



National Center for Competency Testing

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EX-0508

NCMA National Certified Medical Assistant Detailed Test Plan

Rev: 2020

NCMA 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 150 scored items, 15 unscored pretest items, and candidates are allowed three (3) hours to complete the examination.

Number of Scored Items

Content Categories

21

Content Category: Pharmacology

- Consult pharmaceutical desk references to check medications (e.g., drug classification, contraindications, side effects, action, routes of administration, and adverse reactions).
- Perform basic medication related calculations.
- Comply with DEA and other regulatory agency guidelines for ordering, dispensing, documenting, and storing drugs.
- Document medication administration errors.
- Comply with legal requirements for completion of prescriptions and authorization of refills.
- Identify commonly used medications by generic and brand names.
- Recognize general indications for common therapeutic medications used (e.g., insulin for diabetics, etc.).
- Demonstrate safe medication preparation, administration, and documentation (e.g., dosage calculation, route, types of injections, and injection sites).
- Administer medication orally.
- Administer medication subcutaneously (SQ).
- Administer medication intramuscularly (IM).
- Administer medication intradermally (ID).
- Respond to adverse reactions.
- Administer medication transdermally.
- Administer medication topically.
- Adhere to e-prescribing protocols.
- Translate prescription abbreviations.
- Administer medication sublingually (SL) or buccally.
- Administer medication by inhalation.
- Instill ophthalmic medication (e.g., eye drops).
- Instill medication aurally (e.g., ear drops).
- Document medication administration and reactions.
- Document prescriptions and refills.

28 Content Category: Clinical Medical Procedures**• Subcategory: Infection, Exposure Control, and Safety**

- Follow CDC Standard Precautions and transmission precautions (e.g., airborne, contact, droplet, hand hygiene).
- Comply with OSHA standards for Health Care Workers (e.g., blood borne pathogens, SDS, needlesticks, bodily fluids).
- Perform general medical asepsis.
- Perform surgical asepsis.
- Implement cleansing, disinfection, and sterilization as needed.
- Handle and dispose of biohazardous waste.
- Handle and dispose of chemicals.
- Use personal protective equipment (e.g., gloves, gown, mask).
- Follow patient isolation procedures (e.g., radiation, reverse, TB).
- Respond to emergency situations (e.g., fire, biological hazard).
- Prevent the spread of healthcare acquired (nosocomial) infection.
- Practice safety procedures when using medical equipment and supplies (e.g., lock wheels, gait/transfer belts).
- Transfer patients using correct body mechanics.
- Activate safety mechanisms for sharps.

• Subcategory: Patient Care

- Perform adult and pediatric height, weight, and BMI measurements (e.g., standing, wheelchair).
- Obtain patient vital signs.
- Take a patient history.
- Use a pain scale to report patient pain levels.
- Position a patient for an exam or procedure (e.g., Fowler's, lithotomy).
- Perform a pulse oximetry measurement.
- Perform vision screening tests (e.g., Snellen, Ishihara, Pelli-Robson).
- Perform allergy testing.
- Perform suture and staple removal.
- Perform auditory acuity tests.
- Perform ear irrigation.
- Perform eye irrigation.
- Assist the provider with patient examinations (e.g., physical, gynecological).
- Recognize and appropriately report abnormal measure/screening results (e.g., pain assessment and monitoring).
- Prepare and manage patient exam/treatment areas.
- Adapt care to patients with special needs (e.g., physically, mentally impaired).
- Perform wound care and/or dressing changes.
- Assist with immobility support/splint applications (e.g., elastic bandage, wrist splint).
- Assist with minor surgical procedures (e.g., skin prep).
- Perform therapeutic modalities as instructed (e.g., crutch training, hot/cold compress, ROM exercises).
- Provide basic patient instruction/education (hemocult, breast/testicular self-exams, nutrition).
- Assist with oxygen therapy (e.g., nasal cannula).

- Assist patients with spirometry (e.g., peak flow, PFT).
- Assist with patient-administered nebulizer treatments.
- Assist patients with orthotic or prosthetic devices.
- Perform first aid, BLS, and rapid response procedures.

21 **Content Category: Phlebotomy**

- Adhere to standards for patient introduction, identification, and order verification.
- Evaluate pre-test conditions for patient prior to collection (e.g., fasting, medications).
- Adhere to patient safety, infection control, and aseptic technique standards.
- Select appropriate venipuncture equipment for the test ordered and type/age of patient.
- Prepare the patient and the selected site for blood collection (e.g., micro-sampling, venipuncture, bacterial culture).
- Select appropriate capillary puncture equipment for the test ordered and type/age of patient.
- Take appropriate action when blood return is not established (e.g., collapsed vein, missed vein).
- Follow the correct order of draw for blood samples (e.g., capillary, venous).
- Identify additives in evacuated blood collection tubes.
- Follow the manufacturer recommendations for fill level/ratio and tube inversion.
- Implement precautions for patients with special needs (e.g., mastectomy, IV, burns, dementia, bleeding disorders, other).
- Perform venipuncture on patients of all ages.
- Perform capillary punctures by fingerstick.
- Perform capillary punctures by heelstick.
- Select appropriate bandaging supplies (e.g., age, allergy, skin type).
- Perform phlebotomy aftercare.
- Recognize and respond to complications (e.g., hematoma, excessive bleeding, other).
- Anticipate pre-analytical errors and complications (e.g., inadequate collection amount, wrong order of draw).
- Take corrective actions for problems with test requests, specimen transport, or specimen processing.
- Perform blood culture collections.
- Handle laboratory specimens per protocol (e.g., preservatives, light sensitivity, temperature).
- Label specimens appropriately.
- Take appropriate actions for misidentified patients or samples.
- Process specimens for the laboratory appropriately (e.g., centrifuge, aliquot, storage).
- Perform special collections (e.g., trace elements, newborn screen, chain of custody).

18 **Content Category: ECG and Other Diagnostic Tests**

- **Subcategory: Other Diagnostic Tests**
 - Perform CLIA waived point of care testing (POCT) (e.g., urinalysis dip stick, hemoglobin and hematocrit, coagulation, glucose, pregnancy test, fecal occult blood).
 - Perform chain of custody collections (e.g., urine drug screening, paternity testing).
 - Perform lab instrument maintenance and calibration.
 - Collect specimen cultures (e.g., wound, sputum, viral, stool, throat).
 - Instruct patients in specimen collection (e.g., 24-hour urine, clean catch, stool, sputum).
 - Process specimen collections accurately.
 - Perform and record quality control, procedures for CLIA waived point of care testing.

- **Subcategory: ECG Placement Techniques**
 - Prepare and position the patient for ECG testing (e.g., gowning, skin preparation).
 - Place electrodes on the patient appropriately for the test (e.g., stress, Holter, telemetry).
 - Use additional resources as needed for specific diagnostic tests (e.g., blood pressure cuff, treadmill, Holter monitor).
 - Adapt technique to patients with special considerations (e.g., amputee, right sided heart, pacemaker).
 - Adapt technique for special populations (e.g., age appropriate, isolation, special needs).
 - Explain the ECG procedure to the patient (e.g., movement, talking, electronics).
 - Provide patient instruction regarding the Holter monitor.
- **Subcategory: ECG Recording**
 - Provide ongoing monitoring of the patient during stress testing.
 - Capture and record ECG tracings on a patient.
 - Distinguish between regular and irregular rhythms.
 - Initiate response to life threatening arrhythmias per protocol.
 - Monitor patient vital signs and tolerance during testing.
 - Prepare the report for the physician.
 - Transmit the report to the patient's EMR/EHR or chart.
- **Subcategory: ECG Troubleshooting and Maintenance**
 - Identify recording errors (e.g., improper tracing, standardization mark out of range, improper lead placement).
 - Identify causes of artifact (e.g., somatic tremor, patient movement, wandering baseline, AC interference, seizures).
 - Account for patients with special considerations (e.g., shunts, piercings, scars, pacemaker/AICD-failure to pace).
 - Correct artifacts and recording errors (e.g., paper placement, lead reversal, power loss, remove electronic devices, calm the patient).
 - Ensure proper grounding of the ECG machine.
 - Check battery charge and paper supply.
 - Clean and store the ECG machine after use.

21 **Content Category: General Office Procedures**

- **Subcategory: Communication**
 - Communicate effectively verbally and in writing.
 - Direct patients and visitors to the appropriate team member or location (e.g., greet, screen, prioritize).
 - Answer, evaluate, and direct incoming calls to team members using effective telephone techniques.
 - Describe the policies and procedures of the practice to patients.
 - Address possible telephone emergencies appropriately.
 - Initiate the emergency response system (e.g., violent person in the office, fire).
 - Route or transmit medical office correspondence to the appropriate team member via mail, fax or email.
 - Proofread and/or edit office correspondence.
 - Process medical office mail and correspondence via the appropriate shipper and postage classification (e.g., incoming, outgoing).
 - Ensure the availability of patient informational materials (e.g., pamphlets, patient education brochures).

- **Subcategory: Medical Office Computer Applications**
 - Maintain the integrity and confidentiality of computer-stored information.
 - Maintain electronic medical office data (e.g., data entry, retrieval, backup).
 - Use standard office software (e.g., word processing, spreadsheet, database, email, internet browsers, presentation graphics applications).
 - Use medical office software applications (e.g., billing, scheduling, electronic medical records, electronic health records, financial).
 - Perform basic operator level troubleshooting on medical office computer equipment and software.
 - Manage medical office electronic data using devices other than computers (e.g., tablets, mobile phones, bar code scanners, card readers/scanners, kiosks).
 - Use peripheral devices (e.g., printers, copiers, scanners, fax, digital cameras).
 - **Subcategory: Scheduling**
 - Matrix healthcare schedules (e.g., facility, resources, providers).
 - Set up patient and visitor appointments using standard scheduling techniques (e.g., modified wave, double booking).
 - Set up patient appointments using telemedicine and/or home monitoring.
 - Manage appointment dates and times with scheduled patients (e.g., confirm, cancel, reschedule, missed appointments).
 - Maintain daily appointment schedules with team members.
 - Generate daily encounter forms for scheduled patients.
 - Manage referrals (e.g., schedule, obtain, verify).
 - Schedule patients for hospital admissions and surgery.
 - Schedule patients for out-patient diagnostic tests and procedures.
 - Manage the patient reminder system (e.g., tickler, recall).
 - **Subcategory: Medical Records**
 - Require all patients to complete and/or update necessary paperwork/forms.
 - Copy/scan picture identification and insurance card and obtain required signatures.
 - Enter patient information into the medical record.
 - Maintain confidentiality of medical records (e.g., HIPAA compliance).
 - Recognize the stages of meaningful use and merit-based payment (e.g., MIPS).
 - Manage documents and patient charts using paper methods.
 - Manage documents and patient charts using computerized/electronic methods.
 - Respond to legal requests/subpoenas for medical records (e.g., release requests, file transfers).
 - Respond to patient requests for medical records.
 - Make corrections and additions to medical records per state and federal guidelines.
 - Protect and retain medical records per state and federal guidelines.
 - Move medical records between active, inactive, and closed status.
 - Prepare charts for audits and external reviews.
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25 Content Category: Medical Office Management

- **Subcategory: Medical Office General Management**
 - Open and close the medical office for the day.
 - Handle relationships with associated health care provider offices or business associates.
 - Comply with accreditation and licensure requirements.
 - Maintain files on the providers' professional status (e.g., licensure or certification, continuing educational requirements, renewal dates, fees and dues).
 - Maintain the office manuals (e.g., policy and procedures, medical office safety, SDS).
 - Comply with Occupational Safety and Health Act (OSHA) guidelines and regulations.
 - Comply with the Clinical Laboratory Improvement Act (CLIA) guidelines and regulations.
- **Subcategory: Office Financial Management, Billing, Insurance**
 - Explain the financial policies and procedures of the practice to patients and/or responsible parties.
 - Collect payment, copayment, coinsurance, or deductible owed by the patient at the time of service.
 - Provide fee schedules for the patients.
 - Use Current Procedural Terminology (CPT) and Health Care Financing Administration Common Procedure Coding System (HCPCS) codes to bill for services.
 - Use International Classification of Diseases (ICD) codes to bill for services.
 - Comply with fraud and abuse regulations related to insurance and billing.
 - Manage pre-authorizations, pre-certifications, and pre-determinations (e.g., prepare, obtain, verify).

16 Content Category: Law and Ethics

- Recognize legal responsibilities and the scope of practice for the medical assistant.
- Recognize unethical practices and respond in an ethical manner for situations in the medical office.
- Recognize and respond to violations of medical law.
- Follow the protocol on terminating patient care (e.g., non-compliance, collections).
- Comply with disclosure laws (e.g., HIPAA, HITECH).
- Obtain patient consent for examinations and treatment.
- Adhere to laws regarding reportable incidents and communicable diseases.
- Advocate for the patient (e.g., patient navigator).
- Adhere to A Patient's Bill of Rights (AHA).
- Adhere to advanced directives (e.g., power of attorney, living will, donor preferences).

Essential Knowledge Base:**Apply a working understanding of these integrated concepts:**

- Medical Law and ethics
- Sterilization techniques
- Patient assessment and vital signs
- Specialty examination preparation and assistance (e.g., eye, ear, pediatric, geriatric, reproductive, G/U, ECG)
- Minor procedure assistance (e.g., surgical)
- Infection control (e.g., PPE, Biomedical Waste Handling)
- Anatomy, Physiology, Pathophysiology, and Disorders
- Preanalytical errors (e.g., hemolysis, hemoconcentration, air in the cuvette)
- Specimen collecting, handling, and transporting (e.g., blood, urine, cultures)
- Venipuncture techniques
- Patient education
- Quality assurance
- Patient safety and first aid
- Healthcare regulation (e.g., OSHA, CLIA, CDC, HIPAA, Patient's Bill of Rights)
- Chain of custody
- Customer service, complaint resolution, (e.g., de-escalation technique)
- Medical equipment quality control, operation, and maintenance
- Medical history
- Pharmacology (e.g., administration, interactions, dosages, properties)
- Medical practice software
- Administrative procedures (e.g., registration, payment, insurance, financial, mail processing)
- Emergency preparedness
- Medical terminology/abbreviations
- Therapeutic modalities (e.g., wound care, suture removal, crutch training, splinting, bandaging)