

National Certified Phlebotomy Technician NCPT Detailed Test Plan

Rev: 2020
EX-0513

NCPT Detailed Test Plan

This detailed test plan reflects the results of a national job analysis study that determined the critical job competencies to be tested by NCCT in this certification examination. It contains 125 scored items, 25 unscored pretest items, and candidates are allowed three (3) hours to complete the examination. This certification examination is comprised of 90-95% standard, 4-option multiple-choice items and 5-10% alternative items (e.g., Drag and Drop, Multi-Select, Hotspot).

Number of Cored Items Critical Job Competencies

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1 Quality and Professional Issues

- A1 Perform tasks within the scope of practice (e.g., received in clinical training).
- A2 Perform and record quality control procedures and results (e.g., temperature logs, glucose meter).
- A3 Identify and follow up with quality control results that do not meet predetermined criteria (e.g., what was corrective action).
- A4 Perform phlebotomy tasks while maintaining patient guarantees under "The Patient Care Partnership (Patient's Bill of Rights)" of the American Hospital Association
- A5 Adapt interactions with patients based on individual needs (e.g., age, culture, special needs).
- A6 Respond to verbal and nonverbal cues when interacting the patients.
- A7 Comply with laws and standards governing specimen collection as related to reliability and accuracy in lab testing (e.g., CLIA, CAP, COLA, AABB).
- A8 Comply with chain of custody collection requirements (e.g., paternity testing, drug screening, blood alcohol levels).
- A9 Prevent clerical and technical errors that may occur with specimen collection, handling, transporting, and processing by following protocol.
- A10 Document patient and collection information electronically or in hard copy format.
- A11 Comply with laws related to medical records and confidentiality (e.g., HIPAA).
- A12 Comply with laws governing reportable incidents (e.g., mistakes, poor patient outcomes).
- A13 Monitor quality assurance in the collection of blood specimens.
- A14 Adhere to professional standards of the industry (e.g., hygiene, dress code).

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2 Infection Control and Safety

- A1 Adhere to regulations regarding work place safety (e.g., OSHA, SDS, NFPA).
- A2 Respond to workplace hazards including fire, electrical, and chemical.
- A3 Take measures to prevent infection and transmission, including hospital acquired infections.
- A4 Follow Standard and Transmission-based Precautions (e.g., airborne, droplet, contact, hospital-acquired).
- A5 Prevent occurrences that could result in legal action (e.g., hematoma, nerve damage, probing, patient falls).
- A6 Properly use personal protection equipment including gloves, gown, and masks.
- A7 Use safety products as they are intended (e.g., sharps containers, face shields, blood transfer device).

- A8 Activate safety mechanisms on phlebotomy equipment appropriately.
- A9 Properly dispose of phlebotomy equipment following OSHA bloodborne pathogens and hazardous material standards.
- A10 Follow the appropriate course of action for blood and body fluid exposure (e.g., needle stick).
- A11 Perform cleaning and disinfection of equipment and facilities.

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3 Orders and Equipment Selection

- A1 Perform patient registration.
- A2 Perform laboratory test order entry.
- A3 Resolve questionable entries or errors on patient requisition.
- A4 Select appropriate venipuncture equipment for the test ordered and type of patient.
- A5 Select appropriate capillary puncture equipment for the test ordered and type of patient.
- A6 Select proper equipment for patients with allergies.
- A7 Verify quality of equipment (e.g., sterility, recalls, expiration date, defects).
- A8 Select proper antiseptic agents for the test ordered.
- A9 Identify additives/anticoagulants added to evacuated blood collection tubes.
- A10 Assess the mode of action of additives/anticoagulants in blood collection tubes.
- A11 Follow manufacturer recommendations for fill level and tube inversion.
- A12 Select proper bandaging equipment.
- A13 Select appropriate requisitions for specialty lab departments.

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4 Patient ID and Site Preparation

- A1 Review and clarify orders for patient specimen collection.
- A2 Communicate effectively and professionally with patients (e.g., verbal and non verbal).
- A3 Identify patients according to regulatory standards and facility protocol.
- A4 Evaluate pretest conditions for patient prior to collection (e.g., fasting, medications, fistula).
- A5 Assess pre-analytical practices that can affect results positively or negatively (e.g., heating pads, fist pumping).
- A6 Select the appropriate site for venous blood collection.
- A7 Select the appropriate site for arterial blood collection.
- A8 Select the appropriate site for capillary blood collection.
- A9 Apply and release the tourniquet appropriately.
- A10 Prepare the site for blood collection based on test ordered(e.g., venipuncture in antecubital for CBC with alcohol vs blood cultures with chlorhexidine).

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5 Collections

- A1 Prioritize patient collections based on order request (e.g., STAT, timed, routine).
- A2 Take precautions for patients with special needs (e.g., breast surgery, IV, burns, dementia, bleeding disorders).
- A3 Recognize commonly ordered tests and the tubes needed for collection.
- A4 Perform special collections (e.g., trace metal elements, newborn screen, chain of custody).
- A5 Properly anchor the vein.
- A6 Position the needle for venipuncture (e.g., direction, angle, depth).
- A7 Collect samples using CLSI recommended order of draw.
- A8 Perform appropriate post-puncture care for the patient.
- A9 Label specimens for facility protocol.
- A10 Deliver specimens to the laboratory appropriately (e.g., temperature, light, time).
- A11 Process specimens for the laboratory appropriately (e.g., centrifuge, aliquot, storage).
- A12 Assess the suitability of a specimen for analysis.
- A13 Deliver specimens to the correct department in the clinical laboratory.
- A14 Perform blood culture collection.

- A15 Perform capillary puncture collection.
- A16 Instruct the patient in the proper collection and preservation of laboratory specimens (e.g., blood, sputum, urines, stools).
- A17 Collect laboratory specimens per requirements (e.g., urine, stool, culture swabs).
- A18 Process standard non-blood specimens (e.g., urine, sputum, stool, swabs).
- A19 Process special non-blood specimens (e.g., CSF, synovial fluid, peritoneal fluid, pericardial fluid).
- A20 Process blood specimens for testing at reference laboratories.
- A21 Package blood specimens for transport to reference laboratories per protocol.
- A22 Arrange for transport of blood specimens for testing at reference laboratories.
- A23 Perform point of care testing (e.g., urinalysis, hemoglobin and hematocrit, coagulation, glucose, pregnancy test, occult blood).
- A24 Report results and critical values to authorized personnel.

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6 Problems and Correction

- A1 Prevent interference in clinical analysis of blood constituents (e.g., iodine, alcohol, edema, IV fluids).
- A2 Prevent pre-analytical sources of error regarding specimen integrity (e.g., hemolysis, QNS, clotted, incorrect specimen type).
- A3 Perform specimen collection on difficult to draw patient (e.g., chemotherapy, dialysis, edema, pediatric, geriatric, dehydration, obesity) using appropriate techniques.
- A4 Take appropriate action when blood return is not established (e.g., collapsed vein, missed vein).
- A5 Respond to patient adverse reactions that may accompany blood collection (e.g., hematoma, petechiae, nerve injury, diaphoresis, syncope, nausea, seizure).
- A6 Make phlebotomy-related decisions for patients on anticoagulant therapy or with clotting deficiencies (e.g., hold pressure for longer period of time following collection).
- A7 Take corrective actions for problems with test requests, specimen transport, or specimen processing.
- A8 Take corrective actions for misidentified patients or samples.
- A9 Take corrective actions for patient complaints or refusals.

Essential Knowledge Base:

Apply a working understanding of these integrated concepts:

- 1 Infection Control (e.g., PPE, Biomedical Waste Handling)
- 2 Anatomy and Physiology (e.g., circulatory system, lymphatic system)
- 3 Pathology and Disorders
- 4 Pre-analytical Errors
- 5 Blood Collection Procedures
- 6 Non-Blood Collection Procedures
- 7 Order of Draw
- 8 Patient Identification
- 9 Patient Assessment, Education, and Preparation
- 10 Specimen Handling and Transporting Procedures
- 11 Quality Assurance
- 12 Patient Safety and First Aid
- 13 Clinical Laboratory Departments