

Cardiac Diagnostics

Presentation guide

DC = Statement of the competence for a particular domain

E = Elements of the competence for a specific statement of competence

P = Performance criteria for competency; associated with a specific element of the competence

Domain of competence DC.16

Perform hemodynamic monitoring in a simulated clinical setting and diagnostics testing on patients in a clinical setting

E16.1 Perform electrocardiogram (ECG)

- P16.1.1 Describe the electrical conduction system of the human heart
- P16.1.2 Describe the clinical indications and applications for an ECG at rest and during exercise
- P16.1.3 Distinguish between common causes of artifacts and corrective action
- P16.1.4 Describe the basic functions and preparations for ECG recording and/or monitoring equipment including different placements of electrodes
- P16.1.5 Prepare equipment and materials for ECG recording and/or monitoring in a clinical setting
- P16.1.6 Prepare patient for ECG recording and/or monitoring in a clinical setting
- P16.1.7 Perform ECG recording and/or monitoring of patient per hospital protocol in a clinical setting
- P16.1.8 Assess quality of tracing before and during recording and correct common causes of artifacts that may interfere with the ECG
- P16.1.9 Report and document observations of patient ECG recording and/or monitoring in a clinical setting

E16.2 Interpret electrocardiogram

- P16.2.1 Assess heart rate and rhythm from an ECG recording or monitor display
- P16.2.2 Distinguish between basic arrhythmias and likely causes
- P16.2.3 Distinguish between a normal ECG and an abnormal recording and/or monitor display
- P16.2.4 Analyze and interpret patient's ECG tracings for rate and rhythm, including normal sinus rhythm and common dysrhythmias in a clinical setting
- P16.2.5 Apply corrective action and/or report the observation of an arrhythmia on a patient in a clinical setting
- P16.2.6 Report and document observations and interpretations in the patient's chart in a clinical setting

E16.3 Set-up and calibrate equipment for invasive hemodynamic procedures (e.g., pulmonary artery catheter, arterial lines)

- P16.3.1 Distinguish the equipment and accessories essential for invasive hemodynamic procedures
- P16.3.2 Describe the calibration of the equipment utilized for invasive hemodynamic procedures
- P16.3.3 Describe the technical and procedural complications associated with invasive hemodynamic set-ups
- P16.3.4 Prepare the set-up and calibrate equipment for invasive hemodynamic procedures per protocol in a simulated clinical setting

E16.4 Interpret hemodynamic data

- P16.4.1 Describe the measured/calculated (non-invasive) hemodynamic parameters
 - P16.4.2 Describe the measured/calculated (invasive) hemodynamic parameters
 - P16.4.3 Distinguish between hemodynamic pressure waveforms
 - P16.4.4 Describe how to obtain invasive cardiac output measurements
 - P16.4.5 Describe the ventilatory effect on the various pulmonary hemodynamic pressures
 - P16.4.6 Measure and interpret hemodynamic parameters and pressure waveforms on patients in a clinical setting, including cardiac output measurements
-