*Case Scenarios*

Each scenario lasted 20 – 40 minutes with an additional 10 – 20 minutes of debriefing by faculty. The AIS scenario simulated a patient presenting to the emergency room with an acute ischemic stroke. A senior neurology resident role-played the standardized patient with neurologic deficits to imitate a middle cerebral artery stroke as opposed to using a mannequin. The script included National Institute of Health Stroke Scale (NIHSS) findings for the role-player to imitate. This design allowed the learner to perform a stroke scale on a live person in a dynamic situation. Trainees had to assess the patient for eligibility for tPA infusion, review contraindications, explain the procedure to a mock family member, review a non-contrast computed tomography (CT) of the head and a CT angiogram of the head and neck, recognize candidacy for thrombectomy, and manage potential complications.

The status epilepticus simulation was multi-staged and started in a simulated austere battlefield environment. The simulated battle noise and minimal visibility necessitated the trainee to perform a trauma evaluation on the SimMan3G (on the she SimMan3G), recognize a possible severe traumatic brain injury, and request emergency casualty evaluation. As a Level 1 trauma center in the Department of the Defense, our institution is home to training in combat casualty care. This necessitated design of an experience for military neurology trainees. The scenario transitioned to a higher level of care in a hospital setting, where the learner had to recognize and treat a seizure, review a head CT for intracranial pathology, recognize non-convulsive seizure from an example electroencephalogram screen capture, and initiate treatment for non-convulsive SE.

For the brain death and delivering bad news simulation, trainees performed an exam on the SimMan3G after reviewing a CT and contraindications. Subsequently, they had to “share the bad news” with simulated family members, role played by two Department of Neurology volunteers with a medical background. The “family” used a standardized script and were cued to act angry, sad, or accepting depending on specific aspects of the learner’s performance. The “family” was knowledgeable on the script, coached how to respond during the scenario, and provided questions to challenge the learner’s diagnosis and other common end-of-life discussion questions.