

# Medical Assistant Cheat Sheet

## Anatomy and Physiology

The human body has 11 organ systems. The heart has four chambers: two atria and two ventricles. Blood types include A, B, AB, and O, with positive or negative Rh factors. The largest organ of the body is the skin. The skeletal system consists of 206 bones. Neurons transmit nerve impulses. The respiratory system includes the trachea, bronchi, and lungs. The stomach, liver, and pancreas are part of the digestive system. Kidneys are crucial for filtering blood and urine formation. Hormones are produced by the endocrine glands.

## Medical Terminology

"Hypo-" means under or below; "hyper-" means over or above. "-itis" indicates inflammation; "-ectomy" refers to removal. "Cardio-" pertains to the heart; "neuro-" to the nervous system. "Hemat-" relates to blood; "gastro-" to the stomach. "Cytology" is the study of cells. "Osteo-" refers to bones; "arthro-" to joints. "Dermat-" is skin; "pulmo-" pertains to the lungs. "Pathy" means disease; "plasty" means surgical repair. "Tachy-" denotes fast; "brady-" means slow. "Hepat-" relates to the liver.

## Patient Care

Vital signs include temperature, pulse, respiration, and blood pressure. Proper hand hygiene is crucial to prevent infection. Personal Protective Equipment (PPE) includes gloves, masks, and gowns. The five rights of medication administration: right patient, drug, dose, route, and time. Body Mechanics involve safe lifting techniques to prevent injury. Aseptic technique includes procedures to reduce infection risk. Phlebotomy is the act of drawing blood. Basic Life Support (BLS) for healthcare providers includes CPR. Patient privacy is protected under HIPAA. Empathy and effective communication are key in patient care.

## Administrative Knowledge

Medical records management is essential for patient care continuity. Insurance processing requires understanding of terms like deductible and copay. ICD-10 and CPT codes are used for diagnosis and billing. Appointment scheduling should consider patient needs and healthcare provider availability. Medical ethics include autonomy, beneficence, non-maleficence, and justice. Confidentiality of patient information is legally required.

Electronic Health Records (EHR) are digital versions of patients' paper charts. Billing and coding accuracy is crucial for reimbursement. Inventory management includes ordering and stocking medical supplies. Understanding medical office financial procedures, like billing cycles and collections, is important.

## Clinical Knowledge and Skills

Sterilization techniques include autoclaving and using disinfectants. Administering injections requires knowledge of sites and techniques. Basic wound care involves cleaning, dressing, and monitoring. EKG machines monitor the heart's electrical activity. Spirometry tests lung function. Understanding dietary restrictions can aid in patient care. Blood pressure measurement techniques are crucial. Glucose testing is vital for diabetic patient management. Urinalysis can detect diseases and drug presence. Proper disposal of sharps and biohazard materials is essential for safety.

## Legal and Ethical Issues

The Good Samaritan Law provides legal protection to those giving reasonable aid in an emergency. Informed consent is necessary for many medical procedures. Mandatory reporting laws cover child and elder abuse. Patient rights include access to medical records and informed consent. Medical malpractice involves negligence leading to patient harm. The Americans with Disabilities Act (ADA) prohibits discrimination against individuals with disabilities.

Patient confidentiality must be maintained, except in specific legal or safety situations.

Advanced directives include living wills and durable power of attorney for healthcare.

The Occupational Safety and Health Administration (OSHA) sets and enforces safety and health standards in the workplace.

The Family Medical Leave Act (FMLA) allows employees to take unpaid, job-protected leave for family and medical reasons.

## Pharmacology

Antibiotics treat bacterial infections. Analgesics are used for pain relief. Antihypertensives are used to lower blood pressure. Diuretics help the body eliminate excess salt and water. Insulin is used in the management of diabetes. Anticoagulants prevent blood clots. Vaccines are used to prevent infectious diseases. Antidepressants treat symptoms of depression. Bronchodilators are used for asthma and other respiratory conditions. Opioids are potent pain relievers with a high potential for addiction.

## First Aid and Emergency Care

CPR (Cardiopulmonary Resuscitation) is critical in cardiac arrest. The Heimlich maneuver is used to clear airway obstructions. Burns are treated based on their severity or degree. Fractures require immobilization and professional medical care. Signs of a stroke include facial drooping, arm weakness, and speech difficulties. Anaphylaxis is a severe allergic reaction requiring immediate epinephrine. Hypoglycemia (low blood sugar) symptoms include shaking, confusion, and hunger. Heatstroke symptoms include high body temperature, altered mental state, and nausea. Frostbite requires gradual warming and medical evaluation. Poisoning interventions depend on the substance and route of exposure.

## Disease Prevention and Management

Handwashing is the most effective way to prevent the spread of infections.

Immunizations are crucial for preventing vaccine-preventable diseases.

Chronic diseases such as diabetes, hypertension, and heart disease require ongoing management.

Early detection of diseases through screenings can improve outcomes.

Lifestyle modifications, including diet and exercise, are key to managing many health conditions.

Mental health is an essential component of overall health.

Substance abuse negatively impacts health and requires intervention.

STD prevention includes the use of condoms and regular testing.

Proper management of stress contributes to overall well-being.

Patient education on self-care is essential for chronic disease management.

## Communication and Interpersonal Skills

Active listening is crucial for understanding patient concerns.

Non-verbal communication, such as body language, affects patient interactions.

Maintaining professionalism in all patient and colleague interactions is key.

Cultural competence improves patient care in diverse populations.

Empathy and compassion are fundamental in patient care.

Confidentiality must be maintained in all communications.

Effective communication includes clear, concise, and appropriate messaging.

Feedback, both giving and receiving, is essential for professional growth.

Conflict resolution skills can improve workplace dynamics.

Educating patients requires adjusting the message to their level of understanding.

## Glossary

Asepsis: The absence of bacteria, viruses, and other microorganisms to prevent infection.

Bilateral: Relating to or affecting both sides of the body.

Biohazard: Any biological material that poses a risk to human health.

Bradycardia: Slow heart rate, typically below 60 beats per minute.

Catheter: A tube that can be inserted into a body cavity, duct, or vessel for drainage or administration of fluids.

Cyanosis: A bluish discoloration of the skin resulting from poor circulation or inadequate oxygenation of the blood.

Debridement: The removal of dead, damaged, or infected tissue.

Deductible: The amount a patient must pay out of pocket before insurance begins to cover expenses.

Diastolic: The bottom number in a blood pressure reading, representing the pressure in the arteries when the heart rests between beats.

Ectomy: A suffix meaning the surgical removal of a part of the body.

Edema: Swelling caused by excess fluid trapped in the body's tissues.

EHR (Electronic Health Record): A digital version of a patient's paper chart that can be shared across different healthcare settings.

Electrocardiogram (EKG/ECG): A test that measures the electrical activity of the heartbeat.

Empathy: The ability to understand and share the feelings of another.

Fibrillation: A rapid, irregular, and unsynchronized contraction of muscle fibers (commonly referring to the heart).

Gait: The manner or style of walking.

Glucometer: A device for measuring the approximate concentration of glucose in the blood.

Hematoma: A solid swelling of clotted blood within the tissues.

HIPAA (Health Insurance Portability and Accountability Act): Legislation that provides data privacy and security provisions for safeguarding medical information.

Hyperglycemia: High blood sugar levels.

Hypoglycemia: Low blood sugar levels.

Immunization: The process by which a person becomes protected against a disease through vaccination.

Informed Consent: Permission granted in the knowledge of the possible consequences.

Intramuscular (IM): Into the muscle, a method of medication administration.

Intravenous (IV): Into the vein, a method of medication administration.

Jaundice: A yellowing of the skin and eyes due to high bilirubin levels.

Ketones: Chemicals produced when the body burns fat for energy; high levels can indicate diabetes.

Laceration: A deep cut or tear in skin or flesh.

Malpractice: Negligence by a professional healthcare provider in which the treatment provided falls below the accepted standard of practice in the medical community and causes injury or death to the patient.

Necrosis: The death of body tissue due to lack of blood supply or infection.

Nosocomial Infection: An infection acquired in a hospital setting.

Palpation: The act of feeling the body with the hands to examine it.

Pathogen: A bacterium, virus, or other microorganism that can cause disease.

Phlebotomy: The act or practice of drawing blood for diagnostic testing or treatment.

Placebo: A harmless pill, medicine, or procedure prescribed more for the psychological benefit to the patient than for any physiological effect.

PPE (Personal Protective Equipment): Equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses.

Pronation: The rotation of the hand and forearm so that the palm faces backwards or downwards.

Prone: Lying flat, especially face downward.

Proximal: Closer to the point of attachment or origin.

Pulse Oximetry: A noninvasive method for monitoring a person's oxygen saturation.

Quarantine: A restriction on the movement of people and goods, which is intended to prevent the spread of disease or pests.

Range of Motion (ROM): The full movement potential of a joint, usually its range of flexion and extension.

Sphygmomanometer: An instrument for measuring blood pressure.

Sterilization: The process of making something free from bacteria or other living microorganisms.

Subcutaneous (Sub-Q): Beneath the skin, a method of medication administration.

Supination: The rotation of the forearm and hand so that the palm faces forward or upward.

Supine: Lying face upward.

Systolic: The top number in a blood pressure reading, representing the pressure in the arteries when the heart beats and fills them with blood.

Tachycardia: Fast heart rate, typically more than 100 beats per minute.

Triage: The process of determining the priority of patients' treatments based on the severity of their condition.

Ultrasound: A method of producing images of the interior of the body through the use of sound waves.

Vaccination: The administration of a vaccine to help the immune system develop protection from a disease.

Vasoconstriction: The narrowing of the blood vessels resulting from contraction of the muscular wall of the vessels.

Vasodilation: The widening of blood vessels resulting from relaxation of the muscular wall of the vessels.

Venipuncture: The puncture of a vein as part of a medical procedure, typically to withdraw blood or insert an intravenous line.

Vertigo: A sensation of whirling and loss of balance, often caused by looking down from a great height or by disease affecting the inner ear.