PEDIATRIC Procedural Skills Instruction
Airway Insertion and BVM Ventilation

ASSESSORS: PLEASE DO NOT LEAVE ANY ITEM UNRATED

Please rate the examinee on the following items: □ **Infant** □ **Child**			
1. Washed hands.	___Done		__Not Done
2. **Assessor prompt: "What equipment should be set out and checked?"** Correct response, "Oxygen, ambu bag, appropriate size mask, oral and nasal airways, suction, lubricant, stethoscope."	___Correct Response		__Incorrect Response
3. Performed "Time Out" immediately before beginning procedure.	__Correct Technique	__Incorrect Technique	__Not Done
4. Put on gloves	___Done		__Not Done
5. Attached O2 tubing to flow meter and adjusted flow rate to at least 8L/min.	___Done		__Not Done
6. Chose appropriate size mask.	__Correct Technique	__Incorrect Technique	__Not Done
7. Measured oropharyngeal and nasopharyngeal airways. (OPA: corner of mouth to angle of jaw NPA: tip of nose to tragus of ear)	__Correct Technique	__Incorrect Technique	__Not Done
8. Inserted OPA directly into oropharynx (may use tongue blade to depress tongue).	__Correct Technique	__Incorrect Technique	__Not Done
9. Lubricated NPA and inserted in posterior direction, perpendicular to plane of face.	__Correct Technique	__Incorrect Technique	__Not Done
10. Placed patient in "sniffing position" and avoided hyperextension (may place padding under shoulders or neck) and opened mouth.	__Correct Technique	__Incorrect Technique	__Not Done
11. One person technique: Two to three fingers positioned behind angle of mandible, lifted mandible up and towards the mask, thumb and index finger of same hand held mask. *Avoided placing fingers on soft tissues of neck.*	__Correct Technique	__Incorrect Technique	__Not Done
12. With other hand compressed ambu bag to deliver appropriate tidal volume and watched for chest rise. If no chest rise, repositioned patient and/or mask and resumed bagging.	__Correct Technique	__Incorrect Technique	__Not Done
13. **Assessor prompt: "What needs to be performed now?"** Correct response, "Auscultation of the chest."	___Correct Response		__Incorrect Response

14. Two person technique: Two to three fingers of each hand positioned behind angle of mandible, lifted mandible up and towards the mask. Thumb and index finger of each hand held mask.	__Correct Technique	__Incorrect Technique	__Not Done
15. Second person (assessor) compressed ambu bag. Watched for chest rise. If no chest rise, repositioned patient and/or mask and resumed bagging.	__Correct Technique	__Incorrect Technique	__Not Done
16. **Assessor prompt: "What needs to be performed now?"** Correct response, "Auscultation of the chest."	___Correct Response		__Incorrect Response
17. **Assessor prompt, " What must you do once the procedure is completed?"** Correct Response, " Document in the patient chart."	__Correct Response		__Incorrect Response

Assessment based on ability to perform skills on a medical task trainer only *7/11*

PEDIATRIC Procedural Skills Instruction
IV Insertion

ASSESSORS: PLEASE DO NOT LEAVE ANY ITEM UNRATED

Please rate the examinee on the following items:			
1. Washed hands.	___Done		__Not Done
2. **Assessor Prompt, "What equipment should be set out and checked?"** Correct response: "Skin cleanser, tourniquet, tape, IV catheters, connecting device, saline flush, tegaderm IV tubing and fluids, gauze, alcohol wipes.	__Correct Response		__Incorrect Response
3. Performed "Time Out" immediately before beginning Procedure.	__Correct Technique	__Incorrect Technique	__Not Done
4. Verbalized that the procedure generally requires the help of an additional person to help hold/comfort the child.	___Done		__Not Done
8. Put on gloves.	___Done		__Not Done
9. Selected vein for catheterization.	___Done		__Not Done
10. Cleansed skin with betadine/skin cleanser starting at intended puncture site and sponged outward in concentric circles x3, then cleansed with alcohol.	__Correct Technique	__Incorrect Technique	__Not Done
11. Applied tourniquet.	___Done		__Not Done
12. Held extremity with non-dominant hand and anchored vein with index finger, holding skin taut.	__Correct Technique	__Incorrect Technique	__Not Done
13. Inserted needle superficially with bevel facing upwards. (If unsuccessful, removed needle and attempted again in a different vein.)	__Correct Technique	__Incorrect Technique	__Not Done
14. When blood return apparent, advanced catheter into vein.	__Correct Technique	__Incorrect Technique	__Not Done
15. Removed tourniquet.	___Done		__Not Done
16. Placed one finger at edge of catheter and removed needle using other hand. If using safety device, retracted needle instead of removing by hand.	__Correct Technique	__Incorrect Technique	__Not Done
17. Disposed of needle in sharps container (did not recap needle).	__Correct Technique	__Incorrect Technique	__Not Done

18. Using connecting device attached syringe with flush and flushed catheter to ensure patency.	__Correct Technique	__Incorrect Technique	__Not Done
19. Secured catheter with tape and tegaderm.	__Correct Technique	__Incorrect Technique	__Not Done
20. Attached IV tubing to catheter and opened IV line.	___Done		__Not Done
21. Labeled IV site with date, needle size, and initials. (Written on tape first, then placed on IV site)	__Correct Technique	__Incorrect Technique	__Not Done
22. Used proper removal technique: removed tape and tegaderm, applied gauze with pressure at insertion site, removed catheter. Placed band aid.	__Correct Technique	__Incorrect Technique	__Not Done
23. Placed biohazard materials in biohazard container.	__Done		__Not Done
24. Maintained cleanliness throughout the procedure.	__Done		__Not Done
25. **Assessor prompt: "What must you do once the procedure is completed?"** Correct response: "Document the procedure in patient's chart".	__Correct Response		__Incorrect Response

Assessment based on ability to perform skills on a medical task trainer only.

7/11

PEDIATRIC Procedural Skills Instruction
Intraosseous Needle Insertion

ASSESSORS: PLEASE DO NOT LEAVE ANY ITEM UNRATED

Note: This is generally performed as a clean but not sterile procedure.

Please rate the examinee on the following items:			
1. Washed hands.	___Done		__Not Done
2. Checked that all necessary equipment was available and ready to use.	___Done		__Not Done
3. **Assessor prompt, "What equipment should be set out and checked?"** Correct response, "Skin cleanser, gloves, mask, gauze, IO needle, needle driver (EZ-IO), tape/securing device, saline flush, IV tubing, and fluids."	__Correct Response		__Incorrect Response
4. Performed a Time-Out immediately before beginning procedure.	__Correct Technique	__Incorrect Technique	__Not Done
5. Positioned leg with slight external rotation (for proximal tibia insertion).	___Done		__Not Done
6. Identified insertion site as flat part of tibia ~1-3cm below and just medial to tibial tuberosity (infant).	___Done		__Not Done
7. **Assessor prompt, "What other sites are used in the child and adolescent?"** Correct response, "Child – distal tibia just above the medial malleolus. Adolescent – distal tibia or distal femur."	__Correct Response		__Incorrect Response
8. Correctly assembled needle driver and appropriate size needle.	__Correct Technique	__Incorrect Technique	__Not Done
9. Put on gloves.	___Done		__Not Done
10. Using skin cleanser cleansed intended puncture site and sponged outwards in widening circles x3.	__Correct Technique	__Incorrect Technique	__Not Done
11. Removed needle cap while briefly powering the needle driver.	__Correct Technique	__Incorrect Technique	__Not Done
12. Stabilized extremity with non-dominant hand. ***Ensured that hand was not held behind insertion site.***	__Correct Technique	__Incorrect Technique	__Not Done
13. Inserted needle through the skin until the tip of needle touched the bone.	__Correct Technique	__Incorrect Technique	__Not Done
14. Checked that at least one black line was visible on needle above the skin before powering the needle	__Done		__Not Done

driver on.			
15. Placed needle driver at 90º to the bone and powered needle driver on; applied *minimal pressure* and advanced needle into bone.	__Correct Technique	__Incorrect Technique	__Not Done
16. Stabilized the needle with one hand and removed the needle driver by pulling the unit straight back.	__Correct Technique	__Incorrect Technique	__Not Done
17. Held the needle with one hand and removed the stylet with the other hand by turning counterclockwise.	__Correct Technique	__Incorrect Technique	__Not Done
18. Disposed of stylet in biohazard sharps container.	__Done		__Not Done
19. Secured needle with tape or securing device.	__Done		__Not Done
20. Flushed with saline flush.	__Done		__Not Done
21. Attached IV tubing and fluids.	__Done		__Not Done
22. To remove needle, stabilized extremity, attached syringe to needle hub and rotating in clockwise direction pulled straight out.	__Correct Technique	__Incorrect Technique	__Not Done
23. Applied gauze with pressure at insertion site and applied band aid.	__Correct Technique	__Incorrect Technique	__Not Done
24. Disposed of needle in biohazard sharps container.	__Done		__Not Done
25. **Assessor prompt, "What must you do once the procedure is completed?"** Correct response, "Document procedure in patient chart".	__Correct Response		__Incorrect Response

Assessment based on ability to perform skills on a medical task trainer only. *07/11*

PEDIATRIC Procedural Skills Instruction
Lumbar Puncture

ASSESSORS: PLEASE DO NOT LEAVE ANY ITEM UNRATED

Please rate the examinee on the following items:			
1. Washed hands.	___Done		__Not Done
2. Checked that all necessary equipment was available and ready to use; LP kit, mask, sterile gloves.	___Done		__Not Done
3. Performed "Time Out" immediately before beginning Procedure.	__Correct Technique	__Incorrect Technique	__Not Done
4. Verbalized that when the procedure is performed on young children or infants a second person is required to help position/console the patient.	___Done		__Not Done
5. Positioned patient in lateral recumbent position with spine parallel to bed, hips and knees flexed towards the chest.	__Correct Technique	__Incorrect Technique	__Not Done
6. Instructed the assistant on correct positioning/hold of the patient.	___Done		__Not Done
7. Palpated posterior superior iliac crest and moved fingers medially to find L3-L4 interspace. Marked selected space by making an indentation with fingernail.	__Correct Technique	__Incorrect Technique	__Not Done
8. Put on mask.	___Done		__Not Done
9. Opened LP tray in a sterile fashion.	__Correct Technique	__Incorrect Technique	__Not Done
10. Put on gloves and maintained sterility.	__Correct Technique	__Incorrect Technique	__Not Done
11. Prepared LP tray: a) Identified components on tray b) Loosened caps on containers & positioned on tray c) Checked that stylet could easily be withdrawn from needle	___Done		__Not Done
12. Cleansed skin with povidone iodine/skin cleanser starting at intended puncture site and sponged outward in widening circles. Cleansed x3.	__Correct Technique	__Incorrect Technique	__Not Done
13. Placed sterile drapes under the patient and over back and hips, leaving lumbar area exposed.	__Correct Technique	__Incorrect Technique	__Not Done
14. Used 25 gauge needle to inject 1% lidocaine intradermally to produce a wheal, then injected into deeper tissues. (*Aspirated before injecting into deeper tissue to ensure that needle was not in a blood vessel*).	__Correct Technique	__Incorrect Technique	__Not Done

15. **Assessor prompt: "What other forms of anesthetic/pain management can be used in children?"** Correct answer, "Topical anesthetic (EMLA), sucrose on pacifier."	__Correct Response		__Incorrect Response
16. Held thumb of non-dominant hand in position of identified interspace.	___Done		__Not Done
17. Using dominant hand inserted spinal needle with bevel up into identified interspace, perpendicular to the vertical plane, slightly cephalad and towards the umbilicus.	__Correct Technique	__Incorrect Technique	__Not Done
18. Advanced needle; if bony resistance felt, backed needle out to the subcutaneous tissue, changed angle and re-advanced needle.	__Correct Technique	__Incorrect Technique	__Not Done
19. Withdrew stylet to check for spinal fluid. **Assessor prompt: "How much fluid should be obtained?"** Correct response, "Approximately 1mL in each of four tubes."	__Correct Response	__Incorrect Response	__Not Done
20. If no spinal fluid, replaced stylet and adjusted the needle slightly by advancing or withdrawing. (If no fluid, retracted the needle completely and attempted again using another site.)	__Correct Technique	__Incorrect Technique	__Not Done
21. Placed tubes with spinal fluid upright in tray.	__Done		__Not Done
22. Reinserted stylet.	__Done		__Not Done
23. Placed gauze over needle at puncture site and removed needle with stylet.	__Correct Technique	__Incorrect Technique	__Not Done
24. Disposed of needle in sharps container.	__Done		__Not Done
25. Wiped off skin cleanser and placed band aid.	__Done		__Not Done
26. Disposed of soiled/bloody gauze in biohazard container.	__Done		__Not Done
27. Maintained sterility throughout procedure.	__Done		__Not Done
28. **Assessor prompt: "What must you do once the procedure is completed?".** Correct response: "Document the procedure in patient's chart".	__Correct Response		__Incorrect Response

Assessment based on ability to perform skills on a medical task trainer only.
7/11

PEDIATRIC Procedural Skills Instruction
Umbilical Line Insertion

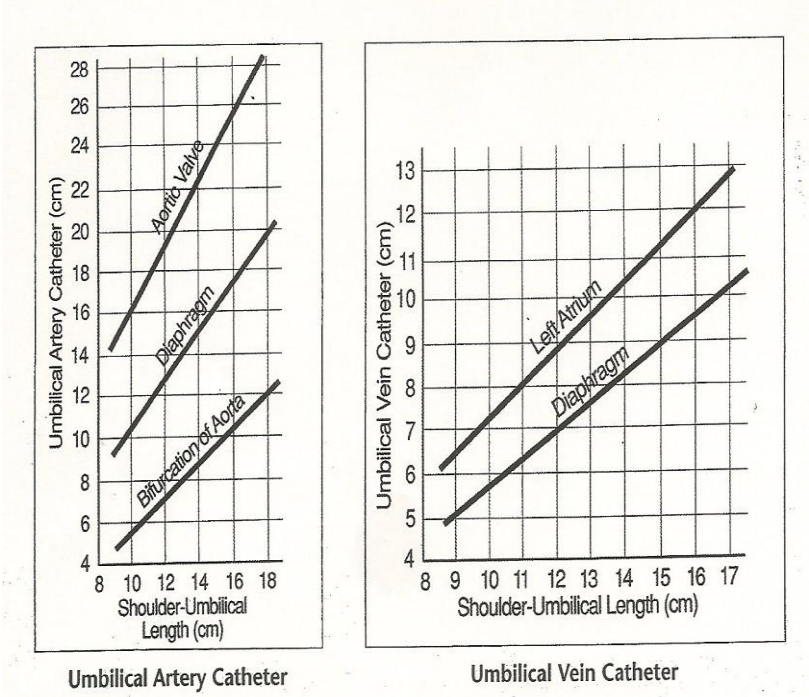
ASSESSORS: PLEASE DO NOT LEAVE ANY ITEM UNRATED

Please rate the examinee on the following items: □ Artery □ Vein			
1. Washed hands.	___Done		__Not Done
2. **Assessor prompt: "What equipment should be collected and checked?"** Correct response, "Umbilical line insertion kit, appropriate size umbilical catheters, suture, three way stopcocks, tape measure, flush, mask, hat, eye protection, gown and sterile gloves".	___Correct Response		__Incorrect Response
3. Performed "Time Out" immediately before beginning procedure.	___Done		__Not Done
4. Measured tip of shoulder to umbilical cord stump to determine depth of insertion.	__Correct Technique	__Incorrect Technique	__Not Done
5. Consulted standard graph to determine appropriate catheter insertion depth.	___Done		__Not Done
6. Opened umbilical line kit in a sterile fashion.	__Correct Technique	__Incorrect Technique	__Not Done
7. Put on hat, eye protection, mask, sterile gown and sterile gloves.	___Done		__Not Done
8. Attached three way stopcock to hub of catheter and flushed with flush solution (ensured that no bubbles remained). Turned stopcock to "off" position.	__Correct Technique	__Incorrect Technique	__Not Done
9. Instructed gloved assistant to grasp cord with forceps and gently pull umbilical cord vertically out of sterile field.	___Done		__Not Done
10. Cleansed umbilical cord and surrounding skin with betadine/antiseptic skin cleanser x 3; cleansed cord then abdomen sponging outwards in concentric circles.	__Correct Technique	__Incorrect Technique	__Not Done
11. Tied umbilical tie around umbilical cord close to, but not on the skin.	__Correct Technique	__Incorrect Technique	__Not Done
12. Using scalpel cut umbilical cord horizontally ~1-1.5cm from skin.	__Done		__Not Done
13. Disposed of scalpel in biohazard container. (Assistant Appropriately disposed of remaining cord).	___Done		__Not Done
14. Draped area surrounding umbilical cord.	___Done		__Not Done
15. Identified umbilical cord vessels. **Assessor prompt: "How do you identify the umbilical arteries and vein?"** Correct response: "The two arteries are smaller than the vein	___Correct Response		__Incorrect Response

and are thick-walled. The vein is thin-walled and often close to the periphery".			
16. With non-dominant hand grasped cord stump using toothed forceps close to, but not on the vessel to be catheterized and applied gentle upward traction.	___Done		__Not Done
17. Dilated the vessel: *Artery* • Using dominant hand gently introduced one point of fine curved forceps into artery lumen, probed gently and allowed artery to dilate for ~ 15 seconds. • Removed forceps, brought both points of forceps together and gently introduced them into the lumen, allowed them to spring apart slightly. Removed forceps. *Vein* • Using dominant hand gently introduced both points of fine curved forceps into the lumen, then removed forceps.	__Correct Technique	__Incorrect Technique	__Not Done
18. Applying traction to cord while holding with toothed forceps grasped fluid-filled catheter ~ 1cm from tip between thumb and forefinger or with fine curved forceps and inserted catheter into vessel lumen.	__Correct Technique	__Incorrect Technique	__Not Done
19. Advanced catheter to desired depth and aspirated to confirm intraluminal position.	__Correct Technique	__Incorrect Technique	__Not Done
20. If no blood return, withdrew catheter, re-dilated vessel and reinserted catheter.	__Done	__Not Done	__Not Applicable
21. Following blood return, flushed catheter with 0.5-1mL of flush solution (checked that no bubbles present in flush solution) and returned stopcock to "closed" position.	__Correct Technique	__Incorrect Technique	__Not Done
22. Verbalized that to secure catheter a suture should be placed in wharton's jelly, close to the vessel, and the ends of suture tied around catheter.	__Done		__Not Done
23. Removed umbilical tie and wiped betadine/antiseptic cleanser off skin.	__Done		__Not Done
24. **Assessor prompt:" How do you determine correct line position?"** Correct response: "X-ray of abdomen and chest".	__Correct Response		__Incorrect Response
25. **Assessor prompt:"What are the acceptable catheter positions?"** Correct response: "Arterial: High—tip between T6-T9. Low—tip between L3-L4". "Venous: tip should be above diaphragm, below R atrium; ~ T7-T9, or in an emergency inserted ~5cm, just until blood returns".	__Correct Response		__Incorrect Response
26. To remove catheter: carefully cut suture and gradually withdrew catheter; ensured that catheter was removed in its entirety.	__Correct Technique	__Incorrect Technique	__Not Done

27. Using gauze applied pressure to achieve hemostasis.	__Done		__Not Done
28. Disposed of catheter and soiled gauze in biohazard container.	__Done		__Not Done
29. Maintained sterility throughout procedure.	__Done		__Not Done
30. **Assessor prompt: "What must you do once the procedure is completed?"** Correct response:"Document procedure in patient chart".	__Correct Response		__Incorrect Response

Assessment based on ability to perform on a task-trainer only. 7/11



Umbilical Artery Catheter **Umbilical Vein Catheter**

To determine appropriate catheter insertion depth, measure (in cm) from the top of the shoulder to the umbilicus. Plot shoulder-umbilical length (X axis) against umbilical catheter length (Y axis).
Arterial: Between T6-T9 (above diaphragm) for high line; between L3-L4 (above bifurcation of aorta) for low line.
Venous: Above diaphragm, below atrium; approximately T7-T9 (optimal at inferior cava/ R atrial junction).

Procedural Skills Instruction
Time-Out Checklist

ASSESSORS: PLEASE DO NOT LEAVE ANY ITEM UNRATED

All steps must be verbalized for all applicable procedures.

Please rate the examinee on the following items:			
1. Written consent from patient or surrogate obtained.	___Done	__Not Done	
2. All team members participated in time out. (Must verbalize if specific procedure may involve more than one caregiver.)	___Done	__Not Done	___N/A
3. Patient identity confirmed w/minimum of two identifiers.	___Done	__Not Done	
4. Procedure to be performed confirmed.	___Done	__Not Done	
5. Patient positioning verified.	___Done	__Not Done	___N/A
6. Procedure location, including correct side (or side being used is verbalized- as in right arm, left wrist, etc.)	___Done	__Not Done	___N/A
7. Applicable pre-procedure medications, equipment, imaging set and confirmed.	___Done	__Not Done	___N/A
8. Time Out documented	___Done	__Not Done	
9. If any change in plan – time-out is performed again.	___Done	__Not Done	
10. If protocol is abbreviated or by-passed for an emergent situation, appropriate documentation is provided.	___Done	__Not Done	