Using Interprofessional Simulations Designed for Competent-to-Expert Clinicians in an Acute Care to Promote Effective Teamwork

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Interprofessional education creates an opportunity to develop teamwork, communication, and a stronger understanding of roles and scope of practice of team members from various disciplines (Holtschneider & Park, 2015; Olson & Bialocerkowski, 2014). Interprofessional simulations promote healthy work environments, teamwork, and collaboration (James, Page, & Sprague, 2016; Nagelkerk et al., 2014; Sexton & Baessler, 2016). Although research, guidelines, and core competencies exist to guide interprofessional simulation education (INACSL, 2016; IPECEP, 2011; O’Rourke et al., 2018; Olson & Bialocerkowski, 2014; WHO, 2010), limited tools exist in high-acuity simulation scenarios aimed towards competent-to-expert-level hospital-based clinical teams. Most simulation education available has been aimed towards educating novice and advanced beginner practitioners in the areas of assessment and clinical skills (Palaganas, Epps, & Raemer, 2013; Sittner et al., 2015). Based on this area of critical need, an innovative interprofessional simulation program was designed to meet the educational needs of competent-to-expert-level clinicians in the acute care setting at a small rural hospital. High-fidelity simulations scenarios were developed using Benner’s Novice-to-Expert Theory, Bloom’s Taxonomy high-level learning outcomes, QSEN Competencies, and the Core Competencies for Interprofessional Collaborative Practice to engage healthcare professionals from various disciplines.

For this program, high-fidelity simulation scenarios were created to include physicians, nurses, nurse technicians, pharmacists, and respiratory therapists to focus on interdepartmental teamwork and collaboration and a positive work environment. The simulation scenarios and debriefing sessions were created in consultation with a representative who was considered an expert in the field. Learning outcomes were written at Bloom’s taxonomy level of analysis, synthesis, and evaluation, to account for the level of experience and clinical skills of participants. The professionals’ levels of experience ranged from competent, to proficient, to expert, according to Benner’s (1984) Novice-to-Expert Theory. Each of the six QSEN competencies were incorporated into each scenario (QSEN, 2018).

Participation from each discipline was supported by the hospital’s leadership team and time was given for clinicians to engage in simulation sessions. Simulation sessions were scheduled to accommodate clinical staff from both day and night shifts. A sign-up process was put in place to allow for each discipline to be represented in every scenario. Simulations were led by a simulation instructor who could facilitate interprofessional critical thinking and teamwork and collaboration. Scenarios included high acuity patients with deteriorating statuses. The scenarios allowed each discipline to play a role in critical thinking. Pre-briefing was completed with consideration for each discipline’s area of expertise. Interprofessional scenarios give teams the ability to anticipate actions (James, Page, & Sprague, 2016). During the simulation, each team member’s expertise was needed in order to manage the patient’s condition collaboratively.

Current literature recognizes the challenge to incorporating all professions into the scenario and creating a meaningful debrief for individual disciplines (Cheng et al., 2014; DeMarco et al., 2015; Holtschneider & Park, 2015). Understanding of scope and anticipation during simulation scenarios can yield bedside results of quicker response times, reduction of errors in communication, and create healthier relationships (Sexton & Baessler, 2016). Participants contemplated on how their role and scope of practice can affect effective teamwork and the quality of care provided.
Strategic debriefing sessions were used to reflect on the simulation experience. Structured debriefing questions can facilitate reflection of communication and teamwork skills (Cheng et al., 2014). The instructor influences thought process and open discussion around teamwork strategies and impact (Holtschneider & Park, 2015). The debriefing session also allowed participants to identify quality improvement opportunities and future teamwork development. Combining the reflection of clinical skills and interdepartmental collaboration can lead to healthy work environments and higher quality of care at the bedside (Jarzemsky, McCarthy, & Ellis, 2010). There is value in hearing the thought process of other departments during the debrief, as well as scope of practice.

Healthy work environments create higher-level communication and relationships that influence higher quality of care at the bedside (Jarzemsky, McCarthy, & Ellis, 2010). Interprofessional simulations create a safe environment for teams to build healthy relationships by understanding roles, communication, values, and teamwork (Holtschneider & Park, 2015). Scenarios and debriefing allowed peers to practice better communication skills and strengthen relationships within the teams. The understanding of scope of practice of each team member and anticipation of actions during scenarios yielded outcomes of quicker response times, reduction of errors in communication, higher quality of care and healthy interprofessional relationships. Participants reported that interprofessional simulations encouraged teamwork, collaboration, and cohesiveness. The collaboration of teams in a safe simulated environment created a milieu of trusting healthy relationships.

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High Acuity Simulations; Competent to Expert, Interprofessionals and Teamwork Collaboration Healthy Work Environment

References:


Abstract Summary:
This interprofessional simulation program was designed to meet the educational needs of competent-to-expert-level clinicians in the acute care setting. High-fidelity simulations scenarios were developed using QSEN competencies to engage healthcare professionals from various disciplines. High-fidelity simulations were used to promote a healthier workplace environment through critical thinking, teamwork, and collaboration.

Content Outline:
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1. Introduction
   1. Interprofessional education creates an opportunity to develop teamwork, communication, and a stronger understanding of roles and scope of practice of team members from various disciplines.
   2. Limited tools exist in high-acuity simulation scenarios aimed towards competent-to-expert-level hospital-based clinical teams.
   3. Based on this area of critical need, an innovative interprofessional simulation program was designed to meet the educational needs of competent-to-expert-level clinicians in the acute care setting at a small rural hospital.
   4. High-fidelity simulations scenarios were developed using Benner’s Novice-to-Expert Theory, Bloom’s Taxonomy high-level learning outcomes, QSEN Competencies, and the Core Competencies for Interprofessional Collaborative Practice to engage healthcare professionals from various disciplines.

1. Body
   1. Main Point #1 Creation of high fidelity simulations for competent-to-expert interprofessional teams.
      1. Supporting point #1 Benner’s Novice-to-Expert Theory accounts for the level of experience of hospital-based clinicians
      2. Supporting point #2 Bloom’s Taxonomy high-level learning outcomes support high acuity scenarios with deteriorating patients.
      3. Supporting point #3 QSEN Competencies ground the simulations in evidence-based education.
      4. Core Competencies for Interprofessional Collaborative Practice serve to guide competencies during simulation and guide debriefing session.
      5. Supporting point #5 Understanding of scope and anticipation during simulation scenarios can yield bedside results of quicker response times, reduction of errors in communication, and create healthier relationships.

   1. Main Point #2 Interprofessional debriefing sessions.
      1. Supporting point #1 Structured debriefing questions can facilitate reflection of communication and teamwork skills.
      2. Supporting point #2 The debriefing session allows participants to identify quality improvement opportunities and future teamwork development.
      3. Supporting point #3 Combining the reflection of clinical skills and interdepartmental collaboration can lead to healthy work environments and higher quality of care at the bedside.

2. Conclusion
   1. Interprofessional Simulation education creates a safe and healthy work environment
   2. Competent to expert nurses realize value of High-level outcomes for clinical skills and critical thinking.

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**Author Summary:** Dan Kunde and Cibele Webb share a background teaching nursing informatics and conducting high-fidelity simulations in the hospital and academic settings, respectively. Sensing a gap in clinical simulation education for experienced interdisciplinary teams in the acute care setting, the presenters partnered to develop a unique interprofessional simulation program using a combination of Benner’s Novice-to-Expert Theory, Bloom’s Taxonomy high-level learning outcomes, QSEN Competencies, and the Core Competencies for Interprofessional Collaborative Practice.

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