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helping save lives



# How Simulation Can Help Prepare New Nurse Graduates for Practice

*A Guide for Residency Programs*

## A Note on How to Use This eBook

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This eBook is intended to provide you with an introduction to how patient simulation can help your New Nurse Graduates (NGNs) make a safe and effective transition from academia to the bedside. The chapters cover everything from how simulation can make a difference, to the basics of simulation and how to use it to its fullest potential. Depending on what you may already know about simulation and your areas of highest interest, we encourage you to navigate the chapters in whichever order you prefer.

*If you're fully new to simulation, you may want to begin with the “What Is Patient Simulation, Exactly?” chapter, located on page 12.*



*“Healthcare is so complex now – and [NGNs] are expected to hit the ground running. Adding the opportunity for focused experiential learning in clinical areas has improved our residents’ understanding, competence, and confidence.”*

Liz Bruno, Executive Director of Education and Human Performance Improvement at Baptist Health<sup>1</sup>

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## Margo: A Real-Life New Nurse Graduate's Story

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Margo was 4-6 months into her career as a New Nurse Graduate (NGN).<sup>2</sup> She had just completed a 3-month orientation program, but still felt overwhelmed. She noticed that one of her patients had a duplicated insulin order in the system: a dose of long-acting insulin, and another for regular insulin. "I remember...thinking it didn't look right, [but] I was still feeling overwhelmed – and it's embarrassing to admit, I wasn't familiar enough with insulin to verbalize to myself why I thought it was wrong... I was always asking questions – and I was trying so hard to practice independently."

She reasoned that the order must be correct, since it was written by a Nurse Practitioner, it had been reviewed by a pharmacist, and then checked by another nurse. She proceeded to retrieve the double dose of insulin.

"I was task-oriented and not thought-oriented," she recalls. Upon bringing the medicine to the patient, she asked him to confirm if this was the same dosage he usually took at home. He confirmed that it was – perhaps because he didn't understand, or he didn't feel like he could say no. "I wasn't skilled enough to ask open-ended questions," Margo explains. "Instead, I asked for confirmation. I should have asked, 'tell me about your home medication regimen,' instead of asking a yes or no question." She went ahead and gave him the double dose.

Four hours later, Margo checked on the patient. He was unresponsive and seizing. As the response team began a desperate attempt to resuscitate him, Margo shouted that she had given him too much insulin. Thankfully, after a night of pushing dextrose to stabilize him, there was no discernable loss of function in the patient.



## Could Simulation Have Made Margo's Story Different?

Seventy-five percent of New Nurse Graduates (NGNs) have committed medication errors<sup>3</sup> – whether it be handing the wrong medication to the patient, dispensing an incorrect dose, or giving a prescription to the wrong patient. For NGNs, the most common cause of medication errors is traced back to lack of “presence of mind,” as well as nerves and pressure.<sup>4</sup>

In the case of Margo's story, the medication error didn't actually originate with her – but as an NGN, a lack of confidence and being overwhelmed contributed to how she handled it. Consider how this situation may have played out differently if she felt more confident and less overwhelmed.

**What if she'd first undergone a simulation of a similar scenario, giving her the opportunity for deliberate practice without posing any risk to the patient?** She would've likely gained valuable insights in areas such as:

- confidently communicating concerns about an incorrect dosage
- grasping the importance of inter-professional communication
- asking open-ended questions of the patient
- acknowledging her own potential to contribute to effective team functioning
- recognizing the importance of asking for help when needed
- managing stress more effectively

With more training, this story might have instead been a successful “good catch” story, in which Margo broke the chain of events leading to patient harm by stopping the error before it reached the patient.

Intended for novice and advanced educators alike, this eBook is an introduction to how patient simulation can help you set your NGNs up for success. This risk-free, consistent, and repeatable training environment will allow them to focus on building the competency and confidence they need for an effective and safe transition to practice.



***Nursing Anne Simulator Male.*** Nursing Anne Simulator offers safe and realistic practice on core nursing skills – from basic assessments and critical thinking to advanced interventions.

# How Simulation Can Strengthen Your New Nurse Residency Program

Simulation is highly effective for building competency, confidence, and readiness for practice.<sup>5</sup> It strengthens assessment and clinical skills, and enhances the ability to apply critical thinking to simulated patient scenarios.<sup>6</sup> Research shows that simulation helps New Nurse Graduates (NGNs) “see the big picture” of patient care.<sup>7</sup> It’s been shown to reduce NGNs’ anxiety and increase their ability to think critically instead of becoming scared and flustered in a high-stakes situation.<sup>8</sup>

*“The simulation labs gave us the opportunity to make mistakes and learn from them in a judgment-free atmosphere,” one NGN said. “Once I began working as a nurse and began to see some of the scenarios presented during simulations come to life, I felt confident in my approach to solve the situation due to my previous exposure during simulations.”<sup>9</sup>*



One study examined the extensive use of simulation as part of an NGN residency program. The study found that the **simulations rapidly increased the competencies of the NGNs and their confidence and self-assessed readiness to provide care to patients. And, it lowered the rate of turnover.**<sup>10</sup>

Simulation offers consistency and standardization, giving every NGN the opportunity to practice the same scenarios – ones that they otherwise might not have each encountered. And, simulation is repeatable: learners can practice as many times as it takes.

The benefits you can reap from simulation extend beyond helping to sharpen NGNs’ critical competencies. You may want to consider also using it to evaluate competency development, as well as identify and remediate learning needs.

A survey of 434 NGNs found that most respondents identified more than 100 different skills/procedures that they were uncomfortable with at 12 months.<sup>11</sup> Top skills/areas included:

- IV starts
- Trach/suctioning care
- Venous/arterial/Swan-Ganz lines
- Death/dying/end-of-life care
- Dubhoff/NG tube placement
- Care of unstable, high-risk, complex patient

**Well-designed simulation scenarios can address all of the above, helping NGNs build their confidence and abilities.**

# These Are Unparalleled Times in Nursing

The pandemic years worsened what was already an ongoing nursing shortage – leaving many hospitals scrambling for practice-ready nurses.

Inadequate staffing levels, desire for higher pay, not feeling supported at work, and the emotional toll of the job are among the reasons that burnt-out nurses are leaving the profession in droves.<sup>12</sup> And, even more nurses are planning their exits in the wake of RaDonda Vaught's conviction.<sup>13</sup>



The nursing staffing crisis is only expected to get worse. Many nurses are set to retire in the coming years – as of 2017, over 50% of nurses were aged 50 or older, and almost 30% were 60 and older.<sup>14</sup> Nursing schools are facing shortages in clinical time opportunities, faculty, and classroom space, causing them to turn away 91,938 qualified applications in 2021.<sup>15</sup>

## 81.3%

of hospitals reporting an RN vacancy rate above 10%<sup>16</sup>

## 100,000

number of nurses that left the profession in 2021 alone – a much higher increase than ever seen in the last 4 decades<sup>17</sup>

## 32%

of RNs indicating they may leave their current role in the next year<sup>18</sup>

## The Cost of Nurse Turnover

High nurse turnover is an issue for a hospital's bottom line. Every year, RN turnover costs a hospital between \$5.2M and \$9M.<sup>19</sup> Recruitment and replacement costs are a direct impact, but decreased reimbursement rates associated with sub-optimal care are an indirect contributor.<sup>20</sup>

Hospitals in desperate need of nurses have had to rely on contract nurses, driving up labor costs. According to recent data, median hourly rates that hospitals paid for contract nurses in January 2022 more than tripled from rates in January 2019.<sup>21</sup> In some cases, compensation for contract nurses has reached or exceeded \$240 per hour.<sup>22</sup> The data also showed that **contract nurses represented a median of 38.6% of total hospital nurse expenses in January 2022, compared to a median of only 4.7% in January 2019.**<sup>23</sup>

Naturally, the “perfect storm” that these factors are creating is sparking many hospitals to put even more focus on implementing strategies to improve retention of their nurses.

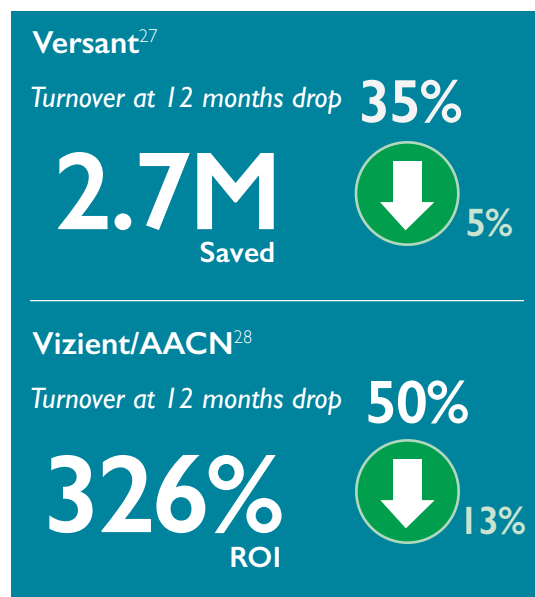


# Retention: A New Nurse Residency Program Delivers Positive ROI

If your hospital is dealing with nurse staffing shortages and high turnover, you likely know that retaining your nurses can help address not only these issues – but your financial outlook as well. **Each percent change in RN turnover could save the average hospital \$262,300 per year.**<sup>24</sup>

Evidence indicates that a supportive residency program for New Nurse Graduates (NGNs) results in decreased turnover.<sup>25</sup> In 2014, the National Council of State Boards of Nursing (NCSBN) developed a 12-month, evidence-based program for effectively transitioning NGNs to practice.<sup>26</sup> They evaluated the effectiveness of their program in a study of 1,032 NGNs from 70 hospitals. NGNs that completed the NCSBN's program had a 12-month turnover rate of 15.5%, compared to a 26.8% rate in the control group (which consisted of NGNs who completed a limited program). Using the turnover rates of the groups, they calculated that they would've lost an additional 83 RNs if not for the NCSBN's program. They concluded that **their replacement costs for those RNs could have potentially been \$7.9M.**

Two well-known residency programs are the Versant and Vizient/AACN programs. Both programs have been shown to drastically reduce NGN turnover rates, resulting in major cost savings for the hospitals.



NGN retention also plays an important role in reducing dependency on contract nurses, which can have a substantial financial impact as well. **For every 20 travel RNs eliminated, a hospital can save, on average, \$4,203,000.**<sup>29</sup>

And, there is payoff for patient safety. One study found that hospitals with lower turnover rates (between 4% and 12%) had lower risk-adjusted mortality and lower patient lengths of stay than hospitals with moderate (12% to 22%) or high (22% to 44%) turnover rates.<sup>30</sup>

**The evidence is clear: focusing on increasing NGN retention can make a major difference in your hospital's bottom line and the safety of its patients.**

Up to **30%** of first-year nurses leave their job within the first year.<sup>31</sup>

Up to **50%** leave within two years.<sup>32</sup>

*A comprehensive residency program can change this.*



# The Reality Shock Facing New Nurse Graduates



The challenge of transitioning from academia to the clinical environment has been noted in the literature for decades – and there is little evidence of considerable progress made in closing the transition gap.<sup>33</sup> In fact, evidence shows that the problem is even more severe today.<sup>34</sup> The role of nurses has increased in complexity, with more advanced technologies, acuity of patients, specialization, quality and safety requirements, and evidence-based practice requirements, among other factors.<sup>35</sup>

Nurse and researcher Marlene Kramer coined the term “reality shock” in 1974 to describe the transition from nursing school to the bedside. Her work has since been used widely as a framework to understand and respond to this challenge.<sup>36</sup> According to Kramer, the New Nurse Graduate (NGN) goes through four phases, during which they discover the difference between what they thought nursing would be and what it truly is:

- **Honeymoon phase:** The NGN is excited and optimistic to begin their career. They might make comments like, “I’m so glad I chose nursing; I will be a part of changing the future of healthcare!”<sup>37</sup>
- **Shock phase:** The NGN starts discovering disparities between what they were expecting to do based on what they learned in school, and the reality of the actual workplace.<sup>38</sup> One NGN reported, “how vastly different the real world of healthcare is compared to the shelter of nursing school.”<sup>39</sup> Feelings of withdrawal, rejection, and hostility toward others are common, as well as fatigue and even illness.<sup>40</sup> In some cases, it’s at this point that an NGN might decide that the reality is too much, and moves on to another occupation.<sup>41</sup>
- **Recovery phase:** “Healing” begins: the NGN starts to understand the new culture, and feelings of tension and anxiety lessen. Their desire to succeed returns.<sup>42</sup>
- **Resolution phase:** The NGN makes a successful transition to confident and competent nurse. The nurse has now grown more fully as a person and professionally, and meeting work expectations starts coming more naturally.<sup>43</sup>

**Research shows that NGNs who are given the support and tools to successfully get through the shock phase are able to progress to the next stage of recovery.**<sup>44</sup> Your NGN residency program is an ideal place to start looking for ways to help ease NGN reality shock.

***As NGNs navigate this rocky road, would you want them practicing on a real patient?***

# The Impact of New Nurses on Patient Care – and Why Simulation Is Critical



“Practicing on real people, such as has traditionally been done, is no longer an acceptable way to learn skills.”<sup>45</sup>

A study of data collected using a Performance-Based Development System (PBDS) from 2016-2020 covering more than 5,000 New Nurse Graduates (NGNs) found that **only 14% showed entry-level competencies or readiness for residency.**<sup>46</sup>

NGNs in their first year of practice are sometimes described as being “advanced beginners.”<sup>47</sup> Without having had a lot of experiential learning, NGNs don't have the ability to perceive subtle changes.<sup>48</sup> Instead, they focus more on concrete thinking, technology, and skills – causing them to miss the full picture.<sup>49</sup> This has been shown to have an adverse effect on patient outcomes.<sup>50</sup>

Research shows that NGNs are linked to patient safety issues, such as near misses, adverse events, and practice errors.<sup>51</sup> **One study found that 50% of NGNs miss signs of life-threatening conditions.**<sup>52</sup>

Naturally, stress plays a big role. The stresses NGNs are under have been linked to patient errors.<sup>53</sup> One study found that NGNs who reported higher stress ratings also reported making substantially more errors than NGNs reporting lower stress levels.<sup>54</sup>

It's well-understood that there is a steep and stress-filled learning curve for NGNs. In a traditional apprenticeship model, learning is occurring on live patients, which can lead to risk. **Every point on the learning curve is a human life. Simulation can take this risk out of the learning equation.**

One study examined 29 NGNs who completed more than 3,400 virtual patient simulations during a residency program.<sup>55</sup> The study examined how NGNs performed in virtual simulations at the outset of the program compared to at its conclusion, after they'd completed a series of virtual scenarios over the course of 12 weeks. Sentinel events in the simulations dropped from 100% of NGNs at the beginning of the program to 20.7% after the program. Medication errors decreased from 766 to 160, and failure-to-rescue decreased from 81% to 23%.

**Simulation can provide your NGNs with realistic learning experiences, while at the same time providing peace of mind that no harm to patients will occur as a result.**

# Simulation Success Story: Swedish Health Services Residency Program

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Swedish Health Services in Seattle, WA is the largest nonprofit health provider in the greater Seattle area.<sup>56</sup> Nursing leadership decided to build a New Nurse Graduate (NGN) residency program to ensure that they onboarded all the NGNs in the most efficient and cost-effective way possible, while supporting the NGNs' safe transition to practice. Based on evidence indicating that interactive programs are more effective for learning than classroom education, they opted to incorporate simulation into their program.

The simulations were based on low-volume, high-risk events, which ensured each NGN received the same experience. They also embedded a core set of patient safety practices, which aligned with the Joint Commission's National Patient Safety Goals, into each simulation. One of the scenarios involved blood administration with an anaphylactic reaction. They chose this scenario because students don't spend time on this skill in school – and critical safety steps are necessary, in a specific sequence, to ensure the safety of the patient. Running this scenario enabled educators to evaluate whether the NGNs understood the safe blood administration procedures and showed an ability to adapt to changing patient conditions.

**The program proved a major success, showing benefits in ROI, NGN turnover, and patient outcomes.**

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**\$2.5 Million**  
saved within the first year

**2%**  
NGN turnover rate from 2011-2016  
*compared to national average of 8.4% to 13.9%*

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**"Nurse residency programs and simulation are very expensive ways to learn, but we find the learning so superior, as measured from the patient's perspective, to be a tremendous asset.** The nursing residency program graduates are more self-confident, have better job satisfaction, and stay at Swedish longer than the national averages,"<sup>57</sup> explains Susan Jones BSN, MN, RN, the Residency Program Manager.

The patient safety practices they'd built into the simulations showed improvements that included:<sup>58</sup>

- **Fall prevention:** Steady declining fall-with-injury rate over the life of the program
- **Rapid response team utilization:** code rate outside the intensive care unit has fallen to almost zero, which provides evidence that NGNs are consistently recognizing early signs of patient deterioration and are calling for help

**Swedish Health Services believes that a large portion of the improvements is directly attributable to the patient safety practices being embedded in the simulations – because these were the only safety interventions that took place during the time measured.**

As the program has progressed, it has grown to include all medical-surgical areas, critical care, most emergency, NICU, family-childbirth center, labor and delivery, antepartum, and postpartum care. **Simulation continues to be a core element of the program for all of these specialties.**

# What Is Patient Simulation, Exactly?

According to the Society for Simulation in Healthcare, simulation is defined as “a technique that creates a situation or environment to allow persons to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or to gain understanding of systems or human actions.”<sup>59</sup> Compared to didactic learning methods like lectures, simulation can be more effective at making learning “stick” by engaging learners in an immersive, hands-on setting.

**A well-executed simulation effectively creates a psychologically safe learning environment, where learners can feel comfortable to make mistakes and share their thoughts without risk or consequences.**<sup>60</sup> Psychological safety contributes to individual and organizational learning, creativity, and the ability to speak up and provide feedback, a key element of simulation that is important to the transition to practice.<sup>61</sup>

## Types of Simulation

### A Review of Simulation Modalities:

**Standardized Patient** - A person who has been carefully coached to simulate an actual patient, presenting the history, body language, physical symptoms, as well as the emotional and personality characteristics.

**Task Trainer** – A device designed to train in just the key elements of the procedure or skill being learned, such as lumbar puncture, chest tube insertion, central line insertion, etc.

**Manikin** – A full or partial body representation of a patient for practice. Typically, manikins are used for a more refined set of skills training.

**Low-Fidelity Simulation** – Simulation techniques and solutions that do not require external programming for the learner to participate. Examples include case studies, role playing, and task trainers used in a clinical practice situation.

**High-fidelity Simulation** – Refers to simulation experiences that are highly realistic and provide a high level of interactivity and realism for the learner.

**Hybrid Simulation** – The union of two or more modalities of simulation. Most commonly, this applies to a situation where a task trainer is realistically affixed to a standardized patient allowing for the teaching and assessment of technical and communication skills in an integrated fashion.

**Virtual Simulation** – A person operates simulated systems to mimic a patient case virtually.

Whatever your level of simulation expertise, pretend for a moment that you are a novice. Look beyond the features of available technology and return to your learning objectives. Ultimately, these will dictate the best type of clinical simulation solution to meet your needs.



## Residency Programs: What the NCSBN Has to Say \_\_\_\_\_



Residency programs are “planned, comprehensive periods of time during which registered nurses can acquire the knowledge and skills to deliver safe, quality care in a specific clinical setting.”<sup>62</sup> **The evidence shows that these programs are critical to a successful transition to practice.**<sup>63</sup>

The National Council of State Boards of Nursing (NCSBN) has conducted significant research on NGN transition to practice, including convening a committee to develop an evidence-based transition to practice model.

According to the NCSBN’s research, programs that included at least six of the following elements were found to be more successful than limited programs:<sup>64</sup>

- patient-centered care
- communication and teamwork
- quality improvement
- evidence-based practice
- informatics
- safety
- clinical reasoning
- feedback
- reflection
- specialty knowledge in an area of practice

**NGNs in these programs reported fewer patient care errors and negative safety practices, and had higher levels of competency, lower stress levels, and higher job satisfaction.**<sup>65</sup>

As you’ll discover in the following chapters, **using simulation offers repeatable and measurable results for the areas highlighted by the NCSBN.** Whether you are interested in starting an NGN residency program or expanding the one you already have, consider how the use of simulation can deliver you and your NGNs a better and more thorough experience.

# Introduce Your New Nurses to a Culture of Safety

## Using the QSEN Competencies

The Quality and Safety Education for Nurses (QSEN) competencies were developed to meet the challenge of preparing future nurses who will have the knowledge, skills, and attitudes necessary to continuously improve the quality and safety of the healthcare systems within which they work. QSEN defines “safety” as minimizing risk of harm to patients and providers through both system effectiveness and individual performance.<sup>66</sup> The QSEN framework interweaves both the Magnet model and its components, as well as The Joint Commission Accreditation Standards.<sup>67</sup>

While the QSEN competencies were initially developed for undergraduate and graduate student education, they can also strengthen quality and safety practices for all of nursing.<sup>68</sup> The QSEN competencies are among the elements that the NCSBN found to be most effective as part of a residency program.<sup>69</sup>

Below, we have listed each QSEN competency and the knowledge/skills/attitudes it consists of. We’ve also provided a checklist of suggested simulation activities, authored by QSEN, that you can use as a guide for teaching the competencies.<sup>70</sup>

QSEN Competency & Targeted Knowledge/Skills/Attitudes	Simulation Activities Before, During or After the Scenario
<b>Patient-centered care</b>	
<ul style="list-style-type: none"> <li>• Integrate multiple dimensions of patient-centered care</li> <li>• Engage patient/family in active partnerships that promote health, safety and self-care management</li> <li>• Explore ethical/legal implications of patient-centered care</li> <li>• Participate in building consensus or resolving conflict</li> <li>• Value active partnership with patients/families in planning, implementation and evaluation of care</li> <li>• Recognize personally held attitudes about working with patients from different backgrounds</li> </ul>	<p><b>During the scenario:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Recognize when a patient's condition has changed and take action after performing a focused nursing assessment</li> <li><input type="checkbox"/> Evaluate patient response to specific nursing interventions</li> <li><input type="checkbox"/> Seek and include input from patient/family members</li> <li><input type="checkbox"/> Respond to a visitor's request for protected health information</li> <li><input type="checkbox"/> Discuss options when a patient/family wishes conflict with plan of care</li> </ul> <p><b>During debriefing:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Share outcomes from similar experiences in real life</li> <li><input type="checkbox"/> Discuss actual experiences with diverse patient populations (cognitive or developmental delay, homeless, non-native speakers)</li> </ul>
<b>Teamwork/Collaboration</b>	
<ul style="list-style-type: none"> <li>• Follow communication practices that minimize risks associated with handoffs among providers</li> <li>• Appreciate importance of inter-professional communication</li> <li>• Initiate request for help when appropriate to situation</li> <li>• Effectively communicate with team members, adapting own style to needs of the team and situation</li> </ul>	<p><b>Prior to scenario:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Review institutional policy for taking a verbal order and receiving critical lab results over telephone</li> </ul> <p><b>During the scenario:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Practice communication during shift-to-shift handoff</li> <li><input type="checkbox"/> Delegate duties / Ask nursing colleagues for help</li> </ul>

# Introduce Your New Nurses to a Culture of Safety

## Using the QSEN Competencies

<ul style="list-style-type: none"> <li>• Assert own position/perspective in discussions about patient care</li> <li>• Analyze differences in communication styles</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use SBAR method to communicate a change in patient condition and obtain a verbal order from provider</li> <li><input type="checkbox"/> Initiate and prioritize new orders appropriately; question orders that seem inappropriate</li> <li><input type="checkbox"/> Engage other members of the health care team: RT, RD, PT, etc.</li> </ul> <p><b>During debriefing:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Talk about roles and responsibilities during a crisis</li> <li><input type="checkbox"/> Review difficult communication situations and role-play revisions</li> </ul>
<b>Evidence-based Practice</b>	
<ul style="list-style-type: none"> <li>• Locate/read evidence-based reports related to clinical practice topics and guidelines</li> <li>• Describe Evidence-based Practice (EBP) to include the components of research evidence, clinical expertise and patient/family values</li> <li>• Use high quality sources of health care information</li> <li>• Value the need for continuous improvement in clinical practice based on new knowledge</li> </ul>	<p><b>Prior to scenario:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Research strategies related to assessment, intervention, evaluation and discharge planning for a specific patient population</li> <li><input type="checkbox"/> Complete assigned readings and discussion questions related to scenario</li> </ul> <p><b>During the scenario:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Use an evidence-based approach to assess a patient at risk for _____</li> <li><input type="checkbox"/> Adapt evidence-based guidelines for the treatment of _____</li> </ul> <p><b>During debriefing:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Discuss how current practice has changed over time</li> </ul>
<b>Safety</b>	
<ul style="list-style-type: none"> <li>• Demonstrate effective use of technology and standardized practices that support safety and quality.</li> <li>• Communicate observations or concerns related to hazards or errors to patients, families and team</li> <li>• Use organizational systems for near miss and error reporting</li> </ul>	<p><b>Prior to scenario:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Review math calculations necessary for med administration</li> </ul> <p><b>During the scenario:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Use a checklist (safety scan) to scan patient, environment &amp; equipment for embedded errors during handoff communication</li> <li><input type="checkbox"/> Practice effective inter/intra professional communication about safety</li> <li><input type="checkbox"/> Implement check on 6 rights when administering meds</li> </ul> <p><b>During debriefing:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Consider potential safety risks and how to avoid them</li> <li><input type="checkbox"/> Compare and contrast observations of actual and ideal practice</li> </ul>

# Introduce Your New Nurses to a Culture of Safety Using the QSEN Competencies

## Evidence-based Practice

- Navigate and document within an electronic health record (EHR)
- Inform practice decisions using available information technology
- Value technologies that support clinical decision making, error prevention and care coordination

### Prior to scenario:

- ☐ Obtain details about patient's history and nursing care from an EHR

### During the scenario:

- ☐ Use personal digital assistant (PDA) and hospital intranet to look up unanticipated medications.
- ☐ Document patient care using an EHR
- ☐ Use safety-enhancing features of point-of-care technology

### During debriefing:

- ☐ Discuss nurses' role in design, implementation and evaluation of information technologies to support patient care



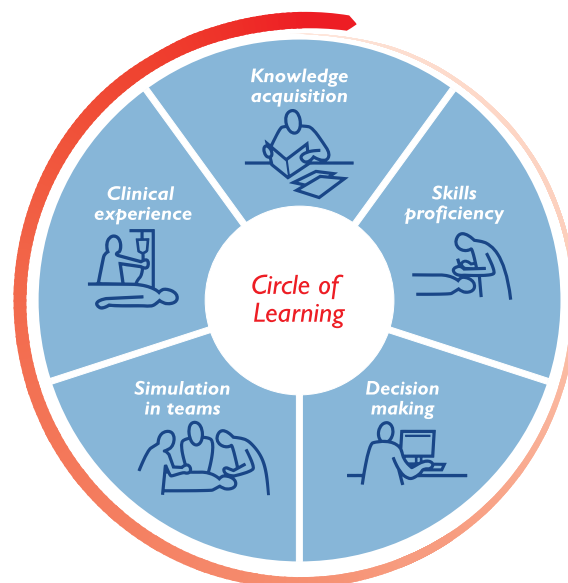
[Laerdal Scenario Cloud](#)



# Organize Your Learning for Efficiency and Impact

Our observation of some of the best New Nurse Graduate (NGN) residency programs is that they introduce NGNs to a deliberate evolution in their training. A phased simulation learning journey can help your NGNs to “walk before they run” and build upon what they’ve learned before reaching a real patient.

Laerdal’s Circle of Learning is a systematic approach to healthcare training that organizes the phases of learning required to develop confidence and competence to effectively treat patients. Learning goals increase in complexity as learners progress through the phases.



## *The Circle of Learning’s phases consist of:*

- **Knowledge acquisition:** introduction to the knowledge needed to meet educational objectives. This includes books, lectures, and other didactic forms of learning.
- **Skills proficiency:** repetitive practice using task trainers and/or manikins to support the development of psychomotor skills. For example, mastery of IV insertion using an IV arm task trainer.
- **Decision-making:** interactive content simulating real patient cases and feedback to reinforce decision-making and critical-thinking skills. Virtual simulations can help build these skills in preparation for the sim lab and later, caring for real patients.
- **Simulation in teams:** **A breakdown in communication has been found to be a contributing factor in as many as 70% of cases of patient harm.<sup>71</sup>** That’s why the Circle of Learning has an entire phase of learning dedicated to reducing human error in teams. A well-designed scenario using a high-fidelity simulator will lend a realistic learning environment for students to practice working together effectively as a team.
- **Clinical experience:** practice obtained in the actual clinical environment on real patients. A landmark NCSBN study published in 2014 found that simulation can effectively replace up to 50% of clinical hours.<sup>72</sup> Many states are increasing their use of simulation to address scarcities in clinical opportunities.

# Debriefing: A Critical Step for Experiential Learning

Those who teach using simulation often argue that the debriefing session following the simulation is where most of the learning occurs. It is only through the debrief that learners can fully absorb the information, discuss what they've learned, and then change their behavior in future situations.

*Some essential elements of effective debriefing include:*

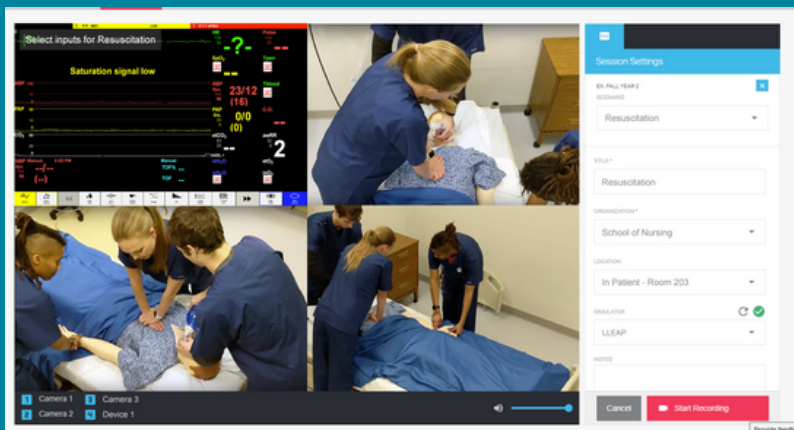
- ✓ Ensuring a supportive climate among peers.
- ✓ An established set of rules for engaging as a group.
- ✓ A shared mental model with input from the facilitator.
- ✓ Individuals being granted the space to process their reactions and feelings related to the scenario.
- ✓ More time dedicated to the debrief than the simulation experience itself.
- ✓ Participants doing most of the talking.

## Sample Debriefing Questions:

- ✓ Tell me in a few sentences what happened to this patient.
- ✓ What were your objectives and how were they met/not met?
- ✓ Who was the leader and how did you know?
- ✓ What was your thought process when [a particular event occurred]?
- ✓ What did the group do well? How did those behaviors help the team?
- ✓ What would you do differently next time?
- ✓ How can you help when a team member's performance needs improvement?
- ✓ What did you learn?
- ✓ Any additional comments?

## Use Video Technology to Create Deeper Connections to the Material

Debriefing a simulation scenario encourages better understanding of the learning concepts, but it's worth considering how to take this one step further with video recording. The line of debriefing questions will uncover a retrospective look at the learners' performance. Giving these same learners an opportunity to review a video playback of themselves and their peers can lead to a more thorough analysis of the situation.



*SimCapture can help you to manage, assess, and debrief your simulations. It can also provide reports and statistics on performance, as well as capture student evaluations.*

# Stress Impacts New Nurses: Use Simulation to Teach Stress Coping Techniques

You may want to consider using simulation to help train New Nurse Graduates (NGNs) to recognize how stress influences their performance and which coping mechanisms can help. Keep in mind that your learners won't benefit from situations that are so unrealistic that they create stress for the sake of stress. As you design scenarios to help teach stress-coping mechanisms, look for situations where stress has reduced performance in your own hospital or others'.

**During an emergency, it's estimated that stress can reduce human performance by up to 25%.<sup>73</sup>**

For an NGN who is likely already dealing with high stress levels associated with the transition to practice, an emergency situation could potentially have even more of an impact on performance.

## DOs and DON'Ts: Using Simulation to Teach Stress Coping Techniques

### DO's

- Tell participants what the purpose is of each scenario and what the desired application will be on the job.
- Provide stress management strategies in advance and let them practice prior to a simulation.
- Encourage participants to be honest with themselves about stress triggers.
- Introduce stress triggers slowly in simulations. Let the participants walk before they run.
- Allow appropriate time for debriefing.
- Use video recording so that learners can see the impact of stress on patient care.

### DON'Ts

- Create levels of stress beyond a learner's tools and capacity for using those tools.
- Throw people into situations designed to be "shock therapy."
- Create scenarios intended to scare learners with the idea of "toughening them up."
- Create scenarios that are unrealistic with no possible future application to the job.



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## Need More of a Foundation?

## Use the Healthcare Simulation Standards of Best Practice™

If there was one survival guide you need for simulation, the International Nursing Association for Clinical Simulation and Learning's (INACSL's) Healthcare Simulation Standards of Best Practice™ is likely your best resource. The Standards are considered to be the industry go-to source: practical, tried, and tested.

We've provided a high-level summary of the Standards below to give you an idea of the areas they cover. Use this summary to identify areas that you wish to learn more about – and then explore them further by reading the full Standards.

### ✓ Invest in the ongoing professional development of your simulation staff

The field of simulation-based education is continuing to evolve – so it's important that your program's simulationists evolve with it in order to ensure the best quality simulations and educational payoff for your students.

### ✓ Devote time to plan and conduct a quality prebriefing

Prebriefing consists of preparation (pre-simulation activities) and briefing (immediately before the activity) to ensure that learners are prepared for the experience and are aware of the ground rules.



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### ✓ Design your simulations with purpose

Good simulation-based experiences are purposefully designed to meet identified objectives and optimize the attainment of expected outcomes by mimicking what actually happens in practice.

### ✓ Be a good facilitator

Ideally, facilitation should be conducted by a trained simulation facilitator – as specific skills and knowledge of simulation pedagogy are important for effective facilitation before, during, and after the simulation.

### ✓ Debrief expertly

All simulation-based educational (SBE) activities must include a planned debriefing process, which may include feedback, debriefing, and guided reflection. The ultimate goal of the debriefing process is to promote reflective thinking.



[Technical Services](#)

### ✓ Don't under-estimate the impact of operations

Increased operational efficiency contributes to a smoother-running program. This includes ensuring operations staff receive the training they need to be competent in setting up, operating, and maintaining simulation equipment.



## Need More of a Foundation?

## Use the Healthcare Simulation Standards of Best Practice™

### ✓ Articulate measurable objectives and outcomes

Every simulation-based experience should originate with measurable objectives designed to accomplish expected outcomes. The objectives will help guide you in determining the right simulation modality and fidelity to use.

### ✓ Maintain professional integrity

Professional integrity refers to the ethical behaviors and conduct that are expected of everyone involved in simulation-based experiences: facilitators, learners, and participants.

### ✓ Incorporate Simulation-Enhanced Interprofessional Education

Simulation-enhanced interprofessional education (Sim-IPE) allows learners across different healthcare professions to engage in a simulation-based experience to achieve linked or shared objectives and outcomes.

### ✓ Evaluate the performance of your learners

Simulation-based experiences may include evaluation of the learner. Evaluations should be directed by the objectives, outcome and/or level of the learner, and can be of a formative, summative, or high-stakes type.



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# A Final Word

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The American Nurses Association describes nurses as being the “backbone” of healthcare provision, and the “glue” that holds a patient’s healthcare journey together.<sup>74</sup>

Laerdal Medical’s goal is to use our simulation-based solutions to help save One Million More Lives annually by 2030. The information that we’ve shared in this eBook is a part of that effort. Nurses are a critical building block of safe healthcare delivery. Supporting them effectively in their challenging journey from academia to the bedside will help set them up for a successful, lasting career at your hospital. We hope to make an impact by supporting you in achieving your goals of supporting them.

## Helping Save Lives and Our Zero Harm Goal

Laerdal’s mission is helping save lives. Our vision is that no one should die or be disabled unnecessarily during birth or from sudden illness, trauma or medical errors. We pursue our mission and vision by enabling our clients to pursue the best education, training, and quality improvement strategies possible. We provide patient simulation solutions that will enable your strategies to “stick.” We measure our results through yours, keeping a keen eye on your key performance indicators and your desired outcomes. By giving you the tools necessary to incorporate simulation into your new nurse residency program, our intent is to help you empower your new nurses to save more lives.

## We want to support your efforts

We’ve covered a lot of information in this eBook. Let us know how we can help you get started. Your local Laerdal representative can work with you to give you and your staff a broader introduction to simulation and to our products and services. We can arrange for both on-site and virtual demonstrations.

Or, maybe you’d prefer to utilize the power of simulation for your NGNs without having to worry about running a simulation program. We offer a turnkey program, called Laerdal Accelerate Program, designed specifically for NGN residency programs. It combines simulators, operators, facilitators, curricula, scenarios, teams/skills assessment, and data insights to build NGN confidence and competence. With this program, you’ll be able to focus on training and skills assessment without the distraction of equipment operation, setup, tear-down, administration, storage, logistics, or curriculum acquisition. Plus, with data insights, you’ll be able to evaluate strengths, identify opportunities to improve, and demonstrate the impact of education/simulation programs.

All we need to do is begin the discussion. Let us turn your vision into reality. **Reach out to your Laerdal representative to get started today.**

**Learn more at [Laerdal.com](https://www.laerdal.com)**

**To stay up to date on Laerdal’s published content, subscribe to our email list [here](#).**



*[Nursing Anne Simulator](#)*

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