

National Certified Patient Care Technician Detailed Test Plan

Effective: February 2021
EX-0506

NCPCT 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 85-90% standard, 4-option multiple-choice items and 10-15% alternative items (e.g., Drag and Drop, Multi-Select, Hotspot).

Number of Scored Items Content Categories

24 1 Professional Responsibilities

- A1 Comply with regulations governing reportable incidents (e.g., needle stick, falls, errors).
- A2 Comply with standards governing reliability and accuracy in point of care lab testing.
- A3 Comply with the Americans with Disabilities Act (ADA).
- A4 Comply with laws related to scope of employment (e.g., immunizations, background checks, drug screens, certifications).
- A5 Obtain patient permission before performing procedures.
- A6 Follow the proper procedures for documenting in the patient's electronic health record (EHR).
- A7 Demonstrate compliance with laws related to Protected Health Information (PHI) (e.g., HIPAA).
- A8 Adhere to the Patient's Bill of Rights (AHA).
- A9 Comply with federal and state health care legislation and regulations (e.g., Joint Commission, State Board of Nursing).
- A10 Respond to nonverbal communications.
- A11 Adapt professional communication to meet the needs of the individual (e.g., age, developmental level, language barriers, patient condition, etc.).
- A12 Use therapeutic communication when providing care to patients (e.g., open ended questions, active listening, empathy).
- A13 Provide emotional support for patients and their families.
- A14 Help patients and families to cope with grief, death, and dying.
- A15 Adapt care to account for cultural diversity or spiritual beliefs.
- A16 Communicate with other health care professionals using proper medical terminology.
- A17 Receive and direct incoming communications to appropriate team members (e.g., phone, pagers, call lights).
- A18 Explain general facility policies to patients and family members.
- A19 Explain procedures within the regulated scope of practice.
- A20 Prioritize and organize tasks to be performed.
- A21 Perform only those tasks within the regulated scope of practice (may vary by state or facility).
- A22 Observe the chain of command in a healthcare environment.
- A23 Respond appropriately to observations of unethical or unlawful practice.
- A24 Comply with laws that protect patients from negligence and incompetence.
- A25 Report
 - a patient neglect or abuse
 - b substance abuse involving staff or patients
 - c sexual harassment involving staff or patients
 - d negligence and incompetence

2 Safety and Infection Control

- A1 Follow the correct procedures for identifying patients.
- A2 Follow CDC Standard Precautions and Transmission-Based Precautions (e.g., airborne, contact, and droplet).
- A3 Follow patient isolation procedures (e.g., radiation, reverse, TB).
- A4 Comply with OSHA standards for Health Care Workers (e.g., blood borne pathogens, MSDS, needlesticks).
- A5 Follow the appropriate course of action for medical follow-up of a post-exposure incident (e.g., needlestick, splash).
- A6 Use personal protective equipment (e.g., gloves, gown, mask).
- A7 Practice infection prevention and exposure control procedures to break the chain of infection.
- A8 Instruct patients and family members regarding infection control.
- A9 Prevent the spread of healthcare acquired (nosocomial) infection.
- A10 Differentiate among the need/uses for cleansing, disinfection, and sterilization.
- A11 Perform medical asepsis.
- A12 Perform surgical asepsis.
- A13 Disinfect non-disposable medical equipment.
- A14 Sterilize non-disposable medical equipment.
- A15 Apply precautions in biohazardous waste handling and disposal.
- A16 Respond to emergency situations (e.g., fire, biological hazard).
- A17 Activate safety mechanisms for sharps.
- A18 Transport patients using correct safety measures.
- A19 Transfer patients using correct body mechanics.
- A20 Practice safety procedures when using medical equipment and supplies (e.g., lock wheels, gait/transfer belts, restraints, call lights).
- A21 Monitor and maintain patients' environment (e.g., fall precautions, faulty equipment, general housekeeping).

3 Direct Patient Care

- A1 Obtain patient vital signs.
- A2 Perform a pulse oximetry measurement.
- A3 Use a pain scale to report patient pain levels.
- A4 Perform height, weight, and BMI measurements (e.g., standing wheelchair, or bed scales).
- A5 Monitor, accurately measure, and record intake/output (e.g., hydration, diet, urine, emesis, wound drainage).
- A6 Observe dressings for wound condition changes (e.g., sanguineous, serous, purulent).
- A7 Report changes in the patient's condition (e.g., level of consciousness, blood pressure).
- A8 Visually inspect patient specimens for abnormalities (e.g., stool, emesis).
- A9 Identify and report changes in skin integrity (e.g., decubitus ulcers, bruising, edema).
- A10 Provide routine patient care under the supervision of the nursing staff per the care plan (e.g., ADLs, bathing, linen change).
- A11 Provide continuous monitoring for patients who meet the criteria for one-to-one observation.
- A12 Prepare supplies and equipment to be used by the patient (e.g., toilet hat, patient hygiene).
- A13 Adapt care to patients with special needs (e.g., physically, mentally impaired).
- A14 Assist with admission, discharge, and/or transfer of patients.
- A15 Prioritize care based on patient needs and condition.
- A16 Follow the individualized plan of care ordered for the patient.
- A17 Adhere to the Five Rights of Delegation.

- A18 Provide care for a patient with an NG tube.
 - a patient positioning
 - b skin integrity
- A19 Provide care for a patient with gastric tube.
 - a patient positioning
 - b skin integrity
- A20 Perform oral suctioning (e.g., bulb, Yankauer).
- A21 Use a mechanical lift per protocol.
- A22 Reposition a patient (e.g., draw sheet, lift sheet).
- A23 Perform a two-person manual transfer of a patient (e.g., slide board, transfer sheet).
- A24 Perform Passive Range of Motion (PROM) for a patient.
- A25 Assist the patient with Active Range of Motion (AROM) (e.g., ambulation).
- A26 Assist patients with restorative rehabilitation activities (e.g., bladder and bowel retraining, ambulation, feeding).
- A27 Use adaptive devices for activities of daily living (ADLs) (e.g., dressing and feeding devices).
- A28 Remove peripheral IVs.
- A29 Perform simple, non-medicated dressing changes.
- A30 Assist with wound care and/or dressing changes.
- A31 Assist with immobility support/splint applications (e.g., elastic bandage, wrist splint).
- A32 Apply anti-embolitic devices (e.g., TED hose, AVIs, SCD).
- A33 Provide skin care (e.g., moisture barrier, repositioning,).
- A34 Use devices to prevent skin breakdown (e.g., pressure relief mattresses, heel protectors).
- A35 Assist the patient with coughing and deep-breathing exercises.
- A36 Assist with preoperative care (e.g., skin prep).
- A37 Assist with postoperative care
- A38 Assist the patient with taking prescribed self-administered medications.
- A39 Assist with oxygen therapy (e.g., nasal cannula).
- A40 Assist patients with incentive spirometry.
- A41 Assist with patient-administered nebulizer treatments.
- A42 Assist patients with orthotic or prosthetic devices (e.g., hearing aids, dentures, AFO).
- A43 Assist patients with orthopedic devices (e.g., trapeze bars, CPM, traction, abduction wedges).
- A44 Perform ostomy care (not including irrigation).
- A45 Assist the patient with ostomy care.
- A46 Perform catheter care.
- A47 Perform bladder scanning.
- A48 Perform or assist with enemas.
- A49 Perform first aid, BLS, and rapid response procedures.
- A50 Perform postmortem care.
- A51 Insert peripheral IVs.
- A52 Apply immobility splints to patients (e.g., pre-formed, soft, immobility).

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4 Phlebotomy

A Orders and Equipment Selection

- A1 Identify venipuncture equipment typically found on a blood collection tray.
- A2 Identify microsampling equipment typically found on a blood collection tray.
- A3 Differentiate among the uses of evacuated tubes (i.e. all stopper colors) in blood collection.
- A4 Select equipment for specimen collection needs according to physician orders, patient age, vein and patient conditions.

- A5 Identify additives/anticoagulants added to evacuated blood collection tubes (by stopper color).
- A6 Identify the importance of inversion, required number of inversions, and fill-levels in tubes with additives/anticoagulants.
- A7 Select proper equipment for use with patients that have latex allergies.
- A8 Select proper bandaging equipment (e.g., site, age, allergy, skin type).

B Collection, Problems, and Correction

- B1 Determine appropriate site selection for blood collection (e.g., based upon varied patient conditions).
- B2 Prepare patients and site for blood collection (e.g., microsampling, venipuncture, bacterial culture).
- B3 Perform venipuncture on patients of all ages.
- B4 Perform capillary punctures by fingerstick.
- B5 Assist patients in performing capillary punctures.
- B6 Identify the CLSI-recommended order of draw for blood samples collected by a specified method.
- B7 Take precautions for patients with special needs (e.g., mastectomy, IV, burns, dementia, bleeding disorders, other).
- B8 Respond to complications of phlebotomy (e.g., hematoma, excessive bleeding, other).
- B9 Perform post-phlebotomy care.
- B10 Take corrective actions for problems with test requests, specimen transport, or specimen processing.
- B11 Anticipate pre-analytical errors and complications.
- B12 Assist other healthcare professionals with blood culture collections.
- B13 Collect laboratory specimens per protocol (e.g., urine, stool, culture swabs).
- B14 Handle laboratory specimens per protocol. (e.g., preservatives, light sensitivity, temperature)
- B15 Calculate volume requirements to avoid causing iatrogenic anemia.

19 5 ECG

A Patient Comfort and Safety

- A1 Provide patient instruction regarding the ECG procedure (e.g., Holter monitor, stress test, 12-lead, telemetry).
- A2 Prepare and position the patient for testing (e.g., gowning, skin preparation).
- A3 Place electrodes on the patient appropriately for the test (e.g., stress, Holter, telemetry).
- A4 Use additional resources as needed for specific diagnostic tests (e.g., blood pressure cuff, treadmill, Holter monitor).
- A5 Educate the patient regarding behavior throughout the test.
- A6 Adapt technique to patients with special considerations (e.g., amputee, pacemaker).
- A7 Adapt technique for special populations (e.g., age appropriate, isolation, special needs).

B ECG Recording and Recognition of Abnormal Rhythms

- B1 Provide ongoing monitoring of the patient during ECG procedures.
- B2 Capture and record ECG tracings.
- B3 Identify and measure waveform characteristics (e.g., P waves, T waves, QRS complexes).
- B4 Recognize atrial and ventricular abnormalities (e.g., PVC, PAC).
- B5 Distinguish regular and irregular rhythms.
- B6 Recognize cardiac rhythm classifications and rates
 - a sinus
 - b atrial
 - c ventricular
 - d asystole

- B7 Initiate response to life threatening arrhythmias per protocol.
- B8 Monitor patient vital signs and tolerance during testing.
- B9 Prepare the report for the appropriate healthcare team member.
- B10 Transmit the report to the patient's EMR/EHR or chart.
- B11 Identify and measure waveform quality (e.g., amplitude, symmetry, direction).

C ECG Troubleshooting and Maintenance

- C1 Identify recording errors (e.g., improper tracing, standardization mark out of range, improper lead placement).
- C2 Identify causes of artifact (e.g., somatic tremor, patient movement, wandering baseline, AC interference, seizures).
- C3 Account for patients with special considerations (e.g., clothing, burns, shunts, piercings, scars, pacemaker/AICD).
- C4 Correct artifacts and recording errors (e.g., paper placement, lead reversal, power loss, remove electronic devices, calm the patient).
- C5 Operate the ECG machine per manufacturer's and facility's protocol.

Essential Knowledge Base:

Apply a working understanding of these integrated concepts:

- 1 Medical equipment maintenance
- 2 ECG
- 3 Obtaining a medical history
- 4 Medical equipment operation
- 5 Medical procedure justifications/explanations
- 6 Drug properties and interactions
- 7 EMR/EHR software
- 8 HIPAA
- 9 Infection Control
- 10 Anatomy and Physiology
- 11 Pathology and Disorders
- 12 Pre-analytical Errors
- 13 Blood Collection Procedures
- 14 Non-Blood Collection Procedures
- 15 Phlebotomy techniques
- 16 Patient Assessment, Education, and Preparation
- 17 Specimen Handling and Transporting Procedures
- 18 Patient Safety and First Aid

