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TeamSTEPPS: A Foundation for Shared Governance in a High-Risk Obstetrical/Neonatal Service Line

Genevieve Wright
gawright@usfca.edu

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TeamSTEPPS: A Foundation for Shared Governance in a
High-Risk Obstetrical/Neonatal Service Line

Genevieve Wright

University of San Francisco

Committee:

Dr. Elena Capella, Committee Chair

Dr. Nancy Taquino, First Committee Member

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Abstract

Problem: Declining registered nurse (RN) engagement in the maternal child health (MCH) department, despite improvements in RN staffing, some reductions in nurse-patient ratios, the addition of support staff resources, and a focus on quality and safety.

Context: The project setting is an MCH department of a 184-bed community hospital, part of a large national organization, serving a diverse population in Northern California. The initial stakeholders included RNs, managers, and assistant managers; the team was later expanded as the project developed (see Appendix A).

Intervention: The original aim of this project was to improve nurse engagement among frontline nurses through the implementation of a shared governance model. Shared governance, consistently recognized in the literature to positively affect nurse engagement and level organizational hierarchies, gives voice to RNs and increases RN involvement in decision making, impacting their practice and their work environment. As the project evolved, so too did it's aim. Patient safety was a critical driver for the modification of the project. The revision laid a critical foundation for the future of shared governance by improving teamwork and communication among nurses, management, and providers using TeamSTEPPS (Team Strategies and Tools to Enhance Performance and Patient Safety).

Measures: The TeamSTEPPS Teamwork Perceptions Questionnaire (T-TPQ) provided insight into the department's culture and guidance for the development of the curriculum. The questionnaire is comprised of 39 questions, including three demographic questions and one free-text question. The T-TPQ employs a Likert scale, with anchors ranging from *strongly agree* to *strongly disagree* (see Appendix B). The goal for the project was to train 95% of the team in TeamSTEPPS to improve communication and teamwork, as evidenced by a 5% increase in

strongly agree and *agree* responses on the post-training T-TPQ. See Appendix C for a

breakdown of the targeted team by role.

Results: There were 166 respondents for the pre-training T-TPQ survey (see Appendix D). The

TeamSTEPPS training goal was to train 95% of team members; the goal was met with 94.5% of

team members trained. Of those trained, 90.5% completed the post-training course evaluation.

Before implementation, less than 40% of participants scored their knowledge of TeamSTEPPS as

very good or *excellent*, after implementation, 85% scored their post-training knowledge as *very*

good or *excellent*. Overall, there was a 40% increase in *excellent* and *very good* responses. The

plan to complete post-implementation T-TPQ six months after implementation was delayed due

to a leadership decision to wait until People Pulse results were received. As such, the post-

implementation T-TPQ data will not be available until the end of the first quarter of 2019.

Conclusions: While the post-implementation survey data are not available, there are indications

of the project's success. The post-training evaluations indicated the training significantly

improved the knowledge level of participants (see Appendix E). Additionally, activities in the

department aimed at sustaining the use of the TeamSTEPPS tools and strategies are evident six

months post-training and have been embedded in department processes, including critical events

debriefings; there is also evidence of ongoing commitment with the development and regular

engagement of the steering committee and charter.

Section II: Introduction

Problem Description

Setting

The project setting was a 184-bed acute care hospital located in Northern California. Part of a national health organization serving nearly 11 million members, the facility was part of a two-hospital service area serving approximately 350,000 members. The hospital serves a diverse population, with the demographics of the membership population closely mimicking the composition of the community population, with a few exceptions (see Appendix F).

The project was implemented in the maternal child health (MCH) department, which includes labor and delivery, neonatal intensive care, and mother-baby units. The MCH department provides Level III obstetric and neonatal services and is a designated a California Children's Services Hospital. The MCH department provides antenatal, intrapartum, postpartum, and neonatal care. The care team includes registered nurses (RN), physician providers, certified nurse midwives, certified registered nurse anesthetists, maternal-fetal-medicine specialists, neonatologists, surgical technicians, and other healthcare professionals (see Appendix C). The MCH department relies upon and is partnered with multiple inpatient and outpatient departments to support patient care and to ensure the seamless transition of patients through the care experience.

Pre-Project State

The organization utilizes the survey tool People Pulse (PP) to annually assess employee satisfaction. The PP survey data had demonstrated a decline in MCH nurse engagement since the hospital opened in 2014. Precursors to this decline in staff engagement included an unprojected 25% to 30% surge in births that began almost immediately after the hospital opened. Existing

RN staffing levels were insufficient to meet the increased patient demand, resulting in high levels of overtime and less than optimal levels of staffing.

The RN staffing resources had been addressed over a period of two years, with the addition of 30 RN full-time equivalents (FTEs). The increase in FTEs was accomplished through an aggressive hiring campaign that included seven RN training programs. Six of the training programs were aimed at experienced nurses entering a new specialty, and the seventh training program focused on newly-graduated nurse residents.

The increase in RN FTEs and the department's focus on initiatives aimed at improving the work environment and quality of care (e.g., evidence-based practices and reducing overtime-driven fatigue) did not produce any discernable increase in RN engagement; in fact, staff engagement and satisfaction declined further, as evidenced by the 2016 PP survey results. At the start of the project, the 2017 PP data were not yet available. Once the 2017 data became available, it became apparent that there had been very little change from 2016 results (see Appendix G).

Dempsey and Reilly (2016) identified that nurses with less than 1-year tenure in their current position and those with more than 20 years tenure demonstrated the highest levels of engagement. Based on the mix of new and long-tenured staff in the project department, capitalizing on these two groups was an important factor in the success of the project. In keeping with Dempsey and Reilly's findings, newly trained staff and long-tenure staff were members of the design and training team for the project.

Significance

With the Institute of Medicine's (IOM, 2011) challenge for nurses to assume a greater role in leadership in all aspects of healthcare, it was imperative to increase RN engagement at

every level. Kutney-Lee et al. (2014) identified RN engagement as an important contributor to positive outcomes for RNs and patients. Additionally, nurse and patient outcomes influence both consumer choice and reimbursement rates from the Centers for Medicare and Medicaid Services (CMS), making nurse engagement an important factor influencing the overall success of healthcare organizations in the marketplace.

Despite increases in RN FTEs and improvement initiatives implemented in the MCH department, the department was still underperforming in important areas, including RN engagement. In the process of exploring why increasing RN FTEs and improvement initiatives had failed to produce a positive shift in RN engagement, the subject of culture emerged as a possible mitigating factor. Culture, commonly described as *the way we do things around here*, was identified as a strong influencer of RN engagement. Coupling *the way we do things* with another widely used expression, *culture eats strategy for lunch,* culture became a focal point in understanding why improvements in staffing and attention to quality and safety had not resulted in positive changes in RN engagement in the project department.

The existing management structure was a traditional management model, primarily operating from a top-down approach to decision making. This traditional structure and hierarchal leadership approach provided limited opportunities for RN input in decisions that impacted their professional nursing practice and their work environments. Though there were structures in place to engage the voice of the nurse, including direct report rounding, staff meetings, and RN membership on the patient safety committee, the overall perception was that RNs and other frontline staff were not substantially included in decisions impacting their practice and their work environment. To achieve the RN engagement needed to ignite culture change, it was necessary to flatten the hierarchy to include RNs as leaders and owners of their practice.

Rosen et al. (2018) identified that teamwork, especially when effective and efficient, influences the level of staff engagement and ownership over the work environment, thus contributing team resilience and engendering positive perceptions. Rosen et al. further acknowledged, there is a plethora of evidence supporting team training as a strategy for building effective teams. In response to the newly identified need to improve teamwork and communication among the nurses and the rest of the interdisciplinary team, TeamSTEPPS (Team Strategies and Tools to Enhance Performance and Patient Safety) was identified as a critical building block to reframe the culture in the department, which would serve as the foundation for the future implementation of shared governance (SG).

PICO(T) Question

Among registered nurses working in acute care settings, how do participative management models (e.g., shared governance) impact nurse satisfaction, engagement, and retention when compared to traditional management models? Having later identified a need to change the aim of the project, a second PICO(T) question was developed to guide the literature search: In hospital-based teams, where registered nurses comprise most of the team, how does TeamSTEPPS team training impact teamwork and communication?

Available Knowledge

The initial literature searches were conducted using the following key terms: *shared governance, impact, professional nurse, empower, outcomes, traditional management, participative,* and *top-down*. These searches revealed 361 articles, of which 48 abstracts and 20 full texts were reviewed. Ten articles were selected for inclusion based on their discussion of the impact on RN engagement, satisfaction, and retention. Subsequent searches included the following additional key terms: *team(s), teamwork, communication,* and *TeamSTEPPS*. Of the

128 articles identified, 16 full-text articles were reviewed, and five articles were selected for inclusion. The searches were limited to articles published in English and published no earlier than 2010 to ensure the most recently available and relevant evidence was utilized. Electronic databases included CINAHL, PubMed, and the Cochrane Database of Systematic Reviews. The reviewed studies were conducted in a variety of practice settings and geographic areas, utilized multiple tools and processes, and examined different outcomes (see Appendix H). The John's Hopkins Research Evidence and Non-Research Evidence Appraisal Tools were utilized to rate the strength of the evidence.

According to the IOM (2011), nurses are integral to the future of the healthcare system in the United States. Consequently, the IOM urges nurses to assume leadership roles in healthcare. The IOM identified four focus areas for nurses, including evidence-based practice, practicing to the full scope of their licensure and education, partnerships with other disciplines, and workforce planning and policy.

Registered nurses make up the largest group of healthcare professionals in the United States, with at least 50% of RNs working in acute care settings (U.S. Department of Labor, 2016). As the largest professional group in the healthcare system, RNs have the opportunity and an obligation to lead in the rapidly changing healthcare environment. Therefore, RN engagement in leading the future of healthcare is critical to meeting the IOM's challenge, regardless of role or title of individual RNs.

The Advisory Board (2013) reported that RNs are the least engaged frontline staff in healthcare (see Appendix I). Dempsey and Reilly (2016) demonstrated a curve in RN engagement based on tenure in their position. The RNs with less than six months tenure had the highest levels of engagement, while nurses with >1–10 years of tenure had the lowest levels of

engagement (see Appendix J). Dempsey and Riley also identified lower levels of engagement among RNs practicing closest to the bedside (see Appendix K). Low engagement among direct care RNs is particularly concerning considering the significant role RNs must play in the future of healthcare. Registered nurses must be active leaders, capable of influencing nursing practice and the environments where patient care is provided.

The most common themes in the literature included the connection between SG and nurse engagement, the recognition that SG models need to be customized to fit the organizations they serve, and SG models must be sufficiently fluid to evolve and change with their organizations to remain relevant and effective over time. Newman (2011) reviewed the 6-year journey of a nursing team from a traditional management model to an SG model, citing the importance of engaging nurses at the beginning of the process and avoiding a top-down change process. Using an approach that engaged nurses from the beginning contributed to the successful change in leadership model, resulting in positive outcomes for RNs and patients alike.

Similarly, another hospital identified that their existing SG model was failing and required redesign (Jacobs & Ward, 2012). The leadership elected to take a staff-focused approach to the redesign of the failing SG model. Employing a process that included a SWOT analysis, staff surveys, and focus groups, the team successfully redesigned the SG structure, resulting in improved communication and a more efficient and effective SG model. The department teams experienced greater clarity of focus that aligned directly with organizational pillars and goals. With department and organizational goals aligned, the team was essentially rowing together in the same direction (Jacobs & Ward, 2012).

Gerard, Owens, and Oliver (2016) also highlighted the importance of continuous improvement in the SG process, as SG structures must adapt as organizations change over time.

SG implementation and design approaches may differ and are unique to the environments they exist within. Evidence supports the notion that SG requires ongoing evaluation, planning, and adjustment to support the best outcomes and continued effectiveness as the needs of the organization, patients, nurses, and healthcare change (Gerard et al., 2016).

Orr and Davenport (2015) argued that the future of nursing is dependent upon the use of evidence-based practice, as well as RNs developing their leadership skills and bringing innovation to nursing practice. As such, RNs play an integral role in the future development of a high-quality and cost-effective American healthcare system (Orr & Davenport, 2015).

Overcast, Petty, and Brown (2012) investigated multiple factors, including SG, to determine what factors influenced RN engagement. The authors employed the Index of Professional Nursing Governance (IPNG) tool, which measures multiple factors to determine the impact of each factor on nurse engagement. The researchers found that none of the individual factors alone, including participation in SG, impacted the IPNG score. However, there was a positive correlation when RNs working in inpatient settings were directly involved in SG, suggesting that increased RN involvement has a positive impact on RN engagement and patient care outcomes (Overcast et al., 2012).

Siller, Dolansky, Clavelle, and Fitzpatrick (2016) conducted a small study among emergency department RNs working either in an SG model or traditional leadership model. Siller et al. utilized the IPNG and Utrecht Work Engagement Scale, with the aim of understanding how RNs' perceptions of SG related to their work engagement. The IPNG scores reflecting work engagement were distinctly higher among RNs working with SG leadership models than among those working in traditional leadership models (Siller et al., 2016).

Keyko, Cummings, Yonge, and Wong (2016) conducted a systematic review to determine the precursors to, as well as the impacts of, work engagement among professional RNs. The article was not specific to either traditional management or SG models. However, the article did include factors and themes relevant to both models. Keyko et al. found positive outcomes increased with favorable RN engagement in organizations where SG was present.

Structural empowerment (SE) was identified as a key factor attributed to positive RN engagement and active participation in RN practice. Clavelle, Porter O'Grady, Weston, and Verran (2016) conducted an empirical review of the literature spanning a 10-year period, including SG, SE, and related concepts. This review examined SG and the assertion that constant changes in healthcare make it necessary to evolve SG to the stronger framework of SE. The authors argued that the professional governance structure, with its focus on accountability, partnership, ownership, and equity, could be beneficial in elevating the role of the RN as the demand for integrated, collaborative, and value-based care evolves. Newman (2011) and Gerard et al. (2016) argued that SG needs to change and adapt over time. These arguments are consistent with claims by Clavelle et al., who argued that it was necessary for SG to evolve to a stronger framework.

It should be acknowledged that more studies exist addressing the relationship between SG and RN engagement than studies demonstrating a relationship between RN engagement and patient outcomes (Hastings, Armitage, Mallinson, Jackson, & Suter, 2014). Kutney-Lee et al. (2014) reported that evidence of a causal relationship between RN engagement and patient outcomes is limited and may warrant some skepticism. Notwithstanding, Kutney-Lee et al. suggested that a strong business case could be made for SG as a strategy to improve RN

experience and to influence patient satisfaction, as well as other publicly reported patient quality outcome measures.

Adding to the body of knowledge guiding this project was research on teamwork, communication, and TeamSTEPPS. Rosen et al. (2018) conducted a study of teamwork in healthcare and identified six specific focus areas they referred to as *discoveries*. One of these discoveries was the importance of team training in healthcare. While the study did not identify any specific methodology, there was strong support for the systematic use of evidence-based practices in the development of team training (Rosen et al., 2018).

The study by Rosen et al. (2018) also cited two behavioral strategies commonly employed by RNs that are important to recognize, as they may negatively impact the quality of teamwork and communication. First, RNs tend to continue to address the task-at-hand when a problem is encountered rather than stopping to examine the cause of the problem and to consider a different course of action. Second, nurses are selective in whom they will ask for help, preferring to request help from those who they are familiar with rather than someone socially distant or unfamiliar. For instance, an RN is more apt to ask for help from a long-term coworker than of a co-worker of equal experience but new to the department. This behavior was thought to be about avoiding judgments of their competence and reputation. The RNs' avoidance of the cause of problems and the selectiveness in requesting help can result in weakness and pose an area of risk to a culture of teamwork and communication (Rose et al., 2018).

Castner, Foltz-Ramos, Schwartz, and Cervavolo (2012) studied TeamSTEPPS in a large multi-facility organization. Leadership at all levels was identified as a key element of success or failure in the implementation of TeamSTEPPS. Castner et al. concluded that the effectiveness of team training hinged upon the equalization of hierarchy and the engagement of frontline leaders

who could successfully engage other team members to build effective teamwork behaviors penetrating the entire team.

In another study, conducted in a large multi-facility organization, including acute care, long-term care, and ambulatory services, TeamSTEPPS was implemented with the intention to transform the organizational culture (Thomas & Galla, 2012). The researchers identified the importance of creating training that was inclusive of frontline team members rather than just management. This approach is qualitatively similar to the methodology guiding SG practices. Thomas and Galla (2012) noted the value of creating a structure and engaging staff to transform the organization's culture.

A study by Gallup (2017) identified that only 32% of nurses were effectively engaged; this figure translates into only one in three nurses being engaged in the workplace. Physician engagement was only slightly higher at 34%. Gallup identified several organizational impacts or risks associated with low staff engagement, including customer satisfaction, profitability, productivity, staff turnover, safety gaps for staff and patients, theft, and quality. These findings are particularly interesting because it was the potential for adverse patient events that drove the need to refocus energy on the implementation of TeamSTEPPS before launching SG. Consequently, this study supports the rationale and importance of increasing engagement among nurses and other team members to create a culture of inclusion and ownership at all levels, while equalizing the hierarchy (Gallup, 2017).

Dent and Tye (2016) highlighted the value of creating work environments that support teamwork and communication aimed at increasing staff engagement. However, simply providing staff with training in TeamSTEPPS is insufficient to initiate a culture change. Organizations need

to go beyond training to ensure a sustainable culture of change with engaged leadership at all levels of the team.

Clapper and Ng (2013) offered valuable insights into the successful design, implementation, and sustainability of TeamSTEPPS. One particularly important element, according to the literature, involves having leadership that is committed to supporting the intervention from its inception, through design and implementation, and ongoing support to sustain the change. Leaders must invest resources of time, money, and personnel; take personal ownership; and promote the changes to ensure successful cultural change with TeamSTEPPS.

In summary, if RNs are to take their place among healthcare leaders and fulfill the IOM's challenge for RNs to be leaders in healthcare today, and in the future, it is critical to address RN engagement. The fact that RNs make up the largest segment of healthcare professionals and are identified as the least engaged members of healthcare teams highlights the importance of creating cultures that engage RNs. The inclusion of RNs in decision-making impacting their practice and work environments while leveling hierarchy are thought to be key components correlated with RN engagement. The literature identifies that SG models do level hierarchy by including RNs in decision-making particularly when it directly impacts nursing practice and work environment. SG models are also associated with higher levels of RN engagement than traditional management models. TeamSTEPPS is also connected with leveling hierarchy and building cultures that embrace the frontline RN as decision-makers and leaders. Based on the literature review both SG and TeamSTEPPS are strong models to influence RN engagement making both SG and TeamSTEPPS good choices for this project.

Rationale

A conceptual framework combining the Institute of Health Improvement's (IHI) Organizing Theory of Change (OTC) with the organization's branded professional practice model—the Voice of Nursing (VON)—and human caring theory were employed during this project. The IHI's OTC, like Lewin's change theory, consists of three phases (Shirey, 2013; see Appendix L). Stakeholders are identified in the first phase by answering the question: Who are we organizing? The second phase answers the question: How can we get the power we need? The second question focuses on leveling the hierarchy and on having power *with* others rather than *over* them. The final phase focuses on the intended change and defines the desired outcome of the project.

The literature is consistent about the importance of directly involving frontline RNs in the design and implementation of TeamSTEPPS programs, which is in keeping with the implementation of SG models. The OTC was rooted in the direct involvement of all stakeholders as part of a process from training design to delivery and beyond to sustainability, making the model and an excellent choice for this project. Additionally, OTC aligns with both the TeamSTEPPS and the SG models.

The project organization's branded professional practice model, the VON, was informed by the ANA's *Scope and Standards of Practice*, the American Academy of Ambulatory Care Nursing Standards, the ANA's *Code of Ethics*, and Jean Watson's human caring theory (Leavell, 2015). The VON values include patient and family-centric care, professionalism, compassion, teamwork, excellence, and integrity. A visual representation of the VON is provided in Appendix M. Core elements of SG include evidence-based practices, education, professional development, and policy. These elements are contained within the VON professional practice model (PPM),

which provides foundational support for the implementation of TeamSTEPPS and the future

implementation of an SG model.

In 2008, the project organization adopted Watson's (2008) human caring theory as the

organization's theoretical framework for nursing. Watson's theory asserts that caring emanates

from the heart and that authentic human caring and relationship-centered caring are essential for

healing practices to serve the whole person and to create healing environments for patients and

care providers. The theory was valuable in this project to strengthen the theoretical model's

connection to the foundation of TeamSTEPPS, SG, and the organization's PPM.

Specific Aims

The initial aim of this project was to implement an SG model to engage nurses in the

MCH department in their professional practice and to build a culture of collaboration between

staff RNs and management/leadership. While this was still a goal for this department, the aim of

the project was modified to address more urgent departmental needs. The modified aim was to

improve communication and teamwork among nurses, management, and providers by training

95% of all MCH team members in TeamSTEPPS by March 31, 2018. A 95% training rate was

expected to ensure a level of consistency across the department in relation to usage of the

TeamSTEPPS tools. Additionally, a toolkit (Appendix N) was developed to guide future teams in

the design, implementation, and sustainability of TeamSTEPPS related activities.

Section III. Methods

Context

In keeping with the OTC, an extensive list of primary stakeholders was identified and included frontline nurses, ancillary support staff, providers, and managers. The OTC identifies five categories of stakeholders, including constituents, supporters, leadership, competition (i.e., competitors), and opposition (see Appendix A). Individuals may belong to one or more stakeholder groups.

Constituents are individuals and groups at the center of and directly impacted by the proposed intervention or change. Ensuring a common purpose is critical for strong engagement and participation from constituents. In this project, the common purpose was to improve teamwork and communication among the constituents. Many of the leadership stakeholders emerge from the constituency membership. Nurses, for instance, are members of the constituency, with some also becoming members of the leadership stakeholder group. The leadership stakeholder team included executive sponsors and 37 individuals designated to design and customize the TeamSTEPPS program and deliver the training to the constituent group, as shown in Appendix O.

Supporter stakeholders may not have a stated or direct interest in the project, but they may nonetheless benefit indirectly or they may be of benefit to the project. Competition stakeholders might also share the same interests as the constituents, however, may have taken a different approach or solution to the problem. Failing to establish a common purpose with this group has the potential to lead to opposition. Opposition stakeholders generally do not share the same values or goals. Establishing a connection with opposition stakeholders is difficult and may

not be possible, but it is important to recognize their existence and potential impact on the
project.

Some stakeholders were unaware of the plan as the team entered the design phase. The
leadership stakeholder team members were initially recruited from the perinatal safety team and
the clinical events team training team. Some of the members had been trained as master trainers
for TeamSTEPPS and served as module leaders. The team was expanded to others who voiced an
interest in participating in the project. Communication about the intervention was included in
staff meetings and posted in the unit prior to the training. Due to the change in the project's aim,
the communication plan was less robust than originally planned.

Intervention

The original project intervention was to implement an SG leadership model. Due to
occurrences in the department just prior to the commencement of the SG implementation, the
project was paused, and the intervention was changed to TeamSTEPPS. TeamSTEPPS was
developed for the healthcare industry by the Department of Defense (DOD) and Agency for
Healthcare Research and Quality (AHRQ). TeamSTEPPS consists of four core competencies:
leadership, communication, situational monitoring, and mutual support (see Appendix P). These
competencies help teams to embrace a flattened or horizontal hierarchy, gives a voice to all team
members and builds a culture of respect and trust (AHRQ, 2017). Developing a TeamSTEPPS
program is a four-phase process inclusive of needs assessment, design and planning, training and
implementation, and sustainment. A toolkit has been created to guide leaders and teams who are
interested in implementing TeamSTEPPS in their departments.

Gap Analysis

An independent assessment of the department was conducted by two members of a regional risk team. The assessment consisted of individual face-to-face interviews, including nurses, ancillary staff, providers, management, and leadership, aimed at gaining an understanding of the existing culture and perspectives of those working in the environment. The results of this assessment were shared with senior leaders, the chief physician, and nursing director. While the raw data were not distributed, the overall gap analysis of the culture of the project department revealed two issues: communication and teamwork. Communication included difficulty in speaking up and the lack of quality and consistency of communication between team members. Based on the assessment and recommendations of the assessment team, TeamSTEPPS was determined to be of critical importance in improving the department's culture and in overcoming the issues that play a role in adverse patient events (see Appendix Q).

Gantt Chart

A Gantt chart was created to depict the planned timeline of the project. The timeline spans a year and includes qualifying the project through completion and presentation of the project. This chart has been modified to depict the timeline inclusive of the change in direction for the project (see Appendix R).

SWOT Analysis

The SWOT analysis identifies the strengths, weaknesses, opportunities, and potential threats to the project (see Appendix S). This analysis was helpful in maintaining awareness of what elements were present as the project moved forward. While the strengths and opportunities outnumbered the weaknesses and threats, it was important to be mindful of positive and negative elements and their potential to impact the success of a project.

Work Breakdown Structure

The work breakdown structure for this project was organized into three main work elements: project development, project implementation, and evaluation. More discreet elements cascade down to work packages required for implementation of the project and to guide scope (see Appendix T).

Budget / Return on Investment

Factors included in the budget for this project included staff costs for the design team, training hours, and projected committee costs to support the sustainability of this program. Additional costs included supplies, food, and printed materials. This program will not provide additional revenue. The program is expected to save costs by preventing errors and harm resulting from greater staff and provider engagement, effective communication, and teamwork.

The payroll budget includes RNs, managers, clinical nurse educator, clinical nurse specialist (CNS), director, clerical support, and other support staff. Overtime was projected at various levels, as it varied based on staffing needs and schedules. The budget included payroll and non-payroll expenses for planning and design, training and implementation, and post-implementation sustaining activities. Manager costs were based on average salaries and no overtime, as are the costs for the educator, CNS, director, and clerical support. The worst-case scenario for payroll cost was $365,519, including 50% overtime for non-management staff, at a total cost of $308,070 based on eight hours of training per participant. The non-payroll projected budget included training venue, food and beverage, trainer shirts, participant pocket handbook, and printed materials, with a non-payroll budget of $17,750. The projected start-up budget was $325,820, however, reduced training time resulted in a final budget of $162,428.54 (see Appendix U).

Cost Avoidance / Benefit Analysis

The project did not and will not produce an immediate return on investment; in fact, in the short-term, additional costs were incurred by the organization. However, the long-term benefits of the investment will be realized by the cost avoidance associated with harm events. Successful transformation of the department culture to be one that is exemplified by the authentic engagement of nurses, providers, management, and other team members will reduce and prevent costs of care associated with harm events, including extended hospitalization, additional care, and monetary awards to patients. Additionally, there are harder to quantify costs associated with the loss of reputation relative to people choosing or not choosing the organization for their care.

To put some context to what the potential cost avoidance might be, it is important to consider that 1.6 newborns per 1,000 discharges incur a potentially avoidable birth trauma/injury, and maternal obstetrical trauma can range from 3.9/1,000 discharges to 160.6/1000 discharges (Russo & Andrews, 2011). Per the organization's risk management department, a significant birth injury settlement award can cost as much as $1.7 million on average. In 2003, the Centers for Disease Control and Prevention (CDC, 2018) estimated the lifetime cost of care for a person with cerebral palsy to be $1 million, and in 2014, estimates were as high as $1.4 million. As the organization discharges approximately 3,750 newborns and 3,700 delivery mothers, the potential cost avoidance is significant (see Appendix V).

Responsibility / Communication Matrix

A responsibility/communication matrix is important in a large project to assure that all constituents are aligned and communication breakdowns and confusion are avoided. The responsibility/communication matrix delineated the responsible person(s) for the activities and

communication elements required for the project from beginning to end. This matrix provides a

quick reference and tracking tool for the responsibility/communication plan (see Appendix W).

Pre-Implementation Survey

The first step in the process was to survey staff, management, and providers utilizing the

TeamSTEPPS Teamwork Perceptions Questionnaire (T-TPQ). The T-TPQ is a validated survey

consisting of 39 questions (see Appendix B). Data collection took place over a 2-week period,

with 166 team members completing the survey. The breakdown of survey participants by role

can be seen in Appendix D. This represented approximately 44% of those who received the

survey.

The survey results identified teamwork and communication as focal areas for the

TeamSTEPPS program. The analysis of the survey was shared with senior leadership, physician

leaders, and the nursing director, with a recommendation to adopt TeamSTEPPS as the intervention.

Approval to move forward with the TeamSTEPPS project was received. Concurrently, members

of the design team were being identified in preparation to begin the program design once the

focus areas had been identified and validated.

TeamSTEPPS Design

The design and implementation team were identified and convened, with the goal of

customizing the TeamSTEPPS training for the target department. The core competencies, which

were translated into training modules, were leadership, communication, situational monitoring,

and mutual support. Each module was subsequently distilled down to two or three skills (see

Appendix X). Respective module leaders worked with their team members to design the content

of the modules and to identify team roles, including speakers and presenters. Weekly meetings

were held with all design team members to review the modules and to discuss plans for actual

training. Individual teams worked offline on their specific modules. A 4-hour trial run was held

just prior to the training dates to fine-tune the modules and to ensure that the team would be able

to present the training within the timeframe.

Training

The nurse educator and CNS were the key architects of the training plan and organization

of dates, venue, and coordination of departmental and training staffing. Five training dates were

selected between February 28 and March 15, 2018. Seven 4-hour classes were conducted, during

which 400 individuals were trained. In addition to those who were members of the department,

other disciplines who provided service in or to the department were invited to participate,

including house supervisors, intensive care unit nurses, and respiratory therapists (see Appendix

Y).

The training environment was set up with assigned seating to ensure each table had

multidisciplinary membership to mimic the work environment teams. The training modalities

included lecture, video, group work, and interactive team events. The modules were designed to

maintain participants' interest and to hold their attention throughout the training. Due to the lack

of a suitable training space within the facility, the training was held offsite. It was identified that

training offsite reduced distractions and other interruptions that frequently occur in the hospital

setting. Post-training debriefs were held after each training session to identify opportunities to

improve and best practices. Offsite training was identified as a best practice and is recommended

for future teams rolling out similar projects.

Sustainability Plan

Post-training sustainability was an important element in the project. A subset of the

design team and leadership formed the TeamSTEPPS steering committee. The sustainability plan

included the importance of visual management tools and activities to keep the TeamSTEPPS

present and to give team members an opportunity to practice the skills learned in the training. It

was decided that there would be a focus on one or two skills at least every one to two months.

Visual boards were created for team members to recognize and post when one of the skills was

observed. This strategy created an enjoyable sense of competition between units, and monthly

awards were offered for the most observed skills posted each month. Additionally, one of the

module teams created a short video to reinforce the *I've got 5 minutes* skill. This video was

filmed in the department and featured different members of the team and disciplines.

Study of the Intervention

Ideally, any analysis of the efficacy of the intervention would rely on outcome metrics

relative to improvement in communication and teamwork, including data relative to patient harm

and errors, as well as nurse engagement data. However, due to various time constraints and the

timing of this project, obtaining these data was not feasible. The study approach initially

employed a pre- and post-survey utilizing the T-TPQ. Additional data included post-training

evaluation data and training completion data.

Measures

Outcome Measures

The pre-training data provided key insights into what skills were needed to develop the

curriculum and served as baseline data for the project. The T-TPQ was administered prior to the

project launch in February 2018. The T-TPQ is a reliable and valid tool developed by the AHRQ

and DOD. The questionnaire was comprised of three demographic questions, one free-text

question, and 35 questions using a Likert scale, with anchors ranging from *strongly agree* to

strongly disagree. The questionnaire was administered using the Survey Monkey online

platform. The survey contained no personal identifiers, and the results were presented as aggregate data. The data did not include any person-specific information.

The intention was to use the same survey instrument for post-implementation data, with the aim of demonstrating improvement in communication and teamwork as evidenced by a 5% increase in *strongly agree* and *agree* responses on the post-training T-TPQ. Due to the leadership decision to postpone the post-implementation survey, the data are not available. However, there is evidence of adoption of the TeamSTEPPS tools and strategies identified to address teamwork and communication in the targeted department.

The overall success in training 400 individuals, representing 94.5% of the targeted team members, plus 43 others who provide services to or within the department, demonstrates a significant accomplishment in the planning and execution of the TeamSTEPPS training. The post-training evaluations demonstrated an increase in knowledge, which was consistent across all training sessions.

Process Measures

The project employed four process measures, which consisted of the formation of a multidisciplinary TeamSTEPPS steering committee, development of a TeamSTEPPS implementation charter, establishment of at least bi-mont TeamSTEPPS steering committee meetings, and identification of sustained TeamSTEPPS activities.

Balancing Measures

Staff attendance and RN assignment, despite objection data, were expected to serve as balancing measures. The data were ultimately not available due to unavoidable and unplanned role changes.

Analysis

The post-implementation survey was planned for six months after implementation but was initially delayed due to an overlap with the timing of the annual PP survey. Leadership further delayed the post-implementation T-TPQ, preferring to complete after the 2018 PP results are available. The post-implementation T-TPQ is now planned to occur one year after implementation.

The project employed four process measures: percentage of participants who perceive a post-training increase in knowledge of TeamSTEPPS, establishment of a multidisciplinary TeamSTEPPS steering committee and charter, TeamSTEPPS steering committee meeting at least every other month, and evidence that sustainment activities are identified and in place in the department. All four process measures have been achieved and represented in Appendix Z.

Of those trained, 90.5% completed the post-training course evaluation. Before implementation, 40% of participants scored their knowledge of TeamSTEPPS as very good or excellent; after implementation, 85% scored their knowledge of TeamSTEPPS as very good or excellent. Overall, the data demonstrated a 45% increase in excellent and very good responses. The TeamSTEPPS steering committee has been formed and includes a subset of the original design and training team. Due to the significant size of the training team, it was not possible to include all in the steering committee. The committee membership by role is included in Appendix AA. The team has completed their charter (see Appendix BB) and has been meeting consistently at least every other month since training was completed. As described earlier, sustainability activities are in place, including a department developed and filmed video reinforcing the *I've got 5 minutes* skill; visual boards encouraging team recognition of those observed utilizing TeamSTEPPS tools, with monthly rewards for most observed; TeamSTEPPS

tools embedded and reviewed in all critical events debriefings; and department focus on one tool at least every two months. Overall, the project was successfully designed, delivered, and implemented in the target department, with evidence of sustainability activities in place.

Ethical Considerations

Several ethical concerns were identified relative to this project. The importance of maintaining the privacy of survey participants and addressing any concerns over their psychological safety was critical. Precautions were in place to protect the anonymity of participants who were interviewed prior to TeamSTEPPS training. The identity of the individuals interviewed was known only to the interviewers and not included in the report out. Additionally, T-TPQs were collected using an anonymous Survey Monkey tool. The demographic data included only role, unit of work, and facility. The post-training evaluation tool was a paper tool that did not include any personal identifiers. Additionally, all reported data were presented in aggregate form. No data were collected that could be used to infer the identity of participants to protect the identity of all participants to assure they felt safe to participate, without threat of reprisal, and to transparently share their perceptions. Without the assurance of anonymity, it was unlikely that the data collected would provide valid insight into the culture in the department.

Efforts were made to create a psychologically safe environment for TeamSTEPPS training, including ground rules for sharing in and outside of the training. Discussion groups were multidisciplinary and did not include leadership. Open participation in discussions was encouraged and supported by non-judgmental oversight and group reporting, rather than individual reporting. Table team activities were overseen by staff on the TeamSTEPPS design team, rather than management, to reduce any sense of hierarchy influencing the conversations.

The project was in alignment with both Jesuit values and those of the American Nurses Association. The Jesuits embrace diversity and the betterment of the human condition. These values are consistent with the intention of this project, which was to improve nurse and provider communication and teamwork practices by focusing on inclusive leadership and reshaping the culture of the department. The project was also aligned with the ANA Code of Ethics, which guides nursing practice, establishes the ethical values of the nurse, and defines accompanying obligations and duties, along with Watson's (2008) 10 Caritas processes (see Appendix CC).

The purpose of the project was to promote patient safety, improve patient throughput and access, and maintain high standards of care. The Doctor of Nursing Practice Statement of Non-Research Determination, describing the project, the aim of the project, planned intervention(s), the projected impact on nursing practice, outcome measures, process measures, and balancing measures, was completed and subsequently approved as a quality improvement endeavor through the University of San Francisco School of Nursing and Health Professionals (see Appendix DD). As such, the project did not require an Institutional Review Board approval for implementation.

Section IV. Results

There were 166 respondents for the pre-training T-TPQ survey (see Appendix D), which represents 44% of those who received the survey. The data provided on the pre-training T-TPQ provided the guidance for the training focus for the department. Communication and teamwork were the focus areas identified and served the basis for the development of the training program. The plan to repeat the T-TPQ six months after implementation was delayed due to overlap with the PP survey and has since been delayed until after the PP survey results are available. As such, the post-implementation T-TPQ data will not be available until end of the first quarter of 2019.

The TeamSTEPPS training goal was to train 95% of team members; the goal was essentially met, with 94.5% of team members trained. In addition to the originally targeted department team, 43 other team members who provide services in or to the department were trained. Of those trained, 90.5% completed the post-training course evaluation. Before implementation, less than 40% of participants scored their knowledge of TeamSTEPPS as very good or excellent; after implementation, 85% scored their post-training knowledge as very good or excellent. Overall, the data demonstrated a 45% increase in excellent and very good responses.

In addition to the participant perceptions of knowledge pre- and post-training, there were three additional process measures: establishment of a multidisciplinary TeamSTEPPS steering committee and charter, TeamSTEPPS steering committee meeting at least every other month, and evidence of sustainment activities. All four process measures have been achieved and represented in Appendix Z.

The TeamSTEPPS steering committee has been formed and includes a subset of the original design and training team. Due to the significant size of the training team, it was not

possible to include all in the steering committee. The committee membership was determined by department leadership in collaboration with training team members and includes members from leadership and multiple disciplines and roles, including frontline RNs. The membership list by role is included in Appendix AA.

The team has completed their charter (see Appendix BB) and has been meeting consistently at least every other month since training was completed. Initially the team attempted to meet weekly; however, this proved to be a difficult task and did not provide appropriate time to carry out the work and decisions of the team between meetings. This resulted in the decision to schedule monthly meetings, with a minimum of every other month.

As described earlier, sustainability activities are in place, including a department developed and filmed video reinforcing the *I've got 5 minutes* skill; visual boards encouraging team recognition of those observed utilizing TeamSTEPPS tools, with monthly rewards for most observed; TeamSTEPPS tools embedded and reviewed in all critical events debriefings; and the department focus on one tool at least every two months. Overall, the project was successfully designed, delivered, and implemented in the target department, with evidence of sustainability activities in place. Balancing measures data were ultimately not available due to unavoidable and unplanned role changes.

Section V: Discussion

Summary

The original aim of the project, to implement an SG leadership structure in the MCH department, was initiated and partially developed; however, due to the identification of the need to address the department's cultural foundation before SG could succeed, a revised aim was developed. The revised aim was to implement TeamSTEPPS training and adopt the tools and strategies in the department, with a focus on improving teamwork and communication among team members. TeamSTEPPS training became the project intervention. While the intervention changed, the intention to improve nurse engagement remained and was expanded to the larger team. The incredible teamwork of the design team demonstrated the capability to engage effectively in teamwork and communication as a multidisciplinary team. The design team became the architects and leaders of change. All design team members were charged with the accountability to not only train, but to be the implementers, embedders, and champions for TeamSTEPPS to become a part of *the way we do things around here*, also known as culture. The project resulted in the successful training of 400 individuals; provided new tools to improve safety and behaviors that strengthen communication and teamwork, a roadmap for others to follow as more teams adopt TeamSTEPPS; and developed frontline leaders, including RNs who demonstrated authentic engagement throughout the process of this project. The greatest weakness of the project was the inability to complete the outcome data collection. Without outcome data, the evidence of success is somewhat circumstantial.

The intended impact of this project was to initiate the development of a fresh foundation to help establish the stable culture needed to support the implementation of SG at a future date. One of the most important characteristics of this project was the lack of hierarchy, with the

leadership lying with the frontline stakeholders. Management and leadership took on a role of support and barrier removal. This is consistent with the SG leadership model, suggesting that while SG was not fully implemented, elements of it were evident in the project.

It is too early to determine the full impact of the project and its ultimate sustainability. However, while not quantifiable, observations and evidence of the TeamSTEPPS in use provide evidence that TeamSTEPPS tools and strategies can be effective in engaging team members to improve communication and teamwork, thereby strengthening the safety culture and relationships consistent with the literature. Changes in practices within the department include team huddles and critical events team training, TeamSTEPPS tools use analyzed in critical events debriefings, ongoing and regular steering team meeting, visual board, and team competitions with rewards for use of the TeamSTEPPS tools. It is also worth noting the fun and enjoyment the team demonstrated during the training as evidence that the training was engaging.

An unintended and unplanned by-product of the project was the development of the *How to Design and Deliver TeamSTEPPS Toolkit.* The toolkit provides guidance based on the experience of this project for others who want to adopt TeamSTEPPS in their departments. The toolkit is simple and provides some tips and hints for successful training design.

Limitations

As previously noted, the inability to collect post-implementation data handicaps the project. Without data to demonstrate the outcomes of the project, it is difficult to provide unbiased evidence by which to evaluate the results of the project. Changes in leadership direction, along with changes to the role of the director, added further complexity to the project and resulted in certain limitations in terms of data collection.

Conclusions

While quantifiable evidence is missing, the team was successful in designing the training and delivering the training to 400 individuals and is expected to provide the model for other departments in the hospital. Participant feedback regarding their level of knowledge speaks to the quality of the training provided. The resulting *How to Design and Deliver TeamSTEPPS Toolkit* is also a tangible outcome.

The purpose of the project was to improve RN engagement in their practice and to be leaders from wherever they stand. The original vehicle to engage and promote RN leadership in the organization was SG and was transitioned to TeamSTEPPS. The process of designing and delivering the training resulted in the emergence of some of the characteristics of SG, with a leveling of hierarchy and an increase in engagement and empowerment of the team. In the process, frontline nurses and providers became the leaders, while management and leadership took a role more consistent with the OTCs power *with* principle rather than power *over,* providing support and removing barriers with the team. In concluding this project, it is evident that the process was as important as the project was.

Section VI: Other Information

Funding

All payroll funding for this project was provided out of the department's operational budget. Additional resources were also provided out of the operational budget, including team t-shirts, decorations, and team awards. Additional funding for the venue and food was provided by the senior leadership team. Funding was subject to the approval of the chief nurse executive.

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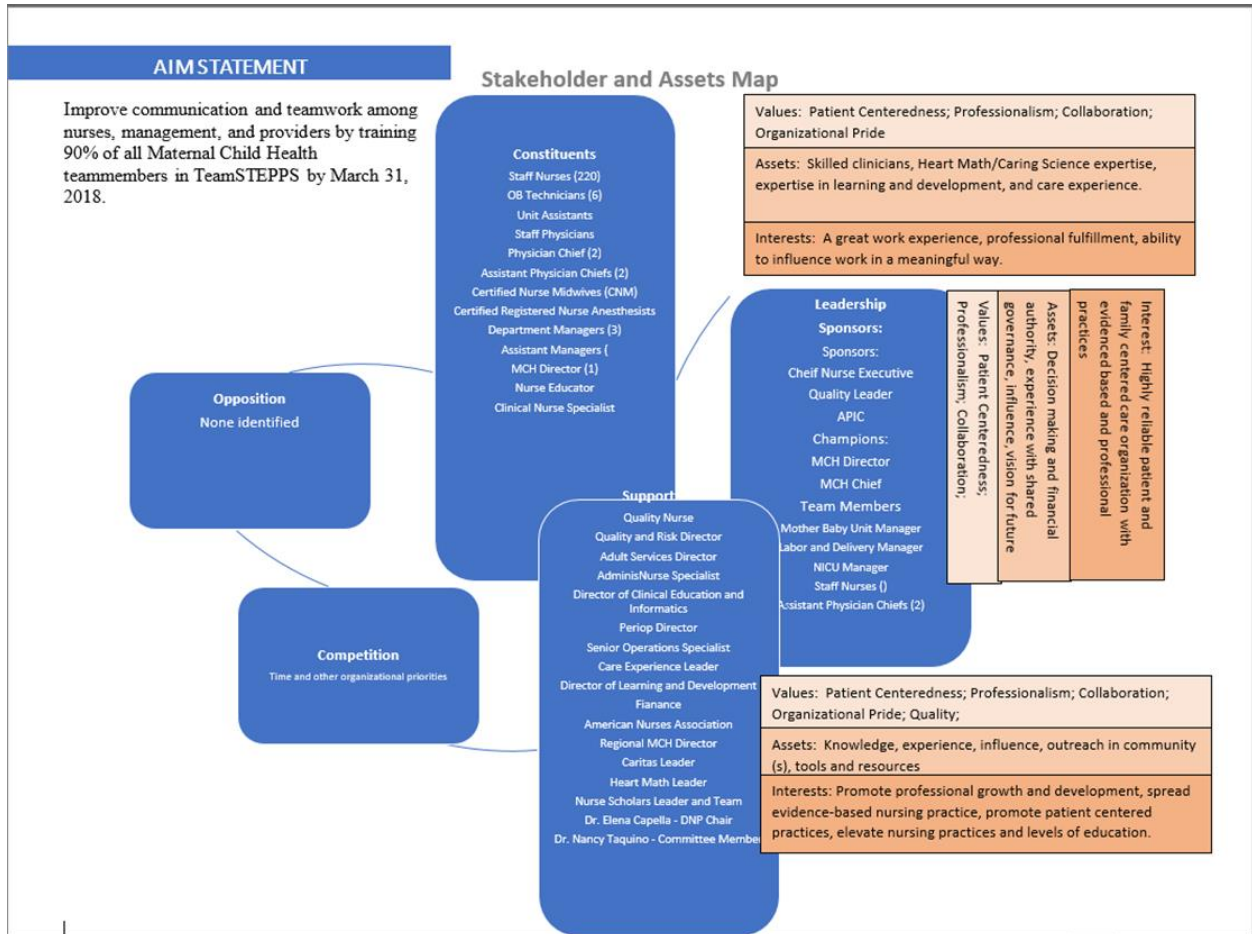
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VII. Appendices

Appendix A. Stakeholders and Assets Map

AIM STATEMENT

Improve communication and teamwork among nurses, management, and providers by training 90% of all Maternal Child Health teammembers in TeamSTEPPS by March 31, 2018.

Stakeholder and Assets Map

Constituents
Staff Nurses (220)
OB Technicians (6)
Unit Assistants
Staff Physicians
Physician Chief (2)
Assistant Physician Chiefs (2)
Certified Nurse Midwives (CNM)
Certified Registered Nurse Anesthesists
Department Managers (3)
Assistant Managers (
MCH Director (1)
Nurse Educator
Clinical Nurse Specialist

Values: Patient Centeredness; Professionalism; Collaboration; Organizational Pride

Assets: Skilled clinicians, Heart Math/Caring Science expertise, expertise in learning and development, and care experience.

Interests: A great work experience, professional fulfillment, ability to influence work in a meaningful way.

Opposition
None identified

Leadership
Sponsors:
Sponsors:
Cheif Nurse Executive
Quality Leader
APIC
Champions:
MCH Director
MCH Chief
Team Members
Mother Baby Unit Manager
Labor and Delivery Manager
NICU Manager
Staff Nurses ()
Assistant Physician Chiefs (2)

Values: Patient Centeredness; Professionalism; Collaboration;

Assets: Decision making and financial authority, experience with shared governance, influence, vision for future practices

Interest: Highly reliable patient and family centered care organization with evidenced based and professional practices

Competition
Time and other organizational priorities

Support
Quality Nurse
Quality and Risk Director
Adult Services Director
AdminisNurse Specialist
Director of Clinical Education and Informatics
Periop Director
Senior Operations Specialist
Care Experience Leader
Director of Learning and Development
Fianance
American Nurses Association
Regional MCH Director
Caritas Leader
Heart Math Leader
Nurse Scholars Leader and Team
Dr. Elena Capella - DNP Chair
Dr. Nancy Taquino - Committee Member

Values: Patient Centeredness; Professionalism; Collaboration; Organizational Pride; Quality;

Assets: Knowledge, experience, influence, outreach in community (s), tools and resources

Interests: Promote professional growth and development, spread evidence-based nursing practice, promote patient centered practices, elevate nursing practices and levels of education.

Appendix B. TeamSTEPPS Perception Questionnaire Survey Monkey

2016 TeamSTEPPS Teamwork Perceptions Questionnaire

Work Place Information

* 1. What is your job classification?

Other (please specify)

* 2. What department do you work in?

Other (please specify)

* 3. What facility do you work in?

Other (please specify)

2016 TeamSTEPPS Teamwork Perceptions Questionnaire

Team Structure

* 4. The skills of the staff overlap sufficiently so that work can be shared when necessary.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 5. Staff are held accountable for their actions.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 6. Staff/Providers within my unit/department I work in share information that enables timely decisionmaking by the direct patient care team.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 7. My unit/department makes efficient use of resources (e.g., staff, supplies, equipment, information).

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 8. Staff/Providers understand their roles and responsibilities.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 9. My unit/department I work in clearly understand their roles and responsibilities.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 10. My unit/department I work in has clearly articulated goals.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 11. My unit/department I work in operates at a high level of efficiency.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

2016 TeamSTEPPS Teamwork Perceptions Questionnaire

Leadership

* 12. My supervisor/manager/chief considers staff/providers input when making decisions about patient care.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 13. My supervisor/manager/chief provides opportunities to discuss (debrief) our unit's/department's performance after an event.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 14. My supervisor/manager/chief takes time to meet with staff/providers to develop a plan for patient care.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 15. My supervisor/manager/chief ensures that adequate resources (e.g., staff, supplies, equipment, information) are available.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 16. My supervisor/manager/chief models appropriate team behavior.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 17. My supervisor/manager/chief ensures that staff/providers are aware of any situations or changes that may affect patient care.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

2016 TeamSTEPPS Teamwork Perceptions Questionnaire

Situation Monitoring

* 18. Staff/Providers effectively anticipate each other's needs.

   ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

19. Staff/Providers monitor each other's performance.

   ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

20. Staff/Providers exchange relevant information as it becomes available.

   ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

21. Staff/Providers continuously scan the environment for important information.

   ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

* 22. Staff/Providers share information regarding potential complications (e.g., patient changes, bed availability).

   ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

* 23. Staff/Providers meets to reevaluate patient care goals when aspects of the situation have changed.

   ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

* 24. Staff/Providers correct each other's mistakes to ensure that procedures are followed properly.

   ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

2016 TeamSTEPPS Teamwork Perceptions Questionnaire

Mutual Support

* 25. Staff/Providers assist fellow staff during high workload.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 26. Staff/Providers request assistance from fellow staff when they feel overwhelmed.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 27. Staff/Providers caution each other about potentially dangerous situations or conditions.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 28. Feedback between staff/providers is delivered in a way that promotes positive interactions and future change.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 29. Staff advocate for patients even when their opinion conflicts with that of a senior member of the unit/department.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 30. When staff/providers have a concern about patient safety, they challenge others until they are sure the concern has been heard.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

* 31. Staff/Providers resolve their conflicts, even when the conflicts have become personal.

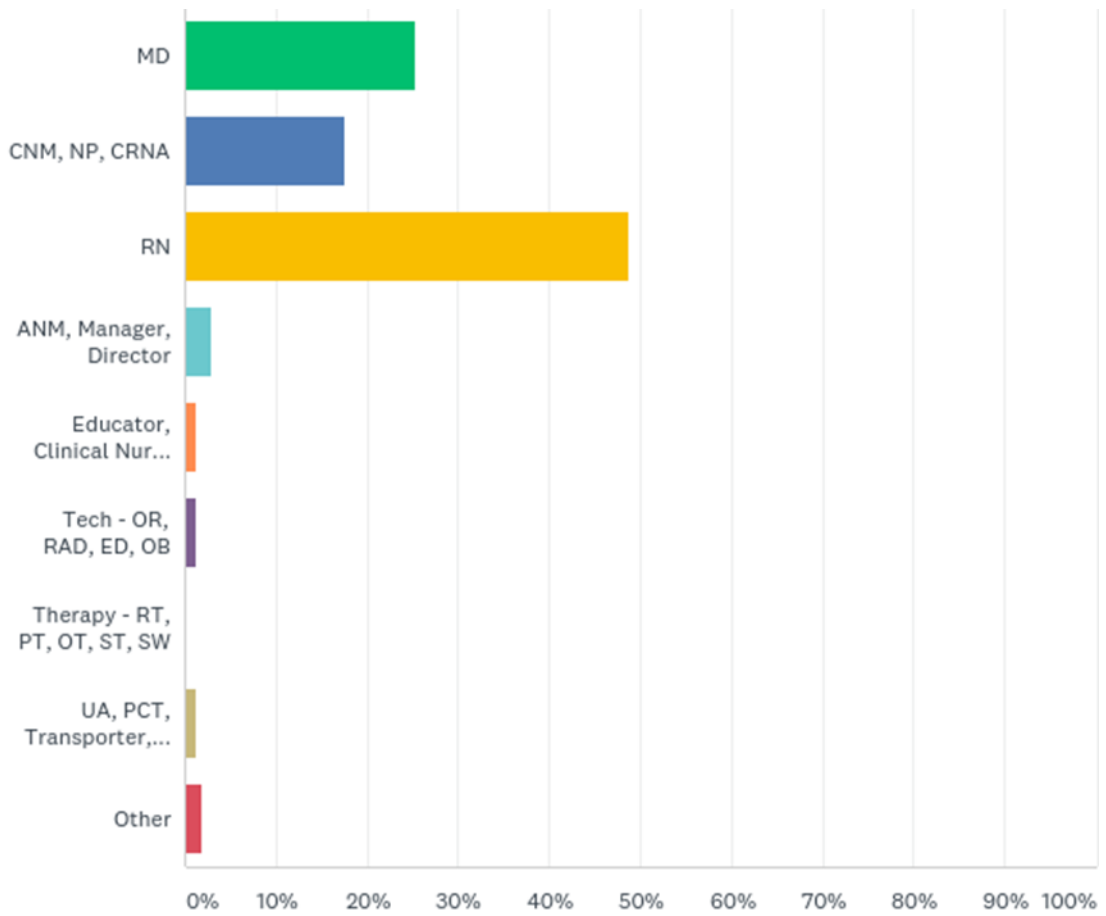○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

2016 TeamSTEPPS Teamwork Perceptions Questionnaire

Communication

* 32. Information regarding patient care is explained to patients and their families in lay terms.

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

* 33. Staff/Providers relay relevant information in a timely manner.

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

* 34. When communicating with patients, staff/providers allow enough time for questions.

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

* 35. Staff/Providers use common terminology when communicating with each other.

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

* 36. Staff/Providers verbally verify information that they recieve from one another.

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

* 37. Staff/Providers follow a standardized method of sharing information when handing off patients.

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

* 38. Staff/Providers seek information from all available sources.

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

2016 TeamSTEPPS Teamwork Perceptions Questionnaire

Comments

39. What is one thing you would want done differently to improve teamwork or communications?

Appendix C. Target Team by Role

TARGET TEAM MEMBERS FOR TEAMSTEPPS TRAINING

NICU PHYSICIANS 6%
OB PHYSICIANS 9%
MIDWIVES 5%
ANESTHESIA 6%
L&D RN 23%
OBTech 2%
Hearing Screeners 1%
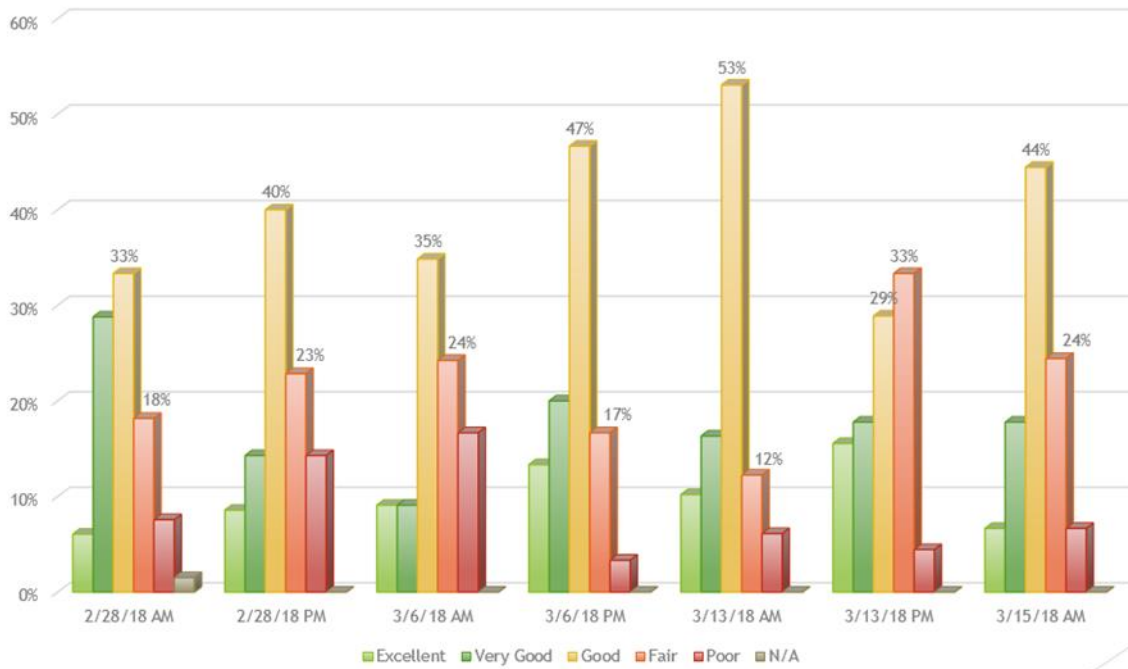MB RN 19%
NICU RN 23%
Lactation 2%
Unit Assistants 4%

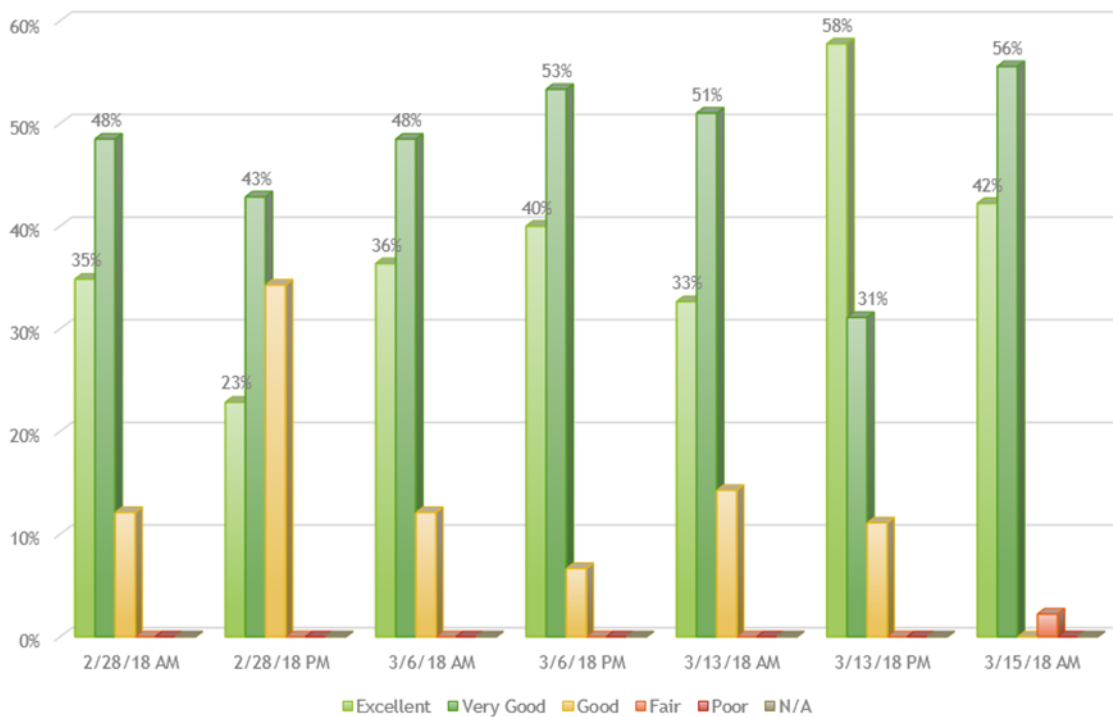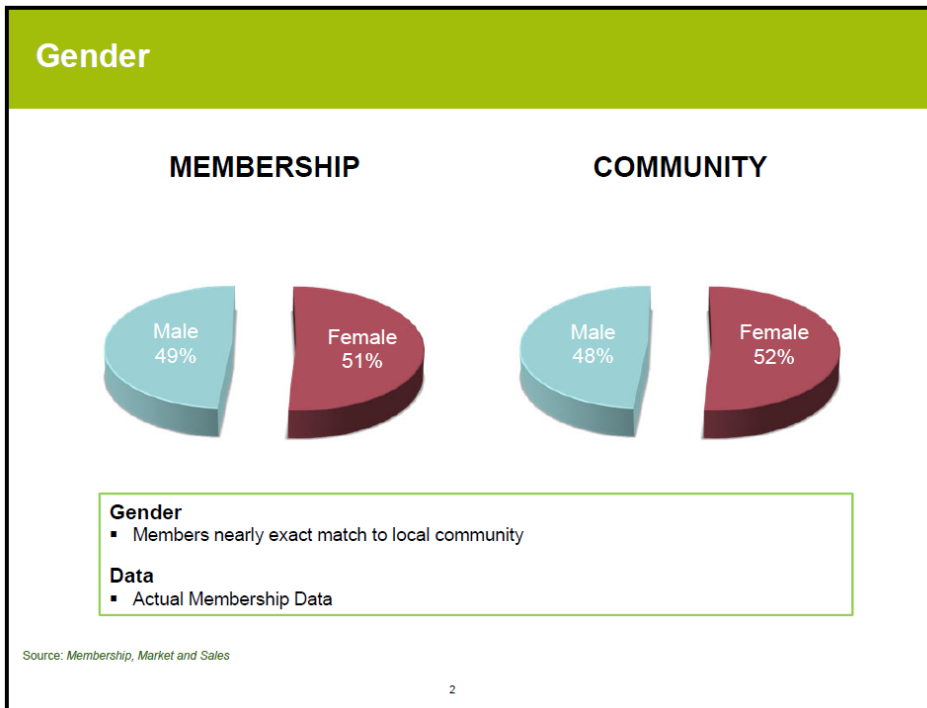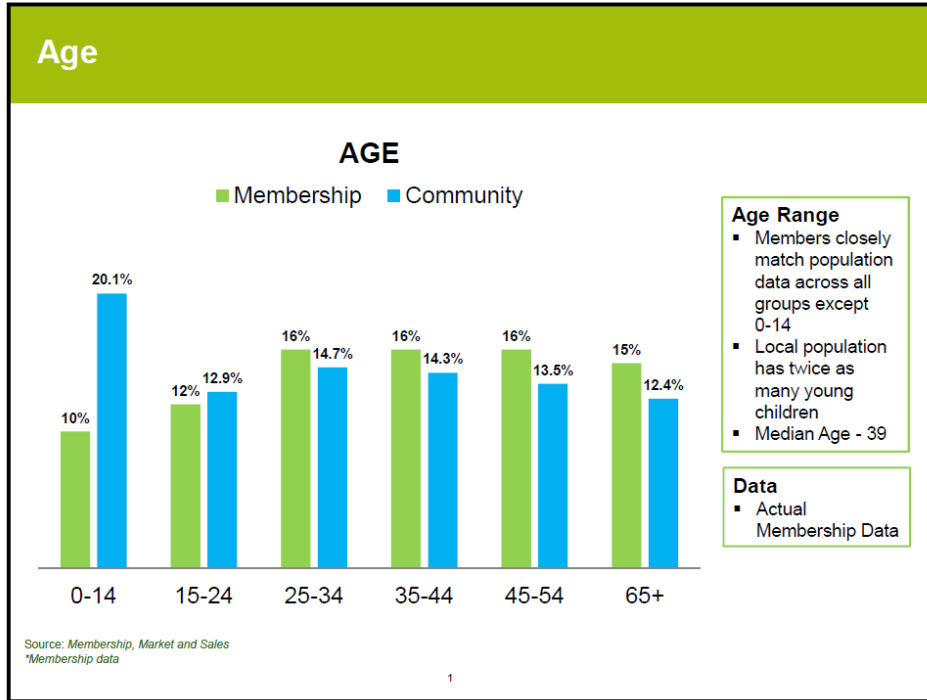Appendix D. Survey Participants by Role

Appendix E. Post-Training Knowledge Data
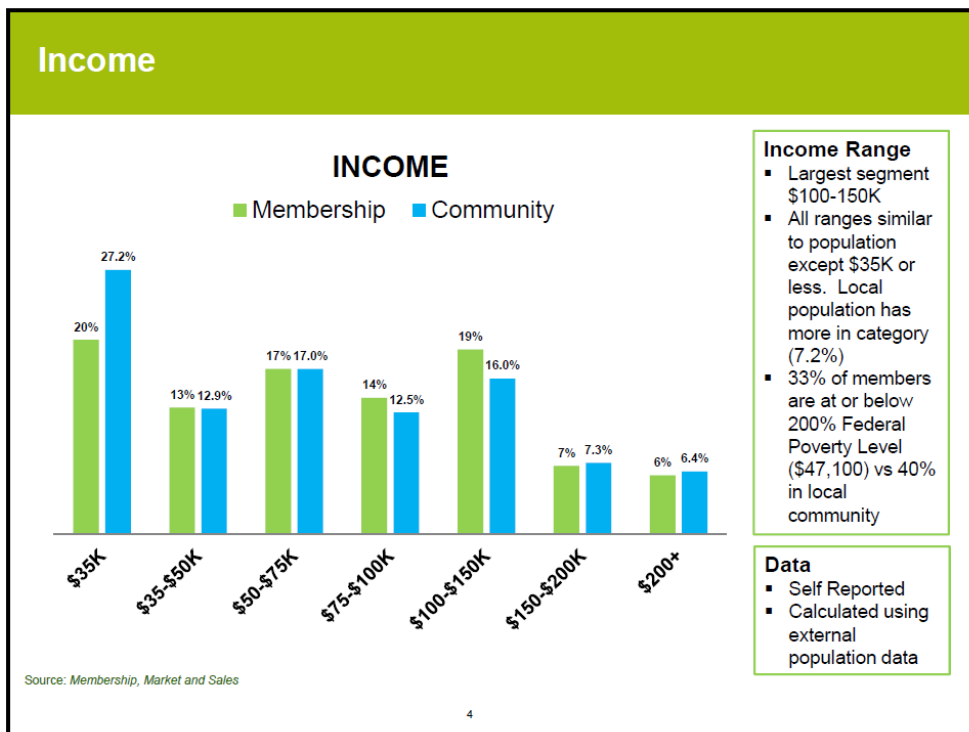
Before this Presentation My Knowledge of this Subject Was:

After this Program My Knowledge of this Subject is:

Appendix F. Membership and Community Demographics

Ethnicity

Membership **Community**

White: 27% / 19.60%
Black: 11% / 13.00%
Hispanic: 30% / 35.90%
Asian/Pacific Islander: 31% / 25.70%
Other: 1% / 1.40%

Race
- Largest segments:
  - Asian (31%)
  - Hispanic (30%)
  - White (27%)
  - Black (11%)
- Slightly higher reported White and Asian but fewer reported Hispanic compared to local population

Data
- Self Reported

Source: Membership, Market and Sales
*Self-Reported

3

Income

INCOME

Membership **Community**

$35K: 20% / 27.2%
$35-$50K: 13% / 12.9%
$50-$75K: 17% / 17.0%
$75-$100K: 14% / 12.5%
$100-$150K: 19% / 16.0%
$150-$200K: 7% / 7.3%
$200+: 6% / 6.4%

Income Range
- Largest segment $100-150K
- All ranges similar to population except $35K or less. Local population has more in category (7.2%)
- 33% of members are at or below 200% Federal Poverty Level ($47,100) vs 40% in local community

Data
- Self Reported
- Calculated using external population data

Source: Membership, Market and Sales

4

Appendix G. People Pulse Data 2014 – 2017

MY DEPARTMENT OR WORK UNIT OPERATES EFFECTIVELY AS A TEAM.

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

2014   2015   2016   2017

I HAVE ENOUGH TO SAY ABOUT HOW I DO MY JOB

74%
73%
72%
71%
70%
69%
68%
67%

2014   2015   2016   2017

Appendix H. Systematic Evidence Review Table

STUDY	DESIGN	SAMPLE/ SETTING	OUTCOME	APPRAISAL OF EVIDENCE
Newman, K.P. 2011. Transforming organizational culture through shared governance	Single-hospital implementation and outcome description	519 bed hospital in Kentucky	Shared governance improved performance, staff engagement, obtained Magnet status	John's Hopkin's Non-Evidence Appraisal Tool: Level V B
Overcast, J., Petty, L.J., Brown, S. 2012 Perceptions of shared governance among nurses at a midwestern hospital.	Prospective, cross sectional Instrument used Index of Professional Nursing Governance (IPNG)	100 nurses in one hospital; each shift was visited no exclusions	Nurses who have active role in SG score higher on IPNG. Appears engagement is higher when RNs are more involved directly.	John's Hopkin's Non-Research Evidence Appraisal Tool: Level V B
Siller, J., Dolansky, M.A., Clavelle, J.T., Fitzpatrick, J.J. 2016. Shared governance and work engagement in emergency nurses	Descriptive, correlation design	43 emergency nurses recruited on Emergency Nurses Association website	Significant positive relationship between shared governance and work engagement	John's Hopkin's Non-Research Evidence Tool: Level V B
Keyko, K., Cummings, G.G., Yonge, O., Wong, C.A. 2016 Work engagement in professional nursing	Systematic review Yield 3621 titles & abstracts screened 113 Full text reviews 18 included	1 Qualitative study 2 mixed methods 15 quantitative studies	Many factors influence work engagement: NDj-R is good model for evaluating: more study warranted	John's Hopkin's Research Evidence Appraisal Tool: Level III B

practice: A systematic review				
Clavelle, J.T, Weston, M.J., Porter-O'Grady, T., Verran, J.A. 2016. Evolution of structural empowerment moving from shared to professional governance.	Conducted concept analysis of structural empowerment (SE)and shared governance (SG) Deductive lit review over 10 years. Concept clarification worksheets & matrix tables used	Reviewed SG evolution and concepts and attributes of PG	Concepts of PG demo evolved framework 4 key attributes of PG Accountability Professional Obligation Collateral relationships Decision Making	John's Hopkin's Non-Research Evidence Appraisal Tool: Level V B
Gerard, S., Owens, D., Oliver, P. 2016. Nurse perceptions of shared decision-making processes. Quantifying a shared governance culture.	Single-hospital non-human research study employed the Decisional Involvement Scale (DIS) utilized convenience sample	476-bed community hospital where SG had was in place 10 years.	SG requires continuous improvement to maintain and continue success.	Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool: Level III A
Hastings, S.E., Armitage, G.D., Mallison, S., Jackson, K., Suter, E. 2014. Exploring the relationship between governance mechanisms in healthcare and health workforce outcomes: a systemic review.	Systemic Review	Included peer reviewed papers and grey literature. 2 reviewers independently reviewed with 113 retained for study.	Shared governance along with Magnet accreditation, and professional development focus demonstrated improved outcomes for workforce. Training on quality initiatives when implementing a new	Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool: Level III B

			initiative was associated with more better outcomes and more positive response from providers	
Dempsey, C., Reilly, B.A., 2016. Nurse engagement: What are the contributing factors for success?	Literature review	NA	Nurse engagement has a critical impact on quality, safety, patient outcomes, and patient experience making nurse engagement a critical focus for leaders in healthcare.	Johns Hopkins Nursing Evidence-Based Practice Non-Research Evidence Appraisal Tool: Level V A
Kutney-Lee, A., Germack, H., Hatfield, L. et al 2016. Nurse engagement in shared governance and patient and nurse outcomes.	Large cross-sectional study utilizing secondary data	20,674 nurses in 425 hospitals in for states in the U.S.	Limitations to demonstrating a causal relationship between nurse engagement and patient outcomes authors suggest SG can be a strong strategy to impact nurse satisfaction and influence patient satisfaction and other publicly reported outcomes.	Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool: Level III A
Jacobs D., Ward CW. 2012. Empowering frontline nurses to	Implementation description	Single hospital on Magnet journey	Initiated a successful implementation of SG by beginning with a appreciative inquiry	Johns Hopkins Nursing Evidence-Based Practice

			approach, avoiding top-down tactics. Resulted in positive outcomes for staff and patients.	Non-Research Evidence Appraisal Tool: Level V B
Orr, P., Davenport, D. 2015. Embracing change.	Literature Review	NA	Discussion of implementation of change in nursing in alignment with IOM and ACA and supporting theoretical models	Johns Hopkins Nursing Evidence-Based Practice Non-Research Evidence Appraisal Tool: Level V A
Castner, J., Foltz-Ramos, K., Schwartz, D.G., Cervavolo, D.J., 2012. A leadership challenge staff **nurse** perceptions after an organizational TeamSTEPPS initiative.	Cross-sectional study	A 5-hospital healthcare organization	The study was intended to measure nurse perceptions of teamwork skills and behaviors at work while the organization engaged in an implementation of a teamwork development program.	Johns Hopkins Nursing Evidence Based Practice Research Evidence Appraisal Tool: Level III B
Thomas, L., Galla, C. 2012. Building a culture of safety through team training and engagement.	Organizational Experience, Program Evaluation	Large multi-hospital system including long-term care facilities serving.	One organization's journey to assure success in implementing and sustaining TeamSTEPPS across the organization. More than 30,000	Johns Hopkins Nursing Evidence Based Practice Non-Research Evidence Appraisal Tool: Level V A

			team members trained.	
Dent, B., Tye, J. 2016. Creating a positive culture of ownership.	Organizational experience		Authors discussed literature and data from American Nurses Association (15 hospitals) with supporting evidence that negative cultures within many healthcare organizations is a crisis in healthcare and what one organization did to create and maintain a positive culture.	Johns Hopkins Nursing Evidence Based Practice Non-Research Evidence Appraisal Tool: Level V A
Clapper, T.C., Ng, G.M. 2013. Why your TeamSTEPPS may not be working	Literature review		Evaluation of barriers and factors that may negatively impact implementation and sustainability of TeamSTEPPS	Johns Hopkins Nursing Evidence Based Practice Non-Research Evidence Appraisal Tool: Level V A

Appendix I. RN Engagement

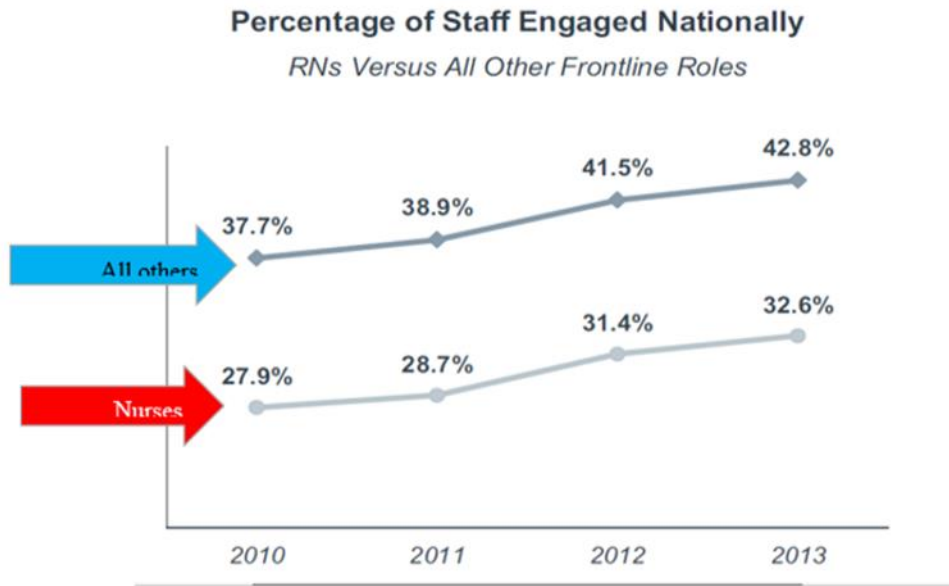Figure 1. RN Engagement vs All Other Frontline Roles.

Percentage of Staff Engaged Nationally
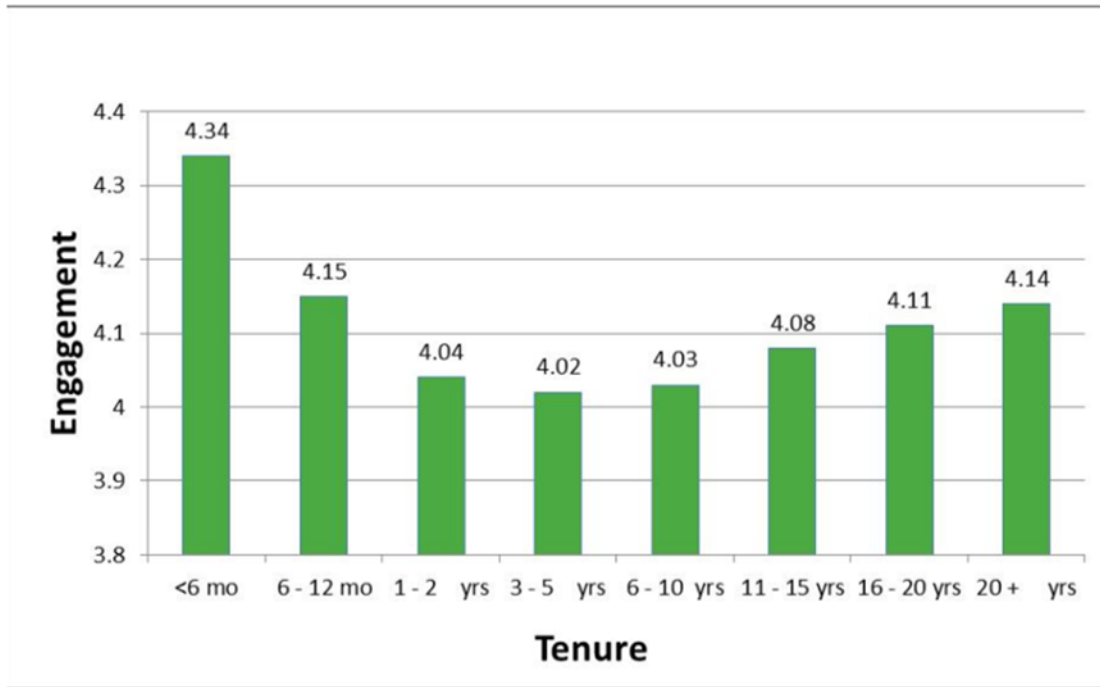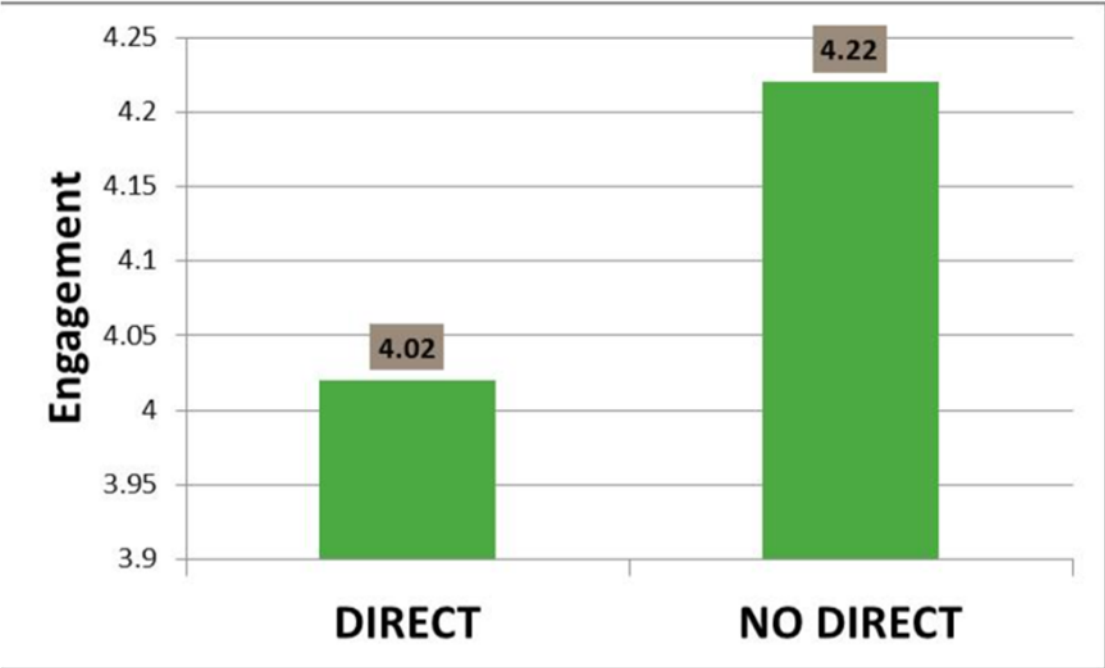
RNs Versus All Other Frontline Roles

Figure 1. Advisory Board 2013.

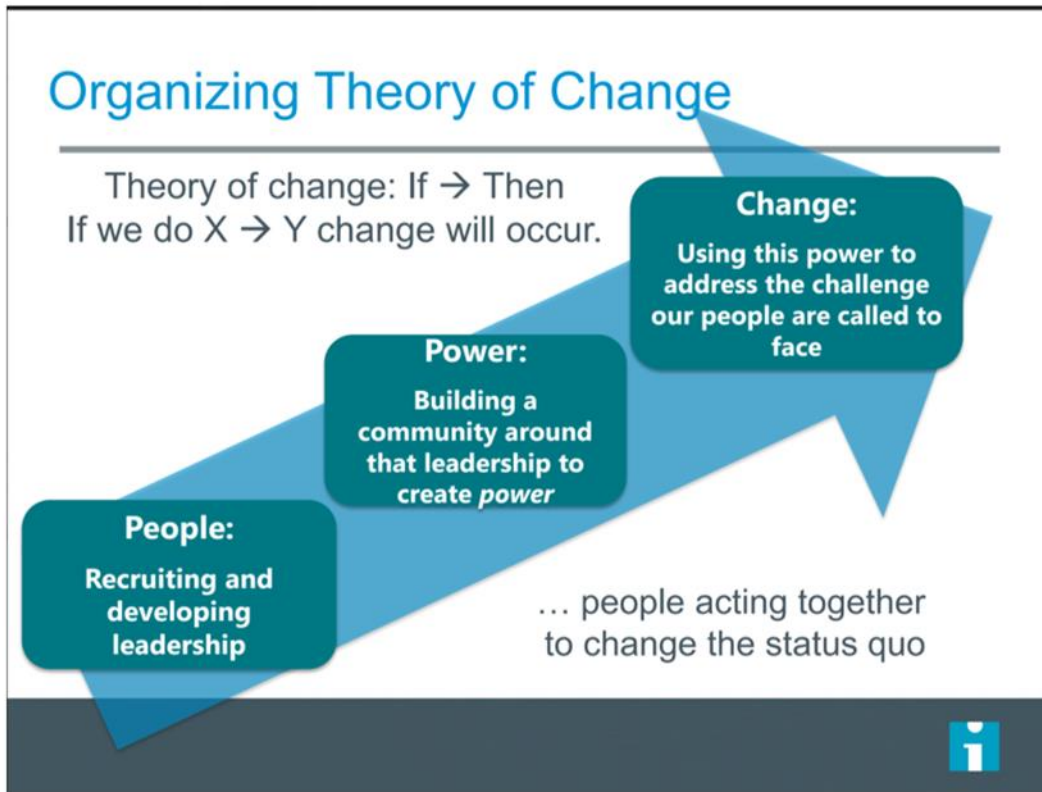Appendix J. RN Engagement by Years in Position

Dempsey & Reilly (2016).

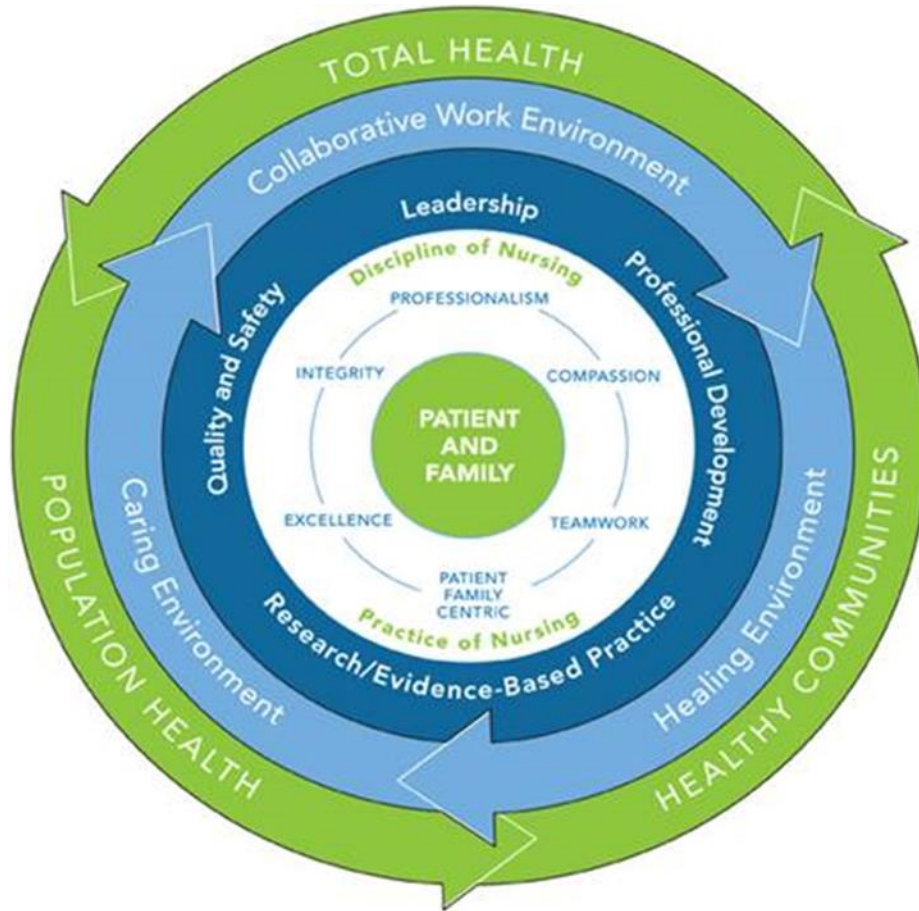Appendix K. RN Engagement – Direct Care and No Direct Care

Dempsey & Reilly (2016).

Appendix L. Organizing Theory of Change Model

Institute of Healthcare Improvement Model

Appendix M. Voice of Nursing Professional Practice Model

Appendix N. How to Design and Deliver TeamSTEPPS Toolkit

DESIGN AND DELIVER TeamSTEPPS

Genevieve Wright DNP, MHCA, RN, NEA-BC

Phone: 925-895-8104
E-mail: gawright@usfca.edu

Genevieve Wright DNP, MHCA, RN, NEA-BC

Designing the Training

With the team established and analysis of the T-TPQ results completed the time is right curriculum development and logistics planning. Logistics may include a timeline for the design and training, a communication plan; establishing and securing an appropriate location for training, materials and equipment needs, scheduling for participants and trainers, seating plans can be effective to assure diverse membership for team interaction. Other logistics might include sign-in sheets, name tags, food and beverage, participant giveaways, t-shirts for design and delivery team; again brainstorming can be helpful to address all logistics necessary to provide a well-organized and effective training. *Recommend creating a team theme to create ownership and connection, and add a little fun.*

Base the curriculum on the T-TPQ results and design for this specific team and the desired duration of training (2 hr, 4hr, 6hr etc.) Recommend building in fun and interactive events, utilize mixed-training techniques (lecture, videos, discussion, team games, story telling) to maintain participant interest and engagement. Developing module teams will help design multiple modules concurrently, and will serve to develop module champions and subject experts for sustainment projects later.

Once modules and training materials are completed plan in time to rehearse and make adjustments prior to the first training.

Delivering the Training

A well-designed curriculum and a detailed logistics plan will make all the difference in the success of TeamSTEPPS training.

Plan to have the training team arrive early to assure that the space is set up as planned, technology is working, materials and other resources are present, plan for participant flow works in the space, food has arrived, and be prepared to make adjustments as needed. *Recommend a centering moment for the training team before the doors open.*

During the training don't hesitate to make adjustments in real time to accommodate unplanned issues that arise. Take time after every training session to debrief the team and make improvements to the training that are identified. Be sure to have a participant evaluation for each training.

Sustainability Plan

Training is done, but that is just the beginning. Within 1 week of training completion it is critical to keep momentum high. Be sure TeamSTEPPS is visually present in the department. Choose a module or a couple tools to focus on every one to two months. Steering Team should be meeting monthly with an established charter. *Recommend to build into the department governance structure.*

2

Two-Challenge Rule

Brief
CHECKLIST

Conflict Resolution

It is your responsibility to assertively voice your concern at least two times to ensure it has been heard.

Debrief
CHECKLIST

DESC Script

Huddle

SBAR

STEP

TeamSTEPPS

3

How To Design and Deliver TeamSTEPPS Training

Tools and Strategies to Enhance Team Performance and Patient Safety (TeamSTEPPS) designed by the Agency for Healthcare Research and Quality (AHRQ) and the Department of Defense (DOD) with an aim to help healthcare organizations and teams improve team communication and teamwork to positively effect patient safety.

This toolkit provides guidance to help teams design and deliver individualized TeamSTEPPS training. This toolkit assumes an assessment of the team's readiness for TeamSTEPPS has been completed and the team is ready to embark on the TeamSTEPPS journey.

4

Steps to Design and Deliver TeamSTEPPS Training

Leadership Support

Leadership support is critical to before and after implementation TeamSTEPPS. The training lays the foundation, what comes determines the degree to which this intervention transforms the culture and the team.

Proof of Concept

The proof of concept provides the key components to present to the leadership to engage and garner support for the project. Different tools can be used to present the proof of concept and many organizations have tools that must be used. If not, the Institute for Healthcare Improvement (IHI) is a good source.

Elements to include in proof of concept:

- Goal or Aim Statement including what are you trying accomplish, why, by when, and how will you know you were successful? A compelling value add goal is a must.

- Stakeholders are a critical element any project. Who are they and how will they be engage in the process? Frontline stakeholders are essential members of the design and delivery team.

- Money matters; a detailed and realistic projected budget including return on investment (ROI) should be included in the proof of concept. budget, expected return on investment (ROI)

Getting Started

Developing the design and delivery team can be done at same time the TeamSTEPPS Team Perception Questionnaire (T-TPQ) survey is being conducted. The T-TPQ will help the design team determine what TeamSTEPPS modules and tools will most benefit the team. The design and delivery team should include representative stakeholders from all disciplines within the team or department and ancillary support teams. For example in a Labor and Delivery unit you may want nurses, support staff, providers (OB, Anesthesia, Neonatal), management, educators, leadership, quality, services that provide care within the department but not part of might be hospital supervisor, lab, OR, or ICU, and project consultant. Brainstorming and casting a broad net is helpful in this stage; you can always decide to decrease as the project moves forward.

TeamSTEPPS

AHRQ, 2016.

Appendix O. TeamSTEPPS Design and Implementation

Appendix P. TeamSTEPPS Model

Agency for Healthcare Research and Quality

Appendix Q. Gap Analysis

Appendix R. Gantt Chart

ELDNP Project Gantt Chart

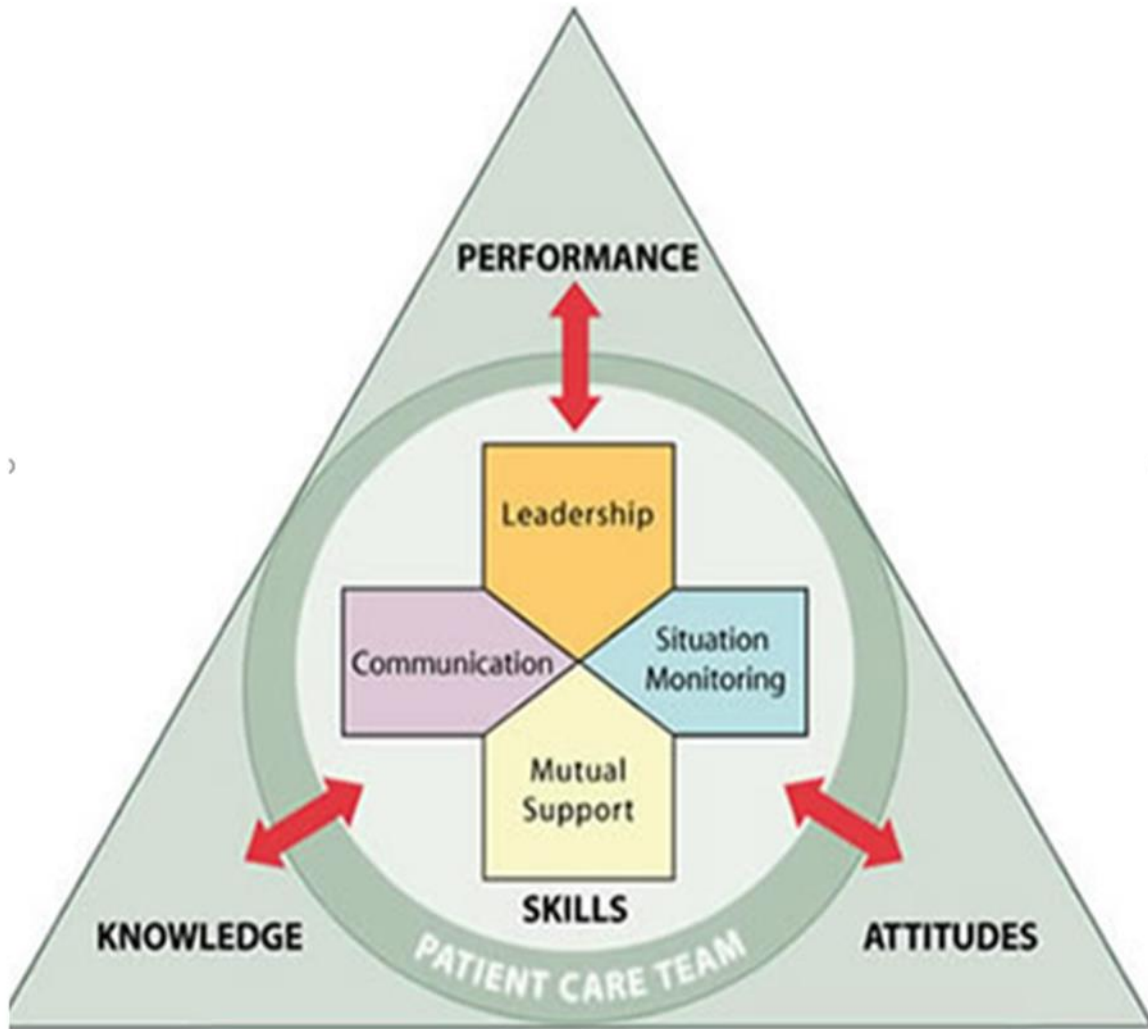| Activity/Task	2017 Dec	2018 Jan	2018 Feb	2018 Mar	2018 Apr	2018 May	2018 Jun	2018 Jul	2018 Aug	2018 Sept	2018 Oct	2018 Nov	2018 Dec
Implementation Phase				Begin				End					
Recieve People Pulse (PP) Baseline Data	4												
Review PP scores and analytics			28										
Share and Understand Data (Teams)				28									
Teams determine focus area				28									
Develop Governance Structure			28										
TeamSTEPPS Training													
TeamSTEPPS Training Design		Begin 24	26										
TeamSTEPPS Training			28	16									
Approval of Governance Structure				23									
Develop Charter Templates				31									
Develop Staff Interest Applications				30									
Communication w/stakeholders			Ongoing	Ongoing	Ongoing	Ongoing	Ongoing						
Revise SOD and Prospectus													
Begin Evaluation Period													
Post Implentation Survey													
Begin Final Project Paper								21					
Focus on Final Paper													
Final Paper Due													?
Graduate Presentations													13
Graduation													14

Appendix S. SWOT Analysis

SWOT ANALYSIS

Project:TeamSTEPPS Laying the Foundation for Shared Governance

S **Strengths**
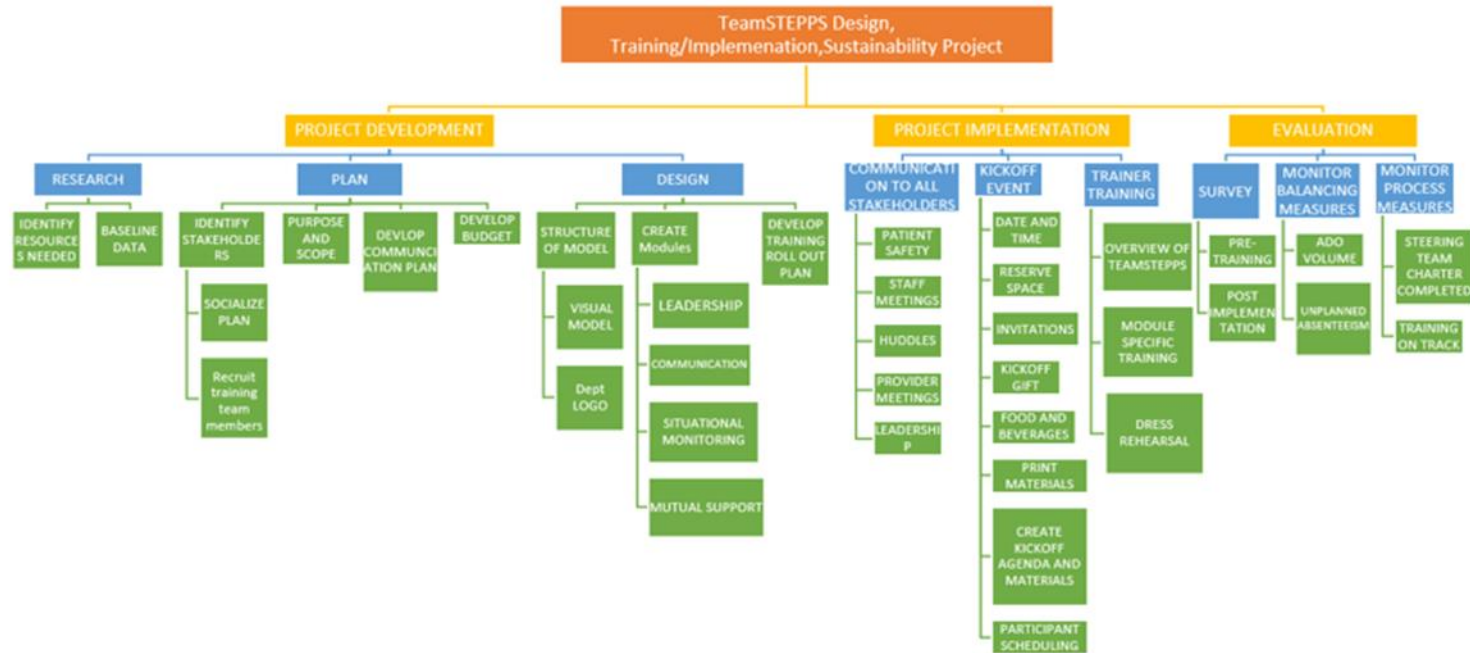- •Membership with Agency for Healthcare Research and Quality
- •Organizational and Leadership support
- •Alignment of nursing and provider leadership
- •Voice of Nursing has been introduced
- •Some TeamSTEPPS master trainers on staff
- •Availability of resources and information i.e. ANCC Magnet Program, literature
- •Hired to core RN staff needs = people to do the work
- •Commitment to support from Quality and Risk
- •Voice of Nursing – professional practice model
- •Complelling business case

W **Weaknesses**
Assistant Manager are key supports and leaders and are the resource underhired
- •Require change of thinking
- •Culture is tough to change,"Culture eats strategy everyday"
- •Staff have limited literacy in
  - • Professional evidence informed practice
  - • Research skills
  - • Quality and Safety training
- •Assuring adequate funding to support change
- •Requires strong commitment to sustain
- •Resistance from stakeholders

O **Opportunities**
- •Improve communication and collaboration with external stakeholders (TCJ, AHRQ, DPH0)
- •Leverage TeamSTEPPS and ANCC Magnet Resources
- •Engage subject matter experts from other organizations

T **Threats**
- •Fear of external reporting of harm events
- •Threats to reputation posted on social media
- •California Nurses Association Bargaining Unit Agreement limitations on scope

Appendix T. Work Breakdown Structure

Appendix U. Budget / Return on Investment

TeamSTEPPS Implementation Budget

	PROJECT TASKS	LABOR HOURS	LABOR COST/HR	TRAVEL COST ($)	OTHER COST ($)	TOTAL PER TASK
PRE-TRAINING EXPENSES	Gain Necessary Approvals	10.0	$0.00	$0.00	$0.00	$0.00
	Complete Research Analysis	40.0	$0.00	$0.00	$0.00	$0.00
	Develop Preliminary Design Specification	20.0	$86.02	$0.00	$0.00	$1,720.40
	Develop Detailed Design Specifications	80.0	$86.02	$0.00	$0.00	$6,881.60
	Venue and Catering Planning	10.0	$45.00	$0.00	$0.00	$450.00
	Venue Decorations	0.0	$0.00	$0.00	$250.00	$250.00
	Printed Materials	0.0	$0.00	$0.00	$200.00	$200.00
	TeamSTEPPS Pocket Guides	0.0	$0.00	$0.00	$1,062.50	$1,062.50
	Trainer T-Shirts	0.0	$0.00	$0.00	$1,329.71	$1,329.71
	Subtotal	**160.0**		**$0.00**	**$2,842.21**	**$11,894.21**
IMPLEMENTATION	Presenters and Support Staff	244.0	$86.02	$0.00	$0.00	$20,988.88
	Staff Training	1,316.0	$86.02	$0.00	$0.00	$113,202.32
	Venue Rental	0.0	$0.00	$0.00	$4,800.00	$4,800.00
	Food	0.0	$0.00	$0.00	$5,860.49	$5,860.49
	Misc. Cost item	0.0	$0.00	$0.00	$0.00	$0.00
	Subtotal	**1,560.0**		**$0.00**	**$10,660.49**	**$144,851.69**
POST-TRAING EXPENSES	Training Debriefs	20.0	$86.02	$0.00	$0.00	$1,720.40
	Steering Committee Meetings	12.0	$86.02	$0.00	$10.00	$1,042.24
	Final Report Submitted to Board	30.0	$80.00	$0.00	$50.00	$2,450.00
	Presentation of Findings	4.0	$80.00	$100.00	$50.00	$470.00
	Subtotal	**66.0**		**$100.00**	**$110.00**	**$5,682.64**
	Subtotals	**1786.0**	**$80.00**	**$100.00**	**$13,612.70**	**$162,428.54**
	Total (Scheduled)	**1786.0**	**$80.00**	**$100.00**	**$13,612.70**	**$162,428.54**

Appendix V. Cost Avoidance

COST AVOIDANCE	
Newborn Birth Injuries	1.6/1000
Newborn Discharges	3750
Maternal Birth Trauma	3.9 - 160.6/1000
Maternal Discharges	3700
Average settlement for severe birth injury	$1,700,000.00
Potential cost avoidance based on newborn discharges	$10,200,000.00

Appendix W. Responsibility / Communication Matrix

PROJECT DEVELOPMENT					
RESEARCH	**WHO**	**PLAN**	**WHO**	**DESIGN**	**WHO**
TeamSTEPPS LITERATURE SEARCH	RN DIRECTOR	IDENTIFY STAKEHOLDERS	RN DIRECTOR MD CHIEF RISK CONSULTANT	TRAINING PLAN	RN DIRECTOR MD CHIEF
PRE-SURVEY (TeamSTEPPS TEAMWORK PERCEPTIONS QUESTIONNAIRE)	RN DIRECTOR MD LEAD	CONCEPT DEVELOPMENT - PROJECT PURPOSE AND SCOPE	RN DIRECTOR MD LEAD RISK CONSULTANT	ADOPT VISUAL MODEL (AHRQ)	DESIGN TEAM
		COMMUNICATION PLAN	RN DIRECTOR MD CHIEF	ADOPT SURVEY TOOL (AHRQ)	RN DIRECTOR MD CHIEF RISK CONSULTANT
		RECRUIT DESIGN TEAM	RN DIRECTOR MD CHIEF CLINICAL NURSE EDUCATOR	TRAINING MODULE DEVELOPMENT	DESIGN TEAM
		DEVELOP DEPLOYMENT PLAN	DESIGN TEAM	DEPARTMENT SPECIFIC LOGO	CLINICAL NURSE EDUCATOR
		BUDGET	RN DIRECTOR MD CHIEF SENIOR LEADERSHIP BUSINESS, STRATEGY, AND FINANCE DEPARTMENT	POWER POINT MATERIALS FOR TRAINING	CLINICAL NURSE EDUCATOR DESIGN TEAM
PROJECT IMPLEMENTATION AND SUSTAINABILITY PLAN					
COMMUNICATION	**WHO**	**KICK-OFF/TRAINING**	**WHO**	**EDUCATION**	**WHO**
W/STAKEHOLDERS	RN DIRECTOR MD CHIEF	DETERMINE DATE(S)	DESIGN TEAM	DESIGN TEAM	RN DIRECTOR MD CHIEF RISK CONSULTANT
W/DESIGN TEAM	RN DIRECTOR MD CHIEF	RESERVE SPACE	ADMIN ASSISTANT	TRAINING MODULES	MASTER TRAINERS MODULE TRAINERS
		PARTICIPANT AND TRAINER SCHEDULING	RN DIRECTOR MD CHIEF CLINICAL EDUCATOR STAFFING OFFICE	FUTURE HIRES	CLINICAL EDUCATION
		FOOD AND BEVERAGE	ADMIN ASSISTANT		
		DESIGN PROMOTION FLYERS	CLINICAL EDUCATOR		
		PRINT MATERIALS	ADMIN ASSISTATN		
		COORDINATION OF TRAINING DAYS	DESIGN TEAM		
SUSTAINABILITY PLAN AND EVALUATION					
SUSTAINABILITY	**WHO**	**MONITORING**	**WHO**	**MONITORING PROCESS MEASURES**	
ONGOING SUSTAINING ACTIVITIES (BI-MONTHLY)	TeamSTEPPS STEERING TEAM	POST IMPLEMENTATION SURVEY	TeamSTEPPS STEERING COMMITTEE RISK CONSULTANT	TS STEERING COMMITTEE CHARTER COMPLETION	RN DIRECTO MD CHIEF
				ADO VOLUME	RN DIRECTOR MANAGERS
				UNPLANNED ABSENTEEISM	RN DIRECTOR
				STAFF TRAINED >90%	RN DIRECTOR MD CHIEF CLINICAL EDUCATOR

GREEN = COMPLETED YELLOW = IN PROGRESS OR ONGOING RED = NOT STARTED

Appendix X. TeamSTEPPS Skills Trained

Appendix Y. Training Participants by Role

Appendix Z. Process Measures

Process Measures	
MEASURE	**STATUS**
Pre- and Post-Training Knowledge Level	Completed
TeamSTEPPS Steering Committee	Completed
T eamSTEPPS Steering Committee Meeting at least bi-monthly	Ongoing
Evidence of Sustaining Activities	Ongoing

Appendix AA. Steering Committee Membership by Role

MATERNAL CHILD HEALTH TeamSTEPPS STEERING COMMITTEE MEMBERSHIP

NICU RN
LABOR AND DELIVERY RN
MOTHER-BABY RN
MOTHER-BABY MANAGER
NICU MANAGER
L&D MANAGER
L&D MD DIRECTOR
OB/GYN CLINIC MD DIRECTOR
CNM CO-CHIEFS
NEONATOLOGIST
ANESTHESIOLOGIST
CRNA
DECEPI (EDUCATION DIRECTOR)
QUALITY DIRECTOR
MCH DIRECTOR
OB CHIEF
REGIONAL CONSULTANT

Appendix BB. TeamSTEPPS Charter

TeamSTEPPS Project Planning Charter

Project Name: MCH TeamSTEPPS Training	**Charter Date:** February 6, 2018
Improvement Advisor: Quality Director	**Champions:** MCH Director, OB Chief, NICU Chief
Project Co- Leads: Clinical Educator and L&D Physician Chief	**Mentors:** Regional Risk and Patient Safety Consultants

Project SMART Goal: Complete TeamSTEPPS training for 95% of MCH providers and staff working in the hospital MCH units in San Leandro by March 31, 2018. Complete projects to embed TeamSTEPPS skills by March 1, 2019.

		Project Team
Problem Statement	Opportunities identified to improve patient safety outcomes related to communication, teamwork and leadership among all providers, staff and management in MCH.	**Senior Leadership Sponsors:** Senior VP & Area Manager, Physician-in-Chief, Chief Nursing Executive
Customer Benefit	Improve safety, quality, and efficiency of patient care using the TeamSTEPPS model and skills for providers, staff and management in MCH.	**Champions:** MCH Director, OB Chief, NICU Chief
Physician and Staff Benefit	Increased MCH providers/staff satisfaction using TeamSTEPPS tools to create shared mental model approach to care and developing a psychological safe environment	**Project Oversight:** MCH TeamSTEPPS Steering Committee
Expected Financial Impact	Potential decrease in staff turnover due to increased job satisfaction. Decrease in potential lawsuits related to adverse events secondary to communication breakdown.	**Frontline:** TeamSTEPPS Master Trainers/Champions
Other Business Benefit	Anticipate increase in patient satisfaction scores and increase in quality and care. Increase in staff satisfaction scores in People Pulse and improvement in TeamSTEPPS perception survey. Decrease in risk involving communication.	

Project Timeline and Key Milestones	**Project Measures**
Identify Problem: January 2018 **Gain Sponsorship:** January 2018 **Create a Steering Committee:** 1/29/2018 **Kick-Off Meeting/ Create Charter:** 2/6/2018	Process Measure: 95% of hospital MCH Providers/Staff will complete TeamSTEPPS Training by March 31, 2018 Outcome Measure: 5% Improvement in TeamSTEPPS perception

Appendix CC. Watson's Caritas Processes

10 Caritas Processes

1. Embrace—altruistic values and practice loving kindness with self and others
2. Inspire—faith and hope and honor others
3. Trust—self and others by nurturing individual beliefs, personal growth and practices
4. Nurture—helping, trusting, caring relationships
5. Forgive—and accept positive and negative feelings–authentically listen to another's story
6. Deepen—scientific problem-solving methods for caring decision making
7. Balance—teaching and learning to address the individual needs, readiness and learning styles
8. Co-create—a healing environment for the physical and spiritual self which respects human dignity
9. Minister—to basic physical, emotional and spiritual human needs.
10. Open—to the mystery and allow miracles to enter

Appendix DD. Statement of Determination

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DNP Statement of Non-Research Determination Form

Student Name: Genevieve Wright

Title of Project: TeamSTEPPS: Laying the Foundation for Shared Governance/Leadership in a High Risk Obstetrical/Neonatal Service Line

Brief Description of Project:

The Institute of Medicine (IOM) released two important reports addressing safety in healthcare and the role of nurses in healthcare. The first, *To Err is Human: Building a Safer Health System*, was released in 1999 addressing the significance of errors in healthcare (Kohn, Corrigan, & Donaldson, 1999). In 2011 the IOM sounded a call to action in the *Future of Nursing* report. Nurses were called upon to take a greater role in reshaping healthcare in the United States. To do so the report laid out four critical areas for nurses:

- Nurses should practice to the full extent of their education and training.
- Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
- Nurses should be full partners, with physicians and other health professionals, in redesigning health care in the United States.
- Effective workforce planning and policy making require better data collection and an improved information infrastructure. (p. 29)

Realizing these goals requires registered nurses to be leaders in their professional practice and to have a shared voice in leadership in the work environment, the community, and nationally. Shared governance leadership models provide structure for the development of accountability for professional nursing practice and the role of nursing in the safety of healthcare. In this model, nurse have an active voice in decisions determining their practice. Traditional top-down management models do not engage the nurse, but rather tell the nurse, contributing to dissatisfaction in the workplace, and a lower level of engagement among nurses. As such, traditional management models lack the framework to successfully achieve the goals of the *Future of Nursing* report. Shared governance models have demonstrated success in improving and sustaining nurse engagement in healthcare settings across the United States.

Shared governance requires a different structure that encompasses practice, policies, education and development, and promotion of every nurse as a leader. "How do we move from the traditional management model to a shared governance model?" "Is the team ready?" "What else might be needed before implementing shared governance councils?" These were important questions in preparing for this project and they revealed the need for more foundational culture

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work with the team before shared governance could be effectively initiated in the project setting.

TeamSTEPPS (Team Strategies Techniques The primary domains included in this project include evidence-informed practice, leadership, professional development, quality and safety, and relationship with self and others. Jean Watson's Caritas Processes will help to inform this work.

B) **Aim Statement:** The aim of this project is to implement a shared governance model to engage nurses in the Maternal Child Health department in their professional practice, and build a culture of collaboration between staff nurses and management. The result of sucessful implementation of a shared governance model will be improved nurse engagement as evidenced by a 5% improvement in responses to each of the four People Pulse questions selected for this project. (See E below)

C) **Description of Intervention:** Shared governance models utilize a structure of councils comprised of staff nurses and management. The councils will be charged with the responsibility to address professional nursing practice, policy, education and development, and recognition. Using a conceptual framework comprised of Organizing as a Change Theory, Caring Science, and the organization's professional practice model will design, develop and implement a council structure for the maternal child service line. The structure will include unit based councils for each nursing unit, and a service line council including membership from each unit council.

The proposed model for this project includes four councils. Each unit will have a council called a Caritas Voice of Nursing Circle. Each will be composed of seven delegates including five staff nurses, one assistant manager, and the department manager. The Caritas Voice of Nursing Joining Circle will have ten members including one staff nurse, and one management delegate from each of the unit circles, a quality nurse, a Clinical Nurse Specialist, one Clinical Educator, and the service line director. In addition to the structural design of the councils/circles the project will include a recruitment and selection process for delegates , communication plan and tools, education and training plan for delegates, scope and charter, and survey and measurement tools.

D) **How will this intervention change practice?** Implementing an SG model with service line will change the decision-making process within the service line. This intervention will change culture to a "power with" rather than "power over" culture with the nurse staff being empowered, with management, to influence the work environment and nursing practice in the organization.

E) **Outcome measurements:**
   • **People Pulse (PP) Mini Survey**

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o 2017 data will provide the baseline (collection Sept/Oct)
1. Goal: Improve staff engagement as evidenced by an increase of 5% on each of the PP questions below.
2. Mini People Pulse Survey will be utilized as the full survey is completed only annually.
3. Survey questions:
   a. I have enough to say in how I do my job.
   b. My department or work unit operates effectively as a team.
   c. In general, how much say or influence do you have over decisions affecting your work?
   d. In my department or work unit, I feel comfortable voicing my opinions, even when they differ from others'.

F) **Process measurement:**
- Percent of staff and managers who have received education/training relative to implementation of unit circles.
- Each circle will customize charter for specific unit by end of 2nd meeting.
- Circles are meeting consistently at a minimum of one meeting per month for unit circles and quarterly for Joining Circle.

- Budget: Non-productive costs relative to circles are within project budget.

G) **Balancing measurement:**
- Internal staff attendance data (HR and Finance)
  o Maintain baseline or reduce unplanned absenteeism over first 90 days following implementation of circles.
- Assignment Despite Objection (ADO) data
  o Maintain baseline or reduce number of submitted ADOs over first 90 days following implementation of circles.

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References

Institute of Medicine. (2011). The future of nursing: Leading change, advancing health.
     Retrieved from the National Academies Press:
http://www.nap.edu/catalog/12956.html

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This project is an Evidence-based Change in Practice Project as outlined in federal
guidelines: (http://answers.hhs.gov/ohrp/categories/1569)

X This project meets the guidelines for an Evidence-based Change in Practice Project as
outlined in the Project Checklist (attached). Student may proceed with implementation.

☐This project involves research with human subjects and must be submitted for IRB
approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and is **a part of usual care**. ALL participants will receive standard of care.	X	
The project is **NOT** designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does **NOT** follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does **NOT** develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does **NOT** seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X	
The project has **NO** funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., **not a personal** research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: *"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not*	X	

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| *formally supervised by the Institutional Review Board."* | | |

ANSWER KEY: If the answer to **ALL of** these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print): Genevieve Wright

_____

Signature of Student:

_____**DATE**_____

SUPERVISING FACULTY MEMBER (CHAIR) NAME (Please print):
Dr. Elena Capella_
Signature of Supervising Faculty Member (Chair):
_____**DATE**_____

Appendix EE. Employer Letter of Support

To: University of San Francisco ELDNP Committee   December 15, 2017

From: Amy Bearden RN, CNE

Subject: Support for DNP Project

Genevieve Wright has my support to complete her DNP project @ Kaiser San Leandro.

Amy L Bearden RN, Chief Nursing Executive

Kaiser Medical Center San Leandro