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Improving Interdisciplinary Relationships in Primary Care with the Implementation of TeamSTEPPS

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IMPROVING INTERDISCIPLINARY COLLABORATION IN PRIMARY CARE WITH IMPLEMENTATION OF TEAMSTEPPS

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Abstract:

A major challenge in healthcare is lack of interdisciplinary collaboration (O'Daniel & Rosenstein, 2008). The Institute of Medicine report, *To Err is Human: Building a Safer Health System* (1999), shows that errors often occur due to lapses in partnership and communication. This article describes the implementation of TeamSTEPPS, an evidence-based tool for optimizing staff relationships and partnership, in a clinic in which a change in the care model had affected interprofessional collaboration and teamwork, threatening healthcare outcomes and staff engagement. The implementation of TeamSTEPPS, customized using elements of IDEO's (2015) Human-Centered Design, shifted the culture of the clinic towards partnership, resulting in improved staff perceptions of teamwork and statistically significant improvements in the quality of patient care.

Keywords: partnership; primary care; interdisciplinary collaboration; interprofessional relationships; TeamSTEPPS; healthcare

INTRODUCTION

Healthcare organizations face many challenges; one of the most problematic is lack of interdisciplinary collaboration (O'Daniel & Rosenstein, 2008). This issue has serious consequences for safety and quality of care (IOM, 1999).

Members of a health care team in a midwestern U.S. urban community clinic experienced issues of ineffective collaboration when they changed their care model by adding registered nurses to the team.Prior to the addition of registered nurses, the care

team comprised one provider, either a physician or a nurse practitioner, and two certified medical assistants. Consultation with counseling, patient outreach, and/or social work were obtained when indicated, but coordination of care was often inconsistent (S. Fahey, personal communication, February 19, 2015).

When registered nurses joined the care team, roles and responsibilities among team members became unclear. Issues with interdisciplinary collaboration and teamwork arose, threatening safety, healthcare outcomes, and staff engagement. Through a brainstorming process the clinic's leadership team came to understand that the staff needed help in shifting to a partnership-based organizational culture, as well as coaching in teamwork methods, in order to work effectively together in interdisciplinary teams to positively affect patient outcomes.

TeamSTEPPS offered the solution to this complex concern. TeamSTEPPS is an interdisciplinary framework that was developed to improve collaboration and teamwork in healthcare (Agency for Healthcare Research and Quality [AHRQ], 2008). To enrich this process, IDEO's (2015) elements of human-centered design were employed to customize TeamSTEPPS for the community clinic, as well as to engage staff members in the process of shifting the organizational culture to a partnership paradigm.

BACKGROUND

The Center for Partnership Studies (n.d.) describes the components of domination and of partnership cultures or organizational systems, including structure, relationships, gender, and beliefs. Domination systems are characterized by authoritarian rule; social and economic structures are rigid and inequitable, both in the family realm and in the state (Eisler, 2007). In contrast, partnership systems are characterized by equitable social and economic structures in both the family and the state (Eisler, 2007).

In the relations component, domination and partnership systems are foundationally contradictory. In domination systems, Eisler (2007) states that there is a "high degree

of fear, abuse, and violence, ranging from child and wife beating to other forms of abuse by 'superiors' in families, workplaces, and society. Children grow up in punitive, authoritarian, male-dominated families where they observe and experience inequality as the accepted norm (p. 319)." In partnership systems, families, society, and workplaces demonstrate a high degree of trust and mutual respect and a low degree of abuse, violence, or fear (Eisler, 2007).

When considering gender in domination and partnership systems, it is easy to discern the differences. In domination systems there is a ranking of males over females; gender stereotypes value male traits such as masculinity, toughness, and conquest over female traits such as caring and compassion (Eisler, 2007). Women and men are valued equally in partnership systems. Eisler (2007) states, "[in partnership systems there is] an equal valuing of the male and female halves of humanity, as well as fluid gender roles with a high valuing of empathy, caring, caregiving, and nonviolence in both women and men, as well as in social and economic policy" (p. 319).

Beliefs prevalent in domination systems are characterized by violence and domination; stories idealize and justify these behaviors (Eisler, 2007). Partnership systems embrace or share stories and beliefs that are inclusive and mutually beneficial; there is higher value given to stories that portray caring relations and empathy (Eisler, 2007).

What do these models have to do with the quality and safety of health care? How do domination and partnership affect health care? Why is this important for an outpatient clinic?" The cultures of healthcare institutions have historically been organized in hierarchies, in which domination of one profession by another has been commonplace (Eisler & Potter, 2014). Today, the domination pattern remains pervasive throughout health care culture, leading to ineffective teamwork and collaboration (Eisler & Potter, 2014; IOM, 2001; O' Daniel & Rosenstein, 2008). It is important to point out that there are hierarchies in partnership models, but they are hierarchies of actualization, in which leaders use power with, instead of over, others. In hierarchies of actualization,

coaching and professional development are used to help each member reach her or his highest potential (Eisler & Potter, 2014).

The Institute of Medicine (IOM) report, *To Err is Human: Building a Safer Health System* (1999), shows that errors often occur due to lapses in collaboration, partnership, and team communication. The amount of evidence to support these claims has grown exponentially since this seminal report.

O'Daniel and Rosenstein (2008), authors of "Professional Communication and Team Collaboration," a chapter in *Patient Safety and Quality: An Evidence-based Handbook for Nurses,* state that one of the most pervasive problems in healthcare today is the lack of teamwork and interdisciplinary collaboration, citing this as one of the most prevalent causes of medical errors in the United States today. The authors also report that communication errors are the foremost cause of sentinel events.

Finally, a startling statistic that drives home the impact of this problem comes from the Joint Commission on Accreditation of Healthcare Organizations [JCAHO] (2005), which reports that if deaths from medical errors were included in U. S. mortality statistics, they would be the fifth leading cause of death.

Yet there is evidence that healthcare organizations may be able to turn this undesirable trend of ineffective interdisciplinary collaboration around. Evidence suggests that patients who are taken care of by collaborative interdisciplinary teams are safer, receive a higher quality of care, and are more satisfied with the care they receive (Eisler & Potter, 2014; IOM, 2001). Additionally, staff satisfaction and engagement improve when there is effective interdisciplinary collaboration (Eisler & Potter, 2014).

According to the World Health Organization [WHO] (2010), collaborative practice can improve access to and coordination of health services, appropriate use of specialist resources, chronic disease outcomes, patient care and safety, patient satisfaction, and caregiver satisfaction. The WHO (2010) also notes that collaborative practice can

decrease patient complaints, complications, redundant testing, length of stay, mortality and morbidity, clinical error rates, hospitalizations, staff turnover, and tension and conflict among staff.

The consequences attributable to a lack of collaboration among healthcare professionals are very serious and often cause harm. Yet the prospect of effective collaboration through partnership yields hope. The poor outcomes resulting from the absence of teamwork are unacceptable. It is essential that health care organizations strive to promote, educate, and maintain effective and efficient interdisciplinary teams (Eisler & Potter, 2014; IOM, 2001; WHO, 2010).

So how do organizations counteract this startling trend of ineffective teamwork? There are powerful arguments to support implementing interventions that explicitly tackle issues with interdisciplinary collaboration and teamwork, especially those that effectively move from a domination culture to a partnership culture.

In 2001, the IOM issued *Ten New Rules for Redesign;* the report states, "Clinicians and institutions should actively collaborate and communicate to ensure an appropriate exchange of information and coordination of care" (p. 4). Joanne Disch, past president of the American Academy of Nursing, reports that one of the five fundamental proficiencies necessary for health care professionals is the capacity to care for patients in interdisciplinary teams (Disch, 2012).

For the clinic, which is the subject of this article, when distinguishing among various tools to improve teamwork, it was important to utilize a tool that was based on partnership. One such tool or intervention designed to optimize team relationships and collaboration is a valid, evidence-based framework called TeamSTEPPS (AHRQ, 2008, 2010, 2014, n.d.). The acronym TeamSTEPPS signifies *Team Strategies and Tools to Enhance Performance and Patient Safety* (AHRQ, 2008). This program was designed by the Department of Defense, Duke University, and the Agency for Healthcare Research

and Quality (AHRQ, 2010), and offers a platform based on the fundamentals of partnership.

TeamSTEPPS provides health care professionals with a shared mental model, a way to build mutual trust, team orientation, shared goals, and a common language (AHRQ, 2008, 2014, n.d.). There are five paradigms within the framework: team structure, leadership, situation monitoring, mutual support, and communication (AHRQ, 2008). When implementation is complete, safety and quality of healthcare services may be enhanced, as well as patient satisfaction, staff satisfaction, and staff retention and engagement (AHRQ, 2008, 2010, 2014, n.d.).

TeamSTEPPS interventions can be customized to create a meaningful, lasting impact. The design strategy for the subject clinic was crafted using innovative partnership principles of human centered design from IDEO's Field Guide to Human Centered Design (2015). When utilizing human centered design as a tool, uptake of key intervention elements was enhanced. It was particularly augmented in the context of this project, where partnership was the driving force.

The TeamSTEPPS framework provides a robust foundation for interdisciplinary collaboration, not only at the subject clinic but also for all healthcare settings. Teamwork, and therefore partnership, is a foundational pillar of TeamSTEPPS. Fundamental elements of partnership systems include democratic and egalitarian structure, equal valuing of males and females, mutual respect and trust with low degree of violence, and beliefs and stories that give high value to empathic and caring relations (Eisler & Potter, 2014). These core partnership principles align with TeamSTEPPS principles of egalitarian leadership, team orientation, having a shared mental model, mutual trust, situation monitoring, and clear and accurate communication among team members (AHRQ, n.d.).

SPECIFIC AIMS

The goal of this quality improvement project was to develop effective interdisciplinary partnerships and teamwork at a primary care clinic through implementation of TeamSTEPPS, a partnership-based framework for collaboration resulting in improvements in the quality and safety of care provided to patients, as well as an organizational culture shift towards partnership.

METHODS

Settings and sample

Context takes into consideration the many variables that influence the culture and environment of an organization. As previously identified, this quality improvement project took place at a small primary care clinic in an urban setting in the Midwest United States that provides primary medical services, counseling, and dental care to approximately 4,300 unique patients in approximately 10,000 encounters annually (S. Fahey, personal communication, October 19, 2015).

An important contextual consideration was the significant cultural shift that occurred when registered nurses were added to the clinic team. The team had trouble deciphering who was responsible for various aspects of patient care, and had difficulties with team cohesion. There was a lack of trust and clear communication - an absence of partnership.

During this time, the clinic employed 45 full- and part-time staff members, including providers, registered nurses, counselors, patient outreach coordinators, dental assistants, front desk associates, certified medical assistants, administrators, and dieticians. It was vital for the success of the project to involve every staff member.

Intervention

The primary purpose of this quality improvement project was to strengthen and advance interdisciplinary collaboration and partnership in the subject clinic. In order to do so, the clinic leadership team worked with a Doctorate of Nursing Practice (DNP) student to tailor a plan to use TeamSTEPPS as an intervention to address collaborative practice issues.

The intervention program was divided into several steps: Pretest or needs assessment, implementation team development, TeamSTEPPS customization, TeamSTEPPS delivery, and posttest analysis of the program. A logic model helped to develop a blueprint for the use of resources and to give a clear understanding of intended outcomes.

Confirming the Need

Anecdotal evidence suggested that issues with interdisciplinary collaboration had begun with the addition of registered nurses to the care team. However, the leadership team required a clear understanding of what the staff's actual needs were. TeamSTEPPS Teamwork Attitudes Questionnaire (TTAQ) and Teamwork Perceptions Questionnaire (TTPQ) were utilized to gauge the teamwork and collaboration concerns. These surveys were developed by the Agency for Healthcare Research and Quality [AHRQ] (2010) and have been validated for measuring teamwork as well as collaboration beliefs and behaviors. The two questionnaires use a five-point Likert scale with ratings from strongly agree to strongly disagree (AHRQ, 2010). There are several questions on the perception of teamwork and the culture of safety in the organization, which are further subdivided into different overarching themes (AHRQ, 2010).

During a mandatory all-staff meeting prior to introduction of TeamSTEPPS, the clinic staff was surveyed to get a clear indication of specific teamwork needs. The results showed that the staff believed strongly in the value of teamwork and collaboration; however they lacked follow-through with behaviors. These results supported the anecdotal findings and established a strong argument for the use of TeamSTEPPS as an effective intervention.

Implementation Team

TeamSTEPPS calls for staff engagement (AHRQ, 2008), to ensure that culture change is accepted as a grassroots effort. To stay true to the framework, several clinic team members who were interested in being change agents were recruited to be part of a committee that would develop teamwork and partnership curriculum based on TeamSTEPPS framework while utilizing IDEO's human-centered design principles. Volunteers agreed to participate in customizing TeamSTEPPS so that the educational sessions reflected the specific needs of the clinic.

Of the 45 staff members, 16 signed up to become implementation team members. These participants were recognized as TeamSTEPPS champions in their respective departments and throughout the clinic, where they serve as special ambassadors to the TeamSTEPPS process. This recognition allowed for engagement and ensured visibility, and provided staff members with an easily accessible resource on TeamSTEPPS and partnership, in which these champions could answer questions and provide clarification on content.

Customizing TeamSTEPPS

The implementation team met weekly for one hour. During this time they employed principles from IDEO's *The Field Guide to Human Centered Design* (2015) to customize and develop TeamSTEPPS curriculum for their peers. IDEO is a popular and successful innovation and design firm that creates products and processes for various customers (IDEO.org, 2015). IDEO's (2015) founding and guiding principles are centered on partnership. Creating engaging, dynamic teams successfully depends on the partnership of everyone involved (IDEO, 2015).

IDEO (2015) has three main phases of innovation: Inspiration, ideation, and implementation. Throughout all phases they emphasize the importance of partnership and empathy for the user while designing interventions (IDEO, 2015). These ideals were critical due to the partnership nature of TeamSTEPPS and the task at hand.

The team wanted to provide safe, quality care to patients but needed collaborative tools to achieve these goals. The implementation team routinely brainstormed about how to position the clinic for success. Using tips from IDEO, they created a TeamSTEPPS program that was effectively and successfully aligned with the needs of their primary care clinic.

IDEO embraces empathy as an instrument of design (IDEO, 2015). One activity that the implementation team routinely applied was actively listening to their colleagues. Essentially, they partnered with one another through empathy and mutually supportive relationships, which is a key principle of partnership (Eisler & Potter, 2014). In doing so, the team understood the unique teamwork challenges they all faced, as well as how to successfully address issues through positive deviance.

Another IDEO notion is the use of a whiteboard and post-notes to provoke thoughts and craft innovative design plans. With this concept the team brought forth ideas and proposed various solutions (IDEO, 2015). Using this technique, the implementation team was able to strategize and understand the best ways to introduce, teach, and ensure sustainability of each TeamSTEPPS tool.

The team iterated the TeamSTEPPS program plan many times to ensure that they didn't miss any details. IDEO reports that each time there is an iteration of the design, the work is improved and refined (IDEO, 2015). In this fashion they crafted a TeamSTEPPS program designed to fit the dynamic partnership needs of the entire clinic.

Delivering TeamSTEPPS

Dissemination of the customized TeamSTEPPS program consisted of three mandatory one-hour, in-person education sessions for each of the 45 staff members at the clinic. The first training session informed the clinic staff about TeamSTEPPS and the importance of working in interdisciplinary teams. The second session was devoted to leadership and communication skills as well as tools for effective communication. The

third session focused on mutual support and situation monitoring. Each of these sessions used TeamSTEPPS tools and partnership content as the foundation for the lesson.

During every session the implementation team was actively involved in teaching the content to the staff. They planned engaging lessons in which the clinic staff would actively build team relationships while learning the TeamSTEPPS material.

Study of the Intervention

In order to evaluate the effects of the TeamSTEPPS program, the clinic did not participate in any additional interdisciplinary collaboration or communication activities during this time period; the teamwork endeavors taking place were solely part of this quality improvement project. To measure the efficacy of the customized TeamSTEPPS approach, the clinic leadership team developed a one-group pretest/posttest design: the staff was assessed pre-implementation and post-implementation on beliefs and behaviors utilizing the TTAQ and TTPQ.

Analysis

Using the Microsoft Excel data analysis program, a biostatistician and the DNP student reviewed the collected data. The pre- and post-tests were analyzed using a two sample T-test. There were 40 staff members who took the pretest TTAQ and TTPQ, and 38 who took the posttest TTAQ and TTPQ.

Subjective comments were collected pre- and post-implementation on the TTAQ and TTPQ surveys. There were places on each survey for staff members to offer their opinions. These remarks were taken into consideration, as well as anecdotal data from clinic leadership.

Finally, the implementation and leadership teams tracked changes in the clinic's monthly scorecards to determine if the TeamSTEPPS curriculum impacted the quality of care provided by the staff.

Ethical Considerations

When appraising whether this project was a quality improvement project or a research project, it was imperative to understand the specific aim of the project and the intended action, which was performance improvement-based. A *Determination of Human Research* form was submitted to the Institutional Review Board (IRB) to ensure compliance with organizational policies. The IRB determined that this project did not fit the definition of human subjects research, nor was it answering a specific research question or hypothesis. Therefore, it was rated as a performance improvement project, and further review by the IRB was not necessary.

RESULTS

Evidence is not merely research-based material; it includes expert opinion, clinical experience, local data, and the patient experience (Rycroft-Malone, 2004). The strength of this collective evidence helped to substantiate this quality improvement project.

The implementation team found that the data were clinically important even if they did not all reach statistical significance. For each paradigm (team structure, leadership, situation monitoring, mutual support, and communication) in both the TTAQ and the TTPQ, there was positive movement. This can be appreciated in Figures 1 and 2.

Figure 1: TTAQ pretest/posttest analysis by domain.

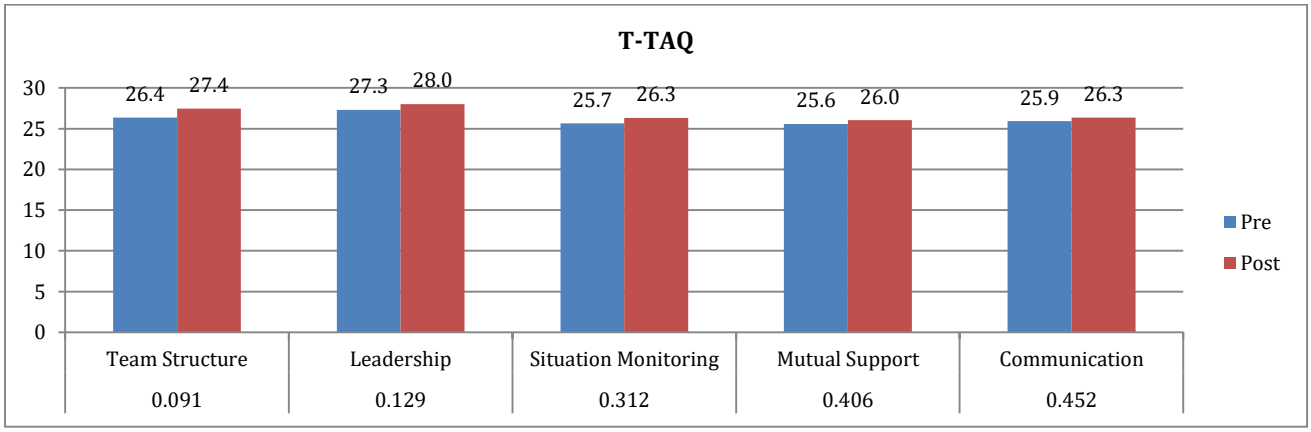
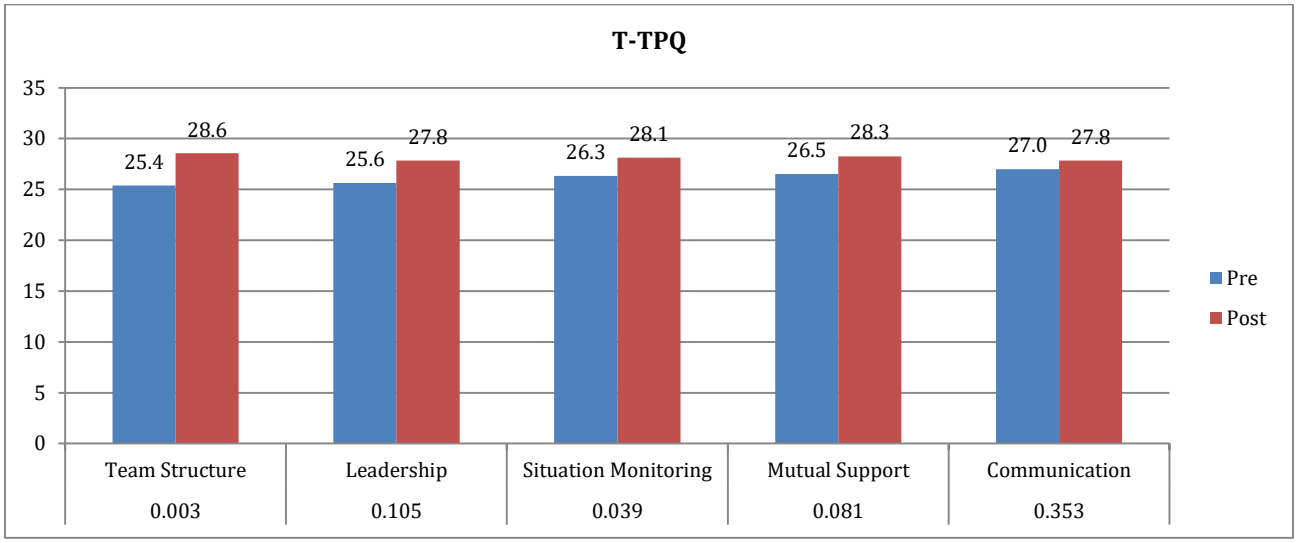


Figure 2: TTPQ pretest/posttest analysis by domain.



Pretest results showed that the staff's teamwork attitudes were already very high, so that any improvement might not be statistically significant. Differences between pre- and posttest results for the TTAQ were not statistically significant. However, it was important to see the impact of the interdisciplinary collaboration behaviors, which would be measured by the TTPQ.

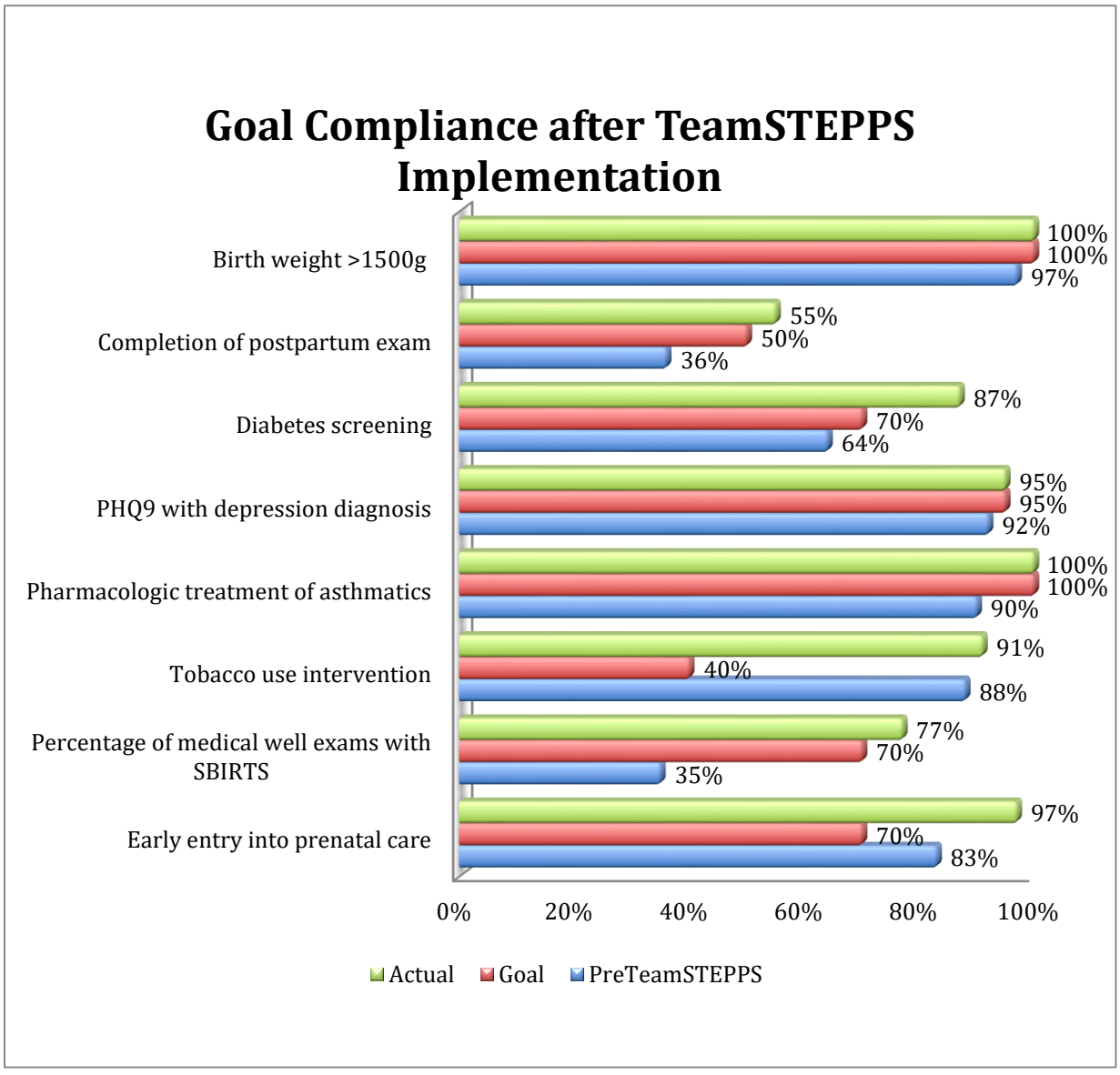
There were statistical differences in two of the five domains in the TTPQ when comparing pretest to posttest. The differences were noted in team structure and situation monitoring. The difference in mutual support pre- and posttest (p-value 0.081) approached statistical significance but did not meet the necessary p-value of 0.05. These results can be visualized in Figure 2.

The clinic reports quality data related to patient outcomes on a monthly and quarterly basis on a "quality scorecard." It was important to take note of any quality improvement that could be attributed to shifting the organizational culture to a partnership paradigm through TeamSTEPPS.

The dashboard metrics showed that the team met and exceeded quality goals after the TeamSTEPPS partnership training for birth weight greater than 1500 grams at 100% (goal

of 100%, previously at 97%), completion of post partum exam 55% (goal of 50%, previously at 36%), diabetes screening 87% (goal of 70%, previously at 64%), PHQ9 tool completion with depression diagnosis at 95% (goal of 95%, previously at 92%), pharmacologic treatment of asthmatics 100% (goal of 100%, previously at 90%), tobacco use intervention 91% (goal of 40%, previously at 88%), medical well exams with SBIRTS-Screening, Brief Intervention, Referral to Treatment at 77% (goal of 70%, previously at 35%), and early entry into prenatal care at 97% (goal of 70%, previously at 83%). These metrics can be appreciated in Figure 3.

Figure 3: Goal compliance after implementation of TeamSTEPPS.



Additionally, the scorecard showed positive movement in other quality metrics: weight assessment and counseling for children and adolescents at 24.34% (previously at 16%), ischemic vascular disease aspirin therapy 84.09% (previously at 60%), and depression screening and follow up 37.39% (previously at 28%). This data can be visualized in Figure 4.

Figure 4: Progress towards goal achievement, comparing pre- and post- TeamSTEPPS implementation.

The clinic leadership felt that these improvements could be attributed to the successful implementation of TeamSTEPPS, especially as no other interventions happened during this time period.

SUMMARY

The clinic leaders and implementation team believe that the greatest indications of the success of TeamSTEPPS are from the subjective data and the quality scorecard. Several staff members have shared observations about the transformation of the clinic's culture toward teamwork and interdisciplinary collaboration, indicating a shift toward a partnership paradigm. The staff members feel that there were many positive changes in the organizational culture. They share that this appeared to be a direct reflection of TeamSTEPPS implementation, which taught the clinic staff how to partner together and become effective interdisciplinary collaborators and communicators.

One of the greatest compliments the leadership received from staff was that staff were pleased that every staff member was afforded the opportunity to be full partners in this process. Eisler and Potter (2014) state that equal partnership is a core component of partnership systems. The clinic staff appreciated that they were able to choose to be a part of the implementation team, where they were able to be champions and leaders as well as equal partners.

LINKING EVIDENCE TO PRACTICE

TeamSTEPPS data illustrates that collaborative work improves continuity of care, access to care, and patient satisfaction (Stevenson et al., 2001). Studies also show patients believe that they are receiving a higher quality of care when teamwork is prevalent among health care workers (Campbell et al., 2001; Weaver et al., 2010). Additional outcomes were discussed in detail, including an increase in the safety and quality of health care provided, and patient satisfaction, as well as staff satisfaction, retention,

and engagement (AHRQ, 2008, 2010, 2014b; Campbell et al., 2001; Leonard, Graham, & Bonacum, 2004; Stevenson et al., 2001).

Other studies show that the number of adverse outcomes was reduced by 50% when team training takes place in health care settings (Mann et al., 2006). In addition, there was a 50% decrease in the severity of events when measured on a severity index scale (Mann, Marcus, & Sachs, 2006). Furthermore, there was a reduction in adverse drug events and improvement in medication reconciliation when admitted patients experienced teamwork (Haig, Sutton, & Whittington, 2006). Another advantage of TeamSTEPPS is that when teamwork was prevalent in primary care offices, diabetic patients received superior care (Bower et al., 2003).

The quality improvement project at this primary care clinic aligns with what has been appreciated nationally in regards to TeamSTEPPS and partnership. Interdisciplinary collaboration is vital for healthcare institutions to provide safe, quality care. Additionally, staff members enjoy the culture shift to a positive emphasis on teamwork and partnering. The outcome data on the quality scorecard fully supports these statements.

LIMITATIONS

While this project notes that TeamSTEPPS training could have an impact on interdisciplinary collaboration, there are some limitations on the generalizability of the work. In particular, the small number of clinic staff makes it difficult to apply these findings to other healthcare settings.

Additionally, tests could have been uniquely matched pre- and post- test to obtain more specific data. This step was not taken due to limitations of resources for data collection, input, and analysis.

CONCLUSION

TeamSTEPPS provides a strong foundation for teamwork, partnership, and interdisciplinary collaborative practice in healthcare settings, positively impacting teamwork attitudes and behaviors. This has been clearly demonstrated in this quality improvement project at the subject clinic.

The clinic has genuinely comprehended the importance of interdisciplinary collaboration and partnership, and fully intends to sustain TeamSTEPPS in their organization. Clinic leadership used a grassroots method and human-centered design concepts, involving key staff members in an implementation team to ensure viability. The implementation team will continue to follow up with TeamSTEPPS curriculum and provide education to the clinic staff. In addition, clinic leaders have entertained sending TeamSTEPPS champions to national TeamSTEPPS conferences as well as TeamSTEPPS sustainability trainings.

Healthcare organizations nationwide and globally should take note of the significance of interdisciplinary collaboration, partnership and teamwork on healthcare outcomes. It is imperative that healthcare institutions ensure a healthy culture with positive aspects of partnership. Healthcare leaders must employ best practice recommendations, which are calling for effective interdisciplinary collaboration. They must understand their cultures and then create a vision, mission, and values surrounding teamwork, partnership, and collaborative practice.

Finally, staff must be empowered to partner with one another and work effectively in interdisciplinary teams. Moving from a domination paradigm to a partnership paradigm in health care organizations will improve the quality and safety of the care provided, as well as improve interdisciplinary relationships and staff satisfaction. When teamwork, partnership, and interdisciplinary collaboration are fully realized, patients and healthcare workers alike will experience the benefits.

References

Agency for Healthcare Research and Quality [AHRQ]. (2008). *TeamSTEPPS implementation guide*. Retrieved from http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/instructor/essentials/implguide.html

Agency for Healthcare Research and Quality [AHRQ]. (2010). *TeamSTEPPS teamwork perceptions questionnaire (TTPQ) manual* [PDF]. Retrieved from http://teamstepps.ahrq.gov/teamwork_perception_questionnaire.pdf

Agency for Healthcare Research and Quality [AHRQ]. (2013). *Patients with limited English proficiency*. Retrieved from http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/lep/

Agency for Healthcare Research and Quality [AHRQ]. (2014). *Patient safety primers: Teamwork training*. Retrieved from http://psnet.ahrq.gov/primer.aspx?primerID=8

Agency for Healthcare Research and Quality [AHRQ]. (n.d.). *TeamSTEPPS: National Implementation*. Retrieved from http://teamstepps.ahrq.gov/about-2cl_3.htm

Agency for Healthcare Research and Quality [AHRQ]. (n.d.a). *TeamSTEPPS: For primary care teams* [PDF]. Retrieved from http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/primarycare/igpcobt.pdf

Agency for Healthcare Research and Quality [AHRQ]. (n.d.b). *TeamSTEPPS: National Implementation*. Retrieved from http://teamstepps.ahrq.gov/about-2cl_3.htm

Bower, P., Campbell, S., Bojke, C., & Sibbald, B. (2003). Team structure, team climate, and the quality of care in primary care: An observational study. *Quality and Safety in Health Care*, 12:273-9.

Brennan, S., Bosch, M., Buchan, H., & Green, S. A. (2013). Measuring team factors thought to influence the success of quality improvement in primary care: A systematic review of instruments. *Implementation Science*. Retrieved from http://www.biomedcentral.com/content/pdf/1748-5908-8-20.pdf

Campbell, S.M., Hann, M., Hacker, J., Burns, C., Oliver, D, Thapar, A.,,… & Roland, M. O. Identifying predictors of high-quality care in English general practice: Observational study. *BMJ*, 323:1-6.

Castner, J., Foltz-Ramos, K., Schwartz, D. G., & Ceravolo, D.J. (2012). A leadership challenge: Staff nurse perceptions after an organizational TeamSTEPPS initiative. *Journal of Nursing Administration*. 42(10):467-72, 2012 Oct.

Center for Partnership Studies. (n.d.). The domination-partnership systems continuum. Retrieved from http://www.partnershipway.org/core-pathways/abcs-of-dominator-and-partnership-relations/two-social-possibilities-the-domination-system-and-the-partnership-system

Disch, J. (2012). Leadership to create change (Chapter 15). In G. Sherwood and J. Barnsteiner *Quality and safety in nursing: A competency approach to improving outcomes* [E-book]. Malden, MA: Wiley-Blackwell.

Disch, J. (2012b). Teamwork and collaboration (Chapter 5). In G. Sherwood and J. Barnsteiner *Quality and safety in nursing: A competency approach to improving outcomes* [E-book]. Malden, MA: Wiley-Blackwell.

Eisler, R. (2007). The real wealth of nations: Creating a caring economy [E-book]. San Francisco, CA: Berrett-Koehler.

Eisler, R. & Potter, T. M. (2014). *Transforming interprofessional partnerships: A new framework for nursing and partnership-based healthcare*. Indianapolis, IN: Sigma Theta Tau International. Kindle Edition.

Harvey, G., Loftus-Hills, A., Rycroft-Malone, J., Titchen, A., Kitson, A., McCormack, B., & Seers, K. (2002). Getting evidence into practice: The role and function of facilitation. *Journal of Advanced Nursing*, 37(6), 577-588.

IDEO.org. (2015). The field guide to human centered design. Retrieved from http://d1r3w4d5z5a88i.cloudfront.net/assets/guide/Field%20Guide%20to%20Human-Centered%20Design_IDEOorg_English-a91845bb340ad2dff5f1a66259789e06.pdf

Institute of Medicine [IOM]. (1999). *To err is human: Building a safer health system* [PDF]. Retrieved from https://www.iom.edu/Reports/1999/To-Err-is-Human-Building-A-Safer-Health-System.aspx

Institute of Medicine [IOM]. (2001). *Crossing the quality chasm: A new health system for the 21st century* [PDF]. Retrieved from https://www.iom.edu/~/media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf

Haig, K. M., Sutton, S., & Whittington, J. (2006). SBAR: a shared mental model for improving communication between clinicians. *Joint Commission Journal on Quality and Patient Safety*, (32):167-75

Institute for Healthcare Improvement. (2014). *IHI triple aim initiative*. Retrieved from http://www.ihi.org/Engage/Initiatives/TripleAim/Pages/default.asp

Joint Commission on Accreditation of Healthcare Organizations [JCAHO]. (2005). *The joint commission guide to improving staff communication*. Oakbrook Terrace, IL: Joint Commission Resources.

Knowlton, L. & Philips, C. (2013). *The logic model guidebook* (2nd Ed.). Thousand Oaks: Sage Publishing, Inc.

Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.). (1999). *To err is human: Building a safer health system*. Washington, D.C.: National Academy Press.

Legatt, S. G. (2011). Effective healthcare teams require effective team members: defining teamwork competencies. *BMC Health Services Research*, 2007, 7:17 doi:10.1186/1472-6963-7-17.

Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: The critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care,* 1:85-90.

Mann, S., Marcus, R., & Sachs, B. (2006). Lessons from the cockpit: how team training can reduce errors on L&D. *Contemporary OB/GYN*, Jan:34-45.

Mann, S., Pratt, S., Gluck, P., Nielsen, P. Risser, D, Greenberg, P.,…Sachs, B. (2006). Assessing quality in obstetrical care: development of standardized measures. *Joint Commission Journal on Quality and Patient Safety*, (32):497-505.

McCawley, P. (n.d.). *The logic model for program planning and evaluation* [PDF document]. Retrieved from http://www.cals.uidaho.edu/edcomm/pdf/CIS/CIS1097.pdf

Milewa, T., Downswell, G., & Harrison, S. (2002). Partnerships, power, and the "new" politics of community participation in British health care. Social Policy and Administration, 36: 796-809. Doi: 10.1111/1467-9515.00318

National Association for Healthcare Quality [NAHQ]. (2012). *Call to action: Safeguarding the integrity of healthcare quality and safety systems* [PDF]. Retrieved from http://www.nahq.org/uploads/NAHQ_call_to_action_FINAL.pdf

O' Daniel, M. & Rosenstein, A. H. (2008). Professional communication and team collaboration (Chapter 33). In R. G. Hughes (Ed.), *Patient safety and quality: An evidence-based handbook for nurses* [E-book]. Rockville, MD: Agency for Healthcare Research and Quality.

Rycroft-Malone, J. (2004). The PARIHS framework: A framework for guiding the implementation of evidence based practice. *Journal of Nursing Care Quality* 19 (4): 297-304.

Ponte, P. R., Gross, A. H., Milliman-Richard, Y. L., & Lacey, K. (2011). Interdisciplinary teamwork and collaboration: An essential element of a positive practice environment. *Annual review of nursing research*. Retrieved from http://web.b.ebscohost.com.ezp2.lib.umn.edu/ehost/pdfviewer/pdfviewer?vid=1&sid=bcfd962b-7365-4ccf-a595-a5f18aba2761%40sessionmgr111&hid=109

Salas, E., Sims, D.E., & Burke, C.S. (2005). Is there a "big five" in teamwork? [PDF]. *Small Group Research,* 36:5, 555-599. DOI: 10.1177/1046496405277134.

Sheppard, F., Williams, M., & Klein, V. R. (2013). TeamSTEPPS and patient safety in healthcare. *Journal of healthcare risk management,* 32(3), 5-10. DOI: 10.1002/jhrm.21099.

Stetler, C. B., Damschroder, L. J., Helfrich, C. D., & Hagedorn, H. J. (2011). A Guide for applying a revised version of the PARIHS framework for implementation. Implementation Science: IS, 6, 99-5908-6-99. doi:10.1186/1748-5908-6-99.

Stevenson, K., Baker, R., Farooqi, A., Sorrie, R, & Khunti, K. (2001). Features of primary health care teams associated with successful quality improvement of diabetes care. *Family Practice*, 18:21-26.

Vertino, K. A. (2014). Evaluation of a teamstepps initiative on staff attitudes towards teamwork. *JONA: The journal of nursing administration,* volume 44(2), February 2014, p 97-102.

Vyt, A. (2007). Interprofessional and transdisciplinary teamwork in healthcare. *Diabetes/Metabolism Research and Reviews*, 2008; 24(Suppl 1): S106–S109. DOI: 10.1002/dmrr.835.

Weaver, S. J., Rosen, M. A., DiazGranados, D., Lazzara, E. H., Lyons, R., Salas, E.,…King, H. B. (2010). Does teamwork improve performance in the operating room? A multilevel evaluation. *Joint Commission Journal on Quality and Patient Safety*, 36(3):133-42.

Weinberg, D. B., Cooney-Miner, D., Perloff, J. N., Babington, L., & Avgar, A. C. (2011). Building collaborative capacity: Promoting interdisciplinary teamwork in the absence of formal teams. *Medical Care*, 49(8):716-23, 2011 Aug.

World Health Organization [WHO]. (2010). *Framework for action on interprofessional education and collaborative practice* [PDF]. Geneva, Switzerland: WHO Press.

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