



## Provider Practice Essentials

Focused. Current. Concise.

# Advanced Practice Provider Clinical Skills and Procedure Workshop 1

## Course Contents and Description

This program has been optimized to educate advanced practice providers - Physician Assistants and Nurse Practitioners - about the identification and management of acute diseases, injuries, and life-threatening emergencies. The program is tailored to be applicable to any practice environment, and designed to encourage the early recognition and identification of high acuity conditions in any practice setting.

The course spans two comprehensive days of education, each day containing a morning and an afternoon session. Morning sessions are divided into approximately 1 hour lecture blocks that focus on specific clinical content, and allow for interactive discussion, question and answer, and clinical examples. Afternoon sessions are dedicated to procedure workshops that are scheduled in tandem with previously presented clinical content to reinforce and enhance the clinical content presented. Upon completion, the Participant will be eligible to claim up to **22.25 hours of CE credit from the American Association of Nurse practitioners (AANP), including 1.25 pharmacology hours**, and **22.00 hours from the American Academy of Physician Assistants (AAPA)** for the course, and may be eligible to receive certification status through our organization. The objectives of each portion of the program are detailed below:

### Cardiac Disorders

To enhance the provider's understanding of basic principles of cardiac circulation, and to reinforce a systematic method of interpreting EKG's to identify critical abnormalities that need immediate management by supervising physicians. These specific abnormalities include:

1) **ST Elevation Myocardial Infarction (STEMI)** in the inferior, lateral, inferolateral, anterior, anterolateral and posterior sections of the heart. (15 Minutes)

Learning Objectives: 1) To identify usual patterns of ST Elevation MI, 2) To identify patients with likelihood of multi-vessel disease, 3) To understand treatment modalities, pharmacology, and current guidelines for management of STEMI. 4) To review current management theory of

STEMI in relation to use of Beta Blockers, Platelet Inhibitors, and other classes of cardioselective medications.

## **2) Ventricular Tachycardia (15 Minutes)**

Learning Objectives: 1) To understand morphology of VTACH and differentiate from mimics, 2) To understand safe treatment choices, 3) To consider additional cardiac diseases in patients with VTACH. (15 Min) 4) To reinforce management of ventricular tachycardia using Class 1a medications, Amiodarone, and other cardioselective medications.

## **3)Atrial Fibrillation (15 Minutes)**

Atrial Fibrillation with Rapid Ventricular Response

Atrial Flutter

Slow Atrial Fibrillation

Learning Objectives: 1) To understand causes of new onset Atrial Fibrillation, 2) To differentiate from and treat variants of atrial fibrillation, 3) To understand appropriate disposition of Atrial Fibrillation patients. 4) To review common cardioselective medications – Beta-Blockers, Calcium channel blockers, for management of Atrial fibrillation.

## **4)Torsades des Pointes (15 Minutes)**

Learning Objectives: 1) To differentiate TDP from VTACH, 2) understand how to appropriately treat TDP, 3) Learn to predict patient populations like to have TDP, 4) To understand electrolyte replacement strategies for potassium and magnesium in the setting of renal failure and other clinical conditions known to cause torsades de pointes.

## **5)1st, 2<sup>nd</sup>, and 3<sup>rd</sup> degree AV Blocks (15 Minutes)**

Learning Objectives: 1) To understand and identify differences between each type of AV block, 2) To understand treatment needs of each type of Block, 3) To understand modalities of treatment and specialist role of management.

## **6)Multifocal Atrial Tachycardia (15 Minutes)**

Sinus Tachycardia

Learning Objectives: 1) to understand the various types of tachycardia, 2) To place tachycardia into a broad clinical differential, 3) Understand what treatment options are specific to each type of tachycardia. 4) To consider the relative effect of Beta-Blockers, sympathomimetic agents and bronchodilators on heart rate when managing COPD.

## **7)Bundle Branch Blocks (15 Min)**

Learning Objectives: 1) To understand the types of cardiac blocks, 2) To clinically correlate cardiac blocks with relative underlying diseases, 3) To interpret STEMI through a bundle branch block using Sgarbossa Criteria.

Program Participants will gain confidence and learn how to differentiate these rhythms and morphologies from each other. Additional objectives of this portion of the program will be to comfortably identify EKG abnormalities in a random fashion and in combination with the patient's clinical picture. Finally, any relevant Core measures and PQRS standards will be reviewed and their applicability to the appropriate clinical environment.

## **Pulmonary Disorders**

The objectives of this program portion will be for each participant to perform the following parts of basic patient examination:

### **8) Basic Airway and Breathing Assessment (15 Minutes)**

Learning Objectives: 1) Identification of suspected airway obstruction, 2)

Identification of Stridor and likely causes, 3) Understand when to suspect non-traumatic of Pneumothorax and patient populations involved.

9) Additional Objectives will be to reinforce current decision-making rules for ordering of appropriate tests, and anticipating procedural intervention (15 Min). These include:

#### **Application of Wells Criteria for Pulmonary Embolism**

#### **Application of the PERC rule**

#### **Identification of populations who are at high risk for Pulmonary Embolism**

#### **Appropriate use of the D-Dimer**

#### **Prediction of severity of Asthma using Peak Flow Meter**

#### **Understand the mechanisms of common bronchodilators for management of Asthma and COPD.**

**Understand selection strategies for anticoagulants** (Heparin, LMWH, Xa Inhibitors in the setting of PE/DVT.

Procedural Objectives will be to intervene with appropriate management when clinical conditions arise. These procedures will include:

**10) Tracheostomy replacement** (for patients with routine established tracheostomy) (15 Minutes)

Learning Objectives: 1) To understand the different types of tracheostomy tubes, 2) To understand how they are placed and maintained, 3) To become comfortable with tracheostomy exchange in patients with mature stoma.

#### **11) Needle Decompression (15 Minutes)**

Learning Objectives: 1) To understand the indication for Needle Decompression, 2) To understand the principle behind the procedure of needle decompression, 3) To demonstrate clinical ability of placement of needle thoracostomy.

#### **12) Chest Tube Insertion (using percutaneous kit) (30 Minutes)**

Learning Objectives: 1) To understand the indication for chest tube insertion, 2) To differentiate between different types of chest tubes and their indications, 3) To demonstrate clinical ability to insert a chest tube. 4) Understand the procedural analgesia approach of regional nerve block, chest wall nerve block, and intrathoracic nerve block prior to procedure.

Practice-related objectives will include education and adherence to appropriate quality-based treatment decisions and documentation related to asthma, bronchitis, upper respiratory infection, and other common pulmonary complaints.

Additional focus will be placed on provider quality reporting measures, complete documentation, and other tools designed to maximize medical communication through improved documentation while increasing charting compliance and reducing reviews and payment denials to supervising physicians.

## **Radiology**

This portion of the program is intended to be an enhanced review of the various types of radiology studies, appropriate utilization and technique of the studies being ordered, and quality-based decision-making related to studies that are part of the PQRS program. This will be a system-focused portion of the program, with the primary objective being to educate the participant that a broad differential diagnosis should be considered when examining each patient, and to reinforce the need to apply this broad differential when ordering studies and treatment. Each section of the human body will be presented to the participant, who will be given a comparison course book with normal anatomy to compare to a sequence of pathologic radiographs for review, comparison, and diagnosis. The intent of these modules is not to expect the participant to memorize and learn the details and nuances of a variety of fractures, but to learn mechanisms and patterns of disease and fractures that should be considered and identified in routine practice.

In addition to plain film ordering and fracture diagnosis, learning about the appropriate immobilization/splinting and referral for routine fractures will also be taught with the objective that each participant have a working understanding of which fractures types require emergent management, urgent follow-up, routine follow-up, or expectant management. Paramount to practicing in the role of an Advanced Practice Provider will be the ability to communicate

fracture findings to the receiving consultant, and the appropriate nomenclature will be reinforced. It will be an objective to present and briefly discuss the origin of each of the following radiographic findings:

### 13) **Chest/Abdomen** (1 Hour)

Learning Objectives: 1) To differentiate between the different types of abdominal imaging. 2) To understand the indications for oral and IV contrast for CT imaging, 3) To understand different studies indicated for different patient populations (i.e. pregnancy), 4) To demonstrate ability to interpret plain radiographs of the chest and abdomen:

- Pneumonia
- Pneumothorax
- Hemothorax
- Hiatal hernia
- Perforated viscous
- Pneumopericardium
- Pneumomediastinum
- Pericardial effusion
- Pleural effusion
- Empyema
- Rib fractures
- Shoulder/humerus fractures
- Scapula fractures
- Clavicle fractures
- Signs of high impact injury
- Constipation
- Bowel Obstruction
- Porcelain Gallbladder
- Gallstones
- Foreign Bodies

### 14) **Spine** (45 Minutes)

Learning Objectives: 1) To associate mechanism of injury with type of fracture, 2) To understand stable versus unstable fractures of the cervical spine, 3) To learn appropriate clearance of the cervical spine, 4) to demonstrate inline mobilization and placement of a cervical collar. 4) To understand the role of specialty consultation and referral with cervical spine fractures:

- X-ray interpretations
- Long board and collar removal
- Unstable Fractures
- Mechanisms for common fractures
- Immobilization
- Correct studies
- Correct consult and referral

### 15) **Nexus Criteria** (15 Minutes)

Learning Objectives: 1) Understand appropriate use and application of the clinical decision rule for cervical spine clearance. 2) Understand limitations to NEXUS application, 3) Understand appropriate documentation of clinical decision rule and outcome.

#### **16) Other spinal fractures and considerations (30 Minutes)**

Learning Objectives: 1) Understand additional spinal fractures and their management, 2) Understand resource utilization and clinical utility of imaging in low back pain. 3) Understand and identify life-threatening and disabling disorders of the back, and their appropriate diagnosis and referral, 4) Correlate clinical findings to radiographic findings for back pain and other disorders of the spine:

- Plain film reading
- Lumbar spine imaging
- Cauda Equina syndrome
- Epidural abscess
- When to order an MRI
- Neurological exam findings

#### **17) Upper Extremity images (1 Hour)**

Learning Objectives: 1) To understand mechanism and expected fracture associations, 2) To identify common fracture patterns on plain radiographs, 3) To understand appropriate disposition of various fracture types, 4) To understand the appropriate immobilization needed for upper extremity injuries.

- Shoulder dislocations and reduction techniques without sedation
- Hill-sacs deformity
- AC separation
- Humeral head fracture
- Humeral neck fracture
- Surgical neck fracture
- Supracondylar fracture (pediatrics)
- Elbow dislocation and reduction
- Radial head fracture
- Galeazzi fracture
- Monteggia fracture
- Distal radius fracture
- Ulnar fracture
- Nightstick fracture
- Greenstick fracture
- Hand Fractures
- Carpal fractures and dislocations
- Metacarpal fractures
- Boxers fracture
- Finger fractures
- Fingertip amputations
- When to consult ortho

## **18) Pelvis and lower extremity images (1 Hour)**

Learning Objectives: 1) To correlate injury type and mechanism with expected fracture patterns on plain films. 2) To understand which fractures need emergent reduction and consultation. 3) To understand method of routine disposition, 4) To understand which types of immobilization are required for management of lower extremity fractures.

- Pelvic Fracture
- Acetabular Fracture
- Hip Fractures
- Femur Fractures
- Knee hyperextension and vascular injury
- Patellar Fracture
- Tibial Plateau Fracture
- Maissonneuve Fracture
- Tib/Fib Fractures
- Bimalleolar Fracture
- Trimalleolar Fracture
- Tarsal Fracture
- Tarsal Dislocation
- Lisfranc Fractures
- Metatarsal Fractures
- Dancer's Fracture
- Toe Fractures
- Distal Toe Amputations

## **Skin and Soft Tissue Conditions**

### **(19) Deadly Skin Conditions (30 Minutes)**

This portion of the program is designed to provide participants with a structured, systematic process to evaluate all skin lesions as they present frequently in the primary care, urgent care, and emergency department setting. The objective will be for all participants to gain a level of comfort excluding life-threatening skin conditions prior to treating them, and also have the confidence to better communicate their findings to higher levels of care. These conditions will include the following:

- Emergent Rash Identification (meningitis, Stevens-Johnson Syndrome, Erythema Multiforme, Toxic Epidermal Necrolysis, Necrotizing Fasciitis)
- Cellulitis
- Abscess
- DVT identification and decision rules with D-Dimer
- Burn Care
- Burn Referral Criteria
- What not to send home.
- Understand anticoagulation options for DVT (Heparin, LMWH, Factor Xa Inhibitors) and their utility in the clinical setting.

- Understand regional injection for analgesia prior to abscess incision and drainage.
- Understand medication choices for routine management of mild to moderate allergic reactions (Epinephrine, Diphenhydramine, H2 Blockers, and Steroids).

## **Procedures**

This portion of the program will allow the participant to practice a variety of common procedures performed in the primary care office, urgent care, or emergency department setting, and is timed and organized to complement the clinical didactic section presented on the same days. Participants will be given the latest mannequin and simulation products to practice and improve their techniques. The Objective of this portion is to educate and demonstrate proper technique to perform these procedures, and to reinforce the confidence level of the practitioner to perform these procedures in the clinical setting. In addition, relevant pharmacologic interventions will be presented as clinically appropriate to procedure being performed. Skill will be assessed and scored by the teaching faculty, and performance review will be included along with the written didactic test for those wishing to be certified. The complete procedure list will consist of many physical stations during the program, but due to supply availability, discontinued stock, or other logistical reasons, not every skill session may be available on the date(s) of the training program. The Corporation will make every effort to ensure that the following procedure stations are available at each course:

- Needle Decompression
- Chest Tube insertion
- Tracheostomy replacement

### **20)Upper Extremity Fracture reductions (30 Minutes)**

Learning Objectives: 1) To understand when emergent reduction of the upper extremity is indicated. 2) To understand the role of sedation with upper extremity reduction, 3) To demonstrate proper reduction techniques.

### **21)Upper extremity splinting (Long Arm, Short Arm, Sugar Tong, Ulnar Gutter) (30 Minutes)**

Learning Objectives: 1) To understand the different types of splints used for upper extremity immobilization. 2) To demonstrate appropriate clinical skill for placement of splints on the upper extremities. 3) To demonstrate technique for post-splint examination.

### **22)Upper extremity joint aspiration (30 Minutes)**

Learning Objectives: 1) To identify the indications for upper extremity joint aspiration. 2) To demonstrate landmarks used for identification of aspiration site, 3) To demonstrate clinical skill to perform joint aspiration.

### **23)Trigger Point Injection (15 Minutes)**

Learning Objectives 1) To understand clinical diagnosis of trigger point. 2) To understand indications for trigger point injection. 3) To demonstrate clinical skill of joint aspiration.

### **24)Nail Trephination and Nail Removal (15 Minutes)**



Learning Objectives: 1) to identify clinical indications for trephination versus removal of the nails. 2) To identify high risk populations related to this procedures (diabetics, smokers), 3) To understand clinical outcomes of this procedure

#### **25)Punch Biopsy (15 Minutes)**

Learning Objectives: 1) To identify lesions that require biopsy in the primary care setting, 2) To describe the procedure and risks of benefits to the patients, 3) To demonstrate skill of performing the procedure.

#### **26)Foreign body/fish hook removal (15 Minutes)**

Learning Objectives: 1) Understanding of various types of soft tissue foreign bodies and their appropriate management. 2) Understanding of fishhook injuries in general and different techniques for removal. 3) Demonstration of understanding of safe ways to perform foreign body removal fro soft tissues.

#### **27)Introduction to Suturing (30 min)**

Learning Objectives: 1) To understand and differentiate the different types of suturing techniques that are commonly used. 2) To understand which types of repair are needed for different tissue injuries and lacerations 3) to demonstrate appropriate selection of closure technique. 4) To demonstrate clinical skill and mastery of each type of suture technique and knot tying. 5) To understand multiple-layer injuries and the appropriate technique for closure of each tissue layer. 6) To understand the appropriate documentation for all laceration repairs.

Techniques, knots, and topics will include the following:

1. a.Simple interrupted
2. b.Simple running
3. c.Mattress
4. d.Subcutaneous/multi layer
5. e.Staple
6. Skin adhesive
7. g.Surgeons knot
8. h.Buried knot
9. Documentation for complexity

#### **28)Local injection, digital blocks, Hematoma Blocks (30 Minutes)**

Learning Objectives: 1) To understand different techniques for local anesthesia, including topical applications, 2) To understand the anatomical landmarks, risks, and benefits of, and procedure for digital block, regional joint block, and hematoma block, 3)To demonstrate skill and performance of digital block.

#### **29)Lumbar Puncture (30 Minutes)**

Learning Objectives: 1) To understand the indications, contraindications, and purpose for performing a lumbar puncture. 2) To understand the lumbar puncture as a procedure and the core

studies that should be ordered with a CSF sample. 3) To demonstrate procedural skill by performing a Lumbar Puncture.

### **30)Incision and Drainage of Abscess (15 Minutes)**

Learning Objectives: 1) To differentiate clinically between an abscess, sebaceous cyst, infected sebaceous cyst, and soft tissue mass. 2) To understand the common approach to incision and drainage of an abscess. 3) To demonstrate clinical procedural ability to perform incision and drainage.

### **31)Joint Reduction (30 Minutes)**

Learning Objectives: 1) To anticipate the type of joint dislocation based on mechanism, anatomic position of extremity, and patient presentation. 2) To understand the correlation of radiograph findings and reduction approach. 3) To differentiate between the different types of reduction approaches, 4) To know when operative management is warranted, 5) to understand referral and post-reduction management. Joints educated will include:

1. a.Patella Reduction
2. b.Ankle Reduction
3. c.Hip Reduction

### **32)Lower Extremity Splinting (30 Minutes)**

Learning Objectives: 1) Understand appropriate splint application for lower extremity injuries. 2) Identify radiographic correlation to splint placement, 3) Demonstrate clinical procedural skill and placement of lower extremity splints.

### **33)Lower Extremity Joint Aspiration (30 Minutes)**

Learning Objectives: 1) Understand indications for joint aspiration. 2) Understand diagnosis of condition based on fluid sample. 3) Understand procedural approach to joint aspiration and proper technique. 4) Understand contraindications of joint aspiration. 5) Demonstrate clinical procedural skill of joint aspiration.

### **34)IO Access (15 Minutes)**

Learning Objectives: 1) Understand indications, contraindications, complications, and utility of Intraosseous lines as alternative types of venous access. 2) Identify and understand common sites of Intraosseous line placement and techniques for insertion. 3) Demonstrate clinical procedural skill of Intraosseous insertion

### **35)Central Venous Catheter Insertion (45 Minutes)**

Learning Objectives: 1) Understand indications, contraindications, complications, utility, and site preference of central venous catheter insertion. 2) Understand procedural technique, approaches to common difficulties with the procedure, and correct placement confirmation. 3) Demonstrate clinical procedural skill of Intraosseous line insertion.

### 36)Optional Comprehensive Course Test (1 Hour)

Learning objectives: 1) Combine clinical, procedural, quality, and management goals educated in this program into a review test designed to cement course content into the Learner's core knowledge content. 2) Apply medical decision-making to board-style review questions with a goal to achieve a raw score of 85%. 3) Gain confidence and verification of knowledge that can be transferred to an application packet and used as a resource for the learner.

## Course Schedule

**Program times are Friday and Saturday from 8am until 5pm**

| Day 1 Morning Session   | Day 1 Afternoon Session   |
|---|---|
| Course Introduction<br>Cardiac Overview<br>Basic EKG Interpretation<br>Acute MI<br>Common Dysrhythmias<br>Electrolyte Disorders and EKG<br>Bundle Branch Blocks   | Procedure Overview<br>Suture Clinic<br>Surgeons Knot<br>Buried Knot<br>Simple Interrupted<br>Simple Running<br>Vertical Mattress<br>Horizontal Mattress<br>Subcutaneous/Multiple Layer Closure<br>Staples<br>Wound Assessment<br>Billing and Documentation for Sutures<br>Local Injections and Digital Blocks |
| Pulmonary Overview<br>Basic Airway Assessment<br>Asthma<br>COPD<br>Pneumothorax<br>Pulmonary Embolism<br>Wells Criteria<br>PERC rule<br>Using D-Dimer<br>Tracheostomy Replacement   | Procedure Clinic<br>Needle Decompression<br>Chest Tube Insertion<br>Shoulder Injection/Aspiration<br>Knee Injection/Aspiration<br>Shoulder Reduction and Immobilization<br>Trigger Point Injection<br>Nail Trephination<br>Nail Removal<br>Foreign Body and Fish Hook Removal<br>Punch Biopsy                 |
| Overview of Radiograph Interpretations<br>Chest, Shoulder, Clavicle Radiographs<br>Abdominal Radiographs<br>Radiographic Signs of Major Diseases<br>Radiographic Signs of High Impact Injuries<br>Radiographic Foreign Bodies |   |

### Day 2 Morning Session

Introduction to Trauma  
Designation of Trauma Centers  
Process of Trauma Assessment  
Primary and Secondary Survey  
Expectations of Trauma Management  
When to Get Help

Cervical Spine Radiology  
Long Board and Collar Removal  
NEXUS Criteria  
Unstable Cervical Fractures  
Mechanisms of Common Cervical Fractures  
Cervical Immobilization  
Ordering Correct Imaging

Thoracic and Lumbar Spine Radiology  
Consultation and Referral for Spinal Injuries  
Patterns of Spinal Cord Injuries

Upper Extremity Radiology  
How to Speak Orthopedics  
Common Fracture Patterns  
Common Reduction Techniques  
Amputations  
When to Consult Orthopedics  
When to Consider Transfer/EMS

### Day 2 Afternoon Session

Pelvic and Lower Extremity Radiology  
Common Fracture Patterns  
Reductions  
Consultations

Skin and Soft Tissue Conditions  
Emergent Rash Identification  
Cellulitis  
Abscess  
DVT identification and decisions rules  
Burn Care and Referral Criteria  
What Not to Send Home

Procedure Clinic  
Lumbar Puncture  
Incision and Drainage of Abscess  
Hip Reduction  
IUD Insertion and Removal  
Patella Reduction  
Ankle Reduction  
Upper and Lower Extremity Splinting  
Intraosseous Access Insertion  
Central Venous Catheter Insertion

Closing Survey and Final Thoughts  
Optional Certification Examination