

Background

The purpose of this document is to provide guidelines for faculty on various aspects of patient simulators to be emphasized to learners during orientation. We recommend that every learner be given a structured orientation to the patient simulators to facilitate their ability to use the technology. In general, this orientation can be accomplished in fifteen to twenty minutes.

Instructions for the Faculty

1. Power on your patient simulator.
2. Open a preconfigured patient or simulated clinical experience (SCE™) as indicated:
 - Adult HPS®, ECS®, iStan®, METIman Nursing® or METIman Prehospital® - Healthy Adult Male or Healthy Adult Female
 - PediaSIM HPS® or PediaSIM ECS® - Healthy Adult Male Child or Healthy Adult Female Child
 - BabySIM® - Healthy Adult Male Infant or Healthy Adult Female Infant
3. Connect to the mannequin (if applicable).
4. Give a head-to-toe description of each feature.
5. Allow time for the learners to find the pulses and listen to the various sounds.

Note:

It is important to point out and frequently remind learners that they are expected to complete ALL aspects of a normal assessment.

Learners are expected to go through all the normal psychomotor aspects of data collection, regardless of whether the simulator itself provides this information.

- An example would be placing their hands in those of the simulator and asking the patient to grip their hands.
- Learners should be told to look to the faculty for assessment cues the simulator does not provide when performing an assessment (as in the example above).

Aspects of assessment where this behavior is expected include:

- Pupil reaction and accommodation (if indicated)
- Skin temperature, skin color, presence or absence of moisture
- Presence or absence of grips and strength in upper extremities
- Presence or absence of movement on command and strength in lower extremities
- Reflexes (if indicated)
- Presence or absence of bowel sounds in simulators without this feature

Mannequin Features

Feature	HPS	PediaSIM HPS	ECS	PediaSIM ECS	BabySIM	iStan	METIman Prehospital	METIman Nursing
<i>Head, Neck and Airway</i>								
Blinking eyes	●	●	●	●	●	●	●	●
Reactive pupils	●	●				●	●	●
Tri-state pupil size (Pinpoint, Normal and Blown)			●	●	●			
Eye secretions	●	●	●	●	●	●	●	
Ear secretions	●	●	●	●	●	●		
Nose secretions		●	●			●	●	
Mouth secretions	●	●	●	●	●	●	●	
Forehead diaphoresis						●		
Trismus						●		
Patient voice speaker	●	●	●	●	●	●	●	●
Phonation and speech					●	●	●	●
Application of real oxygen to improve SpO ₂	●	●						
Bag-valve-mask ventilation	●	●	●	●	●	●	●	●
Endotracheal/nasotracheal intubation	●	●	●	●	●	●	●	
Stomach inflation with esophageal intubation	●	●	●	●	●	●	●	
Tracheostomy tube	●	●	●	●	●	●	●	●
Surgical/needle cricothyrotomy	●	●	●	●	●	●	●	●
Posterior oropharynx occlusion	●	●	●	●		●	●	
Tongue swelling	●	●	●	●		●	●	●

Mannequin Features

Feature	HPS	PediaSIM HPS	ECS	PediaSIM ECS	BabySIM	iStan	METIman Prehospital	METIman Nursing
Laryngospasm	●	●	●	●	●	●	●	
Bronchial occlusion	●	●	●	●	●	●	●	●
Bilateral carotid pulse	●	●	●	●		●	●	●
Pulmonary artery catheter and ability to wedge the catheter, with display on the waveform display monitor or a physiologic monitor	●	<i>Note: Wedge valve can be entered in the software and displayed as a waveform.</i>						
Right external jugular IV line	●	●	●	●		●		
Subclavian venous catheter								●
Convulsions			Optional	Optional		●	●	●
Nasogastric tube placement	●	●	●	●	●	●	●	●
Gavage, lavage and suction								●
Airway secretions and suctioning								●
CO ₂ exhalation for colorimetric end-tidal detection	●	●	●	●	●	●	●	
Trunk								
Breath sounds: Midclavicular, mid-axillary, posterior	●	●	●	●	●			
Breath sounds over entire lungs						●	●	●
Heart sounds: Left/right upper sternal border, left lower sternal border, apex	●	●	●	●	●	●	●	●
ECG monitoring posts and interface with real ECG monitor	●	●	●	●	●	●	●	●
Defibrillation disks and use of real defibrillator	●	●	●	●	●	●	●	●
Monophasic defibrillation	●	●	●	●	●	●	●	●
Biphasic defibrillation						●	●	●

Mannequin Features

Feature	HPS	PediaSIM HPS	ECS	PediaSIM ECS	BabySIM	iStan	METIman Prehospital	METIman Nursing
External transthoracic pacemaker	●	●	●	●	●	●	●	●
Right flail chest						●		
Bilateral needle decompression sites (Note: HPS Serial Numbers 336-361 and 368-and higher only)	●	●	●	●		●	●	
Needle decompression site on right chest only (Note: HPS Serial Numbers 1-335 and 362-367 only)	●				●			
Bilateral chest tube insertion sites (Note: HPS Serial Numbers 336-361 and 368-and higher only)	●	●	●	●	●	●	●	●
Chest tube insertion site on right side only (Note: HPS Serial Numbers 1-335 and 362-367 only)	●				●			
Bowel sounds: speaker location in all four quadrants (Note: HPS Serial Numbers 409-and higher only)	●	●	●	●		●	●	●
Bowel sounds: speaker location in two quadrants					●			
Urinary catheterization	●	●	●	●		●	●	●
Interchangeable external genitalia and urinary output	●	●	●	●	●	●	●	●
Left femoral vein central IV line	●		●		●	●		
Chest/abdomen bleeding sites						●		
Extremities								
Bilateral pulses: Brachial, radial, femoral, popliteal, dorsalis pedal	●	●	●	●	Brachial & Femoral only	●	●	●
Bilateral posterior tibial pulses						●	●	●
Capillary refill measurement						●		
Visible cyanosis in nailbeds						●		

Mannequin Features

Feature	HPS	PediaSIM HPS	ECS	PediaSIM ECS	BabySIM	iStan	METIman Prehospital	METIman Nursing
Peripheral nerve stimulator - thumb twitch	●							
Right arm IV placement site	●	●	●	●				
Bilateral IV placement sites in antecubital ossa and dorsum of hand							●	●
Bilateral permanent IV ports in antecubital ossa						●		
Autoinjection capability						●		
Intraosseous capability (tibial)		●		●	●	Bilateral	Optional	
Intraosseous capability (sternum)						●		
IM injection site (right deltoid)	●		●					
Bilateral IM injection sites (deltoid)							●	●
Pulse oximetry by finger probe						●	●	●
Left arm auscultation of Korotkoff sounds with BP measurement (Note: HPS Serial Numnbers 336-361 and 368-and higher only)	●	●	●	●	●	●		
Left arm palpation of systolic BP	●	●	●	●	●	●		
Left arm non-invasive BP measurement with clinical equipment (Note: Must have full physiologic monitor interface option)	●	●						
Bilateral auscultation of Korotkoff sounds with BP measurement							●	●
Bilateral palpation of systolic BP							●	●
Simultaneous bleeding from two sites						●		
Upper and lower bleeding sites							●	●