

**ARKANSAS STATE BOARD OF NURSING**

Curriculum and Clinical Experiences Guidelines for Medication Assistant Training

**Module I. Medication Principles**

<b>Learning Objectives: By the completion of this module, the learner will be able to:</b>	<b>Content Outline</b>
<ol style="list-style-type: none"> <li>1. Describe the different documents on which medications can be ordered and documented.</li> <li>2. Discuss the various tasks to be performed for medications to be safely obtained and stored.</li> <li>3. Identify conditions necessitating disposal of medication or questioning a medication order.</li> </ol>	<p>Functions involved in the management of medications, including prescription, documenting, storage, disposal, obtaining and questioning</p> <ol style="list-style-type: none"> <li>A. Medication prescription/order               <ol style="list-style-type: none"> <li>1. Recorded on chart</li> <li>2. Verbal or telephone orders. CMA/MA-C cannot take verbal or telephone orders.</li> </ol> </li> <li>B. Medication documentation system               <ol style="list-style-type: none"> <li>1. Agency's medication document</li> <li>2. Medication Administration Record (MAR)</li> <li>3. Kardex</li> <li>4. Controlled substance medication log</li> </ol> </li> <li>C. Medication Storage               <ol style="list-style-type: none"> <li>1. Storage Room</li> <li>2. Medication room</li> <li>3. Medication cart</li> <li>4. Medication tray</li> <li>5. Refrigerator</li> </ol> </li> <li>D. Obtaining medications</li> <li>E. Disposal of contaminated or unused medication</li> <li>F. Questioning a medication order</li> </ol>
<ol style="list-style-type: none"> <li>4. State the ways to measure medications.</li> </ol>	<p>Mathematics, Weights, and Measures</p> <ol style="list-style-type: none"> <li>A. CMA/MA-Cs do not convert medications dosages</li> <li>B. Systems of measurement               <ol style="list-style-type: none"> <li>1. Apothecaries' system</li> <li>2. Metric system (including Liters for oxygen)</li> <li>3. Common household measures</li> <li>4. Roman numerals - drams or grains</li> <li>5. Units (insulin) by action, not weight or volume</li> <li>6. Weight is grain</li> <li>7. Volume is minim</li> </ol> </li> </ol>
<ol style="list-style-type: none"> <li>5. State the different forms in which medication can be manufactured.</li> </ol>	<p>Forms of Medication</p> <ol style="list-style-type: none"> <li>A. Liquid               <ol style="list-style-type: none"> <li>1. Aerosol</li> <li>2. Inhalant</li> <li>3. Drops</li> <li>4. Elixir</li> <li>5. Spray</li> <li>6. Solution</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>7. Suspension (needs mixing/shaking)</li> <li>8. Syrup</li> <li>9. Tincture</li> <li>10. Insulin</li> <li>B. Solid and semi-solids <ul style="list-style-type: none"> <li>1. Capsules</li> <li>2. Tablet (dissolve)</li> <li>3. Scored versus unscored</li> <li>4. Caplets</li> <li>5. Time-released</li> <li>6. Covered with a special coating (not to be crushed)</li> <li>7. Lozenges (dissolve)</li> <li>8. Ointment</li> <li>9. Paste</li> <li>10. Powder</li> <li>11. Cream</li> <li>12. Lotion</li> <li>13. Liniment</li> </ul> </li> <li>C. Medical Gas <ul style="list-style-type: none"> <li>1. Oxygen</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>6. Understand the same medication may have different names.</li> <li>7. Identify accepted abbreviations.</li> <li>8. List what must be confirmed before medication is administered.</li> <li>9. State the types of information that should be known prior to giving a medication.</li> </ul>	<p>Medication Basics</p> <ul style="list-style-type: none"> <li>A. Terminology <ul style="list-style-type: none"> <li>1. Medication names <ul style="list-style-type: none"> <li>a. Generic</li> <li>b. Brand or trade name</li> </ul> </li> </ul> </li> <li>B. Abbreviations <ul style="list-style-type: none"> <li>1. Use standardized abbreviations, acronyms, and symbols</li> <li>2. Do not use abbreviations that should no longer be in use. (<a href="http://www.lsmp.org">www.lsmp.org</a> and <a href="http://www.icafo.org">www.icafo.org</a>)</li> </ul> </li> <li>C. Dosage Range (including sliding scale and oxygen titration)</li> <li>D. Actions (how drug causes chemical changes in body)</li> <li>E. Purpose and effect (combination of biological, physical and psychological changes)</li> <li>F. Implications for administration (what medical conditions are treated by the drug)</li> <li>G. Therapeutic effects (desired effect)</li> <li>H. Side effects (reaction not part of main effect desired. Systemic or localized effects) <ul style="list-style-type: none"> <li>I. Precautions (anticipate or prepare for conditions that may change effect of drug)</li> </ul> </li> <li>J. Contraindications (condition making drug dangerous to use)</li> <li>K. Allergic reactions (life threatening - anaphylaxis)</li> <li>L. Adverse reactions (unpleasant or serious side effects, other than desired)</li> <li>M. Tolerance (body adapts to drug and may be resistant/less effective)</li> </ul>

	<p>N. Interactions</p> <ol style="list-style-type: none"> <li>1. Specific administration information (e.g. do not take with grapefruit Juice).</li> <li>2. Certain classes of medications that should not be prescribed at the same time</li> </ol> <p>O. Additive (synergistic) or antagonist effect</p> <p>P. Idiosyncratic (drug had unusual effect)</p> <p>Q. Paradoxical effect (drug works in opposite way)</p>
<p>10. List the three safety checks of medication administration.</p> <p>11. Identify the six rights of medication administration.</p>	<p>Rights of Medication Administration</p> <p>A. Three safety checks</p> <ol style="list-style-type: none"> <li>1. When removing the medication package from storage (drawer/shelf)</li> <li>2. When removing the medication from the package or container it is kept in       <ol style="list-style-type: none"> <li>a. Insulin dose verification with nursing supervisor prior to administration</li> </ol> </li> <li>3. When returning the package to where it is stored</li> </ol> <p>B. Six rights of medication administration</p>
<p>12. Describe basic steps of medication preparation prior to administration.</p>	<p>Preparation and Actual Medication Administration</p> <ol style="list-style-type: none"> <li>A. Wash hands.</li> <li>B. Review medications that require checking of pulse, blood pressure, oxygen saturation, or blood glucose before administering.</li> <li>C. Identify the patient.</li> <li>D. Introduce yourself.</li> <li>E. Explain what you are going to do.</li> <li>F. Glove if necessary.</li> <li>G. Position the patient.</li> <li>H. Do what you explained.</li> <li>I. Wash hands.</li> <li>J. Document.</li> </ol>

## Module II. Medication Safety

<b>Learning Objectives: By the completion of this module, the learner will be able to:</b>	<b>Content Outline</b>
1. State information needed prior to medication administration.	Prevention of Medication Errors A. Know the following before administering medications 1. Name (generic and trade) 2. Purpose 3. Effect 4. Onset, Peak, Duration 5. Side effect 6. Adverse effects 7. Interactions 8. Special instructions 9. Where to get help
2. Identify common causes of medication errors. 3. State what steps should be taken when a medication error occurs.	Incident Reporting A. Failure to follow prescriber's orders exactly B. Failure to follow manufacturer's specifications/directions for use C. Failure to follow accepted standards for medication administration D. Notify the agency's nurse supervisor according to the agency policy. E. Fill out a medication error or incident report.

### Module III. Communication and Documentation

<b>Learning Objectives: By the completion of this module, the learner will be able to:</b>	<b>Content Outline</b>
1. State when the nurse must be notified of a change in the patient's normal condition.	Reporting of Symptoms or Side Effects A. Observe, monitor, and report any change that is different from the patient's normal condition. B. Notify the nurse as soon as possible with as much information as available. C. Record changes.
2. Explain the methods to take vital signs.	Techniques to Check and Record Vital Signs A. Temperature B. Pulse C. Respirations D. Blood Pressure E. Pain F. Report any change from the patient's normal condition. G. Document selected information on appropriate record.
3. State documentation requirements for medication administration.	Documentation of Medication Administration A. Identifying initials and time on MAR. B. Circle and document the reasons that a patient may not take a medication. C. PRN medication per facility/agency policy

### Module IV. Medication Administration

<b>Learning Objectives: By the completion of this module, the learner will be able to:</b>	<b>Content Outline</b>
1. Identify common methods of medication administration.	Routes of Administration A. Oral B. Buccal C. Sublingual D. Inhaler (metered dose) E. Nebulizer F. Nasal G. Eye (ophthalmic) H. Ear (otic) I. Topical J. Soaks K. Transdermal (e.g., patch) L. Subcutaneous injection (insulin only) M. Inhalation (oxygen)
2. List body systems that may be affected by medication administration.	Body Systems A. Cardiovascular/circulatory B. Respiratory C. Digestive/gastrointestinal D. Nervous E. Integumentary/skin F. Sensory (eyes, ears) G. Musculoskeletal H. Endocrine I. Reproductive J. Immune K. Urinary
3. State effects of medication on the body.	Medication Actions A. Relieves pain B. Controls or prevents growth of bacteria, fungus or viruses C. Reduces inflammation D. Replaces chemicals missing or low in body E. Corrects an irregular, fast, or slow heart rate F. Prevents seizures G. Prevents blood from clotting H. Decreases mucous production I. Lowers blood pressure J. Lowers body temperature K. Relaxes muscles L. Promotes bowel movements M. Increases water loss through kidneys N. Relieves anxiety O. Promotes sleep P. Lowers blood glucose levels

	Q. Provides supplemental oxygen to the body
4. Identify factors that may affect how the body uses medication	<p>Factors Affecting How the Body Uses Medication</p> <ul style="list-style-type: none"> <li>A. Age</li> <li>B. Size</li> <li>C. Family traits</li> <li>D. Diet</li> <li>E. Disease</li> <li>F. Psychological issues</li> <li>G. Gender and basic metabolic rate</li> <li>H. Dosage</li> <li>I. Site of administration</li> <li>J. Exercise and/or oxygen demand</li> <li>K. Other medications</li> </ul>
5. Identify various classifications of medications	<p>Classes of Medications Related to Body Systems</p> <ul style="list-style-type: none"> <li>A. Anti-infective, Anti-viral, or Anti-fungal</li> <li>B. Cardiovascular</li> <li>C. Respiratory</li> <li>D. Gastrointestinal</li> <li>E. Nervous system</li> <li>F. Eyes</li> <li>G. Ears</li> <li>H. Endocrine</li> <li>I. Topical</li> <li>J. Urinary</li> <li>K. Analgesics</li> <li>L. Antidiabetic</li> <li>M. Medical gas</li> </ul>
6. Identify resource materials and professions to contact for clarification of medication questions	<p>Location of Resources and References</p> <ul style="list-style-type: none"> <li>A. Package/drug insert (brochure)</li> <li>B. Physicians' Desk Reference (PDR)</li> <li>C. Pharmacist</li> <li>D. Nurse</li> </ul>

## Module V. Ethical and Legal Issues

<b>Learning Objectives: By the completion of this module, the learner will be able to:</b>	<b>Content Outline</b>
<ol style="list-style-type: none"> <li>1. Distinguish between the tasks a CMA/MA-C can and cannot accept.</li> <li>2. Recognize what should be reported to the nurse.</li> <li>3. Identify when a delegated task should not be accepted.</li> <li>4. List reasons the CMA/MA-C can be disciplined by the Arkansas Board of Nursing.</li> </ol>	<p>Responsibilities and Limitations of CMA/MA-Cs</p> <ol style="list-style-type: none"> <li>A. Role of the CMA/MA-C includes medication administration as a delegated nursing function under nursing supervision. The following acts cannot be delegated to CMA/MA-C:               <ol style="list-style-type: none"> <li>1. Conversion or calculation of medication dosage;</li> <li>2. Assessment of patient's need for or response to medication;</li> <li>3. Nursing judgment regarding the administration of PRN medications.</li> </ol> </li> <li>B. A CMA/MA-C may perform a task involving administration of medications if:               <ol style="list-style-type: none"> <li>1. The CMA/MA-C assignment is to administer medication under the supervision of a licensed nurse in accordance with provisions of this act and rules; and</li> <li>2. The delegation is not prohibited by any provision of this act and rules.</li> </ol> </li> <li>C. A CMA/MA-C shall not perform a task involving the administration of medication if;               <ol style="list-style-type: none"> <li>1. The medication administration requires an assessment of the patient's need for medication, and/or a nursing judgment prior to administration, evaluation, or follow-up;</li> <li>2. A calculation of the dosage of the medication or the conversion of the dosage;</li> <li>3. The supervising nurse is unavailable to monitor the progress of the patient and the effect on the patient of the medication; or</li> <li>4. The patient is not stable or has changing needs.</li> </ol> </li> <li>D. A CMA/MA-C who has any reason to believe that they have made an error in the administration of medication shall follow facility policy and procedure to report the possible or known error to the appropriate superior and shall assist in completing any required documentation of the medication error.</li> <li>E. A CMA/MA-C may be disciplined by the AR Board of Nursing for:               <ol style="list-style-type: none"> <li>1. Crimes</li> <li>2. Negligence</li> <li>3. Drug use</li> <li>4. Mental incompetence</li> <li>5. Other</li> </ol> </li> <li>F. Medication administration policies</li> </ol>

	<ol style="list-style-type: none"> <li>1. CMA/MA-Cs shall report to the supervising nurse: <ol style="list-style-type: none"> <li>a. Signs or symptoms that appear life-threatening;</li> <li>b. Events that appear health threatening; and</li> <li>c. Medications that produce no results or undesirable effects as reported by the patient.</li> </ol> </li> <li>2. A licensed nurse shall supervise CMA/MA-Cs.</li> </ol> <p>G. The CMA/MA-C has the responsibility not to accept a delegation that they know is beyond their knowledge and skills.</p> <p>H. The CMA/MA-C is expected to speak up and ask for training and assistance in performing the delegation, or request not to be delegated to a particular task, function, and/or activity.</p> <p>I. Both the nurse and CMA/MA-C need the appropriate interpersonal and communication skills and organizational support to successfully resolve delegation issues.</p>
<p>5. State the difference between delegation and assignments.</p>	<p>Delegation and Assignments</p> <ol style="list-style-type: none"> <li>A. To delegate is to transfer authority to a competent individual for completing selected nursing tasks/activities/functions.</li> <li>B. Assignment is the distribution of work that each staff member is responsible for during a given work period.</li> <li>C. Delegation is a skill requiring clinical judgment and final accountability for patient care.</li> <li>D. To assign is to direct an individual to do activities within an authorized scope of practice or functions.</li> <li>E. There is both individual and organizational accountability for delegation.</li> <li>F. Organizational accountability relates to: <ol style="list-style-type: none"> <li>a. providing sufficient resources, staffing, and appropriate staff mix;</li> <li>b. implementation of policies and role descriptions;</li> <li>c. providing opportunities for staff development; and</li> <li>d. creating an environment conducive to teamwork, collaboration, and patient-centered care.</li> </ol> </li> <li>G. The practice pervasive functions of assessment, planning, evaluation and nursing judgment cannot be delegated.</li> <li>H. The nurse uses critical thinking and professional judgment when following the Five Rights of Delegation.</li> <li>I. Discrete health care tasks/functions/activities may be delegated if they are within the nurse's scope of practice. The nurse cannot delegate functions and activities not in the nurse's scope of practice.</li> <li>J. Delegation is patient specific. Having done a task for one patient does not automatically mean the CMA/MA-C can do the task for all patients. In addition, delegation is also situation specific; doing a task for one patient in one</li> </ol>

	<p>situation does not mean the CMA/MA-C may perform that task for this patient in all situations.</p> <p>K. A task delegated to a CMA/MA-C cannot be redelegated by the CMA/MA-C.</p>
<p>6. Explain the importance of effective communication.</p>	<p>Role of the Delegating/Supervising Nurse</p> <p>A. The nurse must determine the level of supervision, monitoring, and accessibility they must provide for CMA/MA-C.</p> <p>B. There is a difference in the level of supervision related to the different roles of licensed nurses and CMA/MA-Cs as well as routine tasks versus delegated tasks and the proximity of the supervising nurse.</p> <p>C. The nurse continues to have responsibility for the overall nursing care.</p> <p>D. To delegate effectively, nurses need to be able to rely on nursing CMA/MA-C credentials and job descriptions, especially for a first-time assignment.</p> <p>E. Nursing administration (typically through human resources/personnel) has the responsibility for validating nurse and CMA/MA-C credentials and qualifications.</p> <p>F. This is especially important in work settings where nurses frequently work with temporary staff or with other facility employees on an irregular basis.</p> <p>G. Both the nurse and CMA/MA-C need the appropriate interpersonal and communication skills and organizational support to successfully resolve delegation issues.</p> <p>H. Trust is central to the working relationships between the nurse and CMA/MA-C. Good relationships have two-way communication, initiative, appreciation, and willingness to help each other. Breakdowns in communication may occur when the CMA/MA-C works with more than one nurse. Many CMA/MA-Cs are task-oriented and are not trained to prioritize orders from nurses thereby needing guidance as to how to order activities (Potter &amp; Grant, 2004).</p>
<p>7. Describe the responsibilities to the patient.</p>	<p>Rights of Individuals</p> <p>A. Maintaining confidentiality</p> <p>B. Respecting patients' rights</p> <p>C. Respecting patients' privacy</p> <p>D. Respecting patients' individuality and autonomy</p> <p>E. Communicating respectfully</p> <p>F. Respecting patient's wishes whenever possible</p> <p>G. Right to refuse medication</p> <p>H. Right to be informed</p>
<p>8. Discuss the types of abuse that must be reported.</p>	<p>Legal and Ethical Issues</p> <p>A. Abuse and/or neglect</p> <p>1. Know</p>

<p>9. Provide examples of the types of legal problems that can occur.</p>	<p>2. Identify</p> <ul style="list-style-type: none"> <li>a. Physical</li> <li>b. Verbal</li> <li>c. Psychological</li> <li>d. Sexual</li> <li>e. Financial</li> </ul> <p>3. Prevent</p> <p>4. Report</p> <ul style="list-style-type: none"> <li>B. Exposure to medical malpractice/negligence claims or lawsuits</li> <li>C. Fraud</li> <li>D. Theft</li> <li>E. Diversion</li> </ul>
<p>10. Recognize the numerous rights that must be followed before and after medication is administered.</p> <p>11. List the three steps to take before medication is safe to give.</p>	<p>Rights of Medical Administration and Safety Checks</p> <ul style="list-style-type: none"> <li>A. Rights of medication administration</li> <li>B. Three safety checks <ul style="list-style-type: none"> <li>1. When removing the medication package from storage (drawer/shelf)</li> <li>2. When removing the medication from the package or container it is kept in. <ul style="list-style-type: none"> <li>a. Insulin dose verification with nursing supervisor prior to administration</li> </ul> </li> <li>3. When returning the package to where it is stored</li> </ul> </li> </ul>