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## Standards of Best Practice: Simulation

# INACSL Standards of Best Practice: Simulation<sup>SM</sup> Simulation-Enhanced Interprofessional Education (Sim-IPE)

## INACSL Standards Committee

### KEYWORDS

interprofessional  
education;  
collaborative practice;  
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communication;  
teamwork

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As the science of simulation continues to evolve, so does the need for additions and revisions to the INACSL Standards of Best Practice: Simulation<sup>SM</sup>. Therefore, the INACSL Standards of Best Practice: Simulation are [living documents](#).

## Standard

Simulation-enhanced interprofessional education (Sim-IPE)<sup>1</sup> enables participants from different professions to engage in a simulation-based experience to achieve shared or linked objectives and outcomes.

## Background

The complex health care needs of today's society require health care professionals to work as a collaborative team. Safe, quality health care depends on the ability of the health care team to cooperate, communicate, and share skills and knowledge appropriately. Sim-IPE is the overlap of the pedagogy of simulation and interprofessional education (IPE), providing a collaborative approach for the development and mastery of interprofessional practice

competencies.<sup>2,3</sup> Simulation-based experiences are recognized as an effective way to promote IPE teamwork.

Sim-IPE is designed for individuals to “learn about, from, and with each other to enable effective collaboration and improve health outcomes”<sup>2</sup> (p.31) therefore, creating opportunities for purposeful learning. Creating these rich learning opportunities can be difficult given the many natural variables present in simulation education (e.g., simulation, simulator, simulation program, curriculum, schedules, participants, and educators) that may impact learning. As a way to achieve the highest interprofessional learning that can best withstand these variables, educators should use published theories (educational, organizational, and/or management), concepts, frameworks, standards, and competencies to guide the development implementation and evaluation of Sim-IPE.<sup>4,5</sup>

Strategies from simulation-based education and IPE should be integrated into all aspects of the experience.

Additionally, strategies from human factors research and team performance are essential for effective communication and collaboration in Sim-IPE.

An evaluation plan should be considered when designing a Sim-IPE activity to measure the outcome(s) of the methodology, experience, and learning outcomes to contribute to the body of science specific to Sim-IPE.<sup>3,6</sup> Simulation and IPE are both anecdotally linked to patient safety, but little evidence is available to validate this linkage (Sim-IPE), and most of the available tools currently lack psychometric development.<sup>7</sup> Research utilizing valid and reliable measures is needed to determine the effectiveness of Sim-IPE to include changes in attitudes, changes in clinical practice, and changes in patient outcomes. Educators and researchers are encouraged to disseminate outcomes from Sim-IPE experiences.

Potential consequences of not following this standard may include impaired learning opportunities, professional mistrust, ineffective working relationships, unsafe learning environments, and lack of role clarity.<sup>8</sup>

## Criteria Necessary to Meet This Standard

1. Conduct Sim-IPE based on a theoretical or a conceptual framework.<sup>4,5,9</sup>
2. Utilize best practices in the design and development of Sim-IPE.
3. Recognize and address potential barriers to Sim-IPE.
4. Devise an appropriate evaluation plan for Sim-IPE.

**Criterion 1:** Conduct Sim-IPE based on a theoretical or a conceptual framework.<sup>4,5,9</sup>

### Required elements:

Include adult learning theories, frameworks, standards, and competencies to structure the development of Sim-IPE.

- Explore teamwork or crisis resource management framework(s) with consideration to adopt for consistency.
- Intentionally design Sim-IPE using published theoretical models, frameworks, and/or competencies (e.g., nationally accepted core competencies, certifying and accrediting bodies, professional societies). Conduct curricular mapping to identify potential and/or appropriate integration of Sim-IPE.

Integrate the theoretical and philosophical models of each health care profession involved in the Sim-IPE.

**Criterion 2:** Utilize best practices in the design and development of Sim-IPE.

### Required elements:

Best practices for Sim-IPE should:

- Consider multiple experiences to achieve expected outcomes.
- Incorporate authentic,<sup>10</sup> challenging, reality-based activities/scenarios developed and reviewed by the professions involved in the simulation.
- Develop mutual goals among the professions involved in the experience.
- Base activities on learning objectives,<sup>11</sup> participants' knowledge, skills, needs, and experiences.
- Ensure a safe learning environment.
- Provide appropriate, team-based structured debriefing and feedback as appropriate for the goal of the simulation.<sup>6,9,10,12,13</sup>

**Criterion 3:** Recognize and address potential barriers to Sim-IPE.

### Required elements:

Perform a needs assessment to determine if the organization or program is ready for Sim-IPE and that stakeholders will be able to benefit.<sup>17</sup>

Determine institutional and leadership commitment to Sim-IPE.<sup>2,4,6,15</sup>

Address sustainability and institutional and local issues during the development, planning, and evaluation processes. Utilize Sim-IPE champions and stakeholders throughout the development, planning, and implementation processes.

Review available resources including financial support, simulation space, equipment, supplies, time, and support staff/facilitators, as Sim-IPE can be resource intensive.<sup>4,6,14,15</sup>

Provide initial and ongoing faculty development.<sup>4,16-18</sup>

Determine the infrastructure for Sim-IPE including curricular underpinnings and development of curricula.<sup>2,16-18</sup>

Provide support, including recognition and time, for educators to participate in designing, conducting, and debriefing simulation-based activities.<sup>6,15,16,19</sup>

Develop the plan for sustainment after the initial startup.

Consider that additional barriers to Sim-IPE may occur in some countries.<sup>19</sup>

Follow INACSL Standard: Simulation Design and INACSL Standard: Professional Integrity.

**Criterion 4:** Include an appropriate evaluation plan.

### Required elements:

Use reliable and valid tools, if available.

Develop the evaluation in consultation with experts (i.e., statisticians, researchers, or psychometricians).  
 Investigate how Sim-IPE can be effectively integrated into various curricula (pre and post licensure).  
 Measure how Sim-IPE impacts individual and team behavior.  
 Explore how Sim-IPE can be used to develop and assess interprofessional competencies.  
 Measure how Sim-IPE impacts learner outcomes.  
 Measure how Sim-IPE impacts patient outcomes.<sup>7,18</sup>  
 Measure how Sim-IPE impacts culture change.

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### Original INACSL Standard

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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 provides the INACSL Standards of Best Practice: Simulation<sup>SM</sup>, an evidence-based framework to guide simulation design, implementation, debriefing, evaluation, and research.