MEDICAL ASSISTING KNOWLEDGE

SECTION OUTLINE

Chapter 1 – The Profession of Medical Assisting
Chapter 2 – Medical Terminology
Chapter 3 – Anatomy and Physiology
Chapter 4 – Pathophysiology
Chapter 5 – Microbiology
Chapter 6 – General Psychology
Chapter 7 – Nutrition and Health Promotion
Chapter 8 – Medical Law and Ethics
LEARNING OUTCOMES

1.1 Describe the administrative, clinical, and specialized duties of a medical assistant.

1.2 List the benefits of a Medical Assisting Program.

1.3 Identify the different types of credentials available to medical assistants through examination.

1.4 List the three areas of knowledge included in the CMA and RMA exams.

1.5 Explain the requirements for obtaining and maintaining the CCMA credential.

1.6 Describe the purpose and benefits of the extern experience.

1.7 Describe the personal attributes of a professional medical assistant.

MEDICAL ASSISTING COMPETENCIES

<table>
<thead>
<tr>
<th>COMPETENCY</th>
<th>CMA</th>
<th>RMA</th>
<th>CCMA</th>
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<tr>
<td>General/Legal/Professional</td>
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<tr>
<td>Respond to and initiate written communications by using correct grammar, spelling, and formatting techniques</td>
<td>X</td>
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<tr>
<td>Recognize and respond to verbal and nonverbal communications by being attentive and adapting communication to the recipient’s level of understanding</td>
<td>X</td>
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<td>Be aware of and perform within legal and ethical boundaries</td>
<td>X</td>
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<tr>
<td>Demonstrate knowledge of and monitor current federal and state health-care legislation and regulations; maintain licenses and accreditation</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Exercise efficient time management</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Project a positive attitude</td>
<td>X</td>
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MEDICAL ASSISTING COMPETENCIES (concl.)

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<tr>
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<tr>
<td>General/Legal/Professional</td>
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<tr>
<td>Be a “team player”</td>
<td>X</td>
<td>X</td>
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<td>Exhibit initiative</td>
<td>X</td>
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<tr>
<td>Adapt to change</td>
<td>X</td>
<td>X</td>
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<td>Project a responsible attitude</td>
<td>X</td>
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<td>Be courteous and diplomatic</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Conduct work within scope of education, training, and ability</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Be impartial and show empathy when dealing with patients</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Understand allied health professions and credentialing</td>
<td>X</td>
<td>X</td>
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1.1 The Profession of Medical Assisting

Medical assisting is one of the most versatile health-care professions. Men and women can be equally successful as medical assistants. They are able to work in a variety of administrative and clinical positions within health care. According to the U.S. Department of Labor’s Occupational Outlook Handbook, medical assisting is one of the 10 fastest growing occupations.

The Duties of a Medical Assistant

Medical assistants are skilled health-care professionals who work primarily in ambulatory settings such as medical offices and clinics. The duties a medical assistant may perform include administrative and clinical duties.

Administrative duties: Administrative medical assisting duties include the following:

- Greeting patients
- Handling correspondence
- Scheduling appointments
- Answering telephones
- Using computers, facsimile (fax) machines, and other automated office equipment
- Communicating with patients, families, and coworkers
- Creating and maintaining patient medical records
- Handling billing, bookkeeping, and insurance claim form processing
- Performing medical transcription
- Arranging for hospital admissions and testing procedures
- Organizing and managing office supplies
- Explaining treatment procedures to patients
- Educating patients
- Coding for specific procedures and tests when filling out lab requests
- Collection of payments and speaking with patients about collection policies

Clinical duties: Medical assistants’ clinical duties vary according to state law. They may include the following:

- Asepsis and infection control
- Preparing the examination and treatment areas
- Interviewing patients and documenting patients’ vital signs and medical histories
- Preparing patients for examinations and explaining treatment procedures
- Assisting the physician during examinations
- Disposing of contaminated supplies
- Performing diagnostic tests, such as electrocardiograms (ECGs)
- Giving injections (where allowed by law)
- Performing first aid and cardiopulmonary resuscitation (CPR)
- Preparing and administering medications as directed by the physician, and following state laws for invasive procedures
- Removing sutures or changing wound dressings
- Sterilizing medical instruments
- Assisting patients from diverse cultural backgrounds, as well as patients with hearing or vision impairments or physical or mental disabilities
- Educating patients

Medical assistants’ clinical duties may also include processing various laboratory tests. Medical assistants may prepare the patient for the test, collect the sample, complete the test, report the results to the physician, and report information about the test from the physician to the patient. It must be
noted that medical assistants are not qualified to make any diagnoses. Specific laboratory duties may include:

- Performing tests, such as a urine pregnancy test, in the physician's office laboratory (POL)
- Performing CLIA-waived tests that have a low risk of an erroneous result, which include urinalysis and blood chemistry
- Collecting, preparing, and transmitting laboratory specimens, including blood, body fluids, cultures, tissue samples, and urine specimens
- Teaching specimen collection to patients
- Arranging laboratory services
- Meeting safety standards and fire protection mandates
- Performing as an Occupational Safety & Health Administration (OSHA) compliance officer

**Specialization**

A medical assistant may work with a wide variety of allied health professionals. In addition, medical assistants may choose to specialize in a specific field of health care, in either an administrative or clinical area. For example, ophthalmic medical assistants help ophthalmologists (physicians who provide eye care) by administering diagnostic tests, measuring and recording vision, testing the functioning of a patient's eyes and eye muscles, and performing other duties. Additional training may be required for a medical assistant to specialize in certain areas.

Administrative specialty areas include the following:

- Multiskilled health-care professional
- Medical office administrator
- Dental office administrator
- Medical transcriptionist
- Medical record technologist
- Coding, billing, and insurance specialist

Clinical specialty areas include the following:

- Histologic technician
- Surgical technologist
- Physical therapy assistant
- CPR instructor
- Medical laboratory assistant
- Phlebotomist

**1.2 Membership in a Medical Assisting Association**

Certification and Registration

Certification or registration is not required to practice as a medical assistant in most states. However, for instance, as of July 2013, the state of Washington now requires certification. Source: [http://apps.leg.wa.gov/rcw/default.aspx?cite=18.360&full=true](http://apps.leg.wa.gov/rcw/default.aspx?cite=18.360&full=true). You may practice with a high school diploma or the equivalent. However, you will have more career options if you graduate from an accredited school and become certified or registered.

A solid medical assisting program provides the following:

- Facilities and equipment that are up to date
- Job placement services
- A cooperative education program and opportunities for continuing education

**1.3 Medical Assisting Credentials**

Professional associations set high standards for quality and performance in a profession. They define the tasks and functions of an occupation. They also provide members with the opportunity to communicate and network with one another.

**State and Federal Regulations**

Certain provisions of the Occupational Safety and Health Act (OSHA) and the Clinical Laboratory Improvements Act of 1988 (CLIA ’88) are making mandatory credentialing for medical assistants a logical step in the hiring process. Currently, OSHA and CLIA ‘88 do not require that medical assistants be credentialed. However, various components of these statutes and their regulations can be met by demonstrating that medical assistants in a clinical setting are certified.

One of the CLIA regulatory categories based on their potential risk to public health is waived tests. Waived tests are “laboratory examination and procedures that have been approved by the Food and Drug Administration for home use or that, as determined by the secretary, are simple laboratory examinations and procedures that have an insignificant risk of an erroneous result.”

**CMA Certification**

The Certified Medical Assistant (CMA) credential is awarded by the Certifying Board of the American Association of Medical Assistants (AAMA). The AAMA works to raise the standards of medical assisting to a more professional level. It is the only professional association devoted exclusively to the medical assisting profession. Also, the AAMA is the only organization that certifies MAs that also requires them to graduate from an accredited program. Figure 1-1 shows the pin worn by medical assistants who are certified by the AAMA.

The idea for a national association of medical assistants, which eventually became the AAMA, began at the 1955 annual state convention of the Kansas Medical Assistants Society. The AAMA was created at an American Medical Association meeting the next year. In 1978, the U.S. Department of Health, Education, and Welfare declared medical assisting an allied health profession. The AAMA’s website address is [www.aama-ntl.org](http://www.aama-ntl.org).

![Figure 1-1 This pin is worn by members of the American Association of Medical Assistants.](http://www.aama-ntl.org)
The AAMA Role Delineation Study: In 1996 the AAMA formed a committee. Its goal was to revise and update the standards used for accrediting medical assisting programs. Accreditation is defined as a process in which recognition is granted to an education program. The committee’s findings were published in 1997 under the title of the “AAMA Role Delineation Study: Occupational Analysis of the Medical Assisting Profession.” Included was a new Role Delineation Chart that outlined the areas of competence entry-level medical assistants must master. The Role Delineation Chart was further updated in 2003. The AAMA’s certification examination evaluates the mastery of medical assisting competencies on the basis of the 2003 Role Delineation Study. To take this exam, you must have graduated from a post-secondary accredited program. The National Board of Medical Examiners (NBME) also provides technical assistance in developing the tests. Its website address is www.nbme.org.

The areas of competence listed in the AAMA Role Delineation Study must be mastered by all students enrolled in accredited medical assisting programs. Each of the three areas of competence—administrative, clinical, and general (or trans-disciplinary)—contains a list of statements that describe the medical assistant’s role.

According to the AAMA, the Role Delineation Chart may be used to:

- Describe the field of medical assisting to other health-care professionals
- Identify entry-level competency areas for medical assistants
- Help practitioners assess their own current competence in the field
- Aid in the development of continuing education programs
- Prepare appropriate materials for home study

Professional support for CMAs: Members of the AAMA have a large support group of active medical assistants. Membership benefits include:

- Professional publications, such as CMA Today
- A large variety of educational opportunities
- Legal counsel
- Group insurance

Recertification for the CMA is required every 5 years. The MA may choose to recertify by taking the examination again, or by obtaining 60 continuing education units (CEUs) over this 5 year period.

RMA Certification

The Registered Medical Assistant (RMA) credential is awarded by the American Medical Technologists (AMT), an organization founded in 1939. AMT is accredited by the National Commission for Certifying Agencies (NCCA) and a member of the Institute for Credentialing Excellence. RMA credentialing, used by the AMT since 1984, ensures that you have taken and passed the AMT certification examination for the Registered Medical Assistant. The AMT’s website address is www.americanmedtech.org.

Professional support for RMAs: The AMT offers many benefits for RMAs. These include:

- Insurance programs, including liability, health, and life
- Membership in the AMT Institute for Education
- State chapter activities
- Annual meeting and educational seminars

Recertification for the RMA is required every 3 years. Also, 30 hours of continuing education credits are required every year to maintain certification.

The American Registry of Medical Assistants (ARMA)

Medical assistants who become certified by passing a national certification examination (for example, the CMA or RMA) and medics in military service may apply for membership with the American Registry of Medical Assistants (ARMA).

ARMA is a national registry established in 1950 that certifies medical assistants who have provided the necessary documentation to be a qualified medical assistant.

ARMA grants qualified members the credential of RMA for clinical medical assistants and RMA-A for administrative medical assistants. The ARMA’s website address is arma-cert.org.

1.4 CMA and RMA Exam Topics

The CMA and RMA qualifying examinations are rigorous. Participation in an accredited program, however, will help you learn what you need to know. The examinations cover several distinct areas of knowledge. These include:

- Administrative knowledge, including medical records management, collections, insurance processing, and HIPAA (Health Insurance Portability and Accountability Act)
- Clinical knowledge, including examination room techniques; the preparation, calculation, and administration of medications; performing ECGs; and specimen collection
- General medical knowledge, including terminology, behavioral science, and medical law and ethics

1.5 Certified Clinical Medical Assistant (CCMA) Examination

This credential is awarded by the National Healthcareer Association (NHA). The CCMA exam is offered in a written form or by computer via its website. It consists of 200 questions covering several distinct areas of knowledge. These areas emphasize clinical knowledge, including general assisting, ECG, phlebotomy, and basic lab skills. Also included is preparation of patients, such as taking a medical history, vital signs, physical examination, and patient positioning; biological hazards; emergency first aid; infection control; understanding the
structure of a prescription; anatomy and physiology; law and ethics; pharmacology; specimen handling; quality control; use of microscopes; and various laboratory procedures. CCMAs also need 5 hours of continuing education per year in order to keep their certification. Recertification for the CCMA is required every 5 years.

1.6 Externships

An externship offers work experience while you complete a medical assisting program. You will practice skills learned in the classroom in an actual medical office environment. The term “externship” is interchangeable with “internship.” Externship refers to practical experience obtained after completing classroom requirements, while internship refers to practical experience obtained while still attending classes. A medical assisting extern must be able to accept constructive criticism, be flexible, and also be willing to learn. In an externship, you may be exposed to some procedures that are not performed exactly as you were taught in the classroom or clinical laboratory. There is usually more than one way to get the desired result in patient care. Learn as much as possible while on an externship. It is unprofessional to argue with an externship preceptor. Ask your externship preceptor to explain any differences in techniques from what you learned while you were in the classroom.

References and Portfolios

In addition to enhancing medical assisting skills, an externship offers an opportunity to get a good reference. A medical assistant’s reference is usually written by a supervisor. This reference will describe the student’s performance, strengths, and skills. A reference is one part of the medical assistant’s portfolio. In addition to a letter of reference, a portfolio typically contains a list of references, the student’s resume, any certifications acquired (for example, CPR certification), and other documents of interest that detail volunteer service in a health-related field.

1.7 Preparing for Employment

The next phase of beginning a new career is seeking a position as a medical assistant. Most accredited schools have a Career Services department whose primary focus is job placement after graduation. Career Services will assist you with your resume, interviewing skills, and learning about positions in your field. It is important to include certification awarded in relation to a position on your resume. Medical assistants also can learn about available positions by using classified ads, Internet sites, and employment services and by networking with colleagues, relatives, and friends. New employee: An initial performance evaluation should be given in 90 days after employment.

Personal Attributes

Medical assistants can be more effective and productive if they have the personal qualifications of professionalism, empathy, flexibility, self-motivation, integrity, and honesty. A neat and professional appearance is also essential.

Professionalism: A medical assistant should demonstrate courtesy, conscientiousness, and a generally businesslike manner at all times. It is essential for medical assistants to act professionally with patients, doctors, and coworkers. You represent the physician’s practice and should treat all patients with dignity and kindness. It is important to begin acting like a professional even while you are in the classroom studying to become a medical assistant. Present a neat appearance and show courtesy and respect for peers and instructors.

Professionalism is also displayed in your attitude. The medical assistant is a skilled professional on whom many people, including coworkers and patients, depend. Your attitude can make or break your career. A professional always projects a positive, caring attitude. In the workplace environment, a professional medical assistant is pleasant and courteous and conducts herself in a businesslike and professional manner. The medical assistant should avoid using terms of endearment with patients and remain strictly professional.

Empathy: Empathy is the ability to put yourself in someone else’s situation—to identify with and understand another person’s feelings. Patients who are sick, frustrated, or frightened appreciate empathetic medical personnel. It is always advisable for the medical assistant to ask patients if they need any assistance, including disabled patients.

Flexibility: An attitude of flexibility will allow you to adapt and handle situations with professionalism. For example, when a physician’s schedule changes to include evening and weekend hours, the staff also may be asked to change their schedules. Therefore, you must be flexible and meet the employer’s needs.

Self-motivation: You must be self-motivated and offer assistance with work that needs to be done, even if it is not your assigned job. For example, if a coworker is on sick leave or vacation, offer to pitch in and work extra time to keep the office running smoothly.

Integrity and honesty: A medical assistant with integrity holds himself to high standards. Every task must be performed with the goal of excellence. Individuals with integrity have great pride in everything they do. Integrity may be characterized by honesty, dependability, and reliability. The most important elements in providing superior customer service to patients are integrity and honesty. If you make an error, be honest about it. In order to have integrity, you must be dependable and reliable. Everyone in the office must be able to trust you and the decisions you make.

Accountability: Legal, mental, or moral responsibility. In medicine, it refers to the responsibility for moral and legal requirements of patient care. You should be able to work effectively as a team member in the medical office and ensure that you act responsibly.

Neat appearance: Medical facilities expect externs and their staff to appear as medical professionals. Most require a uniform that consists of a scrub top and bottom and a lab jacket. Your scrubs should be clean, pressed, and well fitting. Shoes should be clean, white, and in good repair. Your name tag or badge should always be worn and visible to patients. Nails

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should be clean and trimmed. Facial and tongue piercings are not acceptable when working with patients, and visible tattoos must be covered. Your hair should be a natural color and pulled back from your face and off the collar. If you wear makeup, it should be conservative and in good taste. Perfumes and colognes should be avoided because patients with respiratory conditions or allergies may not be able to tolerate them.

Types of Medical Practice
Medical practice has a variety of specialties, which include the following:
- Cardiology
- Endocrinology
- Gastroenterology
- Neurology
- Nephrology
- Internal medicine
- Gynecology
- Obstetrics
- Oncology
- Ophthalmology
- Pathology
- Gerontology
- Dermatology
- Orthopedics
- Otorhinolaryngology
- Proctology
- Radiology
- Nuclear medicine
- Plastic surgery
- Pediatrics
- Podiatry
- Anesthesiology
- Bariatrics
CHAPTER 1 REVIEW

Instructions:
Answer the following questions.

1. Which of the following words best describes a medical assistant who works effectively as a team member in the medical office?
   A. Passive
   B. Obtrusive
   C. Argumentative
   D. Accountable
   E. Aggressive

2. Accreditation may be defined as
   A. A contract that specifies an agreement
   B. Permission to engage in a profession
   C. Permission to be licensed
   D. An assessment of an individual’s performance
   E. A process in which recognition is granted to an education program

3. Which one of the following organizations declared medical assisting an allied health profession?
   A. U.S. Department of Justice
   B. U.S. Department of Health, Education, and Welfare
   C. U.S. Department of Health and Human Services
   D. Occupational Safety and Health Administration
   E. American Association of Medical Assistants

4. Which of the following organizations offers the Registered Medical Assistant credential?
   A. AMA
   B. AAMA
   C. AMT
   D. CDC
   E. NBME

5. The CMA and RMA examinations cover all of the following distinct areas of knowledge except
   A. Calculations for preparing medications
   B. HIPAA
   C. Criminal justice
   D. Medical records
   E. Behavioral science

6. Which of the following organizations publishes a journal called CMA Today?
   A. Centers for Disease Control and Prevention
   B. AMT
   C. AAMA

7. Which of the following professional attributes indicates the ability to identify with someone else’s situation?
   A. Empathy
   B. Professionalism
   C. Self-motivation
   D. Integrity
   E. Flexibility

8. The goal of the 1996 AAMA Role Delineation Study was to
   A. Revise and update the CMA exam questions
   B. Revise and update the standards used for the accreditation of medical assisting programs
   C. Create a new role and policy of practicing medicine
   D. Establish a new organization that would combine the AAMA and AMT into one organization
   E. Publish all materials needed for medical assisting programs

9. The initials “RMA” listed after a medical assistant’s name indicate
   A. A professional person
   B. Registration
   C. A multiskilled person
   D. Compliance
   E. Credentials

10. After you become a certified clinical medical assistant, how often is recertification required?
    A. Every year
    B. Every 2 years
    C. Every 3 years
    D. Every 5 years
    E. Every 7 years

11. Which of the following terms refers to legal, mental, or moral responsibility?
    A. Knowledge
    B. Trust
    C. Accountability
    D. Reputation
    E. Concern

12. When should an initial performance evaluation be given for a new employee?
    A. Within 1 week
    B. Within 2 weeks
    C. Within 1 month
13. Which of the following behaviors might be displayed by a medical assistant who is behaving unprofessionally?
   A. Knocking on the door before entering the examination room
   B. Using a term of endearment when talking to a patient
   C. Explaining long delays to patients waiting in the reception area
   D. Being calm while dealing with an angry patient
   E. Thanking a patient for paying for services

14. Which of the following terms describes behaving courteously, conscientiously, and in a generally businesslike manner?
   A. Self-motivation
   B. Professionalism
   C. Job description
   D. Ethics
   E. Morals

15. The most important elements in providing superior customer service to patients are
   A. Self-motivation and flexibility
   B. Neat appearance and self-confidence
   C. Integrity and honesty
   D. Communication of empathy
   E. Wisdom and intellect

16. Which of the following constitutes unprofessional behavior when interacting with an externship preceptor?
   A. Accepting criticism
   B. Arguing
   C. Being flexible
   D. Listening to instructions
   E. Having references

17. Which of the following is/are the greatest benefits of an AAMA membership?
   A. Legal counsel
   B. Group insurance
   C. A large variety of educational opportunities
   D. All of these
   E. None of these

18. Which of the following is the correct website address for the National Board of Medical Examiners?
   A. www.nbme.org
   B. www.nbme.gov

19. Which of the following is not an example of a medical assistant’s clinical duties?
   A. Preparing patients for examinations
   B. Interviewing patients and documenting their vital signs
   C. Performing diagnostic tests
   D. Explaining treatment procedures to patients
   E. Diagnosing communicable diseases

20. Currently, the Occupational Safety and Health Act and the Clinical Laboratory Improvements Act do not require medical assistants to be
   A. Certified
   B. Credentialed
   C. Registered
   D. All of these
   E. None of these

21. Specific laboratory duties for medical assistants include all of the following, except
   A. Meeting safety standards and fire protection mandates
   B. Teaching specimen collection to patients
   C. Performing as an Occupational Safety & Health Administration (OSHA) compliance officer
   D. Arranging laboratory services
   E. Collecting arterial blood for measuring blood oxygen levels

22. Which of the following is the most appropriate information to include on a resume?
   A. Names of family members
   B. A recent, professional photograph
   C. A reason for leaving a previous position
   D. Certifications awarded relating to a position
   E. Salary requirements

23. A patient with a physical disability comes to the office. The most appropriate response by the medical assistant is to
   A. Express sympathy regarding the disability
   B. Tell your supervisor
   C. Ask the patient whether assistance is needed
   D. Ask the patient how the disability occurred
   E. Assume that the patient needs assistance and begin giving aid

CHAPTER 1 / The Profession of Medical Assisting
24. Which of the following acts includes regulations regarding the testing of patient specimens that have a low risk of an erroneous result?

A. Occupational Safety and Health Act
B. Controlled Substances Act
C. Medical Practice Act
D. Food, Drug, and Cosmetic Act
E. Clinical Laboratory Improvements Act

25. The abbreviation “CMA,” when listed after a medical assistant’s name, is his or her

A. Credential
B. Compliance
C. Skill level
D. Licensure
E. Registration