Diagnostic and Therapeutic Technical Skills

Upon completion of the supervised clinical practice experiences, physician assistant students should be able to demonstrate/perform the following technical skills in which they have received prior instruction during the didactic phase of the program. Throughout the clinical phase of the program, students will have the opportunity to gain further instruction and continue practicing these skills and procedures in order to improve their technique. Students are required to log performance of all procedures/skills performed during each rotation, via Typhon clinical tracking system. It is not expected that students will be exposed to all of the below listed procedures on all rotations. It is denoted below as to which clinical rotations students will most likely have the greatest opportunities for each skill/procedure. However, students are expected to proactively pursue any opportunity to participate in such procedures during their clinical rotations to increase their skills set and expand their personal clinical portfolios. Program faculty have set benchmarks (see table below) for logging of those procedures below in bold which represent the skills and procedures common to primary care for which students are expected to have entry-level competency in performing by completion of the program as outlined within the Program Learning Outcomes. Students must be prepared to demonstrate competency on any of the following skills that appear in bold, as they will be tested on randomly selected skills/procedures during Clinical Seminar OSCE Evaluations as well as at the time of Summative evaluation.

1. Vascular Access and General Skills
   a. Venipuncture (FM, IM, EM)
   b. Arterial puncture (IM, EM)
   c. Peripheral IV catheterization (FM, IM, EM, Peds)
   d. Central venous catheterization (EM, IM, S)
   e. Intramuscular, subcutaneous, intradermal and intravenous injections (FM, EM, Peds)

2. Laboratory and Diagnostic Imaging Skills
   a. Interpret peripheral blood smears (FM, Peds)
   b. Collection of specimens for aerobic and anaerobic cultures (FM, Peds, IM, EM, S)
   c. Blood glucose testing (FM, Peds, IM, EM, WH)
   d. Fecal occult blood testing (FM, IM, ER)
   e. Hemoglobin and microhematocrit testing (Peds, FM)
   f. Rapid Strep-A antigen testing (Peds, FM, EM)
   g. Dipstick urinalysis (FM, Peds, WH, BH)
   h. Urine pregnancy (hCG) testing (FM, WH, Peds)
   i. Microscopic examination of urinary sediment (FM, WH)
   j. Microscopic examination of a KOH wet prep (FM, WH)
   k. Microscopic examination of skin scrapings and hair (FM, Peds)
   l. Interpret plain film radiographic images (IM, EM, FM, Peds)

3. EENT Skills
   a. Foreign body removal from skin, eyes, nose, and ears (FM, Peds, EM, S)
   b. Visual acuity and color vision screening (FM, Peds)
   c. Eye irrigation (FM, EM, Peds)
   d. Wood’s lamp corneal examination (w/fluorescein staining) (FM, EM, Peds)
   e. Hearing acuity screening (FM, Peds)
   f. Tympanometry (FM, EM)
   g. Irrigation of the external auditory canal (FM, Peds, ER)
   h. Anterior nasal packing (FM, Peds, EM, S)

4. Cardiovascular Skills
   a. Perform and interpret 3-lead (rhythm) and 12-lead electrocardiogram (ECG) (FM, IM, Peds, EM)
   b. Identify the following heart sounds: S1, S2, gallops, and murmurs (FM, IM, Peds, S, EM)
   c. Doppler assessment of peripheral or prenatal fetal pulses (FM, IM, WH, S, EM)
5. Respiratory Skills
   a. Peak flow testing (FM, IM, EM, Peds)
   b. **Pulmonary function testing (spirometry)** (FM, Peds)
   c. Pharyngeal suctioning (IM, EM)
   d. Tracheal and bronchial suctioning (IM, EM)
   e. Endotracheal intubation (EM, S, IM)
   f. Laryngeal mask airway (LMA) placement (EM, IM)
   g. Needle decompression of a pneumothorax (EM, S)
   h. Thoracentesis and chest tube placement (EM, S, IM)

6. GI/GU Skills
   a. Urinary bladder catheterization (IM, EM, S)
   b. Naso-/oro- gastric intubation and lavage (IM, S, EM)
   c. Digital rectal/prostate exam (FM, EM, IM)
   d. Anoscopy (FM, IM, EM)

7. Orthopedic Skills
   a. **Splinting and casting** (FM, EM, Peds)
   b. Arthrocentesis/intraarticular injection of the large joints (knee, shoulder, hip) (FM, EM)
   c. Bursa/joint aspirations and injections (FM, EM)

8. Neurology Skills
   a. Lumbar puncture (IM)
   b. Interpret EEG report (FM, Peds, EM, IM)

9. Reproductive Health Skills
   a. Vaginal newborn delivery (WH, EM)
   b. Pelvic exam for collection of urethral, vaginal and/or cervical specimens for STI testing (WH, FM, IM, EM, Peds)
   c. **Pelvic exam for collection of vaginal and cervical specimens for cytologic (PAP) examination** (FM, WH)
   d. Clinical breast exam (FM, WH, S)

10. Surgical Skills
    a. Aseptic technique (S, EM, IM, FM, Peds)
    b. Administration of local anesthesia and digital nerve blocks (S, EM, IM, FM, Peds)
    c. **Wound closure with sutures, liquid skin adhesive, steri-strips and staples** (S, EM, IM, FM, Peds)
    d. Superficial wound incision and drainage and packing (FM, EM, S, Peds)
    e. **Wound care, debridement, and dressing** (FM, S, IM, EM)
    f. Skin punch, excisional and shave biopsy procedures (FM, S)
    g. Toenail removal/wedge resection (EM, FM, S)
    h. Chemical and electrical cautery (FM, EM, S, IM)
    i. Cryotherapy of skin lesions (FM, Peds, S)
    j. Electrodecauterization of skin lesions (FM, Peds, S)
    k. Subungual hematoma trephination (EM, FM, Peds)

11. Life Support Skills
    a. Basic life support (BLS) procedures (EM, IM, FM, S, Peds, WH, BH)
    b. Advance cardiac life support (ACLS) procedures (EM, IM, FM, S, WH, BH)
    c. Pediatric advanced life support (PALS) procedures (Peds, FM, S, IM, EM, BH)

**FM = Family Medicine, Peds = Pediatrics, EM = Emergency Medicine, S = Surgery, IM = Inpatient Medicine, WH = Women’s Health, BH = Behavioral Health**
## Procedure/Skills Benchmarks for student logging within Typhon

<table>
<thead>
<tr>
<th>Procedure/Skill</th>
<th>Benchmark Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venipuncture</td>
<td>10</td>
</tr>
<tr>
<td>Peripheral IV catheterization</td>
<td>10</td>
</tr>
<tr>
<td>Injections (IM, SQ, intradermal, IV)</td>
<td>10, 5, 3, 3</td>
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<tr>
<td>Process blood specimen for Hematocrit</td>
<td>3</td>
</tr>
<tr>
<td>Interpret peripheral blood smear</td>
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<tr>
<td>Specimen collection for culture</td>
<td>5</td>
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<tr>
<td>Rapid Strep testing</td>
<td>5</td>
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<tr>
<td>Dipstick urinalyis</td>
<td>5</td>
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<tr>
<td>Interpret plain film radiographs</td>
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<tr>
<td>• CXR (PA and Lateral)</td>
<td>20</td>
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<td>• KUB</td>
<td>10</td>
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<tr>
<td>• Musculoskeletal</td>
<td>20</td>
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<tr>
<td>Perform 12 lead EKG</td>
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<tr>
<td>Interpret 12 lead EKG</td>
<td>15</td>
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<tr>
<td>Evaluate pulmonary function testing</td>
<td>5</td>
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<tr>
<td>Splinting/casting</td>
<td>3</td>
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<tr>
<td>Perform pelvic exam</td>
<td>10</td>
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<tr>
<td>PAP Smear</td>
<td>5</td>
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<tr>
<td>Laceration repair</td>
<td>10</td>
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<tr>
<td>Wound/burn dressings</td>
<td>5</td>
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