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Revised Standards

Healthcare Simulation Standards of Best Practice®: The Debriefing Process

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An umbrella review (UR) was conducted to inform the review of the INACSL Standards for Healthcare Simulation, The Debriefing Process (INACSL Standards Committee et al., 2024) using Joanna Briggs Institute (JBI) methodology (Aromataris et al., 2015; Belbasis et al., 2022). The goal of the UR was to identify "evidence-based practices related to the debriefing process to support the delivery of high-quality simulation that promotes a culture of inclusion, trust, and safety" (INACSL Standards Committee et al., 2024, p.1). This section provides a summary of the evidence acquired through the UR that supports the criteria necessary to meet the standard related to the debriefing process.

The umbrella review supported the premise that all simulation-based experiences (SBEs) must include a debriefing process that is intentional, structured, and based on theoretical frameworks and evidence-based concepts (INACSL Standards Committee et al., 2021; 2025a; Stefanidis et al., 2024). Structured debriefing "incorporates specific questions, guidelines, and activities planned for the session. It delineates the flow of the debriefing conversation and sometimes divides the conversation into multiple stages, each with a specific goal and focus" (Arabi and Kennedy, 2023, p. 1920). The aim of the debriefing process is "to identify and resolve gaps in knowledge, skills, attitudes, and communication related to the individual, team, and/or system" while assisting "in the development of insights, improve future performance, and promote the transfer and integration of learning to practice" (INACSL Standards Committee et al., 2021, p. 27). Evidence acquired through the umbrella review identified structured debriefing and/or feedback improved analytical skills and enhanced learner confidence (Arabi & Kennedy, 2023; Endacott et al., 2018; INACSL Standards Committee et al., 2025a). Also identified were improved performance

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skills, critical thinking, clinical judgement, and problem solving (Astbury et al., 2021; Lee et al., 2020; Niu et al., 2021).

The debriefing process of an SBE should be preceded by a prebrief (INACSL Standards Committee et al., 2021; 2025a; 2025b) and can be integrated at designated points within the scenario (debriefing-on-demand) and/or as a post-scenario activity (Arabi & Kennedy, 2023; Duff et al., 2024). The debriefing process must be appropriate to the modality/modalities of the SBE while encouraging deep cognitive learner engagement (Niu et al., 2021; INACSL Standards Committee et al., 2021; 2025a). Brief didactic insight and unidirectional feedback can occur during the debriefing process to support knowledge transfer but should be limited to allow learners to explore and create knowledge through thoughtful guided review of performance (INACSL Standards Committee et al., 2021; 2025a).

Facilitators are expected to provide safe, respectful simulated environments to promote knowledge acquisition, reflective thinking, and learning transfer (Astbury et al., 2021; INACSL Standards Committee et al., 2021; 2025a). A facilitator is defined as "an individual who is involved in the implementation and/or delivery of simulation activity" (Lioce et al., 2024, p. 22). The umbrella review identified that facilitators who are effective in addressing emotional responses and managing group dynamics create environments where learners feel secure in discussing mistakes and reflecting openly, which enhances clinical decision-making (Kainth & Reedy, 2024).

The duration of the debriefing should vary based on the learner/s' experiences, the objectives of the SBE, and the technique utilized (INACSL Standards Committee et al., 2021; 2025a). The systematic reviews included in the umbrella review identified that the duration of debriefing ranged from 15 to 45 minutes (Kainth & Reedy 2024; Lee et al., 2020), with 20 to 30 minutes being optimal (Lee et al., 2020). Additionally, Lee et al. (2020) cautioned facilitators that if the debriefing was too long, the length could contribute to fatigue and information overload. Therefore, it is recommended that the time allotted for the debriefing process be multifactorial; dependent on the knowledge level and experience of the learner(s), the make-up of the learners (individual or team, and variables such as age, gender and race), and the objectives of the SBE (Arabi & Kennedy, 2023; Cheng et al., 2014; Johnston et al., 2018; Stefanidis et al., 2024).

There was no conclusive evidence from the umbrella review related to the use of video during debriefing and its effect on learner outcomes (Cheng et al., 2014; Endacott et al., 2018; Garden et al., 2015; Levett-Jones & Lapkin, 2014). Therefore, it is recommended that the integration of video into the debriefing of an SBE be considered based on the time available for debriefing, the skills developed or assessed, and the diversity of the learners. Additionally, all learners need to be actively engaged in the SBE's debriefing, whether they participate in-person (actively or as an observer), remotely via local classroom video, or through a virtual learning environment using a web-based conferencing platform (Duff et al., 2024; INACSL Standards Committee et al., 2025a).

The debriefing process can be facilitated by either human educators and/or technology-supported systems such as computer-based, haptics, extended reality, and/or artificial intelligence (Arabi & Kennedy, 2023; Cheng et al., 2014; Duff et al., 2024; Lee et al., 2020; Stefanidis et al., 2024). The outcomes of the debriefing process can be influenced by the skill of the facilitator and/or design of the technology-supported system (Astbury et al., 2021; Kainth & Reedy, 2024). Additionally, the outcomes can be enhanced by incorporating multiple points of view, such as peer observers, small/large groups, external observers, standardized patients, operations specialists, and/or technology-enhanced systems (INACSL Standards Committee et al., 2021; Niu et al., 2021; Stefanidis et al., 2024).

The debriefing process can include three different *techniques* (feedback, debriefing, or guided reflection) or a combination of these techniques (INACSL Standards Committee et al., 2021; 2025a). The structured technique or combination of techniques (a blended approach) selected depends on the SBE, level, or type of learner(s), the objectives, and expected outcome(s) of the experience (Arabi & Kennedy, 2023; Niu et al., 2021).

- Feedback is a unidirectional process where "information [is] transferred between learner, facilitator, simulator, or peer(s) with the intention of improving the understanding of concepts or aspects of performance" (Lioce et al., 2024, p. 22). Feedback can be delivered by a facilitator, a technological device, a computer, a standardized patient (or simulated participant), or by other learners if it is part of the learning process and is structured (Niu et al., 2021; Stefanidis et al., 2024). A systematic review conducted by Cook et al. (2013) identified feedback as a key feature in promoting satisfaction, knowledge, and time skill outcomes in simulation interventions. Several other systematic reviews included in the umbrella review identified that real-time feedback during skills training allowed for demonstration of error correction, which promoted skills development (Arabi & Kennedy, 2023; Astbury et al., 2021; Mundell et al., 2013).
  Learning was promoted when feedback during formative SBEs was provided in a psychologically safe environment, which encouraged shared observations and allowed learner/s to express their perspective (Arabi & Kennedy, 2023). Additionally, the umbrella review identified that facilitators who adjusted their feedback in real-time based on learners' responses and needs were more successful in fostering meaningful reflection and learning (Duff et al., 2024; Stefanidis et al., 2024).
- Debriefing is a bidirectional, structured process that encourages reflective thinking (Lioce et al., 2024). Debriefing can be integrated at designated points within the scenario or as a post-scenario activity, depending on the desired outcome of the SBE (Duff et al., 2024; INACSL Standards Committee, 2021). Post-scenario structured debriefing provides an opportunity for questioning and discussion (Arabi & Kennedy, 2023; Astbury et al., 2021; Cheng et al., 2014; Endacott et al., 2018). Whereas in-scenario debriefing can provide a briefing coaching session (Duff et al., 2024) and reduce stress during a formative experience (Arabi & Kennedy, 2023).
  A debriefing session can be divided into several phases (INACSL Standards Committee et al., 2021). During the description phase, the objectives of the simulation and the purpose of the debriefing should be reviewed with the learners. The reaction/defuse phase allows learners to explore their reactions to the experience. During the analysis/discovery phase, the facilitator assists the learner's exploration of the experiences. This exploration facilitates an understanding of the material and helps the learner resolve any identified knowledge gaps. The summary/application phase provides an opportunity to recap the experience, identify insights, and explore how the knowledge, skills, and attitudes obtained from the experience could be transferred to the actual patient care environment (INACSL Standards Committee et al., 2021).
  The technique of structured debriefing incorporates asking appropriate, strategically placed questions that are deep and probing (Socratic questioning). The use of Socratic questioning facilitates the learner's ability to analyze a concept, develop insight, and gain new understanding (Paul & Elder, 2019). Additionally, asking appropriate questions at the right time allows the facilitator to assess the learner's reasoning and thought processes (Tofade et al., 2013). For example, according to Tofade et al. (2013), asking low-level questions provides data related to knowledge and application; while higher-order ques-

tions elicit deeper critical and reflective thinking and promote learning transfer.
- *Guided reflection* is an intellectual activity by which facilitators encourage learners to explore the critical elements of an experience, thus encouraging understanding and insight. Guided reflection promotes the linkage of theory with practice and research and can be integrated into a debriefing or accomplished through an exercise following the SBE using activities such as journaling and web-based discussions (Astbury et al., 2021; INACSL Standards Committee et al., 2021). Guided reflection leads learners in identifying strengths and weaknesses and in the development of a plan to amend any identified gaps (Arabi & Kennedy, 2023).

The debriefing process can include various *facilitation strategies* such as instructor-facilitated debriefing, self-debriefing, and peer debriefing (INACSL Standards Committee et al., 2025a). Arabi and Kennedy (2023) identified that self-debriefing minimized stress and allowed learners time to organize their thoughts and prepare for discussions. Whereas, peer feedback and collaborative reflection demonstrated an ability to positively influence learners' attitudes toward teamwork, improved communication skills, and decreased learners' psychological burden (Niu et al., 2021). Although facilitators should be aware that peer feedback could impact learning outcomes if inaccurate information is provided due to a peer's limited knowledge base (Niu et al., 2021).

The debriefing process should be facilitated utilizing an evidence-based, structured, theory- driven method or *model* (INACSL Standards Committee et al., 2025a). The method or model selected should promote conscious consideration, allowing learners to reflect on thoughts, feelings, and experiences within different clinical contexts (Arabi & Kennedy, 2023; Duff et al., 2024). Recognizing that each model influences the learners' knowledge, skills, attitudes, and behaviors differently, facilitators should select the model for the debriefing based on the learners, the scenario, and the facilitator's competence with the selected model (INACSL Standards Committee et al., 2025a).

According to Endacott et al. (2018), facilitator training is the key component to the outcomes of the debriefing process. The umbrella review identified facilitator educational initiatives should include, but not be limited to: 1) using various debriefing strategies, 2) establishing and maintaining psychological safety, 3) knowing how to integrate theory-based concepts, 4) using Socratic questioning, and 5) inviting multiple perspectives and manage participant discourse (Duff et al., 2024; Kainth & Reedy, 2024; Lee et al., 2020; INACSL Standards Committee et al., 2025a). Developing expertise in facilitating the debriefing process is a continuous endeavor that demands constant attention and practice. This can be achieved in multiple ways, including attending courses, mentoring, certification and/or credentialing, peer feedback, and/or self-analysis (INACSL Standards Committee et al., 2021; Stefanidis et al., 2024).

In summary, the selection of facilitation strategies, techniques, and/or models or the combination of these tools depends on the learner(s), the design of the SBE, the objectives of the experience, and the expertise of the facilitator(s).

Background

The following section provides an overview of the evidence-based educational underpinnings for the standards of best practice of the debriefing process**.** The educational underpinnings for the debriefing process are supported by multiple learning and system-based theories. Although the works of Dewey (1933), Kolb (1984), and Schön (2017) are discussed in this background section as examples, a vast number of other theories support the debriefing process. For instance, Johari's Window posited by Luft and Ingham (1955), highlighted that there are items known by a learner that an observer may or may not know. Debriefing can help all participants identify these items through careful inquiry.

Dewey (1933) emphasized that learning depends on the dynamic interaction between learners, their environment, and their conscious reflection on the experience. According to Dewey, for an experience to support learning it needs to be active, support understanding, and include a period of reflection. Reflection, according to Dewey (1933), requires learners to be open-minded, actively engaged, and guided through the process by a facilitator who planned the experience.

The cycle of Experiential Learning developed by Kolb (1984) provides a learning theory that integrates concrete experience, reflective observation, abstract conceptualization, and active experimentation. Kolb believed learning relied on reflective observation as an individual progressed from being involved to thinking about the experience and finally assimilating the knowledge into abstract concepts for future actions. Furthermore, Kolb (1984) believed active learning required a synergistic relationship between the learner and an environment that replicated the real world.

The goal of the debriefing process is to promote reflective thinking (Astbury et al., 2021; Johnston et al., 2018; Tofade et al., 2013). Multiple systematic reviews stressed that conscious reflection assists individuals in identifying knowledge gaps and developing insights by connecting thoughts, beliefs, and actions (Arabi & Kennedy, 2023; Duff et al., 2024; Stefanidis et al., 2024). Additionally, reflection supports cognitive reframing (the ability to look at a situation from different perspectives), which is essential to learning and the development and maintenance of professional competencies (Johnston et al., 2018; Tofade et al., 2013). Two types of reflection were described by Schön (2017). Reflection-on-action, or the conscious review of a completed action to discover new insights. Whereas Reflection-in-action is the artistry displayed when knowledge gained from past experiences is integrated into future situations (Schön, 2017).

The systematic reviews included in the UR demonstrated learning outcomes were significantly improved when the debriefing process, regardless of the technique, model, or facilitation strategy, was incorporated into an SBE (Levett-Jones & Lapkin, 2014; Niu et al., 2021). It is important to note that no technique, model, or strategy is necessarily preferential. Therefore, it is recommended facilitators consider a combination of debriefing techniques, models, and strategies to amplify the benefits of various forms (INACSL Standards Committee et al., 2021; 2025a).

In summary, the debriefing process fosters self-confidence, self-awareness, and self-efficacy (Levett-Jones & Lapkin, 2014; INACSL Standards Committee et al., 2021) by enhancing the learner's knowledge development, skill proficiency, and understanding (Johnston et al., 2018; Levett-Jones & Lapkin, 2014; Tannenbaum & Cerasoli, 2013). The potential outcome of following this standard is that the debriefing process would provide a constructive, psychologically safe learning environment. This environment promotes the ability to achieve identified outcomes, recognize areas for continued growth, and transfer knowledge, behaviors, and skills to practice environments (INACSL Standards Committee et al., 2021; Stefanidis et al., 2024).

Criteria necessary to meet this standard

The debriefing process is:

1. Planned and incorporated into the simulation-based experience in an appropriate manner to guide the learner(s) in achieving the desired learning or evaluation outcomes.

2. Constructed, designed, and facilitated by a person(s) or technology-supported system capable and/or competent in providing appropriate feedback, debriefing, and/or guided reflection.
3. Conducted in a manner that promotes self, team, and/or systems analysis. This process should encourage reflection, exploration of knowledge, and identification of performance/system deficits while maintaining psychological safety and confidentiality.
4. Planned and structured in a purposeful way based on theoretical frameworks/models and evidence-based concepts.

Criterion 1: The debriefing process is planned and incorporated into the simulation-based experience in an appropriate manner to guide the learner(s) in achieving the desired learning or evaluation outcomes (INACSL Standards Committee et al., 2021; 2025a).

Required Elements:

- The debriefing process is planned to:
  - Be preceded with a prebriefing/briefing(Follow the Healthcare Simulation Standards of Best Practice® [HSSOBP®] Prebriefing: Preparation and Briefing) (INACSL Standards Committee et al., 2021; 2025a).
  - Be integrated within or conducted after an SBE activity and follow the HSSOBP® Simulation Design (Astbury et al., 2021; Duff et al., 2024; Endacott et al., 2018; INACSL Standards Committee et al., 2021; 2025a)
  - Be learner-centered respecting the learner's background and culture. (INACSL Standards Committee et al., 2021; 2025a).
  - Be individualized and structured according to the educational and experience level of the learner (individual and or team) (INACSL Standards Committee et al., 2021; 2025a).
  - Ensure resources are available to support content, provide clarification, and assist with critical reflection (INACSL Standards Committee et al., 2021; 2025a).
  - Occur in multiple phases to allow deeper exploration of the learner's performance and thinking process (Arabi & Kennedy, 2023).
  - Consider the integration of video-assisted debriefing based on the needs of the learner(s) and SBE objectives (Duff et al., 2024); Stefanidis et al., 2024).
  - Integrate technology supported systems based on the needs of the learner(s) and the SBE objectives (Arabi & Kennedy, 2023; Cheng et al., 2014; Duff et al., 2024; Lee et al., 2020).
- The debriefing process is incorporated into the SBE to:
  - Be evidence-based, timely, and based on observable behavior (Duff et al., 2024; INACSL Standards Committee et al., 2021; 2025a).
  - Be adaptable allowing for modifications in the approach and the reframing (Duff et al., 2024; Stefanidis et al., 2024).
  - Be flexible allowing the duration of the debrief to be based on the experience, learning needs, individual versus team learning, and the outcomes of the experience (Arabi & Kennedy, 2023; Cheng et al., 2014; Duff et al., 2024; Lee et al., 2020).

Criterion 2: The debriefing process is constructed, designed, and facilitated by a person(s) or technology-supported system capable and/or competent in providing appropriate feedback, debriefing, and/or guided reflection (INACSL Standards Committee et al., 2021; 2025a).

Required elements:

- The person(s) or technology-supported system should:
  - Demonstrate the ability to establish and maintain a psychologically safe learning environment (Arabi & Kennedy, 2023; Astbury et al., 2021; Johnston et al., 2018).
  - Demonstrate knowledge and proficiency with the case or procedure and its objectives as well as the expected or desired performance of the learner(s) (Arabi & Kennedy, 2023; Duff et al., 2024; Kainth & Reedy, 2024; Luctkar-Flude et al., 2021; Stefanidis et al., 2024).
  - Demonstrate proficiency and strive for continued competence through professional development in the process of providing evidence-based feedback, debriefing, and/or guided reflection (Stefanidis et al., 2024).
  - Be recognized by the learner(s) as a credible source (INACSL Standards Committee et al., 2021; 2025a).
  - Consider the discipline and number of the learners and the debriefing environment (i.e. in-person, web-based) when selecting the debriefing process to allow engagement with each learner (Arabi & Kennedy, 2023; Cheng et al., 2014; Duff et al., 2024; Johnston et al., 2018; Stefanidis et al., 2024).
  - Use Socratic questioning, inquiry, open-ended and/or reflective questions, and advocacy to guide the conversation within the group to promote review, self-awareness, and critical and reflective thinking (Duff et al., 2024; Tofade et al., 2013).
  - Incorporate communication skills such as active listening, a non-judgmental demeanor, and silence to encourage learner(s) input, self-analysis, and reflection (Duff et al., 2024; INACSL Standards Committee et al., 2021; 2025a).
  - Identify performance gaps or process issues based on the expected outcomes of the simulation-based experience (Arabi & Kennedy, 2023).
  - Provide an unbiased critique of performance with the intent to correct errors, promote understanding, facilitate comprehension, and promote insightfulness (Arabi & Kennedy, 2023; INACSL Standards Committee et al., 2025a).

Criterion 3: The debriefing process is conducted in a manner that promotes self, team, and/or systems analysis. This process should encourage reflection, exploration of knowledge, and identification of performance/system gaps while maintaining psychological safety and confidentiality (INACSL Standards Committee et al., 2021; 2025a).

Required elements:

- The process *(technique, facilitation strategy, and/or model)* should:
  - Utilize a systematic, structured approach to the Debriefing Process (Arabi & Kennedy, 2023; Endacott et al., 2018; Lee et al., 2020; Niu et al., 2021).
  - Integrate focused, Socratic questioning (Arabi & Kennedy, 2023).
  - Be focused on learners' behavior and related to the objectives of the activity (Arabi & Kennedy, 2023; Lee et al., 2020).
  - Guide the learner(s) toward comprehension and understanding to achieve the desired objectives and outcomes (Arabi & Kennedy, 2023; Lee et al., 2020).
  - Utilize video integration appropriately based on predetermined objectives (Arabi & Kennedy, 2023; Stefanidis et al., 2024).
  - Consider the effectiveness of combining human expertise with technology-based tools to enhance effectiveness (INACSL Standards Committee et al., 2025a; Stefanidis et al., 2024).
  - Allow the observation and discussion of the learner's response and/or behavior to improve performance particularly when the learner is unaware of a deficit. The discussion must also allow for clarification of the frames or context

that may not be known by the observer (INACSL Luft & Ingham, 1955; Standards Committee et al., 2021; 2025a).
- The physical environment in which the process is conducted should:
  - Have appropriate support for the learner(s) in the case of unexpected distress or outcome(s) (INACSL Standards Committee et al., 2021; 2025a).
  - Have adequate facilities to allow privacy, open discussion, trust, review, and confidentiality and promote psychological safety (Arabi & Kennedy, 2023; Astbury et al., 2021; Garden et al., 2015; Kainth & Reedy, 2024).

Criterion 4: The debriefing process is planned and structured in a purposeful way based on theoretical frameworks/models and evidence-based concepts (INACSL Standards Committee et al., 2021; 2025a).

- The learning-based design for the process should:
  - Incorporate adult learning principles and learning theories from education, psychology, and/or team science (Endacott et al., 2018; Garden et al., 2015; Stefanidis et al., 2024; Tannenbaum & Cerasoli, 2013).
  - Be selected depending on the complexity of the scenario, contexts, learner(s), time available, and the learning objectives (Arabi & Kennedy, 2023; Duff et al., 2024; Lee et al., 2020; Levett-Jones & Lapkin, 2014; Luctkar-Flude et al., 2021).
  - Integrate Socratic questioning to assist learners in connecting thinking with doing (Arabi & Kennedy, 2023; Duff et al., 2024; Tofade et al., 2013).
  - Allow for flexibility based on different learners, identified objectives and outcomes, timeframe, and the simulation setting (Arabi & Kennedy, 2023; Duff et al., 2024; Johnston et al., 2018; Lee et al., 2020; Levett-Jones & Lapkin, 2014; Luctkar-Flude et al., 2021).
  - Be structured and incorporate various phases (Duff et al., 2024; Lee et al., 2020; Stefanidis et al., 2024).
- The outcome-based design for the process should:
  - Facilitate analysis or critique of the team, system, or the learner(s) themselves (Endacott et al., 2018; Tannenbaum & Cerasoli, 2013).
  - Be designed to encourage learners to search for evidence-based solutions (Arabi & Kennedy, 2023; Duff et al., 2024; Johnston et al., 2018; Lee et al., 2020; Luctkar-Flude et al., 2021; Stefanidis et al., 2024).
  - Foster the learner's ability to apply/transfer the knowledge, skills, and attitudes obtained during SBE to actual clinical settings (Arabi & Kennedy, 2023; Duff et al., 2024; Johnston et al., 2018; Lee et al., 2020; Luctkar-Flude et al., 2021; Stefanidis et al., 2024).
  - Acknowledge that each learner's perspective is valid and may require exploration to be fully understood (INACSL Standards Committee et al., 2021; 2025a).

Original INACSL standard

The INASCL Board of Directors. (2011). Standard VI: The debriefing process. *Clinical Simulation in Nursing*, 7(4S), s16-s17. 10.1016/j.ecns.2011.05.010.

Subsequent standard

Subsequent INACSL Standards Decker, S., Fey, M., Sideras, S., Caballero, S., Boese, T., Franklin, A. E., & Meakim, C. (2013). Standards of best practice: Simulation standard VI: The debriefing process. *Clinical Simulation in Nursing*, 9(6), S26-S29.

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About the International Nursing Association for Clinical Simulation and Learning (INACSL)

The International Nursing Association for Clinical Simulation and Learning (INACSL) is the global leader in transforming practice to improve patient safety through excellence in health care simulation. INACSL is a community of practice for simulation where members can network with simulation leaders, educators, researchers, and industry partners. INACSL also provided the original living documents, INACSL Standards of Best Practice: Simulation®, an evidence-based framework to guide simulation design, implementation, debriefing, evaluation, and research. The Healthcare Simulation Standards of Best Practice® are provided with the support and input of the international community and sponsored by INACSL.

Appendix A

Resources and Recommendations

Debriefing methods remain diverse, but regardless of the method used, debriefing enhances learning and contributes to behavior change (Kainth & Reedy, 2024; Stefanidis et al., 2024; Tannenbaum & Cerasoli, 2013). Currently, there is insufficient evidence to designate which method or combination of methods is best for various contexts, disciplines, levels of study, learning outcomes, and the facilitator's experience (Arabi & Kennedy, 2023; Duff et al., 2024; Lee et al., 2020).

Even if a debriefing model does not formally integrate Socratic questioning, the facilitator should incorporate the strategy of asking essential questions. Socratic questioning facilitates reflective thinking, fosters critical thinking, and assists in the transfer of learning to patient care (Duff et al., 2024; INACSL Standards Committee et al., 2021; Tofade et al., 2013).

- Current models/frameworks for debriefing include but are not limited to the following:
  - Debriefing for Meaningful Learning (DML) (Dreifuerst, 2015).
  - Debriefing with Good Judgment (Rudolph et al., 2006, 2007).
  - Diamond (Jaye et al., 2015).
  - Gather, Analyze, Summarize (GAS) (Phrampus & O'Donnell, 2013).
  - PEARLS for System Integration (PSI) Frameworks (Cheng et al., 2016; Eppich & Cheng, 2015).
  - Promoting Excellence and Reflective Learning in Simulation (PEARLS) (Cheng et al., 2016).
  - Plus-Delta (Fanning & Gaba, 2007; O'Brien et al., 2017).
  - TeamGAINS (Kolbe et al., 2013).
  - Review the event, encourage team participation, Focused feedback, Listen to each other, Emphasize key points, Communicate clearly, and Transform the future (REFLECT) (Zinns et al., 2020).
  - The 3D Model of Debriefing (Defusing, Discovering, and Deepening) (Zigmont et al., 2011).
  - The Critical Incident Stress Debriefing Model (Mitchell & Everly, 1997).

- Frameworks to assist in providing feedback (this list is not exhaustive) are:
  - Learning Conversations (Norris & Bullock, 2017).
  - Situation-Based-Impact-Intent (SBII) (Weitzel, 2019).

Structured debriefing and/or the use of a debriefing framework has a positive impact on the outcomes of the SBE (Duff et al., 2024). This impact includes improved learner self-confidence, knowledge acquisition, and skills performance (Arabi & Kennedy, 2023; Duff et al., 2024; Endacott et al., 2018; Niu et al., 2021; Stefanidis et al., 2024). Yet, a lack of robust empirical evidence exists to assist in identifying elements to consider when planning the debriefing process of an SBE (INACSL Standards Committee et al., 2025a). These elements include the objectives of the SBE, learner characteristics, participant diversity, and facilitation process. Therefore, robust measurement of the outcomes from the debriefing process is needed to provide educators with a broader understanding related to the impact specific elements have on resolving identified gaps in knowledge and skills development (Levett-Jones & Lapkin, 2014; Stefanidis et al., 2024).

- Instruments/tools to assist in the assessment of the debriefing process include (this list is not exhaustive):
  - Debriefing Assessment for Simulation in Healthcare (DASH) (Brett-Fleegler et al., 2012).
  - Debriefing for Meaningful Learning Evaluation Scale (Bradley & Dreifuerst, 2016).
  - Feedback Assessment for Clinical Education (FACE) (Onello et al., 2015).
  - Objective Structured Assessment of Debriefing (OSAD) (Zamjahn et al., 2018).
  - Peer Assessment Debriefing Instrument (PADI) (Saylor et al., 2016).
  - Simulation Effectiveness Tool-Modified (SET-M) (Leighton et al., 2015).

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