Improving Leadership Communication Utilizing Huddle Boards

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Abstract

Effective communication is critical within the healthcare industry. The identified problem for this evidnece-based project was a lack of effective leadership communication within a targeted nursing unit. A literature review identified that huddles and visual management were two effective forms of communication that leaders could provide daily. A quality improvement project to implement huddles and a visual management board was completed utilizing a Plan-Do-Study-Act (PDSA) format. The PDSA was completed in three, three-week cycles. An internal survey was conducted after each three-week cycle with the purpose of determining what information the staff felt was relevant and useful. The results indicated that by seeking the input of the staff, the relevancy, content and process of the huddle improved the staffs' perception of the communication and engagement from the leadership team.

Keywords: huddle, brief, leader communication, engagement, visual management board

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Section I. Introduction

Communication, according to Merriam Webster online dictionary (2022), is simply defined as the exchange of information with common symbols, signs and behaviors between individuals. Communication is multi-faceted and can be interpreted differently depending upon the audience or method of delivery. The method of delivery for communication is important, as is, the tone or non-verbal communication can impact what message the intended audience is receiving. According to Kohn (2000) in "To Err is Human", errors in healthcare are the eighth leading cause of death in the United States and is attributed to approximately 17-29 billion dollars in lost income, production, disability and healthcare costs. One of the major contributions too errors in healthcare, according to Kohn, are communication failures. Additionally noted by Kohn, ineffective and nonexistent leadership is an additional contributor too errors in healthcare. Leadership encompasses a multitude of skills; communication is one that affects performance, decisions, error mitigation, teamwork and situational awareness (Murray & Cope, 2021). Two aspects of the Triple Aim that communication affects is patient experience or quality of care and costs of healthcare (Institute for Healthcare Improvement [IHI], 2020).

Background

The targeted project site was a healthcare enterprise is a nonprofit academic medical center. In addition to 17 affiliated hospitals in Ohio, the enterprise also has hospitals in Nevada, Florida, United Arab Emirates, Canada, and most recently England. The main campus has 1400 beds. To be the best place to receive care and the best place to give care in healthcare is the vision of this institution while caring, research and education are at the core of the mission.

In order to give excellent care, the staff need communication that allows them to know and understand what the priorities for the unit are, why the priorities are important and how these

priorities align with the organizational goals. Murray et al. (2017) noted that leadership engagement at the unit level created an environment that was more conductive to open communication that resulted in a higher level of reporting errors and adverse events. Additionally, in an integrative review completed by Fowler et al. (2021) it was identified that nurse managers who gave feedback and discussed errors on the unit had higher levels of communication and higher levels of error reporting. The nurses' perceptions of the quality of care was also affected by the nurse managers' support level. It was noted that nurse managers who are present and engaged, gave feedback on errors and cultivated a just culture have higher levels of communication skills. Murray and Cope (2021) identified that teamwork and culture are both influenced by the leadership on a unit and at the heart of teamwork is communication. Murray et al. (2017) also noted that managers who lead by example and set clear expectations, while sharing their vision of excellence have more engaged staff that provide a higher level of care.

Organizational Needs Statement

The project was a solid tumor oncology unit that needed clear communication from the unit leadership. This can help improve the nurses' perception of the quality of communication that they receive. The project site utilizes the Press Ganey Caregiver Engagement Survey. In 2021, only 58% of the staff felt as though there was effective communication on this unit. Only 55% of the staff on this unit identified that communication from leadership was favorable. Additionally, only 55% of staff felt that the feedback they received was useful. Approximately 39% of the staff felt that the leadership was accessible.

Problem Statement

In 2020, the majority of staff on this 36-bed oncology unit did not perceive the communication from leadership on the unit that they receive as effective. The communication that the unit does receive, is felt to be useless. The leadership on this unit is not present or engaged.

Purpose Statement

The purpose of this project was to improve the perception of communication and engagement from the unit leadership team.

Section II. Evidence

Literature Review

The Lampus Library Database that encompasses CINHAL, PubMed, and Proquest was utilized for this literature review. Initial keywords were communication and huddle, which revealed 5445 articles, the word leader was added as a key word and reduced the number of available articles to 341. All articles greater than five years were excluded, reducing the number again to 68, and additionally excluded all articles not peer reviewed and the amount decreased to 41. At this time the keyword hospital was added and decreased the amount to 33. Initially the search was for literature reviews and quantitative research studies. Articles that identified an implementation plan, description of huddle and results were included. The final amount of articles are 15. All 15 articles were read with three rejected based venue of project site was ambulatory and did not fit or the description of huddle did not align with this project (see Appendix A).

Current State of Knowledge

According to the IHI (2019a), huddles are a short, 10 minute or less meeting at the beginning of a shift. Huddles are often utilized to manage the safety and quality on the unit. The IHI identifies five topics that are covered in a typical huddle which include; concerns for quality and safety over the last 24 hours, safety priorities for today's patient(s), any tracked data, any other concerns addressed by staff, and general announcements. Visual management boards are a separate entity from huddle, but can be utilized during a huddle. According to the IHI (2019b), visual management boards range in complexity from a large piece of paper to a large wipe off board. Like huddles, visual management boards are used to convey topics that every team

member should know, such as safety data, organizational priorities, ongoing projects, and upcoming education.

Current Approaches to Solving Population Problem(s)

There are several methods of communication that leadership can utilize to improve communication. Instant messaging is a common practice in nursing and used for assorted reasons, ranging from staffing to education. According to Kabingo-Makukula et al. (2019), utilizing social media applications can have a positive effect on professional networking, nursing education and practice.

High performance management systems (HPMS) for healthcare leaders were developed by the IHI and have been shown to improve communication and quality of care within healthcare organizations. HPMS are multifaceted and include multiple features such as; staff identification of problems and possible solutions on a hospital unit, visual management boards, accountability mechanisms, and standard works (Rakover et al., 2020). There are several different methods to deploy HPMS.

Gemba boards are a version of HPMS, these boards have been used to promote communication, teamwork, and practice changes. Gemba is Japanese for “workplace” and Gemba refers to, “going where the work is done” (Bourgault et al., 2018 p.e2). According to Bourgault et al. (2018), Gemba boards were introduced with lean methodology techniques.

Evidence to Support the Intervention

Pimental et al. (2021) completed a literature review of huddles to determine their effectiveness. In 67.7% of the studies the purpose of the literature review was to engage staff and improve communication. Notably 64% of the studies noted an improvement in communication across staff roles, while 26.7% of the studies noted a more supportive climate and 44% noted

improvements in the staff perception of safety. Ryan et al. (2019) completed a systematic review to determine if safety briefings improved patient safety in an acute care setting, in multiple studies, improvements in communication where identified. Croke (2020) reviewed several studies and it was discovered that huddles were beneficial for empowering staff to notify management of any issues or concerns, and it was noted that these studies improved communication and collaboration.

Pimental et al. (2021) noted that to be effective huddles need to be identified as a huddle and linked to a positive outcome. Pimental et al. noted that there are tools to assist with implementing a huddle such as standards for quality improvement reporting excellence (SQUIRE) or the Huddle Observation Tool. Additionally, many other studies noted that huddles should be 15 minutes in duration (Castaldi et al., 2019, Ryan et al., 2019). During this time, staff should share safety events that occurred over the last 24 hours and safety concerns they have for the following 24 hours (Ryan et al., 2019). Castaldi et al. (2019) also noted that the huddle should have clear objectives and a template. The studies also identified the process of identifying the issue should be followed by addressing the issue in a timely manner (Castaldi et al., 2019; Croke, 2021).

Ryan et al. (2019) also noted that while having a standardized format that is consistent in the message is ideal, with one advantage to a huddle being that it can be tweaked for each area to ensure that items that are unique to the patient population can be addressed. Allowing these small changes improves the odds of successful implementation. Castaldi et al. (2019) noted that when implementing the huddles, to be successful, a small focus group should develop the workflow and template for the huddle, identify an area to conduct the huddle to include a visual template.

Loesche (2021) noted that integrating “Three Good Things” into the huddle improved participation and decreased resistance to change.

Evidence-based Practice Framework

The model for change utilized in this project was the Plan-Do-Study-Act (PDSA). According to the Agency for Healthcare Research and Quality (AHRQ; 2020) a PDSA is a four-step improvement process that involves breaking down a process into steps, evaluating the outcome, making improvements on the process and then testing the change again. The IHI (2022) states that PDSA is used to test change utilizing the scientific method.

The planning process in a PDSA is the first step. In this step, the problem is identified, and the improvement team is put together. At this step a detailed plan will be developed by the newly formed team. In this plan process metrics are identified to determine later in the cycle what the next steps will be.

Implementing the plan or “doing” is the second step of the PDSA. During this step, a detailed plan enabled a smooth roll-out. The plan included the board lay-out, topics, and method of reading the board. Additionally, communicating the expectations of huddle attendance was essential to ensure that the change was successful.

Studying or analyzing the results after the implementation is the third step in the PDSA cycle. Utilizing the outcome measures identified in the planning process determines the success of the change and next steps. The next steps were then carefully thought out, designed, and communicated.

The fourth step is “act”. This can mean to make minor or major changes to the plan. The action(s) in the fourth step are dependent upon the results from the third step of the process.

Ethical Consideration & Protection of Human Subjects

The ethical considerations that the project leader was aware of is the project was completed on the unit the leader managed. The ethical consideration that was identified included the staff on the unit may have felt undue pressure to complete the survey if the survey had been distributed by the project leader. This was addressed by ensuring that an independent party, not affiliated with the project team distributed the survey through a survey site. The project site champion sent out the surveys ensuring that the staff understood that the survey was voluntary.

Prior to beginning this project CITI modules were completed by the project leader to gain a clearer understanding of the research process. Once this was completed, the project leader met with a research scientist to determine next steps in the project, including the plan for the project. Once this was complete, approval for the project was obtained by the Associate Chief Nursing Officer. This was done by completing a one-page project description with project details, including the survey. Once this was done, the project team presented the project to the internal Institutional Review Board (IRB). The IRB waived permission because this is a quality improvement project (see Appendix B).

Section III. Project Design

Project Site and Population

The targeted project location was a 36-bed oncology unit at a large academic teaching hospital. The population included 59 staff members on this unit. One facilitator for this project was that the population size is smaller than normal presently. Adopting the changes initiated may be more readily acceptable.

Description of the Setting

The setting of this evidence-based project was an Oncology unit with 36 beds, eight of which are private. The patient population on this unit are oncology patients with solid tumors with an active oncology treatment plan. Patients are admitted to this unit, either for chemotherapy or for symptom management. The average daily census on this unit is 36. This unit is one long hallway with rooms on either side, there is one main nursing station and an additional desk with two computers midway down the hall. There are three supply rooms along the hallway with a "grab and go" supply system.

Description of the Population

The staff on the unit was the target population. There are four Assistant Nurse Managers, 25 Registered Nurses (RN), 15 Patient Care Nursing Assistants (PCNA), four Health Unit Coordinators (HUC), one Nurse Educator and one Certified Nurse Specialist. The staff typically work 12-hour shifts, either 0700-1900 or 1900-0700. There are 46 permanent staff and five temporary staff members. Of the staff on this unit, six are certified in oncology.

Project Team

The project team consists of the project leader, a doctoral student who is leading the project. A Certified Nurse Specialist and clinical Nurse Educator are members assisting with

content. These individuals determined which content was presented weekly. Also, there are four Assistant Nurse Managers who helped roll out the improved huddle process.

Project Goals and Outcome Measures

The goal was to improve communication between the leadership team to the staff in the oncology unit. The tools utilized to determine if there was an improvement in overall communication was a 17-question survey, utilizing an 11-point Likert scale and two free text answer boxes (see Appendix C). There are four questions on the overall information conveyed, five questions on the topics discussed during huddle, four questions on the high-risk patient populations identified, and finally five questions on the overall appearance of the visual management board. Additionally, there are two text entries asking what adjustments the staff would like to see. The survey tool was electronically distributed to the staff on this oncology unit two weeks after the new huddle process and visual management board were in place. One week after receiving feedback the huddle board was altered based upon the feedback from the end-users. Two weeks after the change was implemented another survey was electronically distributed for feedback, and one week after that, the board was changed again, based upon the end-user feedback. Two weeks after the second change another survey was sent out utilizing the same survey tool.

Description of the Methods and Measurement

The data collected during each PDSA cycle utilized the 11-point Likert scale was then analyzed. Each question was evaluated individually and then as a subset of the entire questionnaire. Each section was aggregated individually with the average indicating if the improvement was successful or if there are additional changes needed. Improvement was

determined if the average increased by one or more points.

Discussion of the Data Collection Process

The survey was sent to the staff by the site champion within the organization., this was done to ensure that the staff did not feel pressured by the project leader to complete the survey. This project utilized a survey company for email distribution. The survey was sent out two weeks after the initial implementation of huddle board and process. Moving forward, the survey was sent out every three weeks for two more PDSA cycles.

Implementation Plan

The project team met in December 2022 to discuss the content and flow of the huddle process. A template (see Appendix D) was provided to the assistant nurse managers, this template ensured the selected content was reviewed at each huddle. The staff was educated on the new huddle board initiative one week prior to the "go-live". The initial week of huddle, the staff was oriented daily to each section. The staff were informed that the sections and content would remain the same for one week ensuring each staff member heard the content, the second week the content would change, but the sections would remain the same until the next survey was distributed and evaluated. If any changes were made to the sections or the layout, the staff was notified during the first week after the change was initiated. The initial huddle design was completed and in place January 30, 2023 and the evidenced based huddle process began February 6, 2023.

The stakeholders who presented the board daily were educated on the process January 30 through February 4, 2023. The initial huddle design was completed January 30, 2023. The new huddle board and process went live February 6, 2023. The initial survey was sent out February

20th, 2023. The data was analyzed, and the communication board adjusted to meet the needs of the staff by February 27, 2023. This PDSA cycle continued every three weeks for nine weeks.

Section IV. Results and Findings

Results

The survey results for all three surveys are attached in Appendices F and G for review. In the survey provided to the staff there were four sections. The first section was general information on the communication that the staff received from the leadership team. Was the information relevant and timely? Was staff participation encouraged? The second section asked the staff which topics revolving around unit and organizational goals did they feel should be included. The third section was identification of high-risk patients. All the patients on this unit are high risk, but which ones did the staff want to be aware of? And the last or fourth section asked the staff if the content was legible, easy to read and did the content layout make sense. For each question the respondents had an 11-point Likert scale to indicate their opinion.

Survey One Results

In the first section of survey one on average 68% of the respondents (n=12.) felt that the topics in huddle were relevant to the day-to day activities on the unit. Respondents (68%; n =10) also felt that the topics were engaging, and that participation was encouraged. Respondents (74%; n = 13) felt that the information in huddle was given in a timely manner.

The second section results related to the information that the staff felt should be included. Identification of unit goals topped this section with an average of 65% (n=11) of the respondents identifying this topic. This was followed closely by 64% (n=11) who indicted that staff needs should be included in huddle. Respondents (58%; n = 9) felt that both congratulations and acknowledgements along with educational roll-outs should be included while only 49% (n=8) of the respondents felt that organizational needs should be addressed.

The third section was intended to increase the situational awareness for the staff by identifying high risk patient populations. The respondents felt that fall risk patients should be included by a margin of 64% (n=11) followed by patients who were receiving chemotherapy at 58% (n=10). The respondents noted that Patients with central lines should be identified 51% (n=9) and patients with foleys 37% (n=5) of respondents felt should be identified.

The fourth section revolved around the aesthetics of the board itself. The respondents identified that 59% (n=6) felt that the board was easy to read. Respondents (50%; n=8) felt that the print was clear, while 49% (n=8) felt that the font was big enough. Respondents (46%; n=7) also felt that the organization of the board made sense and 42% (n=7) felt that the different colors of markers helped to identify the different topics.

Additionally the respondents had the option to include a free text, a few choose to respond. One person stated that “the three most acute patients should be identified on the board.”. Another individual responded that “the leadership team should cultivate the expectation that huddle was daily and non-optional.”. The last comment stated that “huddle was very informative.”.

Survey Two Results

After looking at the results for the first survey cycle, the project team implemented changes on how the content was presented during huddle. After evaluating the responses of the first section results the team decided to place an emphasis on new or changed policies and procedures during huddle. The team ensured that not only were these topics discussed, but that there was a corresponding flyer on the huddle board. The response (N=18) indicated that these changes were appreciated. The respondents (91%; n=16) felt that staff participation was encouraged. The respondents (80%; n=14) felt that the topics in huddle were relevant to the day-

to day activities on the unit. The respondents (71%; n=12) also felt that the topics were engaging, and participation was encouraged. The respondents (78%; n=14) felt that the information in huddle was given in a timely manner.

When reviewing the results for the second section, these included unit goals, organizational goals, education, staff needs, and congratulations and acknowledgements. It was determined that this was one area where the leadership team had to make the connection between the units' goals and the organizational goals. The team also felt that engagement was crucial for this section. One process that started was identifying the overarching goal of the organization, and then stating what the unit was doing to meet those goals. Opportunities and successes related to unit goals were also identified. The team began taking a thirty second pause after asking, "are there any opportunities on the unit, what do you need?". The silence was deafening for the first ten seconds, but typically one or two staff would speak up. Again, the results of the second survey indicated improvement.

Identification of unit goals topped this section with an average of 89% (n =17) of the respondents identifying this topic. This was followed closely by 88% (n=17) of respondents who indicted that staff needs should be included in huddle. The respondents (85%; n=17) felt that educational roll-outs should be included, additionally 82% (n=15) of the respondents felt that both congratulations and acknowledgements should be included in the huddle process. The respondents (82%; n=16) identified that organizational goals need to be addressed.

The third section was intended to increase the situational awareness for the staff by identifying high risk patient populations. When the team looked at the responses for these questions, it was identified that the staff wanted to know about patients that were decompensating by the free text option, a fall risk (86%; n=16) or receiving chemotherapy (85%;

n=16). The respondents (72%; n=13) noted that patients with central lines should be identified. Additionally, identifying patients with Foley's increased to 71% (n=14).

After reviewing the results from the first survey where approximately 50% (N=18) felt that the board was legible, easy to read and the layout made sense, the project team made some changes. In response, the team laminated headers for each section of the board and organized the board to follow the flow of the huddle. The results indicated improvement after the second survey. The respondents identified that 69% (n=12) felt that the board was easy to read. Additionally, 80% (n=13) felt that the print was clear, while 77% (n=14) felt that the font was big enough. 74% (n=12) felt that the organization of the board made sense and 81% (n=14) felt that the different colors of markers helped to identify the different topics.

Additionally, the respondents had the option to include a free text, a few choose to respond. One person stated that "we should use the huddle board during the huddle, by standing next to it.". Another person suggested "tailoring the information to days and night shift.". One person suggested "introducing trivia for engagement.", and another person indicated that they "appreciated the assertiveness of the leadership team.".

Survey Three Results

After reviewing the results of the second survey, the leadership team continued to ask for feedback while conducting the huddle each morning. The leadership team ensured that they updated progress on the issues that the staff identified as problems or opportunities. In the first section the respondents (88%; n=10) felt that staff participation was encouraged. The respondents (94%; n=11) felt that the topics in huddle were relevant to the day-to day activities on the unit. The respondents (90%; n=11) also felt that the topics were engaging. Additionally, the respondents (97%; n=11) felt that the information in huddle was given in a timely manner.

The second section results related to the information that the staff felt should be included. After reviewing the second survey results, the team decided to include the unit goals and what the unit's current metrics were. Staff identified needs topped this section with an average of 95% (n=11) of the respondents identifying this topic. This was followed closely by 93% (n=11) who indicted that unit goals should be included in huddle. The respondents, (92%; n=11), felt that educational rollouts should be included while 87% (n=10) of the respondents felt that both congratulations and acknowledgements should be included. Organizational needs still fell to the bottom of the list with 86% (n=10) of respondents identifying that these need to be addressed.

The third section was intended to increase the situational awareness for the staff by identifying high risk patient populations. Based upon the results from the second survey, the leadership team added a grid that is updated daily to identify the high-risk patients. The respondents felt that patients receiving chemotherapy should be included (92%; n=11) followed by patients who were identified as high fall risk (77%; n=9). The respondents noted that patients with central lines and foley's should be identified (70%; n=8).

The fourth section revolved around the aesthetics of the board itself. The leadership team added magnetic tape to the board, to delineate each section. The respondents (86%; n=10) identified that the board was easy to read. The respondents (90%; n=11) felt that both the print was clear, and the font was big enough. The respondents (87.5%; n=10) felt that the organization of the board made sense and felt that the different colors of markers helped to identify the different topics.

Additionally, the respondents had the option to include a free text, a few choose to respond. One person stated that we should keep it simple with a small number of key items and

to change the layout of the board often enough to catch people's attention. Another respondent noted we should address more PCNA topics.

Discussion of Major Findings

While the literature stated that these topics indicated a successful huddle, it did not note if the staff felt that these topics were relevant. It was important to the project team that the staff felt the information was relevant, engaging and timely. The purpose was to improve the perception of communication using the huddle and visual management process. When the project first began; the topics, presentation and huddle board were not a thought-out and organized process. As the project progressed and the team looked at the feedback, the project team built in content organization into the presentation of the information, added the "why" to the unit and organizational goals and discussed why it was important to identify the high-risk populations on our unit. When the project team sent out the third survey, the majority of the staff on this unit noted that the topics were important to discuss and these topics did give value to their daily work as indicated by the results.

This project improvement process was completed using a Plan-Do-Study-Act (PDSA) rapid improvement method with three separate surveys. After each survey the project team tweaked the content, how content was presented and the huddle board itself based upon the feedback from the staff. Prior to the first survey, the leadership team did not change the content of information that they previously addressed during huddle, but the huddle board was put into place and the content was included on the board. At that time approximately half of the respondents felt that the huddle process and board was valuable. By utilizing the feedback provided by the respondents the perception of the huddle process improved to 94%.

After the first survey, the inclusion of organizational goals in huddle went from 49% to 86%, while it still was not the most desired information the fact that including the content increased in desirability to the group indicated that the leadership team was able to incorporate the goals of the unit into the organization's goals. Only 68% (n=12) of the respondents felt that staff participation was encouraged, and 64% (n=11) indicated that staff identified needs should be included in the huddle. Ideally improvements on these two items would indicate an improved sense of psychological safety within the team. At the end of the third survey, 89% (n=10) of the staff felt that staff participation was encouraged, and an overwhelming 95% (n=11) indicated that staff identified needs should be included.

High risk patients have always been a concern to both the staff and the leadership team, but how do we identify what the staff find important to pay attention too, while still ensuring that the staff have the situational awareness to be good team members. Patients receiving chemotherapy have increased acuity, increasing the time and resources that will be devoted to that patient. Initially the staff felt that these patients should be included in huddle 58% (n=10) of the time, by the third survey 92% (n=11) of respondents felt they should be aware of all patients receiving chemotherapy. Additionally, a suggestion that was given through the comments was to identify the top three "most acute" patients. The leadership team decided to list out the patients who were on an Active Medical Response Team or AMET list during huddle.

Section V. Interpretation and Implications

Costs and Resource Management

The supplies, included in Appendix F to complete this project included a white board, markers, page protectors, laminator, laminating pouches, paper, white board markers, magnetic clips and magnetic dots. Resource management included both material objects and personnel. The personnel spent time developing board. Collaboration within the leadership team weekly regarding the content that was presented, ensuring content on board was updated weekly, and in a uniform manner.

Implications of the Findings

By ensuring that the staff felt the content was relevant, they would be present during huddle. This would ensure that staff were aware of both unit changes and hospital initiatives. The staff were meeting daily and discussing high risk patients, which would increase the situational awareness of the staff and increase the teamwork. Reviewing the unit goals daily ensured that the staff were aware of the priorities and choose the actions that would support these goals throughout the day. Hopefully celebrating the individual and team successes provided a moment of gratitude and happiness for the team.

Implications for Patients

During huddle one of the issues discussed were high risk patients. Identifying any patient that was a high risk for harm or clinical deterioration, such as; on the AMET watch list, receiving chemotherapy or considered a “high fall risk” patient daily put the team on notice to respond to this patient immediately. The situational awareness created by the huddle process improved response times to the patients and potentially decreased adverse events. Situational awareness also improved the sense of teamwork within a team.

Another topic discussed during huddle weekly were new processes or expectations. The staff were made aware of changes within the hospital and unit as they happened, so that when caring for patients the staff were better prepared. This was also a time that the staff could discuss how they are experiencing these changes in real time.

Encouraging staff daily to speak up regarding issues that they are experiencing ensures that the staff are not afraid or intimidated by the leadership team. By responding in a positive manner and being open to hearing the issues that are frustrating to the staff, this can encourage staff to speak up if there is a safety issue that they have seen or experienced. This leads to a safer environment for both the team and patients.

Sustainability

Sustainability of this project depends upon the unit leadership's ability to ensure that each staff member recognize the importance of the shared communication. The leadership team must ensure that each staff member are present and engaged. The huddle process needs to be embedded in the culture and expected by both the staff and the leaders.

Dissemination Plan

While huddles are not new, and the effects of huddle are known, the approach that was taken in this project was novel. By asking the staff on a unit what they would find valuable to hear during huddle improved not only their perception of the communication that they received, but also increased engagement. To disseminate these finding, nursing leadership journals can be explored for publishing along with presenting at the East Carolina Project Presentations in July 2023.

Section VI. Conclusion

Limitations and Facilitators

The limitations experienced during this project were few. The most impactful limitation was the simultaneous role out of a central line audit board by the organization. If this had not been rolled out at the same time the project team felt that the patients who were high risk with central lines may not have been identified because of this. Other limitations that presented were getting all project team members to complete huddle, or complete huddle in the manner that was expected. Last, when finally having the survey approved, finding out that the survey platform was not compatible with an 11-point Likert scale and that the format would need to be modified was another limitation. The format was switched from an email to having paper surveys that were located at a lock box in the nurses' station for the staff to fill out. This may have decreased the number of responses received. Additionally the staff attrition during the project affected the number of responses received.

Facilitators to the project included a project site that was open to the idea of this project and allowing it to be completed. A leadership team that was willing to participate. A team that wanted the communication and information to be shared. Additionally, the staff participation, if they had not, the project team would not have been able to get the data needed.

Recommendations for Others

While there were many barriers, most were superficial. This project was very feasible and cost effective. Benefits to this project included improved communication leading to improved patient safety. Recommendations for a clean roll-out include the rapid improvement model with a team that has practiced presenting huddle that includes the information prior to the actual roll-out. This ensures that the whole team feels comfortable putting together a huddle for each week.

Recommendations Further Study

The project team would like to see this project spread to other in-patient units in the organization. The benefits of improved communication from the leadership team to the staff have the implications of improving care to the patients and the sense of teamwork on the unit. This could easily be replicated in other settings, such as outpatient infusion centers or same day surgical centers.

To ensure that the message is the same consistently, one recommendation is to have a template of the information that should be covered each week. Another recommendation to ensure successful implementation would be to conduct a huddle at each shift change, instead of just at the morning huddle. The night shift was hearing the information after their shift was completed. Another gap that must be acknowledged was the staff turnover, during this time the unit lost eight staff members.

Final Thoughts

This project was conducted to improve the communication between the leadership team and the unit staff. Prior to the project, the survey results from staff indicated that the communication on the unit was not beneficial to the staff members and that they found little value in it. The huddle process utilizing a VMB was the tool utilized in this project. The rapid improvement project used a plan do study act method in three-week intervals. During each cycle the staff were surveyed to determine if they felt that the content was relevant, timely, and engaging along with questions regarding the information that they were receiving and visualizing daily.

By utilizing the staff surveys, looking at the responses and implementing the staff suggestions, this helped to create a huddle process and VMB the staff were engaged with each

morning. As the process took shape, the staffs' increased engagement to huddle showed that by involving them in the process, this would improve their perception of the communication they received. By the end of the project the staff rated the information that they were receiving above 90% in relevancy and timeliness.

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Appendix A

Literature Review

Author	Purpose	Study Design	Sample	Relevant Findings
Bourgault, A. M., Upvall, M. J., & Graham, A. (2018).	To explore the use of gemba boards and gemba huddles to facilitate practice change	Qualitative descriptive study	22 Critical care nurses	Nurses had a positive perception of leadership in their organization when it came to practice changes and trusted that follow-up would occur for all suggestions and comments. Utilizing gems boards encouraged communication and teamwork. Transparency of data was improved and appreciated.
Castaldi, M., Kaban, J., Petersen, M., George, G., O'Neill, A., Mullaney, K., Pennacchio, S., & Morley, J. (2019).	To improve communication and make safety culture a priority at our institution.	Quantitative	97 staff members	Improved communication and transparency. The regularly occurring meeting improved the teams sense of shared safety and risk. Fewer serious safety events
Croke, L. (2020).	Design of huddle, different uses of huddle	Literature review	9 studies	Safety huddles can be implemented to identify safety issues, create an awareness of risks, and encourage collaboration among team members in resolving problems. Although the formats, scopes, agendas, and attendees of safety huddles can vary, there are best practices every facility should follow, including identifying who should attend and what should be discussed, and having methods for follow- up and resolution.
Fowler, K. R., Robbins, L. K., & Lucero, A. (2021).	Understanding manager communication on nurse satisfaction and engagement. Does manager communication affect nurse outcomes	Literature review	30 articles	There is a positive association with nurses and patient metrics when evaluating nurse manager communications
Kabinga Makukula, M., Lyambai,K., Wahila, R., & Mwape, L. (2019).	Explore different methods of communication	Qualitative	22 leaders	The integration of social media can foster communication between nurses
Loesche, A. H. (2020).	Identify methods of improving communication and teamwork	Quantitative Process improvement	Convenience sample of 41individuals. 10 pre and 19 post responses	Subjective positive changes in staff morale
Murray, M., & Cope, V. (2021).	Effective communication has been highlighted as essential for efficient teamwork and patient safety	Qualitative retrospective review	32 nursing leaders	Communication is an area that continues to need improvement
Pimentel, C. B., Snow, A. L., Carnes, S. L., Shah, N. R., Loup, J. R., Vallejo-Luces, T. M., Madrigal, C., & Hartmann, C. W. (2021).	Review of what makes aneffective huddle	Literature review	156 studies	For a huddle to be effective, it must be clearly identified and attached to a positive outcome

Rakover, J, Little, K., Scoville, R., & Holder, B,,(2020).	Implementation of huddle systems to track safety initiatives and standard work	Quality Improvement	665 Ambulatory surgical centers	Leaders can implement huddles that focus on standard work, accountability, problem solving and escalation
Ryan, S, Ward, M, Vaughan, D,. (2019).	Synthesize the current evidence on safety briefings	Literature review, mixed methods	12 studies	Outcomes included improved risk identification, reduced falls, enhanced relationships, increased incident reporting, ability to voice concerns, and reduced length of stay. potential for implementation huddles into practice with minimal resources this review shows different methods that can be utilized for the best outcomes

Appendix B

IRB Approval Letter

Office of Nursing Research and Innovation
Student Quality Improvement Project Checklist*

Student Name: Heather Sullivan
College Univ: East Carolina University

Academic degree you are in pursuit of?	BSN	MSN	DNP	Other: _____
	YES	NO	NA	Comments/Details
At CC, are you in a leadership position?	✓			Nurse Manager
Does this project involve collecting data from:				
Patients?		✓		
Employees in your work location?	✓			
Employees you supervise?	✓			
Will raw data leave CC? **		✓		Describe:

[redacted] not applicable; QI/QA, quality improvement/quality assurance
[redacted] odology and need assessments

, If yes, is data leaving for (a) analysis by non- CC academic faculty, (b) to be placed in a non-CC database, (c) to be merged with data collected at another site or (d) other reason? Note: a **Data Use Agreement will most likely be needed.

Instructions: Respond to each item. If you are unsure of the correct response, please discuss with your nurse scientist mentor as soon as possible. Your responses will determine if the project meets QI requirements at CC

QI/QA, EBP with QI/QA Evaluation or Need Assessment Project Descriptions.	YES	NO	NA
Is the purpose to assess or improve quality or efficiency of a process, program, or care delivery within a specific CC health care setting?	✓		
Is the project intended to evaluate current practice and/or attempt to improve it?	✓		
Is there sufficient evidence to support implementing the project activities (what is the rationale for creating or identifying a practice change)?	✓		
Is your intervention (your activities and implementation plan) flexible (changeable) if not working as initially planned?	✓		
Does your project plan include an evaluation approach that allows for rapid and incremental changes?	✓		
Will patients/caregivers at CC potentially benefit from the project?	✓		
Is risk to patients or caregivers (depending on your target audience) no greater than what is involved in standard of care or ordinarily expected when practice changes are implemented?	✓		
Will activities only require consent that is already obtained in clinical practice?			✓
Could the activities be considered part of usual nursing work or patient care?	✓		
Has the manager(s), stakeholder(s) or work-area leader(s) approved your project plan?	✓		
Does the project use benchmarking (established/accepted standards) either within CC or other healthcare organizations? No benchmark for huddles			✓
Does the methodology include **at least 1 cycle** of PDCA (Plan-Do-Check-Act); and involve data reflecting planning and post implementation evaluation?	✓		
Are the outcomes of interest direct measure(s) of the intervention implemented?	✓		
Are the results intended to be rapidly integrated into local care delivery?	✓		

Comments regarding NA responses about your project plans:
consent not needed

☑ **Any changes made to the project post signatures will be reviewed by my nurse scientist mentor *prior to implementation*.**
I will keep my mentor updated in a timely manner as agreed upon & submit all completed project documents to my mentor.

Student Signature: Heather Sullivan	Date: 1-23-23
Nurse Scientist Mentor Signature: [redacted]	Date: 1-23-23
Associate CNO Research Signatur[redacted]	Date 01-25-2023

V2_09-22-21 Once the Associate CNO has signed, this fully signed form acts as permission for the student to move forward with implementing the QA/QI/Needs Assessment or EBP implementation project with QI evaluation methods within CC.

Appendix C

Huddle Survey

Huddle Survey

Thank you for taking this survey, it is voluntary.
This survey is anonymous.
Your participation is not required but appreciated.
The below questions are all related to the huddle board, process, and content.

Please answer the following questions on a scale from 0-10.
0= "not at all", 10 = "absolutely",

Topics in huddle are relevant to my day-to-day activities

0	1	2	3	4	5	6	7	8	9	10

Topics in huddle were engaging

0	1	2	3	4	5	6	7	8	9	10

Information in huddle was timely

0	1	2	3	4	5	6	7	8	9	10

Staff Participation is encouraged

0	1	2	3	4	5	6	7	8	9	10

Please identify which topics are **essential** during huddle on a scale of 0-10.
0 = "Definitely not" and 10 ="Definitely"

Congratulations & Acknowledgements

0	1	2	3	4	5	6	7	8	9	10

Identification of unit goals

0	1	2	3	4	5	6	7	8	9	10

Identification of organizational goals

0	1	2	3	4	5	6	7	8	9	10

Education roll-outs

0	1	2	3	4	5	6	7	8	9	10

Staff identified needs

0	1	2	3	4	5	6	7	8	9	10

Which **High Risk** patients should be identified during huddle on a scale of 0-10?
0 = “Definitely not” and 10 =”Definitely”

Fall risk patient

0	1	2	3	4	5	6	7	8	9	10

Patients with a Foley catheter

0	1	2	3	4	5	6	7	8	9	10

Patients with a central line

0	1	2	3	4	5	6	7	8	9	10

Patients receiving chemotherapy

0	1	2	3	4	5	6	7	8	9	10

Please identify the **aesthetics** of the huddle board on a scale from 1-10.
0= “not at all”, 10 = “absolutely”,

Huddle boards are easy to read

0	1	2	3	4	5	6	7	8	9	10

The font is big enough

0	1	2	3	4	5	6	7	8	9	10

The words are printed clearly

0	1	2	3	4	5	6	7	8	9	10

The different colors of markers makes the information easy to follow.

0	1	2	3	4	5	6	7	8	9	10

The placement of the content makes sense

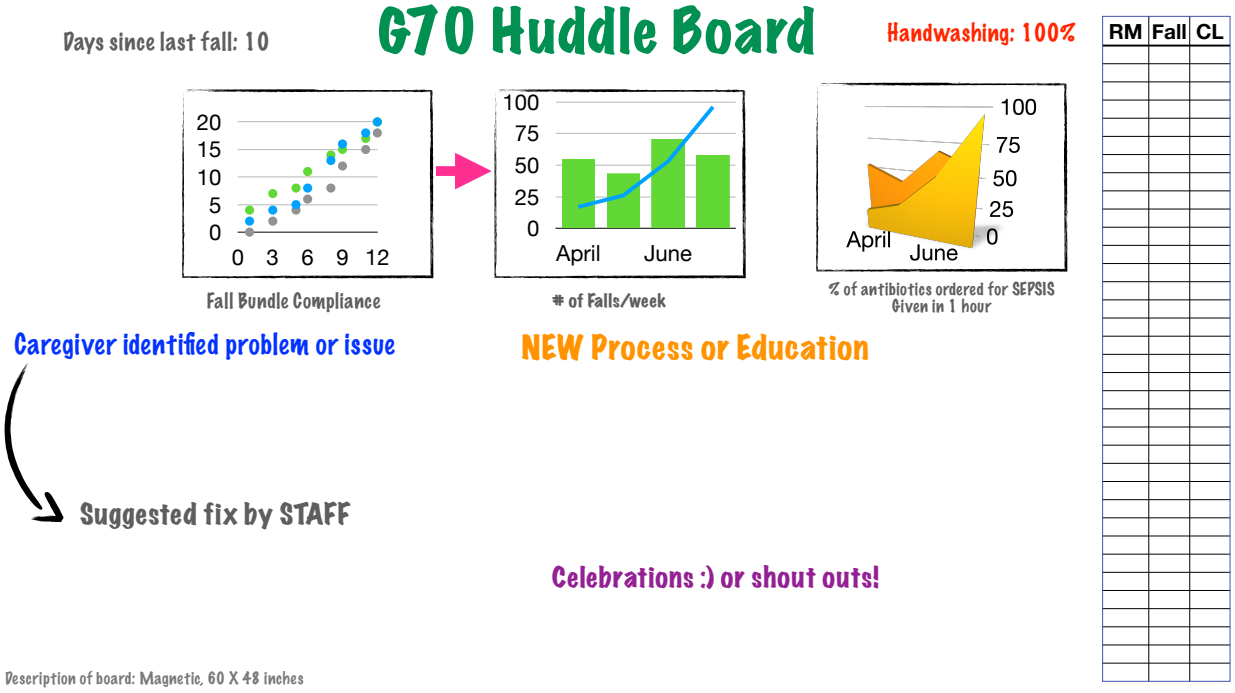
0	1	2	3	4	5	6	7	8	9	10

What could we do to improve the quality of huddle?

Free text

Appendix D

Huddle Template

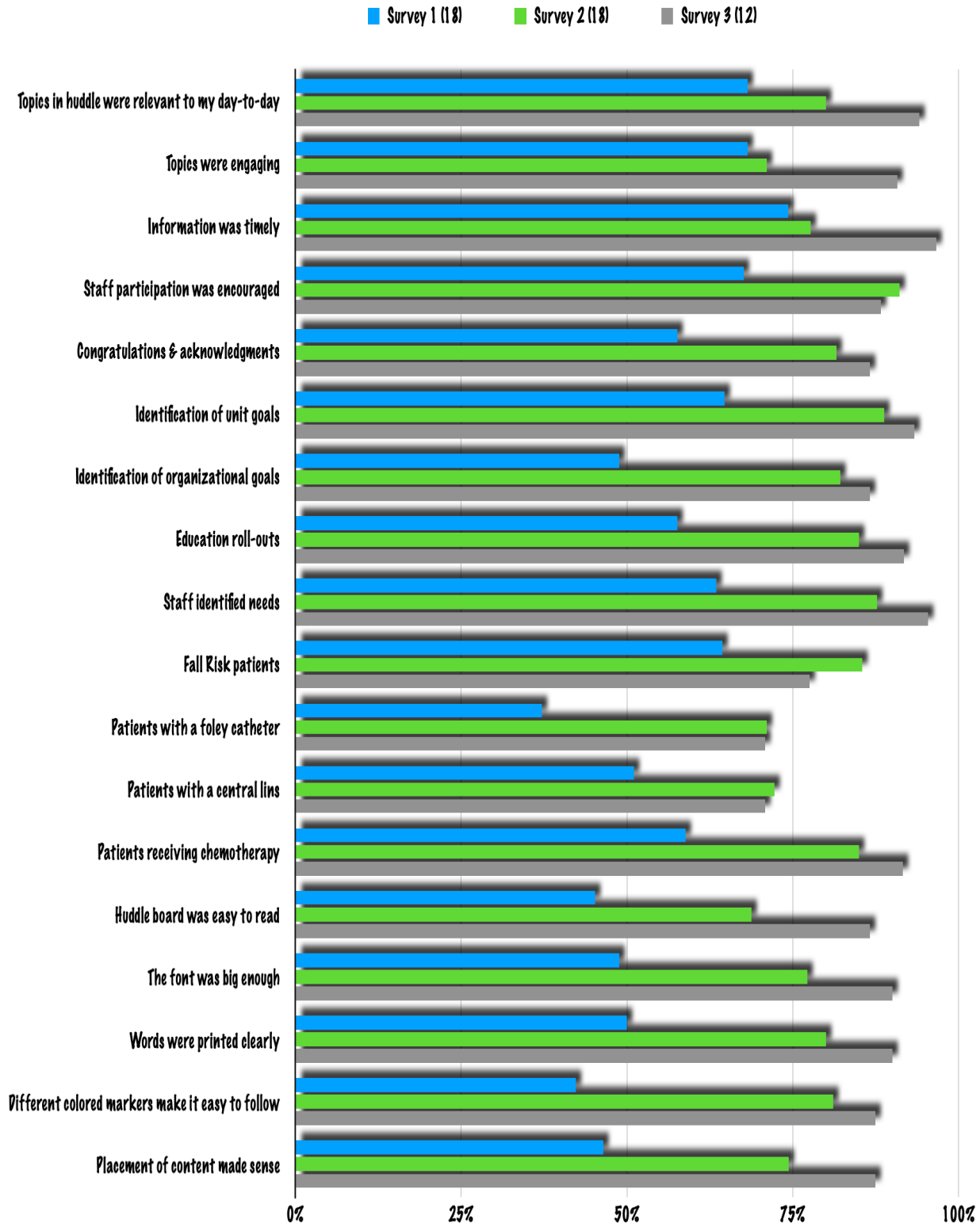


Appendix E

Survey Result Table

	Survey 1 (N=18)	Survey 2 (N=18)	Survey 3 (N=12)
Topics in huddle were relevant to my day-to-day	68.2%	80%	94.1%
Topics were engaging	68.2%	71.1%	90.8%
Information was timely	74.3%	77.7%	96.6%
Staff participation was encouraged	67.6%	91.1%	88.3%
Congratulations & acknowledgments	57.6%	81.6%	86.6%
Identification of unit goals	64.7%	88.8%	93.3%
Identification of organizational goals	48.8%	82.2%	86.6%
Education roll-outs	57.6%	85%	91.8%
Staff identified needs	63.5%	87.7%	95.4%
Fall Risk patients	64.4%	85.5%	77.5%
Patients with a foley catheter	37.2%	71.1%	70.8%
Patients with a central lins	51.1%	72.2%	70.8%
Patients receiving chemotherapy	58.8%	85%	91.6%
Huddle board was easy to read	45.2%	68.8%	86.6%
The font was big enough	48.8%	77.2%	90%
Words were printed clearly	50%	80%	90%
Different colored markers make it easy to follow	42.3%	81.1%	87.5%
Placement of content made sense	46.4%	74.4%	87.5%

Survey Results: Bar Graph



Appendix F

Itemized Budget for Huddle Board Project

Item	Description	Cost	Total Cost
White Board	Ghent Nexus porcelain magnetic white board 4'x6x	804.00 x1	804.00
Dry erase markers	Expo 16pk Multi color dry erase markers, chisel tip	17.49x3	52.47
Magnetic clips	Staples Magnetic Clips, 1.75"W, Silver, 3/Pack (10596)	6.19x6	37.14
Magnetic dots	OIC Heavy Duty Magnets/Clips, Assorted color, 30/Pack (92501)	17.49x2	34.98
Magnetic strips	Dowling Magnets Hold Its Dry Erase Magnetic Tape with Adhesive, Black, 3 Rolls/Bundle (DO-735005)	24.99x1	24.99
Laminator	Fellowes Saturn 3i 95 Thermal & Cold Laminator, 9.5" Width, Silver/Black (5735801)	129.99	129.99
Laminating pouches	Fellowes Thermal Laminating Pouches, Letter Size, 3 Mil, 200/Pack (5743401)	58.99	58.99
Initial planning	Leadership team discussing what topics should be offered & which topics must be included every 3 weeks x 3(NM, 4ANM, CNS)	310.00x6hrs	1,860.00
Weekly updates	1 member of the leadership team updates board & content weekly(NM)	75x12 weeks	900
			$3,902.56