

EVIDENCE-BASED SIMULATION GUIDE



Advancing Clinical Competency & Patient Safety
through High-Fidelity Medical Simulation

September 2025

1 CURRENT LANDSCAPE: Simulation as a Strategic Imperative

Global Consensus & Safety Culture

In 2024, the Society for Simulation in Healthcare (SSH) and the Society for Simulation in Europe (SESAM), representing 50 societies across 67 countries, released a Global Consensus Statement. It emphasizes simulation's critical role in addressing healthcare disparities, reducing morbidity/mortality, and reinforcing a robust patient safety culture. Stakeholders are urged to prioritize simulation-based education in policy and organizational planning.

Underutilized Potential in Quality Improvement

Despite proven effectiveness in identifying safety vulnerabilities and improving teamwork, simulation remains underleveraged as a tool for quality and safety enhancement. Collaboration between quality/safety professionals and simulation leaders is strongly encouraged.

2 EVOLVING STANDARDS & PROFESSIONAL PRACTICE

INACSL's 2025 Standards of Best Practice

The International Nursing Association for Clinical Simulation and Learning (INACSL) recently released the fourth edition of its Standards of Best Practice®. These comprehensive guidelines encompass domains such as simulation design, facilitation, debriefing, professional development, operations, and integrity—setting a future-ready benchmark for simulation educators and developers.

Simulation Center Operations & Recognition

The SSH's Certified Healthcare Simulation Operations Specialist (CHSOS), first introduced in 2014, remains a cornerstone credential for standardizing operations expertise in simulation centers worldwide.

3 INDUSTRY TRENDS & GROWTH TRAJECTORY

Market Expansion Forecast

The healthcare simulation market shows aggressive growth, driven by the demand for patient safety training, procedural complexity, and minimally invasive techniques. One 2025 report projects the global market to expand significantly by 2030.

Immersive Technologies Take the Lead

Virtual reality remains a dominant force. From 2023 to 2031, the VR medical simulation sector is expected to grow at a compound annual growth rate (CAGR) of 25.6%, with market size projected to swell from ~\$955 million USD to \$8.5 billion USD.

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EVIDENCE OF EDUCATIONAL IMPACT & INNOVATION

VR Enhances Procedural Skills & Confidence

A VR-based simulation for Neonatal Resuscitation Program (NRP) training improved users’ sense of presence, experiential learning outcomes, and confidence in critical neonatal skills like mask placement and newborn responsiveness.

Graduate Medical Education Embracing Simulation

In 2025, studies highlighted simulation-based medical training as a vital tool to tackle fragmented clinical education, including improvements in hands-on skills, communication, and crisis resource management.

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PRACTICAL RECOMMENDATIONS FOR SIMULATION CENTERS

Focus Area	Key Insight & Best Practice
Standards Alignment	Adopt INACSL’s 2025 Standards to align with best practices in design, facilitation, debriefing, and professional conduct.
Strategic Advocacy	Leverage the 2024 Global Consensus to position simulation as essential to safety and equity—inform stakeholders and policymakers.
Operational Excellence	Invest in CHSOS credentialing to reinforce technical proficiency and operational reliability in simulation center leadership.
Immersive Methodologies	Expand VR-enhanced training where appropriate, supported by strong evidence of effectiveness in skill-building and learner engagement.
Multidisciplinary Collaboration	Partner simulation teams with quality improvement and safety professionals to maximize impact and relevance.
Evidence Tracking & Evaluation	Incorporate routine assessment of outcomes (clinical skill gains, safety metrics, learner confidence) to substantiate impact.
Future-Proofing	Monitor research advances and market trends to plan phased integration of emerging modalities and infrastructure enhancements.

CONCLUSION

Simulation in healthcare has matured into a multi-dimensional platform, equipping learners with not only clinical skills, but also supporting safety culture and system-level improvements. Anchored in consensus guidance and best practices, and driven by immersive technology trends, simulation can be both high-impact now and foundational for tomorrow’s training needs.

Use this guide to elevate your simulation center’s standards, advocacy, and operational effectiveness, offering real, actionable insight for sustainable advancement.

1. Global Consensus Statement on Simulation-Based Practice in Healthcare, SSH & SESAM (2024)
Source: advancesinsimulation.biomedcentral.com
2. Joint Commission Journal: Simulation's role in quality and safety collaboration (2024)
Source: jointcommissionjournal.com
3. INACSL Fourth Edition Standards of Best Practice[®] (2025)
Source: inacsl.org
4. SSH CHSOS credential and simulation center operations
Source: en.wikipedia.org
5. Healthcare/Medical Simulation Market Outlook (2025)
Source: globenewswire.com
6. VR Medical Simulation Market Growth 2023–2031
Source: simxvr.com
7. VR-NRP Simulation Study (2024)
Source: arxiv.org
8. 2025 Highlights in Graduate Medical Education
Source: sciencedirect.com