquiry*, 24(4),

e12199. doi:10.1111/nin.12199

The Joint Commission. (2015, January). Preventing delays in treatment. Retrieved from

https://www.jointcommission.org/assets/1/23/Quick_Safety_Issue_Nine_Jan_2015_FIN_AL.pdf

The Joint Commission. (2019). Hospital national patient safety goals. Retrieved from

https://www.jointcommission.org/assets/1/6/2019_HAP_NPSGs_final2.pdf

White-Trevino, K., & Dearmon, V. (2018). Transitioning nurse handoff to the bedside. *Nursing*

Administration Quarterly, 42(3), 261-268. doi:10.1097/naq.0000000000000298

Appendix A

Author, year	Study objective/intervention or exposures compared	Design	Sample (N)	Outcomes studied (how measured)	Results	*Level and Quality Rating
Renz, Boltz, Wagner, Capezuti, & Lawrence, 2013	The objective of this study was to successfully implement and evaluate a standardized structure of communication between nurses and medical providers to improve interprofessional communication at a suburban long-term care facility in Pennsylvania over a 4-month period.	<p>Cohort study, quality improvement project</p> <p>Pre-implementation:</p> <ul style="list-style-type: none"> ● Staff nurses participated in SBAR training. ● Medical providers participated in an informational session discussing study goals. ● Four nursing supervisors received additional training (1 hour in length) to monitor adherence to SBAR communication tool. <p>The INTERACT II SBAR Communication Tool and Progress Note:</p> <ul style="list-style-type: none"> ● Situation (symptoms, onset, duration, aggravating/relieving factors, other observations). 	Staff nurses (n=40) comprised of registered nurses (n=19) and licensed practical nurses (n=21). Medical providers comprised of physicians (n=7) and a nurse practitioner (n=1). All within a 137-bed skilled nursing home in suburban Pennsylvania.	<p>1) Nurse satisfaction with nurse-medical provider communication was measured using pre-post-test surveys called the Schmidt Nursing Home Quality of Nurse-physician Communication Scale, which is a 5-point Likert scale.</p> <p>2) Medical provider perception of nurse/medical provider communication was measured using an open-ended questionnaire post-implementation, which was developed from relevant literature.</p> <p>3) Adherence to SBAR implementation was measured through the completed SBAR tools (i.e., utilization, thoroughness, and timeliness), which was collected and audited daily by nursing supervisors.</p>	<p>Thirty-three of the 40 nurses participated in pre-implementation training and completed pre-questionnaire. Seven nurses did not complete pre-implementation training: attrition (n=4) and failure to complete/ submit questionnaire (n=3).</p> <p>1) Nurse satisfaction, although not statistically significant improved from pre- to post-implementation. Post-implementation 87.5% of nurses found SBAR useful, 3 nurses did not comment, and 1 nurses stated SBAR was not useful. Sixty-nine percent of nurses stated SBAR had not limitations, while 28% found the tool time consuming.</p> <p>2) Medical provider perception of nurse/medical provider communication improved since SBAR implementation, 1 stated there was no apparent change who previously viewed communication positively, and 1 stated no improvement post-implementation of SBAR.</p> <p>3) Sixty-five SBAR tools were completed during implementation: full documentation was done with</p>	4 B

		<ul style="list-style-type: none"> ● Background (primary diagnosis, pertinent history, vital signs, functional change, mental status change, medications, pain, laboratory results, allergies, advance directives). ● Assessment (description of appearance) ● Request for action (suggestion of provider visit, lab work, observation, fluids, transfer). 			78% (<i>n</i> =51), the remaining 22% (<i>n</i> =14) had partial missing documentation. There was a 98% compliance rate.	
McAllen, Stephens, Swanson-Biearman, Kerr, & Whiteman, 2018	The aim of this study was to assess implementation of bedside shift report on patient and nurse satisfaction, and patient safety within a 532-bed acute care Midwestern academic hospital.	<p>Cohort study, quality improvement project</p> <p>Pre-implementation: Staff education through the reading of two journal articles, and an educational video developed by project team members.</p> <p>The ISBARQ report format was utilized. Nurses were given script cards to use during report for assistance:</p> <ul style="list-style-type: none"> ● Introduction and assessment of patient and 	Nursing staff (<i>n</i> =67) participated, who were from 3 units of containing patients with surgery, orthopedic, and neuroscience diagnoses from a 532-bed acute care, tertiary teaching hospital.	<p>1) Patient safety was measured by the number of patient falls within a 4-month period. This was tracked through the hospital's incident reporting system.</p> <p>2) Patient satisfaction was measured using results obtained by 8 questions from the Press Ganey survey and 2 questions from HCAHPS.</p> <p>3) Nurse satisfaction was measured using a</p>	<p>1) Overall patient falls decreased by 24% between all three units: 55% reduction in orthopedic unit falls, 6.9% reduction in general surgery unit falls, and 16.9% reduction in neuroscience unit falls.</p> <p>2) Improvement in patient satisfaction scores was statistically significant only on the general surgery unit (<i>p</i>=0.03) post-implementation of bedside shift report. The other two units showed improvement, but the changes were not statistically significant.</p> <p>3) Through the survey nurses reported positive comments concerning bedside shift report with</p>	4 B

		<p>environment (i.e., safety issues)</p> <ul style="list-style-type: none"> ● Situation ● Background ● Assessment ● Recommendation ● Questions 		<p>pre-and post-implementation survey.</p> <p>4) To measure report length times and accountability a bedside shift report audit tool was implemented pre-implementation and post-implementation.</p>	<p>ISBARQ and overall satisfaction, but a decline in the consistency of information received during report.</p> <p>4) No statistically significant difference was found in shift report timing from pre-implementation to post-implementation, but 70% of nurses (n=45) reported an increased report time from pre-to post-implementation ($p=0.008$).</p>	
Marino, Brooks, & DiGiacomo, 2016	<p>The objective of this study was to implement and evaluate a psychiatric SBAR communication tool (PSYCH) in order to decrease communication errors between medical residents and increase their ability to identify pertinent information during transitions-in-care within the psychiatric emergency services at a State University Hospital in New York, over a 12-week period.</p>	<p>Quality improvement project</p> <p>Pre-implementation meeting where PSYCH mnemonic was developed from SBAR to assist residents in identifying pertinent information in psychiatric emergency room handoff.</p> <p>Pre-implementation education session for residents:</p> <ul style="list-style-type: none"> ● Benefits ● Current challenges of psychiatric emergency room handoff. ● Introduction to standardized handoff format (PSYCH). <p>PSYCH mnemonic:</p>	<p>Resident staff consisting of second-postgraduate year (PGY-2) ($n=7$) and PGY-3 ($n=2$) within a psychiatric emergency room.</p>	<p>1) The primary outcome measured was the change in the number of omission during report. This was measured through giving points for information missed on each component within the mnemonic PSYCH.</p> <p>2) The secondary outcome was the change in time spent on handoffs pre- and post-implementation, which was measured through resident reporting.</p> <p>3) The residents' perception to which they understood what was expected of them and their confidence and satisfaction in the handoff process, which</p>	<p>Each of the 7 PGY-2 residents performed 5-9 handoffs. Of the PGY-3 residents one was on call during Time 1 and Time 3, while the other PGY-3 resident was on call during Time 2.</p> <p>1) The number of patients handed off during Time 1 was 171, during Time 2 was 159, and during Time 3 was 123. The resident omissions decreased throughout the study: Time 1 omissions were 224, Time 2 had 203, and Time 3 had 114. There was a statistically significant decrease in omissions post-implementation ($p=0.049$; effect size=0.8).</p> <p>2) The total time spent during handoff decreased throughout the study: total time spent during Time 1 was 391 minutes, Time 2 spent 288 minutes, and Time 3 spent 229 minutes on handoff. The decrease in time spent on handoff was not statistically significant ($p=0.083$; effect size=0.7).</p>	4 B

		<ul style="list-style-type: none"> ● Patient information/ background (i.e., age, race, sex, psychiatric history, substance history). ● Situation leading to the hospital (i.e., How: brought by self, police, family, ambo; Why: suicidal or homicidal ideation, agitation, bizarre behavior). ● Your assessment (i.e., delusional, disorganized, suicidal). ● Critical Information (i.e., intoxicated, withdrawal, pertinent medical history, violence history, awaiting las, medication clarification). ● Hindrance to discharge (i.e., collateral, outpatient linkage, placement/ housing, awaiting inpatient admission). 		<p>was measured using a pre- and post-implementation survey.</p> <p>All measurements were measured at 3 intervals throughout the study. Time 1: Weeks 1-4 Time 2: Weeks 5-8 Time 3: Weeks 9-12</p>	<p>3) Pre- to post-implementation resident clarity on what was expected of them increased from a mean of 2.79 to 3.83 (1 being not clear and 4 being very clear). Resident confidence and satisfaction in handoff communication increased from a mean of 2.57 to 3.42.</p>	
--	--	---	--	--	--	--

<p>Richards, 2016</p>	<p>The objective of this study was to improve the quality of patient care through improving the efficiency and quality of nurse and medical provider communication through the implementation of the SBAR tool that had been modified for psychiatry (PSYCH), within a Colorado inpatient psychiatric facility from September to December 2016.</p>	<p>Quality improvement project</p> <p>Pre-implementation:</p> <ul style="list-style-type: none"> ● Educational session during working shifts providing benefits and goals of the project, use of the psychiatric SBAR tool (PSYCH), and timeline. <p>The SBAR tool was modified by the process team to fit the psychiatric setting, with the mnemonic PSYCH:</p> <ul style="list-style-type: none"> ● Patient ● Situation ● Your assessment ● Critical Information ● Help 	<p>All staff nurses and medical providers on unit C & D with a Colorado psychiatric facility. Staffing within a 24-hour period consists of the following: 2 family nurse practitioners, 1-2 psychiatric nurse practitioners, 1 psychiatrist, and 2 unit nurses. Actual sample size of nurse and medical provider participation on the unit was not discussed within the article.</p>	<p>1) Nurse/ provider phone times from pre- to post-implementation was measured by gathering data through provider phone surveys.</p> <p>2) Nurse perception of the communication between nurses and providers was measured using a pre- and post-implementation survey.</p>	<p>1) Pre-implementation phone times approximated 3-5 minutes, and decreased to approximately 1-2 minutes post-implementation (30-40% reduction).</p> <p>2) Pre-implementation communication survey showed 67% of staff reported perceived medical errors resulting from poor communication, 27% reported current communication 6/10 and 13% reported communication to be 7/10 (with 10 being highest quality of communication). Post-implementation survey showed an increase in the quality of communication, 27% reported post-implementation communication at 7/10, and 20% reported 8/10 communication.</p>	<p>4 B</p>
<p>Sand-Jecklin, & Sherman, 2014</p>	<p>The objective of this study was to improve effectiveness of communication by implementing a blended form of bedside nurse shift handoff, and assessing</p>	<p>Quasi –experimental pre- and post-implementation design</p> <p>Pre-implementation:</p> <ul style="list-style-type: none"> ● Nurses listened to a recorded example of 	<p>7 medical surgical units participated in implementing bedside shift report. Patients and nurses</p>	<p>1)Patient satisfaction, nurse satisfaction, and nurse perceptions were measured through pre- and post-implementation surveys (Patient satisfaction: Patient</p>	<p>1) Significant differences were found in certain survey items for patient satisfaction: ‘made sure I knew who my nurse was’ (p=0.012), ‘included in shift report discussion’ (p=0.042), and ‘communicated important</p>	<p>3 B</p>

	<p>it through patient and nurse satisfaction, and patient safety at a large Mid-Atlantic university hospital over a 13-month period.</p>	<p>nursing bedside shift report.</p> <ul style="list-style-type: none"> • Nurse education video (i.e., guidelines for report) <p>A blended form of NBSR was utilized:</p> <ul style="list-style-type: none"> • Recorded portion of report: SBAR (situation, background, assessment, & recommendation) focused on new or abnormal assessment findings. • Bedside component: introduction, visualization of patient wounds/ drains/ lines, pain assessment, discussion of plan, and assessment of potential patient safety issues 	<p>participated in pre- and post-implementation surveys (baseline: patients $n=233$, nurses $n=148$; 3-month post-implementation: patients $n=157$, nurses $n=98$; 13-month post-implementation: patients $n=154$, nurses $n=54$).</p>	<p>Vies on Nursing Care; Nurse Satisfaction: Nursing Assessment of Shift Report; both 17 question 5-point Likert scales and reliability discussed).</p> <p>2) Patient falls during nurse report and medication errors were measured through staff documentation and incident reports completed by staff.</p> <p>3) Another outcome measured was nursing overtime, which was measured through data collection within employee time records.</p>	<p>information shift to shift' ($p=0.027$), showing significant differences from baseline to post-implementation patient satisfaction. Significant difference in nurse satisfaction was also found through post-implementation nurse perception survey: 'report is an effective and efficient means of communication' ($p=0.000$), 'report helps assure accountability' ($p=0.002$), 'report promotes patient involvement in care' ($p=0.000$), 'report helps prevent patient safety problems' ($p=0.001$), and 'report is completed in a reasonable time' ($p=0.000$).</p> <p>2) The number of falls decreased throughout the study: 20 pre-implementation, 13 at 3-months post-implementation, and 4 at 13-months post-implementation. Medication errors decreased (20 pre-implementation; 10 errors at 3-months post-implementation). No valid conclusion can be made from 3 to 13-month post-implementation medication errors due to a new reporting system implemented.</p> <p>3) No significant change was found in nursing overtime from pre- to post-implementation, resulting in unparalleled results with nurse perceptions that bedside report is more time consuming.</p>	
--	--	--	--	--	---	--

<p>White-Trevino, & Dearmon, 2018</p>	<p>To promote patient safety, and nurse and patient satisfaction through quality improvement in nurse-to-nurse communication by implementing patient centered nursing bedside shift report at an emergency department within a United States hospital over a 12-week period.</p>	<p>Cohort study, quality improvement project</p> <p>Pre-implementation:</p> <ul style="list-style-type: none"> • A training video made by the team (containing overview of practice change, and explained SBAR-T format) was viewed by nurses. • Pocket-sized reference cards were given to nurses to assist with report process, which defined SBAR-T communication structure. Front side was for oncoming nurse and back was for off going nurse. <p>SBAR-T framework was utilized for NBSR:</p> <ul style="list-style-type: none"> • Oncoming nurse: set aside assumptions, be attentive, ask questions, be responsive, thank. • Off going nurse: situation, background, assessment, 	<p><i>n</i>= 46 emergency registered nurses in a 39-bed emergency department. <i>n</i>=12 patients interviewed after an observed bedside shift report.</p>	<p>1) Nurses' perceptions on their influence on 5 patient satisfaction care variables were measured through 2-question survey on SurveyMonkey.</p> <p>2) Patient satisfaction with nurse communication was measured using 5 nurse communication indicators. Interviews of patients were conducted after an observed bedside shift report</p> <p>Communication between nurses was measured through observation of nursing shift handoff over a 3-month period.</p>	<p>1) Only 62% (<i>n</i>=29) of nurses viewed educational video prior to implementation. Only 35% (<i>n</i>=16) nurses responded to post-implementation survey: able to take time to listen (μ=2.8), ability to be attentive to needs (μ=2.6), ability to be courteous (μ=3.5), able to show concern for privacy (μ=3.3), and ability to inform of treatments (μ=2.9).</p> <p>2) Over 3 months 13 nursing shift hands were observed with 92% (<i>n</i>=12) occurring at the bedside; 58% (<i>n</i>=7) of the bedside shift reports had patients actively participating in care; 92% (<i>n</i>=11) of the bedside shift reports had patients who reported satisfaction with care. Patient satisfaction trended upward with nurse concern for privacy (61.9% to 74.5%) and courtesy of nurses (61.9% to 74.5%).</p>	<p>4 B</p>
---	--	---	--	---	--	------------

		recommendation, thank.				
--	--	---------------------------	--	--	--	--

Appendix B

Form B1

Communication Education Class Lesson Plan

Learning Objectives	Content Outline	Method of instruction	Slides	Time Spent	Method of Evaluation
1) Discuss project goals	Introduction & Goals of Project	Diadactic	1-4	3 mins	Observation
2) Describe how communication affects team processes and outcomes	Importance of Communication Communication: Definition & Challenges	Diadactic	5-6	2 mins	Observation
	Handoff Communication	Diadactic	7-9	4 mins	Observation
3) Define effective communication	Information Exchange Strategies	Diadactic	10-11	3 mins	Observation
4) Identify communication challenges	Psychiatric SBAR tool (PSYCH)	Diadactic	12	1 min	Observation
5) Describe elements and benefits of the psychiatric SBAR tool (PSYCH) and patient visualization	Patient Visualization	Diadactic	13	4 mins	Observation
	PSYCH tool Role Play	Role Play/ Interactive	14	2 mins	Observation
6) Partake in role-play using PSYCH tool to improve nurse efficiency	References		15	10 mins	Observation
			16	0 mins	

Form B2

PSYCH Tool Nurse Reference Card

PSYCH SBAR Reference Card

P – Patient Info

Name/ Age/ Sex/ Race
Hx: Psych, Medical, Infectious Disease

S – Situation Leading to ED Visit

HOW: Self/ Family/ Ambo/ Police
WHY: SI/HI/AH/VH/ Psych. Eval.

Y – Your (ED) Assessment

Delusional/ Hallucinations/ Manic/ Suicidal/
Homicidal/ Disorganized/ Sad/ Irritable/
Cooperative/ Arousal Status/ Skin issues/ PICC/
Accessed Port

C – Critical Information

Ambulatory ability/ Withdrawal/ Vitals/
Critical labs/ Medications given

H – Help

Medical clearance obtained
Patient location in ED (Luggage)

Form B3

Psychiatric SBAR Tool (PSYCH)

Psychiatric SBAR tool (PSYCH)

P – Patient Info

Name	Psych hx
Age	Substance hx
Sex	Medical hx (DM = finger stick needed)
Race	Infectious Disease hx (MRSA/ VRE)

S – Situation Leading to ED Visit

HOW: self	WHY: Suicidal
family	Homicidal
ambo	Agitation
police (EP paperwork)	Psychiatric Evaluation/ Medication Refill
	Delusions
	Hallucinations (auditory/visual)

Y – Your (ED) Assessment

Delusional/ Bizarre behavior	Manic/ Hypertalkative
Suicidal/ Homicidal	Disorganized
Depressed/ Flat/ Expansive	Hallucinations (responding?)
Skin issues (rash, bug bites, open wounds)	PICC/ Accessed Port (remove PIV)
Arousal status	Calm/ Cooperative
	Irritable/ Combative

C – Critical Information

Ambulatory ability (assistive devices?)	Withdrawal
Vitals	Critical labs
Medications Given	

H – Help

Medical clearance obtained (nights & after 4pm weekends)
 Patient location in ED
 Luggage/ belongings with the patient

Figure B1

Algorithm for Implementation of Psychiatric SBAR tool (PSYCH) and Patient Visualization

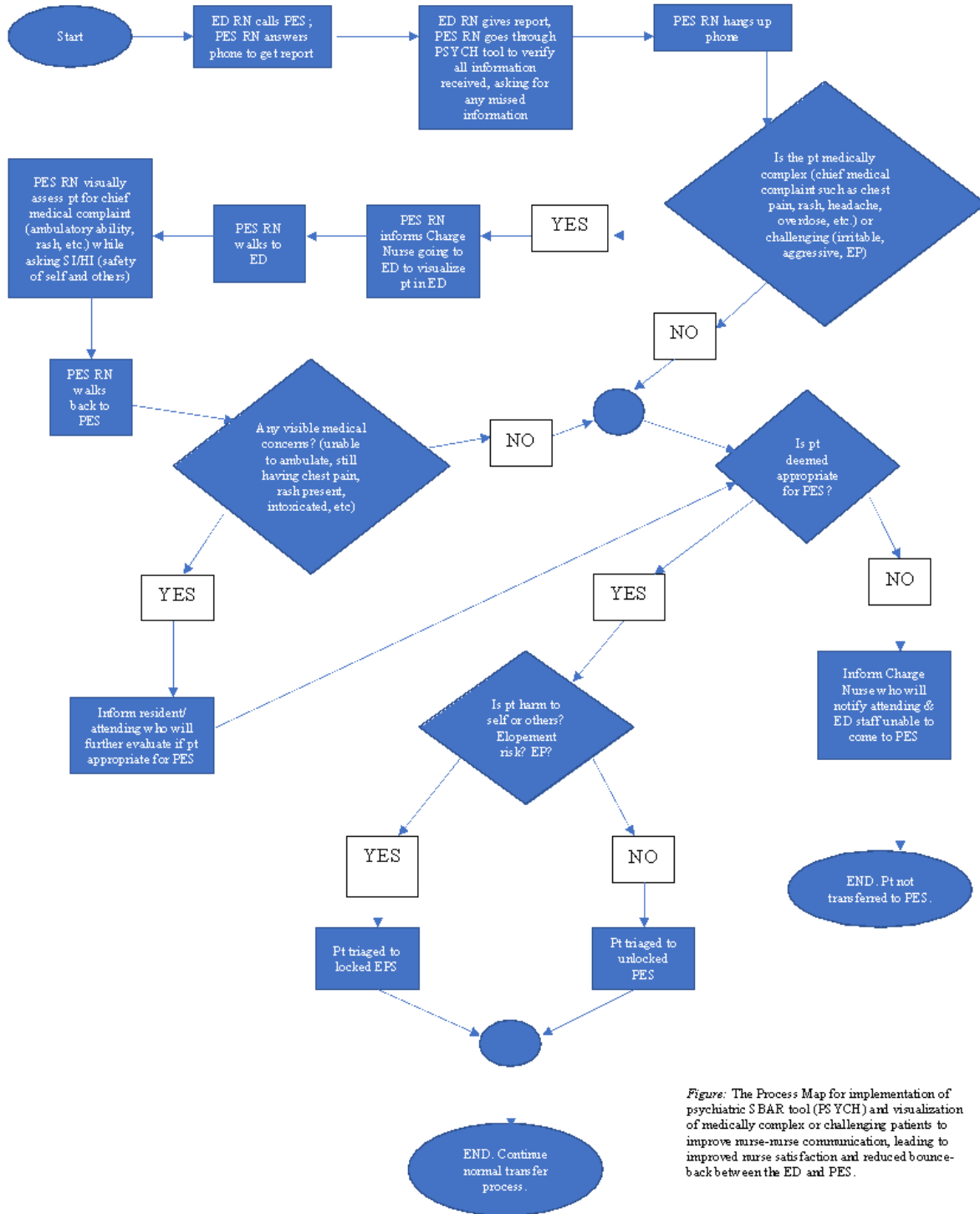


Figure: The Process Map for implementation of psychiatric SBAR tool (PSYCH) and visualization of medically complex or challenging patients to improve nurse-nurse communication, leading to improved nurse satisfaction and reduced bounce-back between the ED and PES.

Appendix C

Form C1

T-TAQ Communication Scale

TeamSTEPPS T-TAQ Communication Scale

Communication	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Teams that do not communicate effectively significantly increase their risk of committing errors.					
2. Poor communication is the most common cause of reported errors.					
3. Adverse events may be reduced by maintaining an information exchange with patients and their families.					
4. I prefer to work with team members who ask questions about information I provide.					
5. It is important to have a standardized method for sharing information when handing off patients.					
6. It is nearly impossible to train individuals how to be better communicators.					

Please provide any additional comments in the space below.

Form C2

AHRQ Permission to Use T-TAQ

5/29/2019

Re: Permission to Use Questionnaire [Reference #180505-00000] - natalie.a.marchione@gmail.com - Gmail

Dear Ms. Marchione:

Thank you for your interest in the TeamSTEPS® 2.0 Teamwork Attitude Questionnaire (T-TAQ) . I am responding on behalf of Ms. Randie Siegel, Deputy Director, Office of Communications at the Agency for Healthcare Research and Quality (AHRQ) . I handle the majority of permissions for the Agency.

Regarding the need for permission, most AHRQ materials are publically available for noncommercial purposes in the United States. Education and quality improvement are among the uses considered noncommercial. Therefore, as far as AHRQ is concerned, you can use the T-TAQ in your DNP project without specific permission. We do ask, however, that proper credit be given to the source (AHRQ) and proper reference citation be included in your Capstone paper.

I have found that most graduate programs want written permission for the student's use of tools such a T-TAQ, as do any Institutional Review Boards that may be involved in reviewing the proposed research. For that reason, you can consider this email formal permission to use the TeamSTEPS® 2.0 Teamwork Attitudes Questionnaire in your DNP research at the University of Maryland, Baltimore.

Please let me know if your program requests a signed letter of permission on AHRQ letterhead, and I will provide it next week.

Thank you for your patience.

Sincerely,

David I. Lewin, M.Phil.
Health Communications Specialist/Manager of Copyrights & Permissions
Office of Communications
Agency for Healthcare Research and Quality
5600 Fishers Lane
Room # 07N58D / Mail Stop # 07N94A
Rockville, MD 20857 USA

Email: David.Lewin@ahrq.hhs.gov
Phone: +1 301-427-1895
Fax: +1 301-427-1783

Form C5

PES Nurse Charge Sheet

Psychiatric Emergency Services

SHIFT MANAGEMENT REPORT

Date: _____ Shift: DAY / NIGHT PES Charge RN: _____

BERT RN: _____ Med Rec RN: _____

Beginning Census: _____ Number of Discharges: _____ Ending Census: _____

PATIENT ASSIGNMENTS

ARRIVAL	LOCATION	PATIENT	RN	DISPO
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			
/	LOCK / UNL			

MISC PATIENT	SERVICE
	AED / BERT / PARC / Subox / PEDS
	AED / BERT / PARC / Subox / PEDS
	AED / BERT / PARC / Subox / PEDS
	AED / BERT / PARC / Subox / PEDS

TO-DO / NOTES

STAFF ASSIGNMENTS

TIME	MHA OBS	RN MILLIEU
7-8		
8-9		
9-10		
10-11		
11-12		
12-1		
1-2		
2-3		
3-4		
4-5		
5-6		
6-7		
7-7:30		

STAFF	BREAK TIME

STAFFING NEEDS

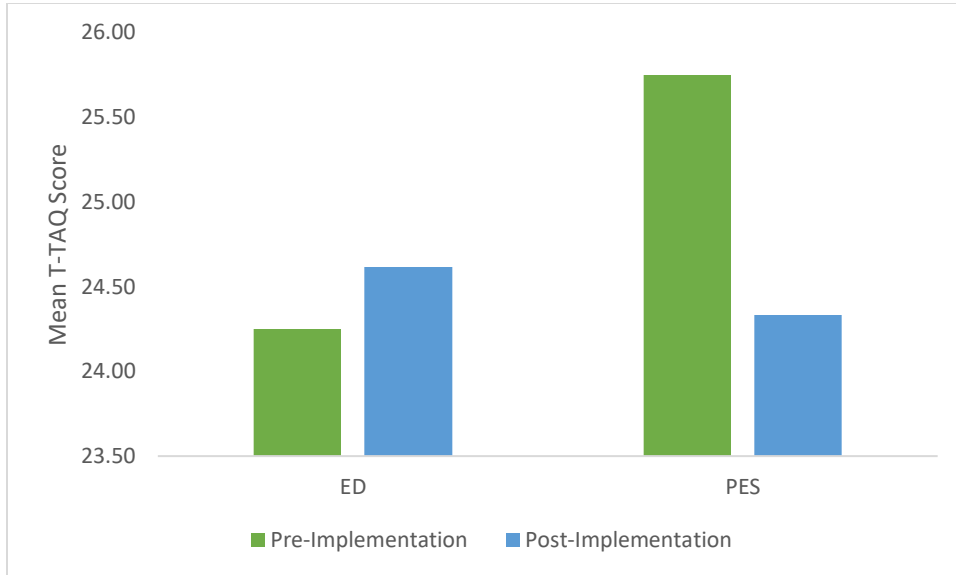
Form C6

Patient Bounce-Back Audit Form of Nurse Charge Sheets

Week	Date & Shift	Total # of Patients Received/ Shift	# Patients Bounced-Back	# Pts Not Bounced-Back	% of Pts Not Bounced-Back
1	10/1/19 AM				
	10/1/19 PM				
	10/2/19 AM				
	10/2/19 PM				
	10/3/19 AM				
	10/3/19 PM				
	10/4/19 AM				
	10/4/19 PM				
	10/5/19 AM				
	10/5/19 PM				
	10/6/19 AM				
	10/6/19 PM				
	10/7/19 AM				
	10/7/19 PM				
2	10/8/19 AM				
	10/8/19 PM				
	10/9/19 AM				
	10/9/19 PM				
	10/10/19 AM				
	10/10/19 PM				
	10/11/19 AM				
	10/11/19 PM				
	10/12/19 AM				
	10/12/19 PM				
	10/13/19 AM				
	10/13/19 PM				
	10/14/19 AM				
	10/14/19 PM				

Figure D1

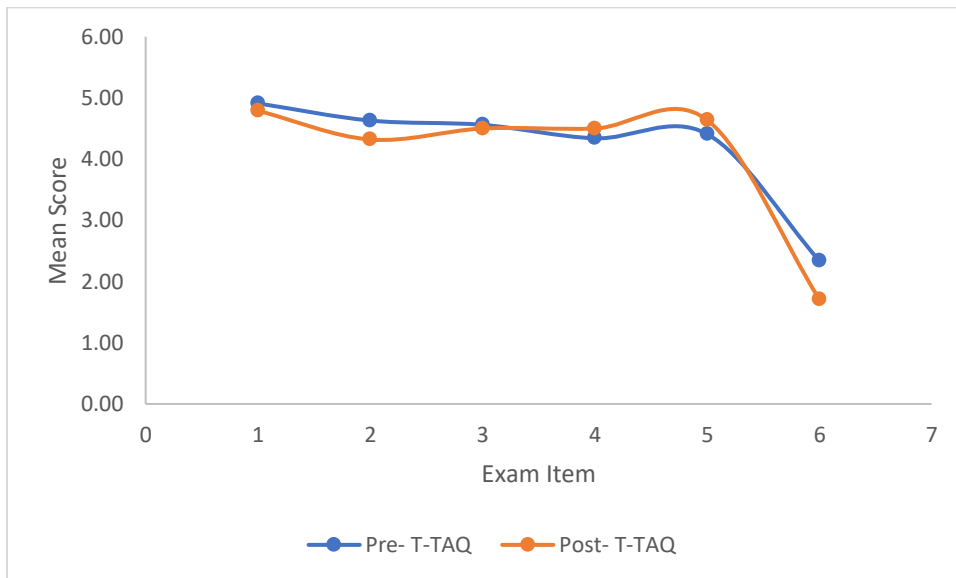
Nurse Perception of Communication Pre- and Post- T-TAQ Communication Scale Scores



Note: This is a visual representation for comparison of the M and SD of T-TAQ pre- and post-implementation scores of those participating in the survey.

Figure D2

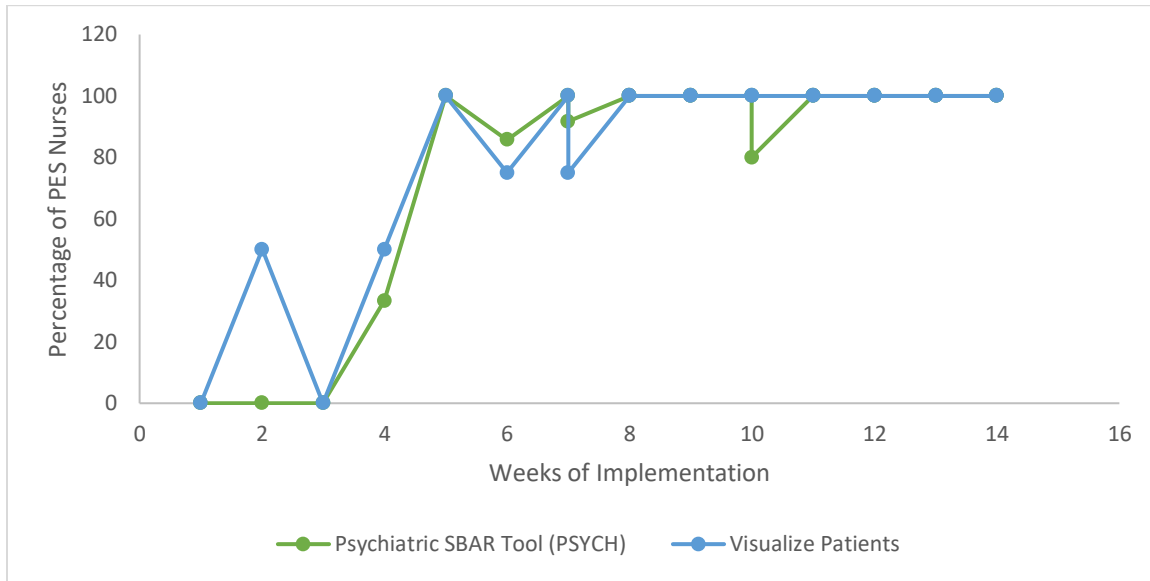
Individualized Questionnaire Item Mean Scores for T-TAQ Pre-survey and Post-survey



Note: This is a visual representation of the M scores for each of the six survey items.

Figure D3

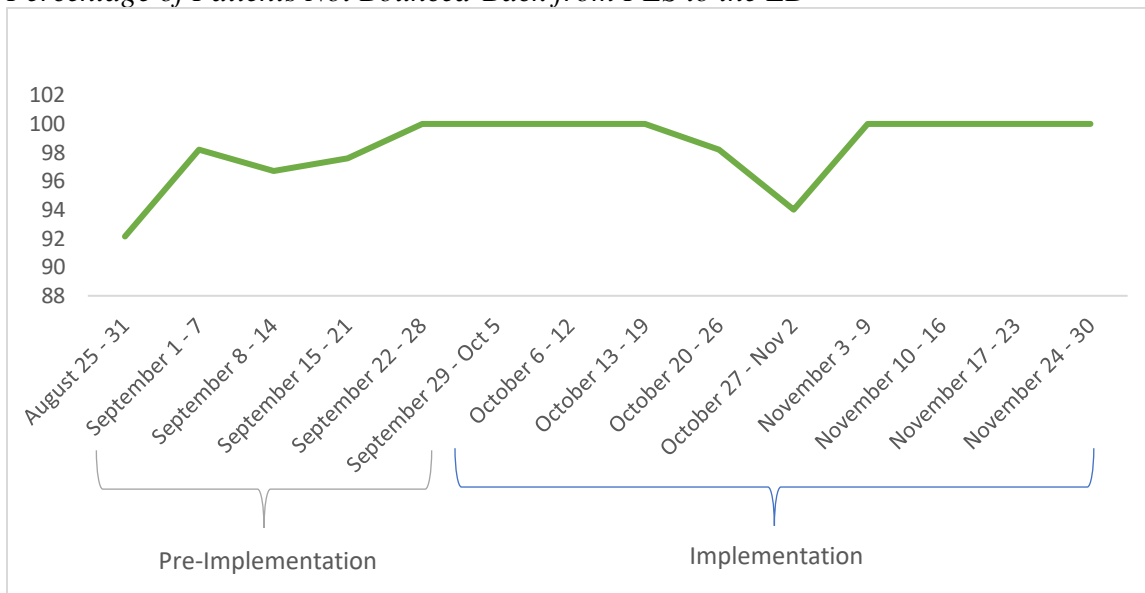
PES Nurse Compliance Throughout Implementation



Note: This is a visual representation of PES nurse ($n = 21$) compliance to use the PSYCH tool and visually assessing medically complex or challenging patients throughout project implementation (October 1st – November 30th, 2019).

Figure D4

Percentage of Patients Not Bounced-Back from PES to the ED



Note: This is a visual representation of patients not bounced-back (readmitted) from PES to the ED from August 25th through November 30th, 2019 with a goal of keeping 100% of patients within PES.