Curriculum Content for Medication Aide Education Programs

Document Summary, Statement of Purpose and Intent
All Oregon State Board of Nursing approved medication aide education programs shall consist of the following curriculum content and competency evaluation.

Curriculum
Classroom instruction prior to students' care of clients that includes:

<table>
<tr><th colspan="3">Module 1: Medication Fundamentals – 15 Hours of Didactic and Four Hours of Skills Lab</th></tr>
<tr><td>Outcomes of Teaching: By the end of the course, the student will be able to:</td><td colspan="2">Curriculum Content:</td></tr>
<tr><td rowspan="2">(1) Describe the different documents on which medications can be ordered and recorded.
(2) Detail the elements of a complete medication order for safe administration.
(3) Discuss the various tasks to be performed for medications to be safely stored.
(4) Identify conditions necessitating disposal of medication.
(5) Questioning an incomplete medication order.</td><td colspan="2">Medication Orders, Documentation, Storage and Disposal</td></tr>
<tr><td>A. Medication prescription/ order
1. Recorded on client record
2. Complete order
▪ Signed
▪ Legible
▪ Drug name
▪ Dose
▪ Route
▪ Time
▪ Frequency
3. CMA cannot take verbal or telephone orders
4. Question an incomplete medication order</td><td>B. Medication documentation system
1. Documentation of orders onto agency's medication document
2. Medication administration record (MAR)
3. Controlled substance medication record
C. Medication Storage and security
1. Storage area
2. Medication room
3. Medication cart
4. Medication refrigerator
A. Disposal of outdated, contaminated or unused medication</td></tr>
<tr><td rowspan="2">(1) State the ways to measure medications.</td><td colspan="2">Mathematics, Weights and Measures</td></tr>
<tr><td colspan="2">A. CMA does not convert medications dosages
B. Basic mathematics functions:
1. Add
2. Subtract
3. Multiply
4. Divide
C. Systems of measurement:
1. Metric system
2. Common household measures
3. Roman numerals
4. Weight is milligrams
5. Volume is milliliters
6. Units
7. Milliequivalent (MEq)</td></tr>
<tr><td>(1) State the different forms</td><td colspan="2">Forms of Medication</td></tr>
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<tr><td rowspan="2">of non-injectable medications</td><td>A. Liquid</td><td colspan="2">B. Solid and semi-solids</td></tr>
<tr><td>1. Aerosol
2. Inhalant
3. Drops
4. Elixir
5. Spray
6. Solution
7. Suspension (needs mixing/shaking)
8. Syrup
9. Tincture</td><td>1. Capsules
2. Tablets
3. Scored versus unscored
4. Caplets
5. Time-released
6. Enteric coated</td><td>7. Lozenges
8. Ointment
9. Paste
10. Powder
11. Cream
12. Lotion
13. Liniment
14. Patch</td></tr>
<tr><td rowspan="2">(1) Recognize that the same medication may have different names.
(2) Identify accepted abbreviations.
(3) Recognize the abbreviations that should not be used.
(4) List the different effects medications can cause, locally and systemically.
(5) State the types of information that should be known about a specific medication prior to giving that medication.</td><td colspan="3">Medication Basics</td></tr>
<tr><td colspan="3">A. Terminology
1. Medication names
▪ Generic
▪ Brand or trade name
B. Abbreviations:
1. Use standardized abbreviations, acronyms and symbols
2. Do not use abbreviations that should no longer be in use
C. Dosage range
D. Actions (how drug causes chemical changes in body)
E. Implications for administration (what medical conditions are treated by the drug)
F. Therapeutic effects (desired effect)
G. Side effects (reaction not part of main effect desired)
H. Precautions (anticipate or prepare for conditions that may change effect of drug)
I. Contraindications (condition making drug dangerous to use)
J. Allergic reactions (life threatening – anaphylaxis)
K. Adverse reactions (unpleasant or serious side effects, other than desired)
L. Tolerance (body adapts to drug and may be resistant/less effective)
M. Interactions:
1. Specific administration information (e.g., do not take with grapefruit juice)
2. Certain classes of medications that should not be prescribed at the same time
N. Additive (synergistic) or antagonist effect
O. Idiosyncratic effect (drug has unusual effect)
l. Paradoxical effect (drug works in opposite way</td></tr>
<tr><td rowspan="2">(1) List the three safety checks of medication administration.
(2) Identify the six rights of medication administration.</td><td colspan="3">Safety and Rights of Medication Administration</td></tr>
<tr><td colspan="3">A. Three safety checks:
1. When removing the medication package from storage (drawer/shelf)
2. When removing the medication from the package/ container it is kept in
3. When returning the package to where it is stored
B. Six rights of medication administration
1. Right client
2. Right drug
3. Right dose
4. Right route
5. Right time
6. Right documentation</td></tr>
<tr><td rowspan="2">(1) Describe basic steps of medication preparation prior to administration.</td><td colspan="3">Preparation and Actual Medication Administration</td></tr>
<tr><td colspan="3">A. Infection prevention practices in medication administration
G. Glove if necessary
H. Position the client</td></tr>
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	B. Hand hygiene C. Review medications that require specific parameters (such as pulse, blood pressure, weight) prior to administration D. Identify the client E. Introduce yourself F. Explain what you are going to do	I. Do what you explained J. Perform hand hygiene K. Special considerations L. Document
Weight: 34%	Evaluation: (1) Knowledge post-test. (2) Return demonstration on new skills as evidenced by role-playing a variety of scenarios in the classroom/lab setting. (3) The clinical skills must be demonstrated on a client, patient, or resident in the clinical setting under the supervision of Board-approved faculty.	

Module 2: Safety - Four Hours of Didactic and One Hour of Skills Lab	
Outcomes of Teaching: By the end of the course, the student will be able to:	Curriculum Content
(1) Identify information needed about the client and the medication 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. Length of time to take effect 5. Side effects 6. Adverse effects 7. Interactions 8. Special instructions 9. Where to get help
(1) Identify common causes of medication errors. (2) State what steps should be taken when a medication error occurs.	Causes and Reporting of Medication Errors A. Causes: 1. Failure to follow prescriber's orders exactly. 2. Failure to follow manufacturer's specifications/ directions for use. 3. Failure to follow accepted standards for medication administration. 4. Failure to listen and report a client's or family's concerns to the nurse. B. Reporting: 1. Notify the agency's nurse/supervisor according to the agency policy. 2. Complete a medication error or incident report.
Weight: 9%	Evaluation: (1) Knowledge post-test. (2) Return demonstration on new skills as evidenced by role-playing a variety of scenarios in the classroom/lab setting. (3) The clinical skills must be demonstrated on a client, patient, or resident in the clinical setting under the supervision of Board-approved faculty.

Module 3: Communication and Documentation- Four Hours of Didactic and One Hour of Skills Lab	
Outcomes of Teaching: By	Curriculum Content

the end of the course, the student will be able to:	
(1) State when the nurse must be notified of a change in the client's baseline condition.	Reporting of Symptoms or Side Effects A. Observe, monitor and report any change that is different from the client's normal condition. B. Notify the nurse as soon as possible with as much information as available. C. Record changes.
(1) Discuss when the nurse should be notified about vital sign changes. (2) State when the nurse should be notified of a client's pain. (3) Identify other change of conditions that should be reported to the nurse.	Report Any Change from the Client's Baseline Condition A. Temperature B. Pulse C. Respirations D. Blood Pressure E. Observe and report complaints of pain F. Other changes in condition (e.g., urinary output, mental status, activity, pulse oxygen level, etc.)
(1) State documentation requirements for medication administration.	Principles of Documentation of Medication Administration A. Document medication administration 1. Administered by 2. Administration date and time 3. Document the reasons that a client may not take a medication B. PRN medication per facility/ agency policy
Weight: 9%	Evaluation: (1) Knowledge post-test. (2) Return demonstration on new skills as evidenced by role-playing a variety of scenarios in the classroom/lab setting. (3) The clinical skills must be demonstrated on a client, patient, or resident in the clinical setting under the supervision of Board-approved faculty.

Module 4: Medication Administration - 20 Hours of Didactic and Four Hours of Skills Lab			
Outcomes of Teaching: By the end of the course, the student will be able to:	Curriculum Content		
(1) Identify common methods of medication administration.	Routes of Administration		
	A. Oral, sublingual and buccal medications B. Eye medications with the exception of eye medications to new post-operative eye clients C. Ear medications D. Nasal medications E. Rectal medications	F. Vaginal medications G. Skin ointments, topical medications including patches and transdermal medications H. Medications by gastrostomy and jejunostomy tubes	I. Premeasured medication delivered by Aerosol/Nebulizer J. Medications delivered by metered hand-held inhalers
(1) Identify factors that may affect how the body uses medication.	Factors Affecting How the Body Uses Medication		
	A. Age B. Size C. Genetics	D. Diet E. Disease F. Psychological issues	G. Gender and basic metabolic rate H. Dosage

<table>
<tr><td>(1) Identify the classifications of medications; state common effects of medication on the body.</td><td colspan="3">Classes of Medications Related to Body Systems and Common Actions</td></tr>
<tr><td></td><td>A. Antimicrobials
▪ Controls or prevents growth of bacteria, fungus, virus or other microorganisms.
B. Cardiovascular
▪ Corrects an irregular, fast or slow heart rate.
▪ Prevents blood from clotting.
▪ Lowers blood pressure.
C. Dermatological
▪ Anti-infective
▪ Anti-inflammatory
D. Endocrine
▪ Antidiabetic
▪ Reduces inflammation
▪ Hormones</td><td>E. Gastrointestinal
▪ Promotes bowel movements
▪ Antacids
▪ Antidiarrheal
▪ Reduces gastric acid
F. Musculoskeletal
▪ Relaxes muscles
▪ Prevent bone loss/build bones
G. Neurological
▪ Prevents seizures
▪ Relieves pain
▪ Lowers body temperature
▪ Anti-Parkinsonian
▪ Antidepressants
▪ Promotes sleep
▪ Relieves anxiety
▪ Antipsychotics
▪ Mood stabilizer
H. Nutrients/Vitamins/ Minerals
▪ Replaces chemicals missing or low in the body</td><td>I. Respiratory
▪ Decreases mucus production
▪ Bronchodilation
▪ Cough depressant/ expectorant
▪ Decongestant
J. Sensory
▪ Anti-glaucoma
▪ Artificial tears
▪ Earwax emulsifiers
K. Urinary
▪ Increase water loss through kidneys
▪ Treat bladder spasms or urinary frequency
▪ Prevents or treats urinary tract infections</td></tr>
<tr><td>Identify resource materials and professionals to contact for clarification of medication questions.</td><td colspan="3">Location of Resources and References</td></tr>
<tr><td></td><td colspan="2">A. Nurse
B. Package/drug insert (brochure)
C. Drug reference manuals
D. Pharmacist</td><td></td></tr>
<tr><td>Weight:
43%</td><td colspan="3">Evaluation:
(1) Knowledge post-test.
(2) Return demonstration on new skills as evidenced by role-playing a variety of scenarios in the classroom/lab setting.
(3) The clinical skills must be demonstrated on a client, patient, or resident in the clinical setting under the supervision of Board-approved faculty.</td></tr>
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<tr><th colspan="2">Module 5: Ethical and Legal - Two Hours of Didactic and One Hour of Skills Lab</th></tr>
<tr><td>Outcomes of Teaching: By the end of the course, the student will be able to:</td><td>Curriculum Content</td></tr>
<tr><td>(1) Identify when a task should or should not be performed by the CMA.
(2) Recognize when and how to report errors.</td><td>Role of CMA
A. The nurse continues to have responsibility for the overall nursing care.
B. The CMA may perform a task involving administration of medications if the assignment is in accordance with the Authorized Duties of the CMA, the facility policy, and under the supervision of a licensed nurse</td></tr>
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(3) Recognize what should be reported to the licensed nurse.	C. The following acts shall not be assigned to the CMA: 1. Conversion or calculation of medication dosage 2. Assessment of client need for or response to medication 3. Nursing judgment regarding the administration of PRN medications D. The CMA shall not perform a task involving the administration of medication if: 1. The licensed nurse is unavailable to monitor the progress of the client and the effect of the medication on the client E. When a CMA has any reason to believe they have made an error in the administration of medication, they must follow facility policy and procedure to report the possible or known error and assist in completing the required documentation F. The CMA must report to the licensed nurse: 1. Signs or symptoms that appear life-threatening 2. Any change in client's condition	
	The responsibility of the CMA when accepting assigned tasks	
	A. The CMA has the responsibility not to accept an assignment they know is beyond their knowledge and skills B. If the CMA is unsure of the assigned task, the CMA is expected to speak up and ask for training and assistance from the licensed nurse	
(1) Describe the rights of the client	Rights of Clients	
	A. Maintaining confidentiality B. Respecting client's rights C. Respecting client's privacy D. Respecting client's culture, individuality, and autonomy	E. Communicating respectfully F. Respecting client's wishes whenever possible G. Right to be informed H. Right to refuse medication
(1) Describe examples of the types of legal problems that can occur.	Specific Legal and Ethical Issues	
	A. Medical malpractice/negligence claims/lawsuits B. Theft C. Diversion	
Weight: 5%	Evaluation: (1) Knowledge post-test. (2) Return demonstration on new skills as evidenced by role-playing a variety of scenarios in the classroom/lab setting. (3) The clinical skills must be demonstrated on a client, patient, or resident in the clinical setting under the supervision of Board-approved faculty.	

Competency Evaluation

In addition, prior to being permitted to administer medications directly to clients, the medication aide student must successfully complete a LAB skills checklist. Each student must practice each skill on the LAB skills checklist prior to any clinical experience/client contact.

Laboratory – 11 Hours of Supervised Skills Lab	
During the laboratory (LAB) portion of the education, the student must successfully demonstrate the following	1) Follows standard precautions including hand hygiene and infection prevention practices as it relates to medication administration 2) Prepares for medication administration 3) Completes three safety checks 4) Correctly interprets abbreviations

skill competencies as evidenced by satisfactory completion of the LAB skills checklist.	5) Interprets dosages correctly 6) Checks for known medication allergies before administering medication 7) Checks the expiration date of the medication before administering 8) Uses organized system for passing medications 9) Protects client confidentiality 10) Follows correct medication administration procedures (Six Rights): a) Right client b) Right drug c) Right dose d) Right route e) Right time f) Right documentation 11) Checks vital signs appropriate for medication 12) Preparation of medication: a) Measures liquid medication b) Crushes c) Splits d) Opens capsules e) Mixes with soft food or liquid f) Measures ointment and paste 13) Puts client in position of safety and comfort for medication administration 14) Properly administers medications by the following routes: a) Oral b) Sublingual c) Buccal d) Eye e) Ear f) Nasal g) Rectal h) Vaginal i) Skin ointments, topical including patches and transdermal j) Gastrostomy or jejunostomy tubes k) Premeasured medication delivered by aerosol/nebulizer l) Medications delivered by metered hand-held inhalers 15) Observes client swallowing medication 16) Consults current, relevant resources (drug references, charge nurse, etc.) as needed 17) Maintains security of medication room, cart, etc. 18) Documents medication following administration 19) Demonstrates appropriate reporting to licensed nurse 20) Demonstrates proper disposal of medication per best practice 21) Demonstrates proper controlled substance counting process

Clinical - 24 Hours of 1:1 Supervised Clinical Experience	
During the clinical portion of the education, the student must successfully demonstrate the following skill competencies as evidenced by satisfactory	1) Follows standard precautions including hand hygiene and infection prevention practices as it relates to medication administration 2) Prepares for medication administration 3) Completes three safety checks 4) Correctly interprets abbreviations 5) Correctly interprets dosages

completion of the clinical skills checklist.	6) Checks for known medication allergies before administering medication 7) Checks the expiration date of the medication before administering 8) Uses organized system for passing medications 9) Protects client confidentiality 10) Follows correct medication administration procedures (Six Rights): a) Right client b) Right drug c) Right dose d) Right route e) Right time f) Right documentation 11) Checks vital signs appropriate for medication 12) Preparation of medication a) Measures liquid medication b) Crushes c) Mixes with soft food or liquid 13) Puts client in position of safety and comfort for medication administration 14) Properly administers medications by the following routes: a) Oral b) Eye c) Skin ointments, topical including patches or transdermal 15) Observes client swallowing medication 16) Consults current, relevant resources (drug references, licensed nurse, etc.) as needed 17) Maintains security of medication room, cart, etc. 18) Documents medication following administration 19) Demonstrates appropriate reporting to licensed nurse 20) Demonstrates proper controlled substance counting process