



## Peer Coaching Integrated in Simulation: Improving Intraprofessional Teamwork

Donna Badowski

DePaul University School of Nursing, 990 W. Fullerton Ave. Suite 3002, Chicago, IL 60614-7282, USA



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### ABSTRACT

Poor communication in healthcare is recognized as a leading cause of medical errors. There is a call from national healthcare organizations for nursing education to focus on higher level competencies. Teamwork and collaboration is one of these competencies and should be a priority in nursing education. It is imperative that nurses function with open communication, mutual respect, and shared decision-making as members of the intra professional team. The traditional clinical practice setting is typically not conducive for an entire clinical group to fully practice these skills. Integrating peer coaching in simulation provides students with the opportunity to practice open communication, provide mutual respect, and share decision making to solve patient problems in a safe environment.

### Introduction

Poor communication within healthcare teams is recognized as a leading cause of medical errors (Institute of Medicine (IOM), 1999). For this reason, the IOM (2001) strongly recommends the integration of teamwork skills in the education of healthcare professionals to improve patient safety. As a result, the IOM (2010) along with Quality and Safety Education for Nurses (QSEN) (2018) identified teamwork and collaboration as a key competency for nurses. It is defined as the ability for nurses to function effectively in both intra and inter-professional teams (QSEN, 2018). Open communication, mutual respect, and shared decision-making among team members are required for effective teamwork and collaboration. In order to ensure this competency among nursing students, nurse educators must intentionally utilize learning strategies allowing students to participate in group, or team, collaborative learning experiences throughout the nursing curricula.

### Collaborative learning

Collaborative learning occurs when students are required to work together to achieve a common goal (Srinivas, n.d.). When utilized, students practice communication, trust, leadership, decision making, and conflict resolution skills. These are the same skills needed for teamwork and collaboration (Agency for Healthcare Research and Quality (AHRQ), 2015; QSEN, 2018). Collaborative learning is not a new concept in nursing education. A systematic review of published articles between 1985-present by Zhang and Cui (2018) shows

collaborative learning to have positive effects on learning for nursing students in lecture, skills lab, clinical, and the online learning environment. Their review did not produce evidence of collaborative learning in simulation-based experiences (SBE), which is an additional learning opportunity in nursing education. These experiences represent actual or potential situations that allow students to develop knowledge, skills, and/or attitudes and provide an opportunity to analyze and respond to realistic situations in a simulated environment (International Nursing Association for Clinical Simulation and Learning (INACSL), 2016b).

Simulation is gaining momentum as an alternative to traditional clinical learning since the landmark National Council State Boards of Nursing Study (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). Simulation provides the particular set of conditions that resemble authentic situations possible in real life (INACSL, 2016b). In nursing education, simulation replicates the traditional clinical environment. As more nursing programs are using simulation as an alternative to traditional clinical (Breymier et al., 2015), it is important to integrate collaborative learning in SBE.

Pairing students in dyads has been an approach to integrating collaborative learning in traditional clinical (Peer, 2015; Zhang & Cui, 2018). Dyads can also be used in SBE. However, entire clinical groups of five to up to ten students can collaboratively learn together with one simulated patient. There is no concern for overwhelming real patients with a large number of students providing care. Working as one clinical team offers opportunities to practice teamwork and collaboration skills during SBE for the entire clinical group. The purpose of this paper is to

E-mail address: [DBADOWSK@depaul.edu](mailto:DBADOWSK@depaul.edu).

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describe peer coaching (PC) as a collaborative learning strategy that can be integrated in the facilitation of SBE. Additionally, this paper will demonstrate how PC in SBE provides students the opportunity to practice teamwork and collaboration skills defined by QSEN (2018).

### Teamwork and collaboration skills

The AHRQ (2015) developed an evidence-based teamwork program called TeamSTEPPS®. The goal of this program is to improve communication and teamwork skills among health care professionals to improve healthcare quality and safety. There are five key interdependent teamwork concepts in the program. These are team structure, communication, leadership, situation monitoring, and mutual support. The TeamSTEPPS® program allows participants to increase team awareness, clarify team roles and responsibilities, resolve conflicts and improve information sharing. This program creates highly effective health care teams to achieve the best clinical outcomes for patients.

Nurses must be competent to effectively function within both nursing and inter professional teams fostering open communication, mutual respect, and shared decision making (QSEN, 2018). QSEN (2018) lists the set of knowledge, skills, and attitudes (KSAs) needed for competency in teamwork and collaboration. Nurse educators must go beyond content knowledge of teamwork and collaboration. There needs to be consistent opportunities for students to practice these skills and to foster a change in attitudes about teamwork and collaboration.

Peer coaching (PC) is when two or more students interact with each other to reflect on current practices; expand, refine, and build new skills; share ideas and teach each other to solve problems (Robbins, 1991). It is a collaborative learning experience. As such, PC in simulation is recommended in any nursing course using SBE as a learning strategy rather than a testing strategy. Consistent with collaborative learning, peer coaching provides for the practice of communication, trust, leadership, decision making, and conflict resolution. Table 1 shows how PC provides for practice of TeamSTEPPS® (AHRQ, 2015) concepts and QSEN's (2018) teamwork and collaboration KSAs. When integrated in simulation, PC not only allows students to solve clinical problems, it offers the deliberate practice of teamwork and collaboration skills. Deliberate practice is the intentional repetition of specific activities to improve performance (Ericsson, Krampe, & Tesch-Romer, 1993). For intentional repetition to occur, it is recommended that PC be integrated in any SBE that is used as a learning strategy.

**Table 1**  
Teamwork and collaboration skills utilized in peer coaching.

QSEN teamwork and collaboration skills (2018)	TeamSTEPPS® concepts (2015)	Primary/secondary nurse role	Peer coach role
Demonstrate awareness of own strengths and limitations as a team member		X	X
Assume role of team member or leader based on the situation	Team structure/leadership	X	
Function competently within own scope of practice as a member of the health care team		X	X
Initiate requests for help when appropriate to situation	Communication	X	
Integrate the contributions of others who play a role in helping patient/family achieve health goals	Mutual support	X	
Clarify roles and accountabilities under conditions of potential overlap in team member functioning	Communication	X	X
Solicit input from other team members to improve individual, as well as team, performance	Communication/mutual support	X	
Initiate actions to resolve conflict	Communication	X	X
Assert own position/perspective in discussions about patient care	Communication	X	X
Act with integrity, consistency and respect for differing views	Communication/mutual support	X	X
Communicate with team members, adapting own style of communicating to needs of the team and situation	Communication	X	X
Choose communication styles that diminish the risks associated with authority gradients among team members	Communication	X	X
Demonstrate commitment to team goals	Mutual support	X	X
Initiate plan for self-development as a team member		X	X

### Integrating peer coaching in simulation-based experiences

#### Preparing students for peer coaching

The INACSL (2016c) *Standards for Best Practice: Simulation<sup>SM</sup>* was developed to enhance student engagement and improve students' success in meeting expected outcomes of SBE. The guidelines of this standard need to be followed when integrating PC in simulation to ensure effectiveness. Criterion three of *Standards for Best Practice: Simulation<sup>SM</sup> Facilitation* requires students receive preparatory activities and pre-briefing for a successful SBE. Preparatory activities prior to SBE may include providing students with the objectives, reading assignments, access to the simulated health record of the simulated patient, and possible instructional videos to review.

Pre-briefing occurs immediately before the start of SBE. It is here that simulation roles are assigned and patient report is provided. When integrating peer coaching in simulation, the facilitator instructs students on how PC is used during SBE and gives students strategies for respectful collaboration if conflict were to arise. The specific instructions in the pre brief include:

- Informing students they function as a team unit charged with the goal of safe, effective quality patient care. The group needs to know they are all team members and, as such, are all responsible for patient goals being met, or not met.
- Assigning student roles for SBE, which include primary/secondary nurse, patient, family member, and observers. Roles should be rotated when doing multiple SBE with the same group of students to ensure all students experience the different roles. There are no special requirements needed for any role since these students are at the same level in their program. The facilitator of SBE reviews the instructions for each role during pre-briefing.
  - Primary nurse: Functions as the leader and provides direct nursing care and makes clinical decisions. He/she may utilize mutual support from any team member to assist in clinical decision-making when unsure on how to proceed. This practice mimics a teamwork and collaboration skill expected of nurses in the clinical environment (QSEN, 2018).
  - Secondary nurse: Provides mutual support and assistance to the primary nurse for direct patient care. He/she may provide PC to the primary nurse when concerned with compromises in patient safety or when the primary nurse seeks support in clinical decision-making.
  - Patient: Interacts with the nurse from the patient perspective

after receiving scripting from the facilitator. He/she may provide PC to primary nurse from the patient perspective, after all, patients are team members. An example statement the patient role might say during PC is “the other nurse checked my name band before giving me my medication” to a primary/secondary nurse who is about to administer medication without checking the patient’s name band.

- Family member: Interacts with the patient/nurse as a family member after receiving scripting from facilitator. He/she may provide PC to primary nurse from the perspective of the family member. Family members are members of the health care team. An example statement a family member might say during PC is “I check my dad’s blood sugar before he takes his insulin” to the primary/secondary nurse who is about to administer insulin without checking the patient’s blood glucose level.
- Observer: To maintain engagement in the learning, observers are tasked with situation monitoring for safe effective care and may provide PC when concerned about compromises in patient safety or when the primary nurse/secondary nurse needs additional support for clinical decision-making. They are stationed in the perimeter of the simulation room.
- Reviewing with students the impact their communication style has on team members to maintain professional behavior. Students are given three communication tools to empower them to be patient advocates when they are concerned about compromises in safe, effective care. These tools are a) the assertive statement, b) the two-challenge rule, and c) CUS ([Agency for Healthcare Research and Quality, 2014](#)).

Integrating PC in simulation offers options for nursing programs using SBE as an alternative to traditional clinical. It allows an entire clinical group to be actively engaged in SBE, functioning as a team practicing teamwork and collaboration skills. The team is charged with the goal of safe, quality patient care. As with any team, if the goal is not achieved, the team members share responsibility of both the positive outcomes as well as negative outcomes. [Table 1](#) demonstrates the TeamSTEPPS® ([AHRQ, 2015](#)) concepts and [QSEN \(2018\)](#) KSAs that are practiced when PC is used in simulation.

#### *Simulation-based experiences with peer coaching*

##### *Staging*

The student taking on the role of the patient is in the simulation control room with the facilitator behind a one-way window. The primary/secondary nurse starts the SBE outside the patient room. The student taking on the role of the family member is in the patient room. Finally, observers are located in the perimeter of the simulated clinical room.

##### *Simulation-based experience*

The SBE begins with the primary/secondary nurse entering the simulated patient room and interacting with the patient as they would in the traditional clinical environment. As the SBE unfolds, observers are closely monitoring the situation for any possible compromises to patient safety. There are two ways an observer may become active participants in the SBE, a) if the primary nurse seeks assistance from them when unsure how to proceed after collaboration with the secondary nurse or b) if the observers are concerned about compromises in patient safety. Below is an example of an actual situation that occurred during a SBE with PC by the observer role.

Scene: Observers are monitoring the primary nurse complete a phone call to the physician to obtain orders for low blood pressure on a patient prescribed an antihypertensive. The primary nurse writes down and reads back the orders to complete the call. The primary nurse prepares the next medication, an opioid. One of the

observers voices a concern about opioid administration for a patient who has low blood pressure.

Observer providing PC: “Wait, I am concerned about this medication. I know opioids are contraindicated in patient’s with low blood pressure.”

Primary nurse: “I just got off the phone with the doctor. She knows the medications that patient is taking and would have done something.”

Observer providing PC: “I understand but in my experience as an EMT, I have seen patient’s bottom out their blood pressures after taking opioids.”

Primary nurse: “Okay, since you are concerned, I will call the doctor back.”

The primary nurse in this SBE felt the physician would have changed the opioid orders since “the doctor knows.” The observer, recognizing her previous experience as a strength, verbalized it to convince the primary nurse her decision-making process was compromising safe patient care. The observer offered the primary nurse mutual support by monitoring the situation and provided respectful communication to the leader of the SBE. The primary nurse recognized her limitations once the observer verbalized her previous experience.

##### *Debriefing*

Debriefing follows immediately after SBE so students can critically reflect on their performance and make recommendations to improve it ([INACSL, 2016a](#)). When PC is used in the facilitation of SBE, students should not only reflect on the clinical objectives of the simulation but also their teamwork and collaboration skills. Students make recommendations on ways to improve as a team member, an important teamwork and collaboration skill ([QSEN, 2018](#)). The facilitator concludes the debriefing with a formative evaluation of the group by providing them with progress toward outcomes and competencies and by closing gaps in knowledge and skills that became evident during the SBE.

Students debriefing, in the SBE example, verbalized the important impact teamwork and collaboration has on maintaining patient safety. They also recognized how effective, respectful communication assists in healthy work relationships. This group of students had a total of nine SBE with PC over three weeks as an alternative to traditional clinical. [Badowski and Oosterhouse \(2017\)](#) found improved teamwork attitudes in this group when compared to a group who had traditional clinical. The traditional clinical group teamwork attitudes actually declined.

##### **Conclusion**

There is an urgent need for nursing education to improve teamwork and collaboration skills in order to improve safe, quality care. It is logical that the only way to have nursing students improve these skills is for nursing education to ensure consistent practice of these skills. Nursing students must work in teams to solve patient problems in order to gain teamwork and collaboration skills needed for clinical practice. Peer coaching in simulation offers the deliberate practice these skills in a safe environment that mimics the clinical environment. Students consistently practice [QSEN \(2018\)](#) teamwork and collaboration KSAs, as well as, TeamSTEPPS® ([AHRQ, 2015](#)) concepts. Peer coaching in SBE is an innovative approach to providing regular opportunities to practice teamwork and collaboration KSAs required for practice. Further research on PC in SBE is recommended to ensure this strategy provides the gains in KSAs for teamwork and collaboration. Additionally, longitudinal studies are needed to follow students to measure if this strategy improves transition to practice and, most importantly, safe quality patient care.

## Conflicts of interest

The authors report no potential or actual conflict of interest related to this research.

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