



Banner Simulation System *Western Region*



Simulation Education and Training

Providing advanced education

Simulation Education and Training uses computer driven mannequins and virtual reality devices to teach health care providers in a safe environment. Trainers simulate patient care scenarios and procedures in this safe environment to continuously improve the clinical skills and teamwork of nurses, physicians and allied health care providers.

The aviation industry pioneered simulation exercises to reduce flight errors. Now leaders have incorporated this technology into the education and training curriculum for health care professionals to improve patient safety.

The participants work with high-tech medical mannequins that breathe, blink, code, seize, bleed and speak. One mannequin even gives birth to a baby after a simulated labor, complete with programmable complications.

Quality patient care

Quality patient care and patient safety is our driving force to provide simulation education and training. Numerous studies have shown that simulation and skill training dramatically improve quality of care. Research has shown that physicians trained with simulators learned procedures 30 percent faster and were six times less likely to have surgical errors.

Simulation is used in many areas

We integrate the simulation education into:

- Facility strategic initiatives
- Clinical initiatives
- Quality Improvement and Risk Management priorities

- New graduate nursing residency programs
- Physician education
- Evidence Based Practice

Specific simulation training scenarios include:

- Cardiac emergencies such as myocardial infarction or cardiac arrest
- Respiratory failure
- Septic shock
- Trauma scenarios
- Operating room emergencies including malignant hyperthermia
- Pediatric emergencies
- Birthing emergencies



The simulation training takes place in settings that have additional and meaningful impact on:

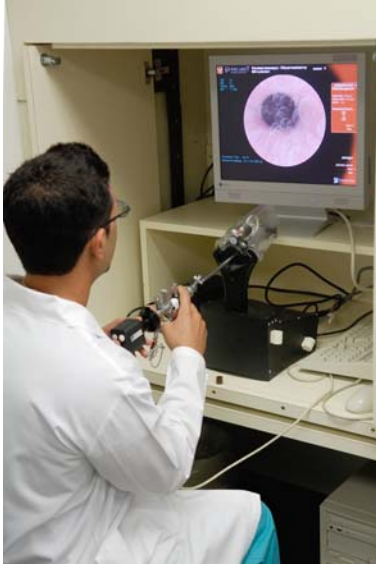
- Communication
- Critical thinking
- Rapid response
- Team training.

Training with advanced technology

The High-Fidelity Simulation equipment includes:

- Four METI Adult mannequins
- A METI PediaSIM ECS pediatric mannequin
- A Noelle Mother-Baby mannequin
- A Laerdal SimBaby Infant simulator

The Banner Health Simulation System in the Western Region covers 11 facilities in six states: Alaska, California, Colorado, Nevada, Nebraska and Wyoming.



Coming in 2009

McKee Medical Center is the host site for a 3,000-square-foot, state-of-the-art simulation education and training facility. This regional simulation center will be fully integrated with simulation services in our Arizona facilities and with our existing Western Region Simulation mobile services.

This virtual health care setting will provide a variety of

medical and learning environments:

Medical Settings

- Intensive care room
- Emergency bay
- Labor and Delivery bay
- Operating suite
- Medical-Surgical patient room
- Driver stations to control simulators

Educational Rooms

- Conference rooms with teleconference capabilities
- Small conference rooms for team learning and debriefing
- Large classrooms for lectures
- Virtual reality and task training areas.

Our goal is to provide physicians, nursing staff and other health care professionals a safe “practice” environment to develop and maintain clinical skill proficiencies, enhance teamwork opportunities and ensure improved patient care.