This curriculum for a medical assistant program is designed for students interested in caring for the sick, injured, convalescent, or disabled under the direction of the family, physicians, and credentialed nurses. The curriculum is divided into 12 units: orientation to medical assisting; principles of medical ethics; risk management; infection control and hazards management; anatomy, physiology, pathology, and psychology; medical database; patient examinations; patient education; medications; medical emergencies and facility safety; laboratory procedures; and general office procedures. Each unit is composed of 2-5 objectives; a number of performance indicators are listed for each objective. The program is designed to include classroom instruction via lectures, demonstrations, and discussions. Hospitals, medical centers, nursing home or care centers, or medical-surgical clinics often work cooperatively with schools to provide students with clinical practice and experience. (YLB)
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A career as a medical assistant is both rewarding and challenging. Working as a medical assistant is for the person who enjoys working with, and helping people. Successful students will have a good aptitude for both science and mathematics. The medical assistant must be able to work in a multi-task environment and enjoy interacting with patients as well as other health care professionals. Medical assistants will help care for the sick, injured, convalescent, or disabled under the direction of the family, physicians, and credentialed nurses.

Most medical assistants will provide assistance in a physician’s office. The curriculum for the Medical Assistant program includes: classroom instruction via lectures, demonstrations, and discussions. Hospitals, medical centers, nursing home or care centers, or medical-surgical clinics often work cooperatively with schools to provide students with clinical practice and experience. The versatile medical assistant will be proficient in both the clinical and office procedures.

Medical assistants interact with patients and note/report information for the physicians. They take vital signs such as temperature, blood pressure, pulse, and respiration. They collect samples from patients for testing, and assist with routine laboratory tests and other office procedures. Depending on the individual health-care setting, the assistant will assist with examinations and procedures and may administer medications in accordance with the employing physician’s directives.

The medical assistant will also need to be competent in a variety of general office procedures including: maintaining medical records, basic computer skills, reception duties, performing general financial functions, and processing insurance forms.

Some experienced medical assistants may be assigned advanced level positions where they will be responsible for supervising other workers and aides in a health care setting. The medical assistant often advances to a higher career level with additional education.
Medical Assisting

Acknowledgements

Overview

1. Orientation to Medical Assisting
2. Principles of Medical Ethics
3. Risk Management
4. Infection Control and Hazards Management
5. Anatomy, Physiology, Pathology, and Psychology
6. Medical Database
7. Patient Examinations
8. Patient Education
9. Medications
10. Medical Emergencies and Facility Safety
11. Laboratory Procedures
12. General Office Procedures
Medical Assisting

Unit 1: Orientation to Medical Assisting

Define role of the medical assistant

1. Survey history of the medical assistant
2. Identify scope of medical assistant’s role and responsibilities within the health-care setting
3. Explore career opportunities for medical assistant

Project professional image

1. Define professionalism for medical assistant
2. Exhibit professional appearance, manners, and attitude
3. Exhibit proper etiquette in professionally related situations

Fulfill individual professional responsibilities

1. Participate in professional associations
2. Participate in professional development in-service activities
3. Follow procedures established to minimize medical liability
4. Adhere to the principles of the Code of Ethics for Medical Assistants adopted by the American Association of Medical Assistants

Unit 2: Principles of Medical Ethics

Follow professional protocol with regard to legal issues

1. Maintain confidentiality
2. Follow the Patient Bill of Rights
3. Comply with legal procedures for the reporting of diseases
4. Explain the statute of limitations
5. Identify/report child and adult abuse
6. Identify legal owner of medical records

Follow professional protocol with regard to patient issues

1. Inform patients about the Truth-in-Lending Law
2. Inform patients about the Anatomical Gift Act
3. Inform patients about advance directives (living wills, powers of attorney)
4. Inform patients about the meaning of informed consent
5. Inform patients of the reasons for the termination of patient services
6. Inform patients about the possible consequences of noncompliance with the physician's recommendations
7. Inform patients about remuneration policies and procedures
8. Inform patients about the implications of communicable diseases
9. Provide emotional support for patients and their families
10. Respond to the needs of patients on an individual basis

Communicate medical information
1. Follow medical ethics when communicating patient data
2. Communicate with physician and other health-care professionals
3. Use accepted medical terminology

Unit 3: Risk Management

Maintain a quality assurance plan
1. Maintain records for audit reviews
2. Maintain patient follow-up system (e.g., tickler files)
3. Document compliance with state and federal regulations
4. Participate in implementation of the quality-control plan
5. Monitor equipment performance
6. Calibrate equipment and instruments
7. Assess staff immunization status
8. Comply with managed-care, Medicaid, and Medicare regulations

Demonstrate knowledge of ergonomics
1. Define ergonomics
2. Minimize repetitive tasks
3. Identify appropriate working heights of chairs, stools, footrests, work areas, equipment, and potential sources of harm to medical assistant
4. Explain need for adequate lighting and ventilation
5. Apply principles of body mechanics

Unit 4: Infection Control and Hazards Management

Comply with state and federal regulations governing infection control and hazards
1. Comply with current Occupational Safety and Health Administration (OSHA) guidelines
2. Comply with current Environmental Protection Agency (EPA) regulations
3. Comply with current recommendations of the Center for Disease Control (CDC)
4. Comply with current mandates of the state medical board

Maintain personal safety and hygiene
1. Acquire immunization against communicable diseases
2. Follow standard precautions
3. Practice personal hygiene
4. Wear personal protective equipment
5. Complete incident reports
6. Apply work practice controls in accordance with OSHA guidelines (e.g., minimize splashes, use of aerosol)

Dispose of waste materials in compliance with government regulations and facility guidelines

1. Dispose of paper and plastic supplies, and apparel
2. Dispose of biohazardous waste/materials
3. Demonstrate use of appropriate spill kit (e.g., body waste, blood, vomit)
4. Dispose of sharps

Maintain infection control of the work area

1. Contain used linens
2. Disinfect sinks
3. Disinfect counter surfaces
4. Disinfect environmental contact surfaces (e.g., light switches, door knobs, telephones)
5. Disinfect examination tables
6. Clean spills and dropped items from floors
7. Maintain infection control in cabinets and drawers

Maintain equipment and instruments in aseptic/sterile condition

1. Follow manufacturer’s safety guidelines for the operation of equipment and instruments
2. Pretreat instruments
3. Sterilize instruments using a chemical disinfectant solution
4. Sterilize instruments using an autoclave
5. Sterilize instruments using a dry heat oven
6. Store sterilized equipment and supplies
7. Maintain quality-control log

Unit 5: Anatomy, Physiology, Pathology, and Psychology

Demonstrate general knowledge of the human body

1. Explain the relationship between human anatomy and physiology
2. Describe the anatomical position
3. Identify body directions, planes, and cavities
4. Name major systems, their functions, and components
5. Define cell composition, shape and size
6. Identify basic life processes of cell division and transportation
7. Identify four major tissue types, their function and subtypes
8. Differentiate between benign and malignant
9. Describe effect of aging across the lifespan

Demonstrate knowledge of human anatomy, physiology, psychology, and pathology

1. Demonstrate basic knowledge of the anatomical systems of the body i.e., skeletal, muscular, nervous, integumentary, lymphatic, urinary, circulatory/cardiovascular, endocrine, respiratory, digestive, and reproductive system
2. Demonstrate general knowledge of human physiology
3. Identify developmental stages of the life cycle
4. Demonstrate knowledge of basic principles of psychology
5. Demonstrate knowledge of basic principles of pathology

Unit 6: Medical Database

Interview patients to obtain pertinent information including cultural, hereditary, and/or environmental influences

1. Obtain the patient’s medical history (e.g., allergies, current medications)
2. Obtain the patient’s family medical history
3. Obtain the patient’s social history
4. Identify the patient’s current complaints
5. Identify/document pain assessment of patient
6. Describe subjective and objective observations

Measure vital signs

1. Measure temperature (i.e., oral, axillary, rectal, tympanic)
2. Measure radial pulse (i.e., radial, apical)
3. Count respirations
4. Measure blood pressure
5. Record vital signs

Obtain physical measurements

1. Measure height (i.e., adult, child, infant)
2. Measure weight (i.e., adult, child, infant)
3. Measure adult chest and waist expansion
4. Measure infant head and chest circumference
5. Measure auditory acuity
6. Measure visual acuity
7. Measure color vision
8. Record physical measurements

Unit 7: Patient Examinations

Assist with examinations and procedures
1. Prepare the examination room(s)
2. Set up trays and equipment (e.g., sterile and nonsterile)
3. Assist the patient with transfer procedures
4. Prepare patient for examination
5. Assist the physician with examination
6. Carry out physician's orders
7. Follow up on patient needs
8. Ensure procedure documentation
9. Assist with specialty medical examinations
10. Assist physician with radiological procedures

Perform specialty procedures

1. Irrigate eye
2. Irrigate ear
3. Assist with tympanometry
4. Perform a 12-lead electrocardiogram (EKG)
5. Perform a pacemaker check
6. Set up Holter monitor test
7. Perform basic spirometry
8. Perform tuberculosis testing (e.g., tine, Mantoux)
9. Administer oxygen
10. Perform pulse oximetry
11. Assist with allergy testing
12. Apply restraints (e.g., papoose board)
13. Perform casting and splinting procedures
14. Apply elastic bandages
15. Administer ultrasonic treatment
16. Assist with diathermy treatment
17. Demonstrate use of ambulatory aids
18. Assist with catheterization

Assist with surgical procedures

1. Follow physician's orders
2. Prepare room(s) for surgical procedure
3. Demonstrate/maintain sterile techniques
4. Set up sterile trays and equipment
5. Prepare patient for procedure
6. Complete a surgical scrub
7. Assist the physician with procedure
8. Maintain a sterile field
9. Change a sterile dressing
10. Follow up on patient needs
11. Complete procedure documentation
12. Disinfect surgical room after a procedure
Unit 8: Patient Education

Inform patient about diagnostic procedures

1. Procure resource information
2. Distribute literature regarding the advised procedure
3. Describe the procedure in general
4. Describe the preparation requirements for the advised diagnostic procedure
5. Respond to patient inquiries (e.g., answer, refer)
6. Interact with patient with special needs (e.g., hearing- or sight-challenged, intellectually challenged, limited English speaking, physically challenged)
7. Interpret terms and abbreviations associated with diagnostic procedures

Educate patient about the self-care recommended according to diagnostic results

1. Explain resource materials provided to patient
2. Instruct patient to follow up on the physician's recommendations
3. Instruct patient about special diets
4. Instruct patient about recommended exercise programs
5. Instruct patient about specialized care
6. Instruct patient in the self-administration of medications
7. Instruct patient in self-examination procedures
8. Instruct patient regarding the effect of environmental hazards on individual diagnoses
9. Instruct patient about standard infant, preschool, adolescent, and adult immunizations
10. Inform patient about World Health Organization (WHO) immunization requirements
11. Provide patient with information about available community services (i.e., support groups and resources)

Unit 9: Medications

Demonstrate knowledge of pharmacology

1. Identify classes of drugs
2. Identify potential drug side effects and/or adverse reactions
3. Identify indicators of substance abuse
4. Identify controlled substances

Manage medications

1. Interpret pharmaceutical abbreviations and terminology
2. Check/maintain records of inventory stock
3. Interact with suppliers (e.g., obtain samples and information, order drugs)
4. Rotate stock
5. Process narcotic forms
6. Store medications (e.g., controlled temperature, secured environment)
7. Dispose of medications in compliance with government regulations

**Administer medications in accordance with physician's orders**

1. Access needed information using the *Physician's Desk Reference*
2. Calculate dosage in accordance with the physician's orders
3. Verify the prescribed route of administration
4. Prepare medications (e.g., oral, injectable, sublingual, transdermal, inhalant, instillation, topical, rectal, and vaginal)
5. Administer medications (e.g., oral, intramuscular and subcutaneous injections, Z-track, sublingual, transdermal, intradermal, inhalant, instillation, topical, rectal, vaginal)
6. Record administration of medications
7. Instruct patient about possible side effects
8. Instruct patients about standard infant, preschool, adolescent, and adult immunizations

**Manage the prescription process**

1. Prepare written prescription for physician's signature in accordance with physician's protocol
2. Provide written instructions for patient
3. Demonstrate use of medications to a patient
4. Maintain standing orders in accordance with physician's protocol
5. Process prescription refills in accordance with physician's protocol
6. Record medications prescribed in accordance with office protocol

**Unit 10: Medical Emergencies and Facility Safety**

**Maintain safety in the medical office/setting**

1. Identify preplanned action in an emergency (e.g., fire, inclement weather, lock-down, bomb threat)
2. Identify triage procedures in event of medical emergency
3. Explain legal implications in event of emergency

**Complete first-aid and cardiopulmonary resuscitation (CPR) training**

1. Acquire first-aid certification through the American Red Cross
2. Acquire cardiopulmonary resuscitation (CPR) certification through the *American Red Cross or American Heart Association*
3. Maintain basic first-aid and CPR certification

**Respond to medical office emergencies**

1. Recognize medical emergency situations
2. Seek the assistance of personnel appropriate to given situation
3. Locate emergency equipment (e.g., crash cart/kit, eyewash station)
4. Follow office protocol for emergencies
Unit 11: Laboratory Procedures

Collect specimens

1. Maintain laboratory supplies
2. Obtain blood specimens for testing (e.g., phlebotomy, finger stick, heel stick)
3. Secure urine specimens for testing (e.g., clean-catch, routine, catheterized)
4. Secure stool specimens for testing
5. Obtain other specimens for testing (e.g., throat, sputum, semen, exudate)
6. Assist the physician with the collection of specimens (e.g., cerebral spinal fluid, Pap smear, vaginal and urethral secretions)
7. Prepare specimens for testing and/or transfer

Perform manual and/or automated laboratory tests

1. Perform urine dipstick tests
2. Perform urine pregnancy tests
3. Perform complete blood count (CBC) with differential red blood cell count
4. Perform monospot tests
5. Perform Gram stains
6. Measure erythrocyte sedimentation rate (ESR)
7. Collect cultures
8. Perform tests on stool specimens for occult blood
9. Perform blood chemistry tests (e.g., glucose, cholesterol)

Document/report test results

1. Identify normal values of test results
2. Report Alert values and Life-Threatening values in accordance with office protocol
3. Document/distribute lab results
4. Convey test results to patient in accordance with physician’s directions

Unit 12: General Office Procedures

Perform telephone triage

1. Demonstrate telephone techniques in accordance with office protocol
2. Establish patient’s identity
3. Identify patient needs
4. Recognize signs and symptoms of an emergency situation
5. Document phone calls and action taken
6. Take action appropriate for given emergency

Maintain medical records
1. File information in accordance with office protocol
2. Prepare patient records
3. Process incoming medical reports
4. Store inactive records
5. Audit records

Demonstrate basic computer skills

1. Operate computer
2. Demonstrate basic computer skills (e.g., input information; create, copy, and save a file; use spellcheck; use computer security codes)
3. Demonstrate knowledge of using technical software specific to medical setting
4. Research information on Internet

Operate office equipment

1. Follow the manufacturer's operating procedures for each piece of equipment
2. Use voice mail, pager, cell phone, and/or intercom systems
3. Operate a transcriber
4. Operate a calculator
5. Operate a checkwriter
6. Operate a typewriter
7. Operate a copy machine
8. Operate a postage meter
9. Operate a facsimile (fax) machine
10. Operate a multiline telephone system
11. Operate an answering machine

Process office communications

1. Prepare correspondence
2. Transcribe information from a dictating machine
4. Process consent forms
5. Process mail

Perform reception duties

1. Open and close the office
2. Explain office procedures and protocol to patients
3. Prepare appointment calendar
4. Process appointments in accordance with office protocol
5. Arrange special services for patients (e.g., laboratory tests, X-rays, magnetic resonance imaging [MRI], patient referrals, hospital admissions, language/communication barriers)
6. Register patients
7. Prepare release forms
8. Prepare data for referring physicians
9. Prepare patient billing information

Maintain administrative and clinical office supplies in accordance with office protocol

1. Inventory office supplies
2. Prepare purchase requisitions
3. Order office supplies
4. Receive office supplies
5. Store office supplies

Maintain patient accounts in accordance with office protocol

1. Apply basic bookkeeping fundamentals
2. Prepare ledger
3. Post charges and credits
4. Post NSF checks
5. Explain the physician's fees
6. Compose itemized statements
7. Process collections
8. Process refunds
9. Prepare aged account reports
10. Process patient inquiries and insurance claims
11. Perform electronic billing
12. Prepare daysheet

Perform payroll functions

1. Process payroll
2. Maintain employee records
3. Maintain employee tax records

Perform general financial functions

1. Prepare financial summaries
2. Perform banking functions (e.g., bank deposit)
3. Maintain petty cash account
4. Reconcile cash and receipts
5. Reconcile bank statement
6. Process bank card transactions
7. Perform accounts payable functions

Process Insurance forms

1. Determine insurance requirements of individual patients
2. Demonstrate knowledge of the ICD9 and CPT coding systems
3. Follow required procedures for private insurance carriers
4. Follow office protocol for self-pay
5. Follow the required procedures for government-insured patients
6. Complete forms specific to the insurance carrier
7. Complete forms using the coding of the international classification of diseases (ICD9)
8. Complete forms using the coding of current procedural terminology (CPT), health care procedural code (HCPC), and/or diagnostic related groups (DRGs)

Medical Assisting
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