



## Certified Healthcare Simulation Educator Examination Blueprint, 2018 Version

### *Examination Blueprint*

The content of the CHSE examination is based on the blueprint. This blueprint was completed as a result of the international Practice Analysis of healthcare simulation operations that occurred between July 2017 and May 2018. The results of this Practice Analysis are contained in this document that describes the knowledge, skills, and abilities (KSAs) that are expected of an individual functioning in this role.

As candidates for the CHSE prepare to take the examination, the following should be considered on how to use the examination blueprint:

- This document includes the high-level examination blueprint which shows the domains and the percentage of the exam for each domain, and also the detailed examination blueprint which lists the KSAs within each domain.
- Every question on the examination must map back to at least one of the KSAs included in the detailed examination blueprint. Any items that cannot map back to at least one KSA will not be on the examination.
- The KSAs listed represent the breadth of work in the healthcare simulation educator role around the world. Individual job descriptions may have significant variance, both in breadth and in depth of function as required by an individual simulation program.
- The KSAs, and thus the examinations, are written at the two-year competency level.
- The verb for each KSA has been carefully chosen using published verbiage in Bloom's Taxonomy. This should indicate to the candidate the expected level of function for each individual KSA, and thus the scope of knowledge that could be expected on the exam.
- Questions on the examinations are typically written at the application and/or analysis level. Very few questions are simple recall level questions (e.g. definitions).

### **Certified Healthcare Simulation Educator High-Level Examination Blueprint**

| Domain   | Weight |
|--|--------|
| I: Professional Values and Capabilities            | 18%    |
| II: Healthcare and Simulation Knowledge/Principles | 28%    |
| III: Educational Principles Applied to Simulation  | 40%    |
| IV: Simulation Resources and Environments          | 14%    |

## **Certified Healthcare Simulation Educator Detailed Examination Blueprint**

### **DOMAIN I: PROFESSIONAL VALUES AND CAPABILITIES (18%)**

- A. Demonstrate characteristics of leadership (e.g. delegation, negotiation)
- B. Recognize opportunities to advocate for simulation
- C. Demonstrate and cultivate respect in relationships with participants, faculty, and the community
- D. Demonstrate characteristics of teamwork (e.g. communication, role clarity, conflict resolution)
- E. Recognize ethical principles and personal responsibilities as they apply to simulation (e.g. integrity, respect, do no harm)
- F. Distinguish among the various roles of personnel involved in simulation
- G. Demonstrate compliance with regulatory requirements
- H. Evaluate credibility of resources in simulation education (e.g. websites, listservs, literature)
- I. Utilize credible resources to inform simulation practices
- J. Differentiate among the basic element of research (e.g. ethical review, informed consent, methodologies)
- K. Define elements of quality management (e.g. plan-do-check-act)

### **DOMAIN II: HEALTHCARE AND SIMULATION KNOWLEDGE AND PRINCIPLES (28%)**

- A. Describe the factors affecting participant engagement within a simulation activity (e.g. learner level, realism, suspension of disbelief)
- B. Examine opportunities to integrate simulation into education, research, and practice
- C. Differentiate the phases of a simulation activity
- D. Differentiate among the methods of feedback
- E. Differentiate elements of debriefing
  - 1. Reflection
  - 2. Facilitation
  - 3. Phases
- F. Differentiate among simulation modalities
- G. Distinguish among various simulation activity settings (e.g. in situ, center-based, mobile)
- H. Distinguish among applications of simulation for individual(s), team(s), and system(s)
- I. Differentiate elements of realism
- J. Recognize stressors contributing to individual and team performance (e.g. cognitive, affective/emotional, psychomotor)
- K. Define elements of human factors
- L. Identify roles for simulation to improve patient safety
- M. Recognize concepts of modeling

### **DOMAIN III: EDUCATIONAL PRINCIPLES APPLIED TO SIMULATION (40%)**

- A. Distinguish principles of utilizing simulation as an educational tool (e.g. learning taxonomies, assessment, learning theories)
- B. Integrate instructional design concepts into simulation activities

- C. Plan and design simulation activities
  - 1. Integrate needs assessment data into simulation activities (e.g. psychomotor behavior, technical, behavioral, cognitive)
  - 2. Define goals
  - 3. Create measurable learning objectives/outcomes
  - 4. Identify and integrate assessment methods
  - 5. Prepare orientation, prebriefing/briefing, debriefing, feedback (i.e. for participants and simulation team)
  - 6. Plan logistics (e.g. people, supplies, timing)
  - 7. Employ strategies to balance risks and outcomes (e.g. real vs simulated equipment/supplies/tissues)
  - 8. Design the case/scenario
  - 9. Select simulation modality/modalities
  - 10. Select location to conduct the simulation activity
  - 11. Identify required resources (e.g. personnel, equipment, supplies)
  - 12. Collaborate in the coordination of the simulation team
  - 13. Prepare materials for participants and simulation team
    - a. Instructions
    - b. Equipment and supplies
    - c. Environment, simulation, and moulage setup
  - 14. Assemble simulation specific resources (e.g. scenario, SP case, teaching script, programming list)
  - 15. Conduct pilot activity for simulations (i.e. dress rehearsal, field test, run-through)
  - 16. Plan for evaluation of the simulation activity
  - 17. Modify simulation activities based on pilot activities
- D. Implement simulation activity
  - 1. Conduct prebriefing/briefing/orientation
    - a. Review potential physical and psychological risks
    - b. Create a psychologically-safe environment
  - 2. Facilitate simulation
    - a. Manage personnel and equipment
    - b. Manage evolving simulation needs
    - c. Manage evolving participant needs
    - d. Manage issues that arise during the simulation (e.g. equipment failure, unexpected behaviors or events)
    - e. Manage physical and psychological risks related to simulation
    - f. Identify participant performance
    - g. Maintain psychologically-safe simulation environment
  - 3. Conduct participant assessment
    - a. Manage physical and psychological risks
    - b. Address performance
      - i. Facilitate debriefing
      - ii. Provide feedback
    - c. Facilitate reflective thinking

- d. Promote transfer of learning to practice
    - e. Facilitate development of action plans related to performance
    - f. Maintain psychologically-safe simulation environment
  - 4. Participate in simulation team debriefing and feedback
- E. Analyze simulation activity evaluations
- F. Modify future simulation activities based on analyzed evaluations
- G. Reliability and validity
  - 1. Differentiate the concepts of reliability and validity in designing simulation activities
  - 2. Analyze how changes in simulation activity design may impact reliability and validity
- H. Recognize the unique criteria for developing and implementing interprofessional simulation activities
- I. Apply ethical principles in simulation activities

DOMAIN IV: SIMULATION RESOURCES AND ENVIRONMENTS (14%)

- A. Recommend modifications to simulation facility/program to improve outcomes
- B. Manage technical and material problems (e.g. video capture, simulator failures, supplies)
- C. Recognize and report gaps, needs, and/or opportunities for a simulation program (e.g. equipment, staffing, policies)
- D. Identify how specific factors impact operational changes (e.g. purchases, staffing, logistics, policies)
- E. Apply strategies for managing risks in a simulation program/center
- F. Utilize resources effectively and efficiently (e.g. money, people, space)