

Pharmacology - DC

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.9

Administer pharmaceutical substances for specific applications on patients in a clinical setting

E9.1 Assess need for medication

P9.1.1 Compare different forms of medications utilized in respiratory care

P9.1.2 Distinguish medications necessary for varying clinical cases

E9.2 Select administrative method (e.g., inhalation, intravenous, instillation, intramuscular)

P9.2.1 Recognize the clinical situation with regards to the administration of a particular drug

P9.2.2 Compare the administrative methods commonly utilized in respiratory care and anesthesia

P9.2.3 Associate the administrative method per clinical situation

E9.3 Calculate drug dosages within metric system

P9.3.1 Demonstrate calculations using the metric system

P9.3.2 Calculate dosage for different forms of medication including diluents

P9.3.3 Demonstrate drug preparations

P9.3.4 Label syringes and vials according to local standards in a clinical setting

P9.3.5 Prepare drug dosage

E9.4 Verify medical prescription

P9.4.1 Identify the essential elements and distinct forms of a prescription

P9.4.2 Assess prescription for respiratory care and confirm its appropriateness in a clinical setting

E9.5 Assess and recognize efficacy and side effects of medication

- P9.5.1 Assess the efficacy of a medication relative to desired effects per prescription and clinical situation
- P9.5.2 Assess presence of side effects
- P9.5.3 Recommend course of action

E9.6 Titrate dose of medication

- P9.6.1 Describe the consequences of administering a particular medication
- P9.6.2 Ascertain indications and contra-indications of a medication dose per clinical situation
- P9.6.3 Apply protocol specific for the administration and adjustment of a medication in a clinical setting

E9.7 Provide oxygen therapy using appropriate method

- P9.7.1 Describe the methods of storage, distribution, transportation and safety standards for oxygen
- P9.7.2 Determine the indications for oxygen therapy
- P9.7.3 Explain the physiological complications and side effects of oxygen therapy
- P9.7.4 Explain the acute and chronic indications for hyperbaric therapy
- P9.7.5 Describe the contraindications to hyperbaric therapy
- P9.7.6 Describe the hazards and complications of hyperbaric therapy
- P9.7.7 Describe the basic principles of operation of a hyperbaric chamber
- P9.7.8 Assess the need for oxygen therapy in a clinical setting
- P9.7.9 Select correct administration system and patient interface for oxygen therapy
- P9.7.10 Administer oxygen therapy in a clinical setting
- P9.7.11 Monitor, assess and document effectiveness of oxygen therapy in a clinical setting
- P9.7.12 Modify therapy as required and wean when indicated in a clinical setting

E9.8 Administer substances (e.g., drugs, fluids) by inhalation

- P9.8.1 Assess prescription for appropriateness
- P9.8.2 Demonstrate precise calculation and safe preparation for substances administered by inhalation
- P9.8.3 Differentiate between types of aerosol generators based on principle of operation
- P9.8.4 Compare different formats and procedures for the administration of substances by inhalation
- P9.8.5 Explain the factors known to influence the administration of a substance by inhalation with respect to penetration, deposition and clearance
- P9.8.6 Describe potential complications associated with the administration of substances by inhalation
- P9.8.7 Administer substances by inhalation per prescription in a clinical setting
- P9.8.8 Monitor and document treatment and patient response

E9.9 Administer substances (e.g., drugs, fluids) by injections

- P9.9.1 Assess prescription for appropriateness
- P9.9.2 Demonstrate precise calculation and safe preparation for substances to be administered by injection
- P9.9.3 Compare different formats and procedures of injection for the administration of substances
- P9.9.4 Describe potential complications associated with the administration of substances by injection
- P9.9.5 Administer substances by injection per prescription in a clinical setting
- P9.9.6 Monitor and document procedure and patient response

E9.10 Administer substances (e.g., drugs, fluids) by instillation

- P9.10.1 Assess prescription for appropriateness
- P9.10.2 Demonstrate calculation and safe preparation for substances administered by instillation
- P9.10.3 Compare different formats and procedures for the administration of substances by instillation
- P9.10.4 Describe potential complications associated with the administration of substances by instillation including monitoring of patient response
- P9.10.5 Administer substances by instillation per prescription in a clinical setting
- P9.10.6 Monitor and document procedure and patient response

E9.11 Administer substances (e.g., drugs, fluids) by infusion

- P9.11.1 Assess prescription for appropriateness
 - P9.11.2 Demonstrate calculation and safe preparation for substances administered by infusion
 - P9.11.3 Compare different formats and procedures for the administration of substances by infusion
 - P9.11.4 Describe potential complications associated with the administration of substances by infusion
 - P9.11.5 Administer substances by infusion per prescription in a clinical setting
 - P9.11.6 Monitor and document procedure and patient response
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