Orientation to Human Patient Simulation for MOCA Course Participants

NB: Although all of the content herein was covered at each site, only a few sites actually used the slide presentation
General instructions

• Do what you would in the real world
• No ‘magical’ interventions
  – Have to give a drug, cycle the BP cuff, defibrillate, etc. to have an effect
• Talk out loud
  – Helps us with what you are thinking, and in the scenario debriefing
Smart phones

- Neither smart phones or any outside cognitive aids can be brought into the scenarios
- Please silence phones or pagers during the scenarios
Ventilation

• Mannequins have very non-compliant lungs!

• If needed, a confederate may make a comment to help you determine if you’re ventilating
  – “I see his chest rising, doctor,” or “I don’t see his chest rising.”

• If a capnograph waveform is present that means that you are ventilating
Airway devices and the mannequin

• It can be very hard to get a good face-mask seal

• Direct laryngoscopy (DL) is more challenging:
  – Larynx is more anterior and superior than in normal patient
  – Neck is very stiff (like a diabetic)

• LMA
  – Won’t seat well in some mannequins
  – Check cuff inflation (use 20 cc)
Mannequin Airway Summary

• Non-compliant lungs
• Difficult mask seal
• Larynx is more anterior and superior than normal
• Neck is stiff
Auscultation

• Breath sounds are heard over the speakers
• Often it sounds like plastic rubbing on a stethoscope
• It is important that you speak out loud what you hear through the stethoscope
• If you hear something different than we intended, a confederate will suggest an alternative interpretation.
Pulses

• The mannequin has physical pulses:
  – Bilateral carotids
  – Bilateral femorals
  – Left radial
  – Left brachial
  – Bilateral pedal (SimMan 3G only)

• Push the area, let up, then feel for the pulse

• Pressing too hard ablates the pulses

• Carotid pulses disappear after a few seconds
  – You have to let go and feel again
Arterial, peripheral venous and central venous cannulation

• Don’t actually insert any of these lines in the mannequins!

• To place a peripheral intravascular catheter, ask a simulation confederate

• To place an a-line, call your anesthesia technician, they’ll help place the line

• To place a central line, you must gown, prep, drape, etc.; then wait for a bit to simulate the time it would take you to start the line in reality
Confederates

• Actors or instructors will play the roles of participants in many of the scenarios

• If you don’t know the role they’re playing, ask:
  – “Hi, I’m Dave the anesthesiologist, who are you?”
Anesthesia Machine

• Fully functioning machine, designed for real patient use
• You can ask anytime about machine function
  – “Is that alarm real?”
  – “How do you do X with this machine?”
Vital Signs Monitor

• Show location of waveforms/information on the monitor
• The non-invasive blood pressure cycles every 2 minutes.
  – To get pressures more frequently, you must manually “cycle the cuff” by [Your site’s method here].
Defibrillator

• We use a fully functional defibrillator
  – WARNING: It’s a real defibrillator, so use proper precautions for you and your team

• How to attach the defibrillator to the mannequin

• Set up and use the defibrillator as you would in real life

• If you don’t actually administer a shock, the mannequin will NOT change its ECG rhythm!
Intravenous Drugs and Fluids

• Syringes are filled with water
• Some drugs may not be exactly the color or consistency of the actual drug
• You must administer the drug to get an effect
  – State out loud what and how much you have given
  – A confederate may ask you to repeat if it’s not clear
• For IV fluids to have their effect, they will need to be administered in the quantity you intend
Infusions

• We won’t ask you to program an infusion pump but ...

• You must obtain a bag of the drug you want to infuse
  — If it’s not in your cart, call the pharmacist

• You must spike and prime the drug with the appropriate disposable set.

• Attach the primed set to the flowing IV

• State out loud the drug & dose you are giving
Consultants

• E.g., blood bank, radiologists, etc. may be available
• Ask one of the confederates to call them for you
• You may be asked to talk with the person