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Review Article

Why Your TeamSTEPPS™ Program May Not Be Working

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Abstract: Team Strategies and Tools to Enhance Performance and Patient Safety® (TeamSTEPPS™) is a patient safety tool developed by the defense industry and based on four competencies: leadership, communication, situational monitoring, and mutual support. Unfortunately, there are barriers that prevent TeamSTEPPS from reaching its full potential, including: (a) lack of administrative support and resources, (b) lack of training focus to address hierarchal differences and incivility at all levels of health care practice and administration, (c) inadequate TeamSTEPPS instruction and simulation practices, and (d) educators' resistance to change from crew resource management concepts. Suggestions for improvement include providing command and health care agency emphasis for the TeamSTEPPS program, providing adequate material and personnel resources, designing training that is geared to trainer implementation at the departmental level, prioritizing and saturating training, and striving toward a just culture.

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Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS™) is a robust patient safety tool developed by the defense industry and based on four competencies: leadership, communication, situational monitoring, and mutual support. For those embracing the four TeamSTEPPS competencies, the potential for improving the workplace environment and patient safety is unlimited. Since 2006, the Agency for Healthcare Research and Quality has offered a free curriculum to any organization willing to embrace its concepts (Clapper & Kong, 2011). Whether it is during an inspection by the Joint Commission, through a professional publication, via conference, or by word of mouth, the TeamSTEPPS message is slowly gaining ground. Unfortunately, there are barriers that prevent TeamSTEPPS from reaching its full potential, including (a) lack of administrative support and resources, (b) lack of training focus to address hierarchal differences and incivility at all levels of health care practice and administration, (c) inadequate TeamSTEPPS instruction and simulation practices, and (d) educators' resistance to change from crew resource management (CRM) concepts. Organizations truly interested in embracing TeamSTEPPS and realizing its full potential will approach the problems and suggestions with an open mind and be prepared to reengage their employees with suitable training and communication for the good of all their patients.

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Lack of Administrative Support and Resources

The Saturation Model

Any initiative worth pursuing requires the attention of all parties. For administrators to make a statement that everybody will receive TeamSTEPPS training is not sufficient. If one is going to really make a difference in any training initiative, a *saturation training model* is necessary, including periodic follow-up training. As an example, one of the authors (T.C.) has proposed and stressed the saturation training model as part of the simulation training for numerous clinical courses, with great success. The saturation training model states that departments and organizations may see a change in culture or behaviors if enough learners are trained in a skill or procedure in a short time. Argyris and Schön (1974/1992) recognized that through reinforcement of behavior models, groups develop norms to support organizational structures and policies. Training entire departments allows for recently trained personnel to assist others with the transition toward inquiry and learning by confronting their theories-in-use and inconsistencies (Argyris & Schön, 1974/1992; Vygotsky, 1978). Obstetrics departments saw significant reductions in shoulder dystocia complications and improved teamwork when entire obstetrics (OB) departments received shoulder dystocia training that included TeamSTEPPS training along with an oxytocin bundle protocol (Jacobs, 2011).

Key Points

- Use the Saturation Training Model proposed by Clapper to effect change in a culture in a short period of time.
- Administrators and organizational leaders need to provide the necessary resources and staffing to allow for implementation and sustainability of TeamSTEPPS in clinical practice.
- Incorporate more student-driven, authentic, and collaborative learning strategies to teach the four TeamSTEPPS competencies.

The saturation training model makes sense because a clinician may receive shoulder dystocia or most any training, but on completing the course, if nobody else in the department is using the skills and equipment addressed in the course, the learner may stop using them. This appears to be the case when numerous central line placement courses were taught by one of us (T.C.) across the 11 public hospitals in New York City. During the quarterly corporation analysis of the impact of training, some improvements in central line infection and errors were noted (Jacobs, 2011); however, the gains appeared sporadic because the training was hit or miss. On the other hand, the same author who used the saturation approach to train entire OB departments in shoulder dystocia teamwork and skills training also applied this concept to other simulation-based courses, including the cardiac code team course, as well as both the basic and advanced airway courses. While follow-up research is needed to assess the true value, initial conversations with department chairs (personal communication, 2011) suggest that the training is positively affecting the culture of safety and clinical skills within each department across the 11 hospitals. Caroline Jacobs (2011), vice president of the largest municipal hospital and health care system in the United States, reported a significant drop in Erb's palsy, an increase in reporting of near misses, a reduction in intensive care unit infections, and decreased triage-to-assessment times during a 3-year period. This was accomplished by including some TeamSTEPPS training with other health care improvement initiatives. To improve patient care and the culture within departments, the same saturation training must exist for TeamSTEPPS training itself. However, greater gain may have been realized if everybody had received initial and follow-up TeamSTEPPS training early on in the implementation.

A challenge to the saturation training model may be that too often, executive leaders may decide to adopt TeamSTEPPS for the organization and hand the initiative over to a patient safety representative to conduct master trainer or train-the-trainer courses. What is often missing is the requirement for departmental and unit level leaders to buy into the TeamSTEPPS plan. As a result, staff may not be assigned to participate in training in a timely manner or may not get assigned at all, leading to sporadic or prolonged implementation. The earlier example of one person's receiving training and not applying what he or she learned because of the lack of saturation illustrates that this would not be an effective way to implement TeamSTEPPS. Therefore, buy-in and support from department and unit-level leaders is critical. In addition, health care compliance agencies are requesting evidence of TeamSTEPPS training. This requirement is also an important motivator for applying a saturation model to generate the greatest effect in the shortest time.

Provide Resources Necessary to Carry Out TeamSTEPPS Principles

Executive and senior leaders must support teamwork as an organizational value (Jacobs, 2011). However, acceptance of the concept by itself is not adequate. Implementing and sustaining TeamSTEPPS require ongoing assessment and financial support. It is not sufficient to conduct TeamSTEPPS training without tangible support being committed in the form of materials and personnel resources. Inadequate staffing, lack of equipment, or outdated or broken equipment is not compatible with patient safety. These conditions are recognizable barriers to effective implementation and sustainability of TeamSTEPPS. For example, the cardiac code team course aimed for learners to understand

that using a step stool is necessary for delivering high-quality chest compressions, and the shoulder dystocia course aimed to teach clinicians to apply suprapubic pressure at the correct angle in order to relieve an impacted fetal shoulder. But teaching that a step stool can make a huge difference is a moot point if stools are not available or a team member must run down the hall to locate one, thereby wasting valuable time. Excessive frugality of resources or supplies can undermine the successful implementation of TeamSTEPPS by destroying key concepts and devaluing priorities that were drilled into the trainees during their saturation training. Administrators may need to invest in peripheral devices to support communication and enable situational monitoring with timely communication mechanisms to verify contact, call-outs, and check-backs and facilitate closed-loop communication explained by Clapper & Kong (2011).

Lack of equipment can be a deterrent to implementing TeamSTEPPS, and inadequate staffing can have equally devastating results. TeamSTEPPS calls for having discrete teams with team roles. If a unit is consistently short staffed, with the result that team members are always overwhelmed with multiple roles, they will not be able to perform their primary function in their intended roles. For example, nurses may often need to take the role of the runner and leave the team to obtain medications from the pharmacy, because of inadequate numbers of ancillary staff, thus slighting a necessary role within an effective TeamSTEPPS complement. Consequently, the core team may be incomplete, and staff members may be unable to sustain the TeamSTEPPS practices they learned. Not providing adequate resources on the units sends the message to stakeholders that patient safety is not important. TeamSTEPPS was just another lecture to be endured but not to be applied in the work environment.

In terms of financial implications, a typical shoulder dystocia litigation payout can easily average $3 million (Clark, Belfort, Dildy, & Meyers, 2008). When the research calls for clearly defined team roles, adequate equipment, and resources such as stools for cardiac code teams and shoulder dystocia teams, department administrators need to find the financial means of providing the personnel and the equipment. One would assume that if money is available for these extraordinary payouts resulting from litigation and damages, then up-front investments for personnel and equipment resources would be a priority for administration and management.

Providing resources and opportunities for training may seem practical, but as Chris Argyris observed, bosses and staff members are known for inane rhetoric that is not valid from their perspective yet temporarily pacifies team members (Abernathy, 1999). Some 90% of organizations are aware of gaps and disconnects in other organizations, but they cannot see when their leaders are creating the problems themselves in their own organizations (Abernathy, 1999). Master training can assist staff members at all organizational levels with the recognition of weak areas within their own system and culture. TeamSTEPPS can assist with addressing these issues for the organization.

Cultural Incivility and Empowerment: Reasons for the Four Competencies

Although TeamSTEPPS is geared toward clinical teams, administrators and managers should also receive ongoing TeamSTEPPS training, because their behaviors may be the root cause of toxicity and mistrust contributing to employee turnover (Branham, 2005). When employees know the right thing to do, but the organization harbors an unjust culture that prevents them from doing it, the result can be morally distressing for the employees (Ganske, 2010; Jameton, 1984). All employees, including housekeeping staff, unit secretaries, clinicians, and administrators, must feel that they are stakeholders and empowered to move the four TeamSTEPPS competencies to total actualization. At the same time, they need to be held accountable to TeamSTEPPS behaviors. Trainers must make the four competencies relevant for ancillary, clinical, and administrative employees so that these employees understand how the four competencies can be applied to change the culture. Trainers must understand that a way to improve the culture is to address the manner in which employees communicate with and treat one another. This is often not an easy task. People desperately protect existing ways of doing things in order to maintain a favorable perception of self, even when the existing system is ineffectual (Argyris & Schön, 1974/1992). Unlearning and relearning is a necessary part of change and can produce great uncertainty in most people (Ford, 2006, p. 517).

One of the reasons the shoulder dystocia and code team courses were so successful in creating positive changes across the 11 hospitals was the application of TeamSTEPPS, which addressed ineffectual teamwork and clinical management. The learners practiced the four competencies during realistic, case-based scenarios. For example, the concepts of situational awareness and mutual support were brought to life when the learners noticed fellow team members performing inadequate suprapubic pressure or chest compressions. Other team members quickly engaged by bringing a step stool, offering to take over the performance of chest compressions, or assisting with more effective suprapubic pressure. Trainers must acknowledge these types of examples with praise to solidify and reinforce the training. While training how to implement the four competencies is necessary, addressing the organizational culture issues, including hierarchal differences and rudeness, is equally needed. Otherwise, the training may be in vain.

Incivility among employees, including tension and conflict between baby-boomer and Generation-X employees, can lead to patients' making negative inferences about the

organization, poor health in the younger cohort, and reduced job satisfaction (Leiter, Price, & Spence, 2010; Porath, Macinnis, & Folkes, 2010). Victims of incivility in the workplace bring this stress home to the family domain, where it influences relationships with loved ones (Ferguson, 2011). Conversely, happy employees produce more, show up to work, are less likely to quit, and attract workers who are like themselves (Spreitzer & Porath, 2012). Research by Spreitzer and Porath (2012, p. 94) found that four conditions can be created that allow employees to thrive in the work environment: (a) providing decision-making discretion, (b) sharing information, (c) minimizing incivility, and (d) offering performance feedback. The four TeamSTEPPS competencies allow for each of these to occur, especially when leaders create a *shared mental model* and think aloud to prepare the team for next steps. The shared mental model creates the information sharing that is necessary for team members to evaluate the situation through situational monitoring, anticipate next steps, take responsibility required for their role, and assist others to maximize care to the patient. The current master trainer model does not adequately prepare departmental trainers to take action to rectify existing cultures and successfully implement the four competencies, nor does it address the hierarchies that may exist.

As team members, physicians may not feel the same need to collaborate because they see themselves as the authority or leader (Garber, Madigan, Click, & Fitzpatrick, 2009, pp. 337-338). This stance can create problems for the team because (a) the authoritarian exercising control over others can create fear and vulnerability in the group, (b) group relationships become defensive rather than facilitative, (c) the defensiveness may lead to mistrust and to conformity to rigid group behaviors, and as a result, (d) team members will be uncomfortable with exploring alternatives (Argyris & Schön, 1974/1992, p. 73) or exercising the four competencies. Since physicians often lack formal leadership training (Clapper & Kong, 2011), they may not have the education or experience to know how to build a team and communicate effectively.

Communication has been shown to be an essential factor in effective primary health care teams (Sargeant, Loney, & Murphy, 2008). Communication flows easily and freely in a downward direction, but for TeamSTEPPS to flourish, it must be able to move upward with the same ease. As noted by Clapper and Kong (2011), simulation can offer learners the opportunity to practice teamwork and communication, but a psychologically unsafe environment in any department—clinical or administrative—is not conducive to open communication. Leaders at the top of an organization may not be aware of the human factors, including disruptive and toxic environments that their subordinate managers can generate. Leaders need to insist on a just culture and candor (Clapper & Kong, 2011) and offer an open-door policy free of reprisal. The entire culture of an organization should be actively monitored by senior executives and, if possible, their public stakeholders.

Inadequate TeamSTEPPS Instruction and Simulation Practices

The initial master trainer course involves 2.5 days of heavy lecture-based instruction, which is often taught out of context and includes material that is unnecessary for the TeamSTEPPS departmental trainer. There is so much information in the 2.5-day master trainer course that trainers come away wondering how and what to train their staff members on in order to get TeamSTEPPS running effectively. Too often, valuable time is dedicated to explaining the culture and climate of the organization to departmental trainers during TeamSTEPPS. The assessment and surveying should be shared in a comprehensive implementation plan, but the trainers do not need this detailed information at this point, when it only contributes to information overload for the departmental trainers, diluting the essence of the training. It would be optimal if this information was shared with them prior to the TeamSTEPPS training.

As noted by Baker, Amodeo, Krokos, Slonim & Herrera, (2010), a climate survey measures perceptions of organizational constructs such as commitment to safety, leadership, interpersonal interactions, attitudes toward stress, and knowledge of how to report adverse events. This is essential information for top-level administrators but has little value for trainers. Instead, training should be focused on assessing teamwork skills through the four competencies via Baker et al.'s TeamSTEPPS Teamwork Attitudes Questionnaire, which was developed to be aligned with TeamSTEPPS and can be used to diagnose teamwork skills and the effectiveness of training on the four competencies. Modifying the master trainer course to emphasize trainer-level skills may help to eliminate the confusion that many learners may feel at the end of the training session.

Everything that a department trainer needs to emphasize is in the pocket TeamSTEPPS guide (Agency for Healthcare Research and Quality, 2006). The master trainer course needs to be modified from its current reliance on lecture-based instruction so that trainers have an opportunity to immerse themselves in the four competencies through the use of active, authentic activities and feedback. Lecturing to the trainers on these points does not guarantee real understanding that instills confidence to enact training in their departments. Managers and administrators may need to receive survey training, but the details can be removed from the master trainer course, as trainers should focus on caring for patients and training the staff. Concentrating on too many master trainer objectives and subjects only confuses the trainers and creates anxiety as they try to develop an instructional plan. There are more than 130 TeamSTEPPS scenarios or mini—case studies that a department trainer can customize to an appropriate specialty

(Clancy, 2007). These can be used in role-play form to solidify the four competencies. As one OB department chair stated after the shoulder dystocia teamwork and skills course, in which the four competencies were heavily integrated into the curriculum, ''I've been trying to teach TeamSTEPPS as a master trainer for 3 years in my department, and this is the first time it made sense'' (personal communication, 2011). Learners and trainers need to know how to apply the competencies to the clinical context of their particular specialty.

After completing the master trainer course, the trainers must develop a similar active learning lesson plan, as well as coaching and sustainment strategies, to teach their staff members to recognize and use the four competencies. The trainer must recognize that an ongoing practice of modeling, reinforcement, and sustainment is the only way to solidify what was taught. The trainer's modeling of the competencies allows the learners to see the ideal state they should strive for (Argyris & Schön, 1974/1992, p. 111). Without ongoing reinforcement, teamwork behaviors and the four competencies deteriorate over time (Helmreich, Merritt, & Wilhelm, 1999). Team communication and behaviors must be reinforced and followed through on the unit level on a daily basis so that learners can see the consequences and effectiveness of the new behaviors (Argyris & Schön, 1974/1992, p. 99).

Departmental and unit leaders must buy into TeamSTEPPS, and when they do, they become the primary drivers for reinforcing TeamSTEPPS. Nursing leaders must be held accountable for managing the process, setting the expectations, and reinforcing TeamSTEPPS concepts in practice, including actively modeling TeamSTEPPS behaviors every day if the program is to be successful. When staff members do a good job of applying TeamSTEPPS, nursing leaders need to point it out to others specifically for positive reinforcement. When staff do not do that, or refuse to adhere, nursing leaders need to counsel them individually. In addition, all participants need to take advantage of simulation opportunities to solidify TeamSTEPPS practices.

Simulation educators must have a thorough understanding of the four competencies and be able to integrate them into every course that is offered through their center in order to support the department sustainment process. In this way, clinical teams can understand that competencies such as situational monitoring can mean recognizing that a fellow team member is short (and the bed was raised), and thus CPR compressions were not performed adequately. Through mutual support, one team member can grab a stool and either provide it to another team member or take over compressions to relieve a colleague fatigued from performing prolonged nonergonomic chest compressions. While we recognize that many conducting simulation are still tied to outdated and antiquated teamwork and communication programs, we are optimistic that once enlightened to the benefits of TeamSTEPPS, many will move to the more active, student-centered teaching practice that TeamSTEPPS emulates.

Educators' Resistance to Change From CRM Concepts

A search for the terms *CRM* and *health care* with three search engines (Science Direct, Ebscohost, and ProQuest) from 2010 to 2012 led to 529 results. Certainly this does not imply that each of the results specifically advocates CRM as a principal teamwork and communication strategy. However, the same search using *TeamSTEPPS* and *health care* as search terms led to only 71 results. One cannot take concepts such as CUS (I am *C*oncerned; I am *U*ncomfortable; there is a *S*afety issue . . . Stop the line), apply it to CRM principles, and refer to CRM in the same way as TeamSTEPPS; CRM still comes up short (Clapper & Kong, 2011). As Clapper and Kong (2011) showed, TeamSTEPPS includes the CRM concepts and more. CRM evolved into TeamSTEPPS in 2006, and clinicians should evolve also. As with medical and nursing practices, one would have to question why we are using dated concepts rather than embracing the latest, evidence-based programs.

Therefore, it is highly recommended that a national patient safety campaign take place that expresses the importance of clinicians' and health care professionals' learning TeamSTEPPS, implements the four competencies in all applicable instructional areas and in the clinical environment, and discards dated CRM concepts. Here again, for optimal outcomes, implementation should be generated from top-level management and infused down throughout the hierarchy. This means that the Agency for Healthcare Research and Quality, the Accreditation Council for Graduate Medical Education, the Joint Commission, the National Patient Safety Foundation, and other health care management organizations must issue statements that express the importance of education and inspection for compliance with the TeamSTEPPS initiative. In addition, journal editors and scientific publications can encourage the sharing and dissemination of research that relates to TeamSTEPPS in order to promote the latest evidenced-based teamwork and communication practices related to patient safety.

Conclusion

TeamSTEPPS is a valuable teamwork and communication tool that has been shown to improve patient safety. Organizations may wish to integrate this important tool into their patient safety program but may be discouraged to learn that the time and resources they dedicated to the initiative meant it was not as effective as it could have been. Reflecting on some obstacles and barriers to success within the organization can help administrators and educators with preparing a plan for success. Success may stem from providing command and health care agency emphasis for the TeamSTEPPS program, providing adequate material and personnel resources, designing training that is geared to trainer implementation at the departmental level,

prioritizing and saturating training, and striving toward a just culture. If we are serious about patient safety and reducing clinical errors, TeamSTEPPS is a viable, evidenced-based strategy that can be applied in all health care settings with success if implemented holistically.

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