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## Key Points

1. Standards of best practice and guidelines exist to outline expectations of education and training for simulation instructors.
2. Numerous methods exist to facilitate the simulation instructor's attainment of competency.
3. Tools are available to educators that can be used to document performance and path to competency.
4. The remote simulation instructor must be confident, competent, and self-sufficient in the role.

## Introduction

The instructor responsible for the development and implementation of simulation-based experiences (SBEs) requires a unique set of qualifications that is different than providing instruction in traditional healthcare learning environments such as a classroom, laboratory, or hospital. While simulation as a learning method is not new, changes in technology have led to the need for a different skill set for healthcare instructors. Forty years ago, students were taught to give injections using oranges. Many still learn using this method. Many were also taught various skills by

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doing them on each other –nasogastric tube insertion and injections of saline, for example. Fortunately, instructors now have new equipment and methods to teach these skills, much to the relief of students everywhere. The increasing capabilities of technology have allowed educators to add complexity to the learning process by focusing on higher order thinking skills (e.g., clinical judgment and critical thinking), communication, and teamwork, all of which are critical to provision of safe patient care [1].

At the same time, learning environments have changed. Online formats have replaced many physical classrooms and science laboratory experiences can be completed online and in virtual reality. The scope of the traditional clinical environment has expanded far beyond the walls of the hospital to include community-based and global learning experiences. Simulation, once tethered (literally) to a space in a school or hospital, can now be used in mobile environments due to advancement of technology. Instructors quickly began to create in situ experiences, simulations that take place in a patient care setting [2]. Traditional disaster drills began to incorporate simulation and instructors came to realize that learning activities could occur wherever the manikin could be supported (electricity). The creation of wireless manikins that can run on battery power allows instructors to travel outside of the typical laboratory space, enhancing the ability to reach learners, rather than requiring learners to come to the lab.

The purpose of this chapter is to outline the requirements and recommendations for achieving the qualifications needed to be a successful simulation instructor in the mobile environment. Standards of best practice, accreditation guidelines, and organizational recommendations related to instructor ability will be presented. Key knowledge, skills, and attitudes (KSAs) needed for success in areas of preparation, prebriefing, facilitation, debriefing, and evaluation will be defined as well as the need for crossover knowledge of the operations role. Opportunities for gaining the key KSAs through instructor development will be outlined, followed by methods used to evaluate competency. Lastly, special considerations for instructor development and qualifications for working in mobile environments will be discussed.

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## What Is a Simulation Instructor?

Simulation instructors are known by various terms: instructor, teacher, faculty, facilitator, educator, subject matter expert, or simulationist. Oftentimes, the organization or employer determines what the role is called; other times, the person determines what they prefer to be called. Some definitions to consider:

- Instructor: “A person who teaches a subject or skill” [3].
- Faculty: Teachers having academic rank in an educational institution [3].
- Facilitator: “An individual who is involved in the implementation and/or delivery of simulation activities” [2, p. 12].

- Subject Matter Expert (SME): “A person with extensive experience and knowledge in a particular subject area, who acts as a consultant and content expert during development of a course” [4, p. 16]. The SME may, or may not, also be the instructor.
- Simulationist: “An individual who is involved in the design, implementation, and/or delivery of simulation activities” [2, p. 36].

As you can see, some of the terms are synonyms of the others and often used interchangeably in the literature, such as instructor, teacher, and educator. Some have connotations within the hierarchy of higher education that dictate the parameters of the role, while the same term used in a staff development environment means something different. Most commonly in simulation education, the focus is placed on the word facilitator, with an expanded definition: the individual is trained to “provide guidance, support, and structure at some or all stages of simulation-based learning including prebriefing, simulation, and/or debriefing” [5, p. S42]. The facilitator helps the learners to meet the learning objectives without specifically giving them the answer or telling them how to perform. The experiential nature of simulation is designed to allow learners to critically think and reach decisions as to how to approach patient management on their own or in a team.

The variety of terms used to define the instructor need not be confusing and may be defined more specifically by the employer. The instructor is present to ensure that the learning experience is created and implemented in a way that allows learners to care for a simulated patient(s) or situation, use clinical judgment to make care decisions, carry out that care, and evaluate the patient’s outcome. One of the hardest things for the instructor to do is to be quiet and not interfere with the learning process. In this chapter, the term instructor and facilitator may be used interchangeably. It should also be noted that depending on job descriptions, a mobile instructor may not have responsibility for all aspects of the SBE. For example, some mobile instructors may implement a SBE but not have been responsible for the creation of the scenario. This comprehensive chapter will cover all aspects that a mobile simulation instructor could be responsible for.

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## **Standards, Accreditation, and Organization Recommendations**

Major simulation organizations have issued standards of best practice that define qualifications required of the simulation instructor. You will see that it is no longer sufficient to move an educator from one role into another without the proper training. For example, in nursing education, the early simulation instructors were moved from the skills laboratory. It has become clear over the past decade that the required skill set of those two educators is quite different. The following organizations have issued standards and guidelines to ensure that instructors are prepared for their role in experiential learning.

## **International Nursing Association for Clinical Simulation and Learning (INACSL)**

The International Nursing Association for Clinical Simulation and Learning (INACSL) first released Standards of Best Practice: Simulation<sup>SM</sup> in 2011 [6], with the most current edition released in December 2016 [5]. There are eight standards and an accompanying glossary of terms used in the Standards. The Standards of Best Practice: Simulation include a standard statement, criterion, and descriptions of how to meet the criterion. The standards provide an outline of expectations for the instructor. The Standards and specific criterion related to the development or qualifications of the instructor include the following:

- Facilitation
  - “Effective facilitation requires a facilitator who has specific skills and knowledge in simulation pedagogy” [7, p. S17].
- Debriefing
  - “The debrief is facilitated by a person(s) competent in the process of debriefing” [8, p. S22].
- Professional Integrity
  - “Foster and role model attributes of professional integrity at all times.
  - Follow standards of practice, guidelines, principles, and ethics of one’s profession” [9, p. S31].
- Simulation Operations
  - “Provide personnel with appropriate expertise to support and sustain the SBE program” [10, p. 682].

## **Society for Simulation in Healthcare**

The Society for Simulation in Healthcare (SSH) has disseminated standards to be met in order to achieve program accreditation. There are seven Core Standards, one of which addresses development or qualifications of instructors:

- Human Resources
  - “The Simulation Program has a process in place to orient, support, and evaluate Simulation Program staff” [11, p. 4]. This standard addresses role orientation, program changes, ongoing professional development, evaluation, and feedback.

The optional Teaching/Education Standards that address development or qualifications of instructors include the following:

- Educational Activity Design
  - “The Simulation Program has personnel with expertise designing simulation educational activities” [12, p. 3].

- Qualified Educators
  - “The Simulation Program has access to qualified educators.
  - The Simulation Program has a process to assure ongoing development and competence of its simulation educators, at least annually.
  - The Simulation Program has a process to assure orientation and development of those who participate in the delivery of educational activities but are not simulation experts” [12, p. 3–4].

## **Association for Simulated Practice in Healthcare**

The Association for Simulated Practice in Healthcare (ASPiH) has extended standards that include themes related to faculty, technical personnel, activity, and resources. Theme 1: Faculty include the following standards:

- “Faculty engage in continuing professional development with regular evaluation of performance by both learner and fellow faculty.
- Faculty are competent in the process of debriefing” [13]

## **Association of Standardized Patient Educators**

The Association of Standardized Patient Educators (ASPE) created standards specifically for those who include human role players (standardized patients, SP) in their simulation programs. Of the five domains included in these standards, Domain 5: Professional Development relates to development and qualifications of the instructor:

- Principle 1: Career Development
  - “Develop and promote expertise in knowledge, skills, and attitudes related to SP-based simulation.
  - Develop and promote expertise in theories, principles, and processes of educational and assessment relevant to the context of one’s practice.
  - Engage in educational opportunities.
  - Seek out opportunities for career mentoring” [14, p. 7].

## **The National Council of State Boards of Nursing**

The National Council of State Boards of Nursing (NCSBN) disseminated a set of guidelines (Alexander et al., 2015) following on the heels of the landmark multisite simulation study that found simulation (under certain conditions) could replace up to 50% of traditional undergraduate nursing education clinical experiences [15]. Guidelines were provided to guide administrators and faculty in creating the necessary administrative support, environment, and faculty preparation required to ensure quality use of simulation as a replacement for traditional clinical experiences. One major guideline was:

- “Lead faculty and sim lab personnel are qualified to conduct simulation
- Faculty are prepared to lead simulations” [16, p. 40].

Checklists were created for Program Preparation and for Faculty Preparation; items related to instructor development and qualifications include the following:

- Program Preparation
  - “The simulation program has an adequate number of dedicated trained simulation faculty members to support the learners in simulation-based experiences.
  - The program has a plan for orienting simulation faculty members to their roles” [16, p. 42].
- Faculty Preparation
  - “Faculty members are prepared by following the INACSL Standards of Best Practice: Simulation.
  - The faculty members are prepared to create a learning environment that encourages active learning, repetitive practice, and reflection and to provide appropriate support throughout each activity.
  - The program provides a means for faculty members to participate in simulation-related professional development” [16, p. 41].

Contributions of SSH, ASPiH, and ASPE are from organizations that are multidisciplinary. The NCSBN represents nursing education and practice. While INACSL was formed by nursing, the membership is multidisciplinary. The recommendations from all of these organizations should be considered, regardless of the profession that is disseminating them as they all are focused on ensuring that the simulation instructor is educated for their role(s).

It is clear from these standards and guidelines that simulation instructors are expected to be trained to competency for specific knowledge, skills, and attitudes (KSA), while maintaining professional integrity and ethical behavior, all within the context of their own profession’s guidelines. The instructor should receive regular feedback and evaluation on their KSAs and opportunities for professional development on at least an annual basis.

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## **Key Knowledge, Skills, and Attitudes Leading to Success**

There are key components of the SBE that all simulation instructors should have competency in creating or performing. The amount of involvement in each of these components will vary based on the job description and expectations of the instructor’s manager or organizational leadership. While some of these are outlined in other chapters of this book, these components bear mentioning in this chapter as well.

1. Preparation for SBE involves several steps, including confirming that the SBE has been scheduled, creating or understanding the defined learning objectives, planning the activity, ensuring that fidelity is adequate, identifying/gathering supplies

- and equipment, developing or disseminating preparation requirements, and choosing or understanding the planned evaluation method [17]. Refer to Chaps. 4, 17, 18, and 22 to learn more about preparation and pre-work for the SBE.
2. Prebriefing is designed to ensure that learners understand the expectations of learning in the simulation environment and includes creating an environment that supports the learners' opportunities for success. This includes orienting learners to the environment and equipment, as well as assuring confidentiality. Reviewing learning objectives or assignment of roles may be the instructor's responsibility, but this often depends on the level of the learner and the objectives of the SBE [17, 18].
  3. Facilitation must be done by a trained person who is able to manage the SBE at the appropriate level of the learner's understanding and experience. The facilitator (instructor) must be able to maintain full focus on the SBE, provide guidance in the form of cues, ensure learner engagement, and observe performance to guide debriefing and evaluation processes, all while monitoring the length of the scenario and managing time [17]. Guidance in the form of cues may not be included in all scenarios, as this is typically based on the level of the learner and assessment method. This is common in formative assessment, while absent in summative assessment. Refer to Chaps. 14 and 15 for instructional methods of designing and implementing mobile SBE.
  4. Debriefing should always be done by the facilitator who observed the learners during the scenario. The instructor is expected to use a theoretical model or plan for debriefing, ensure reflection and engagement, and provide feedback on the learner's performance. This is done in a confidential, respectful manner with the goal of helping learners meet the learning objectives, understand their actions, and define how the simulation learning transfers to the care of human patients [17, 19]. Refer to Chaps. 9 and 16 for further discussion of debriefing.
  5. Evaluation methods should be determined prior to the start of the SBE and include evaluation of the learning outcomes [17, 20], the learning environment, the facilitator/instructor/staff, and the experience. Valid and reliable tools should be used for all evaluation; however, they are required for high-stakes testing in which the outcome will impact the learner's livelihood (e.g., licensure, job) [17]. Refer to Chaps. 5, 6, and 20 for further discussion of assessment and evaluation.
  6. Operations personnel are technologically savvy persons who support SBE in a multitude of ways, including management of audiovisual, information technology, manikin operation and/or programming, setup/breakdown of simulation, moulage, etc. The role often includes educational and administrative responsibilities [10, 21]. Refer to Chaps. 2, 7, 9, and 13 for additional information about this role.

## Theoretical Foundations for Simulation Instructors

Understanding experiential learning is vital to achieving competency in facilitating active learning in the simulation environment. There are a multitude of theories that support this methodology and the instructor should have a working knowledge of them. Theories provide the foundation for development of a SBE. For example,

**Table 21.1** Theoretical foundations for SBE and instructor development

Theory	Theorist	Description
Novice to expert	Benner [22]	Five stages of skill acquisition: novice, advanced beginner, competent, proficient, expert
Experiential learning theory	Kolb [25]	Cycle of concrete experience, reflective observation, abstract conceptualization, active experimentation
Sociocultural theory	Vygotsky [23], Wood & Middleton [26]	Zone of proximal development is difference between what learner can do and cannot do; educator's role is to provide experiences that advance development, through scaffolding
Cognitive load theory	Sweller [27]	Brain can only process so much at any given time; chunk information to allow movement from short-term memory to long-term
Social learning theory	Bandura [28]	Learn by doing or through the experience of others
Situated cognition	Dewey [29]	Each learner has a unique experience, even within a group SBE
Mastery learning	Ericsson & Pool [30]	Deliberate practice outside the comfort zone, with performance feedback leading to modification of efforts; goal to reach target performance
Reflection	Schön [31]	Reflection in-action, on-action, after-action

Benner's Novice-to-Expert theory [22] supports different facilitation methods based on the level of the learner. This theory also informs the planning of instructor development opportunities to support instructors who are at different points on the learning curve. Scaffolding of learning concepts, supported by Vygotsky's work [23] combines with Benner as educational plans for both learners and instructors are developed to build off of previous knowledge.

While this chapter is not intended to teach how to create instructor development programs, it may be a role of some instructors to participate in train-the-trainer sessions or to provide mentorship to less experienced instructors. Theoretical frameworks should guide decisions about instructor development and how best to tailor to the needs of each individual as they move from beginner to competent to proficient. An excellent resource for understanding theoretical principles of effective simulation is provided by Clapper [24]. Some common theories used to develop SBEs as well as instructor education are outlined in Table 21.1. These are only a sample, and not intended to be inclusive. The description includes a key feature or two and the reader is encouraged to learn more from further investigation of the resources.

## Instructor Development Opportunities

Although the use of simulation in healthcare education has expanded exponentially in the past several years, it is still highly likely that persons hired into a simulation-related position will not have the full skill set or level of competency that is desired [32]. The simulation community is less than 15 years removed from trial-and-error learning of roles and responsibilities. As the perception of simulation's value has



increased, so has the need to adhere to guidelines and standards of best practice to achieve high learning outcomes. This requires ongoing instructor development through formal and informal means.

The need to be independent in the role is critical for the simulation instructor working in the mobile environment. A variety of methods exist to help the instructor gain the KSAs needed for the role, including books/manuscripts, workshops, formal courses, certificate programs, academic degree programs, and mentoring. These range in length from 1 day to a year or longer. There are advantages and disadvantages to each option, which should be carefully weighed when deciding which methods to choose. It is likely that a combination of methods will be needed to create a well-rounded instructor. The various attributes related to the types of instructor development are outlined in Table 21.2.

**Table 21.2** Considerations for type of instructor development

Attributes	Considerations
Length of education	Range from 1 day to several years.
	Consider cost of education, including travel.
	How soon does the instructor need to reach competency?
	What depth and breadth of knowledge is required for the instructor's role or position?
	New instructors may require more time to learn, process information, and practice new skills.
	Experienced instructors may need a shorter concentrated event to enhance KSAs.
Interaction: Face-to-face, online, or blended learning	What are the qualifications of the teacher or presenter?
	What role does the teacher or presenter have?
	Is the learning event self-directed by the learner or facilitated by the teacher?
	How is engagement in the material accomplished?
	Is there an opportunity for learners to engage and learn from each other?
	Is interaction and engagement in the course monitored or evaluated?
Content	What topics are included in the education event?
	How do the included topics align with the needs of the simulation instructor?
	What is the depth and breadth of the content?
	Does the content reflect evidence-based practice?
	Are references from peer-reviewed sources and less than 5 years old (except for seminal works)?
Practice/repetition of new skills	What opportunities exist to practice new KSAs?
	How is repetition of skills managed?
	Who evaluates progress in meeting the objectives of the educational program?
	How is feedback provided to the simulation instructor?
Achievement of competency	How is mastery of learning accomplished?
	How is (are) feedback and/or debriefing conducted?
	How often is feedback given to the learner?
	Is there tangible evidence of accomplishment, such as a certificate or academic credit?
	Is tangible evidence of accomplishment important to the simulation instructor's organizational leadership?

It is important to develop a plan that will lead to increased competency of the simulation instructor, whether they are at the novice level or more advanced level. The rapid rate at which understanding of simulation as a pedagogy occurs necessitates that all instructors participate in ongoing professional learning. A formal simulation instructor course can be developed internally by the organization if there is a critical mass of current instructors who have expertise in all areas of simulation facilitation. When internal training is available, the training should be held in the mobile environment to ensure that instructors are oriented to the environment they will work in and observed navigating challenges that arise in that environment [33]. Novice instructors will benefit from longer educational opportunities that are engaging, cover a variety of topics and ideas, but that provide extensive opportunities to practice what is being learned while receiving feedback on performance. A more advanced instructor may identify that they lack understanding of the intricacies of debriefing, even though they have been conducting debriefings for many years. This instructor may benefit from education that is focused on just this particular concept. Reading manuscripts or books, attending conference workshops, or a debriefing course may provide increased understanding on the topic. A well-developed educational plan for each simulation instructor will demonstrate that achievement of competency is valued, expected, and supported by the organization's leadership.

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## Evaluating Instructor Competency

Attending educational events does not equate to achieving competency. Coming home from a conference where new information was heard does not translate to the ability to actually implement the new knowledge. This is why having a well-rounded education plan that incorporates practice, repetition, and feedback is so important. There are several ways to demonstrate competency and achievement. Certification through an organization, such as the SSH, shows that a simulation instructor has knowledge required as an instructor or simulation operations specialist. An advanced certification is available, using a portfolio to demonstrate advanced competency. In addition, there are evaluation tools that can be used to determine level of competency as an instructor.

### Certification

- Certified Healthcare Simulation Educator (CHSE)
  - “Formal professional recognition of specialized knowledge, skills, abilities and accomplishments in simulation education” [34].
  - Requirements to take the certification exam include the following:
    - “Participate in healthcare simulation in an educational role;
    - Focused simulation expertise on learners in undergraduate, graduate, allied health or healthcare practitioners;
    - Bachelor’s degree or equivalent experience;
    - Two-year continued use of simulation in healthcare education, research, or administration” [34].

- Certified Healthcare Simulation Educator-Advanced (CHSE-A).
  - “Distinguishes those who have proven themselves to be advanced in their practice in healthcare simulation and serve as mentors and examples to others in the field” [34].
  - Eligibility requirements for submission of portfolio include the following:
    - “Currently certified CHSE;
    - Participate in healthcare simulation in an educational role;
    - Focused simulation expertise on learners in undergraduate, graduate, allied health or healthcare practitioners;
    - Master’s degree or equivalent experience;
    - Five years of continued use of simulation in healthcare education, research, or administration” [34].
- Certified Healthcare Simulation Operations Specialist (CHSOS).
  - “Formal professional recognition of specialized knowledge, skills, abilities and accomplishments in simulation operations” [34].
  - Eligibility requirements for the exam include the following:
    - Participation in healthcare simulation in an operations role;
    - Focused simulation expertise on learners in undergraduate, graduate, allied health or healthcare practitioners;
    - Bachelor’s degree or equivalent experience;
    - Two-years of experience in a healthcare simulation operations role” [34].

The benefits of certification, as per the SSH [34] include “formal recognition, confirmation of commitment to professional development and lifelong learning, international recognition of accomplishments, and demonstration of skills and professional knowledge to employers...” Some employers require CHSE certification of simulation instructor applicants, while others require this achievement within a specified time frame after hire.

## Evaluation Tools

Several evaluation tools exist to help determine competency in the various KSAs required of a simulation instructor. It is important to use only valid and reliable tools, especially since demonstration of competency may be associated with performance reviews, hiring decisions, or termination of employment. Valid and reliable tools for evaluation of the simulation instructor include the following:

- Facilitator/Instructor – these tools specifically evaluate skills that should be demonstrated by the simulation instructor:
  - Debriefing Assessment for Simulation in Healthcare© (DASH) examines debriefing strategies and techniques [35].
  - Feedback Assessment for Clinical Education© (FACE) assesses development of reflective feedback skills and their use by clinical instructors [36].

- Facilitator Competency Rubric (FCR) outlines required instructor/facilitator skills in the areas of preparation, prebrief, facilitation, debrief, and evaluation. Uses a novice-to-expert framework [37].
- Experience – these tools evaluate the SBE, which is created or implemented by the instructor. Inferences can be made from the results of these tools about the KSAs of the instructor:
  - Simulation Effectiveness Tool – Modified (SET-M) considers students’ perceptions of how well learning needs were met in prebriefing, during the scenario, and in debriefing. Subscales are confidence, learning, prebriefing, and debriefing [38].
  - Clinical Learning Environment Comparison Survey (CLECS) evaluates how well students believe their learning needs were met in the traditional clinical environment and simulated clinical environment [39].
  - Simulation Learning Effectiveness Inventory considers students’ perceptions of course arrangement, equipment resource, debriefing, clinical ability, problem-solving, confidence, and collaboration [40].

The tools identified for evaluation of the instructor can also be used as a method of self-evaluation and identify learning needs of the instructor. The results can help to create the ongoing education plan. For example, after reviewing the FCR, the instructor notes that they do not manage the debriefing session in a manner that approaches the competent-level criteria. The SET-M data shows that learners do not score the debriefing section highly, and the FACES ratings indicate that performance gaps are not identified and explored. These findings should lead to a concerted effort to increase the instructor’s KSAs through targeted educational opportunities.

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## **Considerations for Instructor Development and Qualifications in the Mobile Environment**

In the mobile environment, assistance and backup may not be readily available. While phone calls, Skype, and FaceTime all bring people in contact with each other, the mobile instructor must be self-sufficient, competent, and cross-trained to other roles.

The mobile simulation instructor requires confidence that they can conduct SBE competently on their own. While support is available via phone or two-way interactive video (e.g., FaceTime), the instructor needs to be able to independently manage the prebriefing, facilitate the scenario, and conduct the debriefing as the onsite instructor. There have been efforts documented since 2001 related to facilitating SBE from a distance [41–44]. While technically feasible, there is variability in learner ratings of the experience, and the question remains as to whether competency and knowledge are impacted differently.

The mobile simulation instructor needs to constantly survey the environment of the SBE to determine overall effectiveness of the learning opportunity in real time. Adjustments may need to be made on the spot, while still maintaining adherence to standards of best practice and guidelines. The instructor should also evaluate the use of resources during the SBE [45]. For example, the instructor needs to be able to

adjust the predetermined plan if learners arrive unprepared because they did not complete the required pre-learning activities. Are supplies adequate to meet the learning needs? What happens if a piece of equipment is broken – can the SBE continue? It is the instructor's responsibility that the learning objectives are met, and flexibility and ingenuity are often key to the SBE's success.

All of the components of successful SBE are interlinked and dependent upon each other [46]. While the mobile simulation program may not require that the instructor know the entire role of the operator or vice versa, it is important to have crossover [33]. Consider a mobile simulation laboratory that is 125 miles from the home base when the simulation operator becomes ill. If that person is the only one who knows how to run the simulator's computer software or how to manage audio-visual equipment, then the session will need to be canceled. Another option is that via FaceTime, a qualified simulation operator can "walk through" how to manage the equipment with the simulation instructor. While not ideal, it can salvage a session, but cross-training may be a better long-term solution. Last minute cancellation of the learning opportunity may impact customer or stakeholder relationships. A backup plan is critical for success.

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## Conclusions and Recommendations

It is clear that simulation instructors have a key role in the success of simulation-based education and that ongoing professional development is vital to their success in this role. The cost of instructor training is significant, and the time required to develop competent instructors can be extensive [1] due to rapidly changing simulation pedagogy and the need for repetitious practice. While remote simulation instructors do have access to assistance via audiovisual technology, they must be confident, independent, and competent in their skills. The simulation instructor should have demonstrated competency in preparing for the simulation, conducting prebriefing, facilitating the scenario, debriefing, and evaluating the environment and the learning outcomes, depending on their role description. Cross-training to the role of the simulation operations specialist will help to ensure that remote learning sessions occur even when one person is unable to continue. A variety of methods exist to provide education, training, and professional development opportunities to the remote simulation instructor that will allow guidelines and standards of best practice to be met and exceeded in this environment.

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