

Healthcare Safety Solutions Simulation-Based Education & Readiness Planning



Project Overview

The goal of this simulation-based education & readiness planning is to provide high-quality, on-site simulation-based team training and readiness planning designed to enhance critical thinking, technical proficiency, and teamwork and communication skills for rural EMS personnel, critical access hospital staff, and air transport flight crews.

Our programs target high-risk, low-frequency emergencies to enhance patient outcomes and reduce response times.

- 1. Readiness Planning Sessions
 - Tailored to identify specific learning objectives, outcome measures, and scenario designs based on the unique needs of individual EMS agencies and hospitals. Development of individualized continuous readiness planning to maintain and enhance skills and improve QI initiatives.
- 2. Procedural Skills Labs
 - Hands-on practice sessions preceding simulations to improve participants' critical skills, knowledge, and abilities.
- 3. In-Situ Simulation
 - On-site simulations conducted in actual clinical and field settings to allow participants to practice under real-world conditions they are likely to encounter.
- 4. Quality Improvement Outcomes
 - Simulation training is used to test changes in quality improvement projects, optimize protocols, and improve processes.
- 5. Debriefing Sessions
 - Structured debriefs led by experienced facilitators help teams reflect on their actions, recognize successes, and identify areas for improvement. Immediate feedback reinforces learning and enables participants to adjust and refine their responses.
- 6. Summary Reports
 - Following each session, comprehensive reports are provided to outline readiness levels and offer actionable recommendations for continuous improvement.

Example of Readiness Planning:

Foundational Skills	Situational Competencies	Continuous Readiness and Improvement Activities
Massive Transfusion Protocols•Blood Bank Access•0 Negative Blood•Jada Device•Rapid TransfuserRecognition of Postpartum Hemorrhage•Blood loss estimates•Weighing chucks/pads•Personnel management skillsTransfer of care•Communication/partnership with midwife•SBAR updates, orienting helpTeamwork skills•Role clarification•In-role behaviors•Team-based communication•Patient/family communication•skills	 Home Birth Community midwife assisted birth Resuscitation of infant by EMS NRP by EMS, STABLE by Hospital Resuscitation of mother by ED at Critical Access Hospital Massive Transfusion Protocol Transfer out by air medical flight Dispatch of flight team Transfer and acceptance of patient 	 Quarterly Skills Labs Annual Simulation with debriefing Quality Improvement Project Identified Debriefing after real high-risk OB and neonatal events Late recognition, sub-optimal management events Early recognition, successful management events Develop plan to define training approaches Sim-testing of process, equipment and facility Sim-developing critical care teamwork approach

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