LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

SCOPE OF UNIT:

Guidelines and procedures for preparation, administration, reporting, and recording of oral, ophthalmic, otic, topical, transdermal, oral metered dose inhaler, nasal, rectal, vaginal, as well as administration of oxygen by nasal cannula.

INFORMATION TOPIC: IV-13 OR DEMONSTRATION: IV-13

PREPARE AND ADMINSTER MEDICATIONS
(Lesson Title)

OBJECTIVES- THE STUDENT WILL BE ABLE TO:

Demonstration:

1. Prepare, administer, report, and record individual oral medications according to proper procedures.

2. Prepare, administer, report, and record ophthalmic (eye) medications according to proper procedures.

3. Prepare, administer, report, and record otic (ear) medications according to proper procedures.

4. Prepare, administer, report, and record topical medications according to proper procedures.

5. Prepare, administer, report, and record transdermal patches according to proper procedures.

6. Prepare, administer, report, and record oral metered dose inhaler medications according to proper procedures.

7. Prepare, administer, report, and record nasal medications according to proper procedures.

8. Prepare, administer, report, and record vaginal medications according to proper procedures.

9. Prepare, administer, report, and record rectal medications according to proper procedures.

10. Administer oxygen by nasal cannula according to proper procedures.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 32: Medication Administration Errors.
2. HO 33: Administering Sublingual and Buccal Medications.
3. HO 34: Use of Aerosol Holding Chamber.
4. Medicine cups.
5. Medicine cards/sheets.
6. Medication samples (including suppositories).
7. Medication tray.
8. Gloves.
9. Lubricant (water-soluble).
10. Tissues.
11. Paper towels.
12. Teaching manikin.
13. Alcohol wipes.
14. Cotton balls.
15. Oxygen tank on cart with flowmeter/oxygen concentrator with flowmeter.
16. Humidifier jar.
17. Nasal cannula.
18. NO SMOKING sign.
19. Sterile distilled water.
20. Sterile applicators.

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 13 prior to class and be prepared to return the demonstration on preparing and administering medications using the medication record sheets for your own facility.

INTRODUCTION:

In the preparation and administration of medications basic guidelines assure the administration of the right drug to the right resident at the right time with the right dosage, form, and route of administration. The medication technician plays an important part in maintaining the individual's optimum health by always following the steps of procedure for preparing and administering medications.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: PREPARE, ADMINISTER, REPORT, AND RECORD ORAL MEDICATIONS

1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies. Obtain vital signs if required.

3. Assemble equipment: medication tray, medication cups, single-use paper towel, individual medications, cups, spoons, straws, water, juice, applesauce, jelly, pudding, etc.

4. Organize medications in the order of administration. Review medication reference materials for any medications with which you are not familiar.

5. Wash hands if contaminated.

6. Remove first resident's medication bin from storage and place on work counter.

7. Check medication record/card and remove that container of medication from bin. Verify medication strength, dose and labeled direction on the medication administration record (MAR) against the label on the card or bottle.

8. Prepare medication:

   Tablets and Capsules – pour into cap then into medication cup when pouring from bottle. From bubble card or other container, punch or pour directly into medication cup. Medications may be crushed according to the doctor's order and manufacturer's guidelines.

   Liquids – shake liquid if it is labeled to be shaken. Holding label to palm, pour into calibrated cup at eye level.

   Powders – pour into medicine cup and dilute with appropriate liquid.

   Drops – measure vertically into cup and dilute with appropriate liquid.

9. Check the medication record/card and with label again.

10. Place medication card with identification on the tray with the medication.

11. Check the label against the MAR a third time and return the medication container to appropriate storage.

12. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.

13. Continue same procedure until the resident's medications for that time period are prepared.

14. Return the medication bin to the storage cabinet.

CAUTION: Prepare only one resident's medications at a time.

15. Knock on the resident's door and wait for permission before entering.

16. Identify yourself, and explain your purpose as you approach the resident with the medication.

17. Identify the resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.

18. Hand the medication to resident with a glass of water if needed. An adequate and appropriate amount of fluids (4-8 oz) should be offered with the medication. Be aware of residents who require thickened liquids. For medications that must be given with food, provide a small snack as permitted on the resident's diet if the medication is not being given immediately after a meal.

NOTE: The medication pass should not be interrupted.

19. Assist resident as needed.

20. Remain with resident until medication is swallowed.

21. Discard contaminated medication cup in appropriate container.

22. Wash hands.

23. Proceed to next resident.

24. When the medication pass is complete, return all equipment to medication preparation area. Report and record essential information.

25. Sanitize and store equipment.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: PREPARE, ADMINISTER, REPORT, AND RECORD OPHTHALMIC (EYE) MEDICATIONS.

NOTE: This procedure must be separate from the administration of oral medications.

1. Wash hands. Using antibacterial hand cleanser is NOT appropriate when administering ophthalmic medications.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.

3. Assemble the equipment: medication tray, medication administration record/card, medication, gloves, and tissues.

4. Check the expiration date and that medication has been opened no longer than six months. Check solution for correct color and presence of sediment. Do not use if discolored or an unusual sediment is present. Shake if the medication is a suspension. Medication should be at room temperature unless specified otherwise. New bottles of medications should be marked with the date and time it was opened.

5. Check the medication administration record/card with the label when medication is removed from the resident's individual compartment in the external storage area. Review medication reference materials for any medications with which you are not familiar.

6. Check the medication record/card and the label again.

7. Place medication card with identification on the tray with the medication.

8. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.

9. Place tissues on tray.

10. Carry the tray to the resident's room.

11. Knock on the resident's door and wait for permission before entering.

12. Identify yourself, and explain your purpose as you approach the resident with the medication.

13. Identify the resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.

14. Position the resident (sitting or lying) with head tilted backwards.

15. Observe the affected eye(s) for unusual conditions that may need to be reported.

16. Put on gloves.

17. Cleanse the eye with a tissue, wiping for the inner corner outward. Dispose of tissue(s).

CAUTION: Use a clean tissue if other eye is to be medicated. Use another tissue if a second wiping is needed.

18. Check the medication record/card with the label.

19. Ask the resident to look upward.

20. Hold lower eyelid away from the eye to form a pouch.

    A. For eye drops:

        a. Instill drop into the pouch, never directly onto the center of the eyeball.

        b. With a finger, apply pressure to the inside corner of the eye (inner canthus) for one (1) minute. If an additional drop for the same medication is to be given, wait one minute before administering the second drop. If a different medication is to be given, wait five minutes before instilling the second medication.

    B. For eye ointments:

        a. Apply ointment in a thin strip along the inside of the lower eyelid. If the ointment is given after an eye drop, wait five minutes after administering the drop before administering the ointment.

CAUTION: Do not contaminate the dropper or ointment by touching any part of the eye.

21. Instruct resident to close eye gently and keep eyes closed for a few minutes.

CAUTION: Warn resident not to squeeze eyelids together.

22. Blot excess medication from cheek with tissue.

CAUTION: Do not wipe medication out of eye.

23. Remove gloves and dispose in appropriate container. Wash hands.

24. Read label of medication again as it is returned to the external storage area.

25. Report unusual symptoms to licensed nurse and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: PREPARE, ADMINISTER, REPORT, AND RECORD OTIC (EAR) MEDICATIONS.

NOTE: This procedure must be separate from administration of oral medications.

1. Wash hands. Use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.

3. Assemble the equipment: medication tray, medication administration record/card, medication, gloves, and cotton balls.

4. Check the expiration date and that medication has been opened no longer than six months. Check solution for correct color and presence of sediment. Do not use if discolored or unusual sediment is present; shake suspensions. Medication should be at room temperature unless specified otherwise. New bottles of medications should be marked with the date and time it was opened.

5. Check the medication administration record/card with the label when medication is removed from the resident's individual compartment in the external storage area. Review medication reference materials for any medications with which you are not familiar.

6. Check the medication record/card with the label again.

7. Place medication card with identification on the tray with the medication.

8. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.

9. Place cotton balls on tray.

10. Carry the tray to the resident's room.

11. Knock on the resident's door and wait for permission before entering.

12. Identify yourself, and explain your purpose as you approach the resident with the medication.

13. Identify the resident by calling his/her name and checking ID bracelet, picture, or with knowledgeable third person.

14. Wash hands and put on gloves.

15. Position the resident. Lower the head of the bed if possible and turn resident's head to opposite side. If in a chair, tilt head sideways.

16. Clean the external ear with a cotton ball.

17. Observe the condition of the affected ear.

18. Read medication record/card and medication label again.

19. Draw the medication into the dropper.

20. Pull the ear lobe gently backward and upward for adults, downward, and backward for children.

21. Instill the number of drops ordered into the ear canal. Direct ear drops toward the side of the ear canal to prevent air from being trapped.

CAUTION: Do not contaminate the dropper by touching any part of the ear canal.

22. Place a clean cotton ball loosely in the ear.

CAUTION: Do not push hard on the cotton ball.

23. Instruct the resident to maintain the same position for two or three minutes.

24. Wait at least five minutes to instill drops into the other ear if both ears are to be medicated.

25. Remove and dispose of gloves properly. Wash hands.

26. Read label when returning medications to external storage area.

27. Report unusual symptoms to licensed nurse and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: PREPARE, ADMINISTER, REPORT, AND RECORD TOPICAL MEDICATIONS.

NOTE: This procedure must be separate from administration of oral medications.

1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.

3. Assemble equipment: individual medication tray, medication record/card, medicine cup, medication, clean applicators (tongue blade, cotton swab, etc.), gloves, and a small plastic trash bag.

4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications with which you are not familiar.

5. Remove medication from container. If the medication is supplied in a jar, use a clean applicator to remove the amount of medication needed and place it in a medicine cup.

6. Check the label with the medication record/card again.

7. Prepare the medication and place on the same tray with identification.

8. Check the label on the container a third time.

9. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.

10. Carry the tray to the resident's room.

11. Knock on the resident's door and wait for permission before entering.

12. Identify yourself, and explain your purpose as your approach the resident with the medication.

13. Identify the resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.

14. Provide for privacy.

15. Expose only the area to be treated.

16. Wash hands and put on gloves.

17. Open applicator package.

18. Observe skin for unusual symptoms.

19. Apply medication gently to skin according to doctor’s orders and manufacturer’s instructions.

20. Place applicator in a plastic trash bag. Dispose of trash bag according to facility policy.

CAUTION: Do not place trash bags in resident's trash can.

21. Remove gloves and wash hands.

22. Clean ointment tubes or bottles according to facility policy and return to storage.

23. Report unusual findings to the licensed nurse. Report and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: PREPARE, ADMINISTER, REPORT, AND RECORD TRANSDERMAL PATCHES.

NOTE: This procedure must be separate from administration of oral medications.

CAUTION: Follow specific manufacturer's instructions before applying a new transdermal patch.

1. Wash hands. Use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies. Obtain vital signs if required.

3. Assemble equipment: individual medication tray, medication record/card, tissue, small plastic trash bag, transdermal patch, and two (2) pair of gloves.

4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications that you are not familiar with.

5. Remove medication from container.

6. Check label with medication record/card again.

7. Prepare the medication and place on the same tray with identification.

8. Check the label on the container a third time.

9. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.

10. Carry tray to resident's room.

11. Knock on the resident's door and wait for permission before entering.

12. Identify yourself, and explain your purpose as you approach the resident with the medication.

13. Identify resident by calling his/her name and checking ID bracelet, picture, or with knowledgeable third person.

14. Wash hands and put on gloves.

15. Position resident, exposing only the area to which the medication will be applied and explain the procedure.

16. Locate and remove any old patches.

CAUTION: Follow specific manufacturer's instructions when removing old patches.

17. Clean any residual medication from the skin with a tissue.

18. Remove gloves pulling the glove over the used Transdermal patch and place gloves and used patch in a small plastic trash bag. Dispose of the trash bag according to facility policy.

CAUTION: DO NOT PLACE IN RESIDENT'S TRASH CAN! Old Transdermal patches must be disposed of properly. They are very hazardous to children and animals. Never touch the medication on the transdermal patches.

19. Wash hands and put on gloves.

20. Open drug packet and remove disk.

22. Label Transdermal patch with date, time and your initials.

21. Apply disk to appropriate, dry, clean, and hairless site.

NOTE: Sites should be rotated to avoid irritation.

CAUTION: Apply the system promptly upon its removal from the protective pouch to prevent evaporative loss of medication. Do not use if protective pouch has been opened or damaged.

22. Remove and dispose of gloves in an appropriate container.

23. Wash hands immediately.

24. Report unusual symptoms to the licensed nurse. Report and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: PREPARE, ADMINISTER, REPORT AND RECORD ORAL METERED DOSE INHALER MEDICATIONS.

NOTE: This procedure must be separate from administration of oral medications.

1. Wash hands. Use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.

3. Assemble equipment: medication tray, medication record/card, medication, tissues, gloves, and a glass of water (if needed).

4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications that you are not familiar with.

5. Remove medication from container.

6. Check label with medication record/card again.

7. Prepare the medication and place on the same tray with identification.

8. Check the label on the container a third time.

9. Document the medication on the MAR according to facility policy, making sure that the MAR is signed

10. Carry tray to resident's room.

11. Knock on the resident's door and wait for permission to enter.

12. Identify yourself and explain your purpose as you approach the resident with the medication.

13. Identify resident by calling his/her name and checking I.D. bracelet, picture, or with a knowledgeable third person.

14. Position the resident sitting or lying with head of bed elevated at least 30 degrees.

15. Remove cap from mouthpiece.

16. Shake container vigorously.

17. Position container upside down.

18. Tilt resident's head back (hyperextend) slightly.

19. Instruct resident to breathe out.

20. Closed mouth technique:

    A. Instruct resident to close lips on inhaler and to begin inhaling slowly. Activate inhaler after resident begins inhaling.

21. Open mouth technique (optional for steroid inhalers):

    A. Inhaler is held 1-2 inches from mouth. Activate inhaler at same time resident begins inhaling slowly.

22. Instruct resident to hold breath 5-10 seconds or as long as possible.

23. Instruct resident to breathe out slowly (generally no audible breath sounds).

24. Wait at least one minute before giving a second inhalation (if ordered) of the same medication. Shake container before each administration. If giving two different medications, wait at least 5 minutes before administering the second medication.

25. For steroid inhalers, have resident rinse mouth after use to minimize fungus overgrowth and dry mouth.

NOTE: If resident is using a bronchodilator, it should be used several minutes before the steroid is administered to enhance penetration of the steroid into the bronchial tree.

26. Wash hands.

27. Read label again as medication is returned to cart or storage area.

28. Report unusual symptoms to the licensed nurse. Report and record essential information.

NOTE: Follow manufacturer's instructions for administration of discus inhalers such as Advair.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: PREPARE, ADMINISTER, REPORT, AND RECORD NASAL MEDICATONS

NOTE: This procedure must be separate from administration of oral medications.

1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.

3. Assemble equipment: medication tray, medication record/card, medication, tissues, alcohol wipes, and gloves.

4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications that you are not familiar with.

5. Remove medication from container.

6. Check label with medication record/card again.

7. Prepare the medication and place on the same tray with identification. New pumps should be opened and primed prior to initial use.

8. Check the label on the container a third time.

9. Document the medication on the MAR according to facility policy, making sure that the MAR is signed. Alternate nostrils and record nostril used on MAR.

10. Place tissues and alcohol wipes on the tray.

11. Carry tray to the resident's room.

12. Knock on the resident's door and wait for permission before entering.

13. Identify yourself and explain your purpose as you approach the resident with the medication.

14. Identify the resident by calling his/her name and checking I.D. bracelet, picture, or with a knowledgeable third person.

15. Wash hands and put on gloves.

16. Observe for nasal secretions. Instruct resident to blow nose gently and wipe clean.

17. Position the resident:

    A. Lying down for nose drops.

    B. Sitting up for nasal spray with head tilted back slightly.

18. Read medication record/card and medication label again.

19. Administer the dosage:

    a. Drop the number of drops into the nose toward the septum without touching the nasal membrane.

    b. Insert spray nozzle gently into the nose and spray.

20. Wipe away excess medication with tissue.

21. Instruct resident NOT to blow nose or sniff for a few minutes.

22. Wipe nozzle of spray with alcohol wipe.

23. Remove and dispose of gloves properly. Wash hands.

24. Read label again when returning the medication to external storage area.

25. Report unusual symptoms to the licensed nurse. Report and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURES: PREPARE, ADMINISTER, REPORT, AND RECORD VAGINAL MEDICATIONS

NOTE: This procedure must be separate from administration of oral medications.

1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.

3. Assemble equipment: medication tray, medication record/card, medication, tissues, gloves, water soluble lubricant (if needed), tissues, and paper towels.

4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications that you are not familiar with.

5. Remove medication from container.

6. Check label with medication record/card again.

7. Prepare the medication and place on the same tray with identification.

8. Check the label on the container a third time.

9. Squeeze small amount of water-soluble lubricant on paper towel (if needed).

10. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.

11. Read label again when returning the medication container to the external storage area.

12. Carry tray to resident's room.

13. Knock on the resident's door and wait for permission to enter.

14. Identify yourself, and explain your purpose as you approach the resident with the medication.

15. Identify resident by calling her name and checking ID bracelet, picture, or with knowledgeable third person.

16. Provide privacy.

17. Position resident on back with knees raised or in another appropriate position and cover the legs to provide warmth.

18. Remove wrapper from suppository or applicator.

19. Lubricate suppository or applicator (if necessary).

20. Ask resident to relax and breathe deeply.

21. Retract labia exposing vaginal orifice with one hand. Observe for any unusual symptoms or drainage.

22. Insert applicator or suppository into the full length of the vagina.

23. Remove applicator slowly.

24. Wipe excess lubricant from vagina with tissues.

25. Dispose of disposable applicator, tissues, and paper towels according to facility policy.

26. If using a reusable applicator, clean applicator according to manufacturer's guidelines.

27. Remove gloves and dispose of in a appropriate container; wash hands.

28. Return reusable applicator to external storage area.

29. Report unusual symptoms to the licensed nurse. Report and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURES: PREPARE, ADMINISTER, REPORT AND RECORD RECTAL MEDICATIONS.

NOTE: This procedure must be separate from administration of oral medications.

1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.

3. Assemble equipment: medication tray, medication record/card, medication, gloves, water soluble lubricant, tissues, paper towels.

4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications that you are not familiar with.

5. Remove medication from container.

6. Check label with medication record/card again.

7. Prepare the medication and place on the same tray with identification.

8. Check the label on the container a third time.

9. Squeeze small amount of water-soluble lubricant on paper towel.

10. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.

11. Read label again when returning the medication container to external storage area.

12. Carry tray to resident's room.

13. Knock on the resident's door and wait for permission to enter.

14. Identify yourself, and explain your purpose as you approach the resident with the medication.

15. Identify resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.

16. Provide privacy.

17. Wash hands and put on gloves.

18. Position resident on left side and expose only the buttocks area. Note: make sure resident is clean of urine or feces. If necessary, provide peri care. If peri-care is given, remove gloves, wash hands, and put on clean gloves for administration.

19. Remove wrapper from suppository.

20. Lubricate suppository or applicator.

21. Ask resident to relax and to breathe through mouth. Explain to resident that he/she will feel pressure on the rectum but that he/she should not try to push or defecate.

22. Separate buttocks and insert suppository into rectum beyond the sphincter and against rectal wall (up to middle joint of finger).

CAUTION: Do not embed suppository into fecal material.

23. Remover finger.

24. Wipe excess lubricant from anus.

25. Remove gloves and discard in appropriate container.

26. Wash hands.

27. Make the resident comfortable with the call light within reach.

28. Observe resident every five to ten minutes following insertion for results if necessary for medication administered.

29. Report unusual symptoms to the licensed nurse. Report and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

PROCEDURE: ADMINISTER OXYGEN BY NASAL CANNULA.

NOTE: This procedure must be separate from administration of oral medications.

1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.

2. Review and verify medication administration records/medication cards with physician's order according to facility policy.

3. Assemble equipment: O_2 tank on cart or oxygen concentrator with flowmeter, nasal cannula, humidifier (if needed), Oxygen in Use/NO SMOKING sign, and sterile distilled water.

4. If a humidifier is needed, fill humidifier to mark with sterile distilled water unless otherwise ordered. A humidifier is not usually required if the resident is receiving oxygen at less than 3L/min.

5. Take equipment to the resident.

6. Knock on the resident's door and wait for permission to enter.

7. Identify yourself, and explain your purpose as you approach the resident.

8. Identify the resident by calling name and checking ID bracelet, picture, or with a knowledgeable third person.

9. Place oxygen tank or oxygen concentrator at the bedside near the head of the bed.

CAUTION: Anchor tanks according to facility policy.

10. Connect cannula and tubing to oxygen system.

11. Turn the system on and set flow rate at number of liters per minute as ordered by physician.

NOTE: Make sure oxygen is flowing through the cannula.

12. Place the tips of the cannula in the resident's nose.

CAUTION: Tips should not extend into the nose more than one inch.

13. Adjust tubing to resident's comfort, snug enough to secure the cannula in the

nose but not tight enough to cause pressure on the resident's ears.

14. Adjust the flow rate as ordered.

15. Check vital signs if ordered and observe for unusual symptoms.

16. Post the NO SMOKING sign in sight of visitors and the resident and instruct them not to smoke.

17. Observe resident frequently for:

    A. Proper rate of flow.

    B. Proper adjustment of cannula tubing.

    C. Condition of skin under cannula tubing.

    D. Shortness of breath or difficulty breathing.

    E. Change in mental status.

18. Report unusual symptoms to the licensed nurse. Report and record essential information.

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD ORAL MEDICATIONS

EQUIPMENT:

1. Medicine cups
2. Medicine records/cards
3. Medication
4. Medication tray
5. Water glasses
6. Spoons
7. Straws
8. Paper towels
9. Water/juice in a covered pitcher
10. Applesauce/jelly/pudding in a covered container marked with the date opened

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.		
2. Review and verify medication administration records/cards with physician's order according to facility policy. Check for allergies. Obtain vital signs if required.		
3. Assemble equipment: medication tray, medication cups, single-use paper towel, individual medications, cups, spoons, straws, water, juice, applesauce, jelly, pudding, etc.		
4. Organize medications in the order of administration. Review medication reference materials for any medications with which you are not familiar.		
5. Wash hands if contaminated.		
6. Remove first resident's medication bin from storage and place on work counter.		
7. Check medication record/card and remove that container of medication from bin. Verify medication strength, dose and labeled direction on the medication administration record (MAR) against the label on the card or bottle.		

8. Prepare medication: Tablets and capsules – Pour into cap then into medication cup when pouring from bottle. From bubble card or other container, punch or pour directly into medication cup. Medications may be crushed according to the doctor's order and manufacturer's guidelines. Liquids – shake liquid if it is labeled to be shaken. Holding label to palm, pour into calibrated cup at eye level. Powders – Pour into medicine cup and dilute with appropriate liquid. Drops – Measure vertically into cup and dilute with appropriate liquid.		
9. Check medication record/card with the label again.		
10. Place medication card and identification on the medicine tray.		
11. Check the label against the MAR a third time and return the medication container to appropriate storage.		
12. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.		
13. Continue same procedure until the resident's medications for the time period are prepared.		
14. Return the medication bin to the storage cabinet. CAUTION: Prepare only one resident's medications at a time.		
15. Knock on the resident's door and wait for permission before entering.		
16. Identify yourself, and explain your purpose as you approach the resident with the medication.		
17. Identify the resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.		
18. Hand the medication to resident with a glass of water if needed. An adequate and appropriate amount of fluids (4-8 oz) should be offered with the medication. Be aware of residents who require thickened liquids. For medications that must be given with food, provide a small snack as permitted on the resident's diet if the medication is not being given immediately after a meal. NOTE: The medication pass should not be interrupted.		
19. Assist resident as needed.		
20. Remain with resident until medication is swallowed.		
21. Discard contaminated medication cup in appropriate container.		
22. Wash hands.		
23. Proceed to next resident.		
24. When the medication pass is complete, return all equipment to medication preparation area. Report and record essential information.		
25. Sanitize and store equipment.		

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD ORAL MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD OPHTHALMIC MEDICATIONS

EQUIPMENT:

1. Medication tray
2. MAR/Medication card
3. Medication
4. Tissues
5. Gloves

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands. Using antibacterial hand cleanser is NOT appropriate when administering ophthalmic medications.		
2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.		
3. Assemble the equipment: medication tray, medication administration record/card, medication, gloves, and tissues.		
4. Check that medication has been opened no longer than six months. Check solution for correct color and presence of sediment. Do not use if discolored or an unusual sediment is present. Shake if the medication is a suspension. Medication should be at room temperature unless specified otherwise. New bottles of medications should be marked with the date and time it was opened.		
5. Check the medication record/card with the label when medication is removed from the resident's individual compartment in the external storage area. Review medication reference materials for any medications with which you are not familiar.		
6. Check the medication record/card and the label again.		
7. Place the medication card with identification on the tray with the medication.		
8. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.		
9. Place tissues on tray.		
10. Carry the tray to the resident's room.		
11. Knock on the resident's door and wait for permission before entering.		
12. Identify yourself, and explain your purpose as you approach the resident with the medication.		

13. Identify the resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.		
14. Position the resident (sitting or lying) with head tilted backward.		
15. Observe the affected eye(s) for unusual conditions that may need to be reported.		
16. Wash hands and put on gloves.		
17. Cleanse the eye with a tissue, wiping for the inner corner outward. Dispose of tissue(s). CAUTION: Use a clean tissue if other eye is to be medicated. Use another tissue if a second wiping is needed.		
18. Check the medication record/card with the label.		
19. Ask the resident to look upward.		
20. Hold lower eyelid away from the eye to form a pouch. A. For eye drops: a. Instill drop into the pouch, never directly onto the center of the eyeball. b. With a finger, apply pressure to the inside corner of the eye (inner canthus) for one (1) minute. If an additional drop for the same medications to be given, wait one minute before administering the second drop. If a different medication is to be given, wait five minutes before instilling the second eye drop. B. For eye ointments: a. Apply ointment in a thin strip along the inside of the lower eyelid. If the ointment is given after an eye drop, wait five minutes after administering the drop before administering the ointment. CAUTION: Do not contaminate the dropper or ointment by touching any part of the eye.		
21. Instruct resident to close eyes gently and keep eyes closed for a few minutes. CAUTION: Warn resident not to squeeze eyelids together.		
22. Blot excess medication from cheek with tissue. CAUTION: Do not wipe medication out of eye.		
23. Remove gloves and dispose in appropriate container. Wash hands.		
24. Read label of medication again as it is returned to the external storage area.		
25. Report unusual symptoms to licensed nurse and record essential information.		`

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD OPHTHALMIC MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD OTIC MEDICATIONS

EQUIPMENT:

1. Medication tray
2. MAR/Medication card
3. Medication
4. Cotton balls
5. Gloves.

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands. Use facility approved antibacterial hand cleanser if handwashing facilities are not available.		
2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.		
3. Assemble the equipment: medication tray, medication administration record/card, medication, gloves, and cotton balls.		
4. Check the expiration date and that medication has been opened no longer than six months. Check solution for correct color and presence of sediment. Do not use if discolored or unusual sediment is present; shake suspensions. Medication should be at room temperature unless specified otherwise. New bottles of medications should be marked with the date and time it was opened.		
5. Check the medication administration record/card with the label when medication is removed from the resident's individual compartment in the external storage area. Review medication reference materials for any medications with which you are not familiar.		
6. Check the medication record/card with the label again.		
7. Place medication card with identification on the tray with the medication.		
8. Document the medication on the MAR according to facility policy making sure that the MAR is signed.		
9. Place cotton balls on tray.		
10. Carry the tray to the resident's room.		
11. Knock on the resident's door and wait for permission before entering.		
12. Identify yourself, and explain your purpose as you approach the resident with the medication.		

13. Identify the resident by calling his/her name and checking ID bracelet, picture, or with knowledgeable third person.		
14. Wash hands and put on gloves.		
15. Position the resident. Lower the head of the bed if possible and turn resident's head to opposite side. If in a chair, tilt head sideways.		
16. Clean the external ear with a cotton ball.		
17. Observe the condition of the affected ear.		
18. Read medication record/card and medication label again.		
19. Draw the medication into the dropper.		
20. Pull the ear lobe gently backward and upward for adults, downward, and backward for children.		
21. Instill the number of drops ordered in the ear canal. Direct ear drops toward the side of the ear canal to prevent air from being trapped. CAUTION: Do not contaminate the dropper by touching any part of the ear canal.		
22. Place a clean cotton ball loosely in the ear. CAUTION: Do not push hard on the cotton ball.		
23. Instruct the resident to maintain the same position for two to three minutes.		
24. Wait at least give minutes to instill drops into the other ear if both ears are to be medicated.		
25. Remove and dispose of gloves properly. Wash hands.		
26. Read label when returning medications to external storage area.		
27. Report unusual symptoms to licensed nurse and record essential information.		

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD OTIC MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD TOPICAL MEDICATIONS

EQUIPMENT:

1. Medication tray
2. MAR/Medication card
3. Medicine cup
4. Medication
5. Clean applicators (tongue blade, cotton swab, etc.)
6. Gloves
7. Small plastic trash bag

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.		
2. Review and verify medication administration records/cards with physician's orders according to facility policy. Check for allergies.		
3. Assemble equipment: individual medication tray, medication record/card, medicine cup, medication, clean applicators (tongue blade, cotton swab, etc.), gloves, and a small plastic trash bag.		
4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications with which you are not familiar.		
5. Remove medication from container. If the medication is supplied in a jar, use a clean applicator to remove the amount of medication needed and place it in a medicine cup.		
6. Check label with medication record/card again.		
7. Prepare the medication and place on the same tray with identification.		
8. Check the label on the container a third time.		
9. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.		
10. Carry the tray to the resident's room.		
11. Knock on the resident's door and wait for permission before entering.		
12. Identify yourself, and explain your purpose as you approach the resident with the medication.		

13. Identify the resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.		
14. Provide for privacy.		
15. Expose only the area to be treated.		
16. Wash hands and put on gloves.		
17. Open applicator package.		
18. Observe skin for unusual symptoms.		
19. Apply medication gently to skin according to doctor's orders and manufacturer's instructions.		
20. Place applicator in a plastic trash bag. Dispose of trash bag according to facility policy. CAUTION: Do not place trash bags in resident's trash can.		
21. Remove gloves and wash hands.		
22. Clean ointment tubes and applicators or bottles according to facility policy and return to storage.		
25. Report unusual findings to the licensed nurse. Report and record essential information.		

The student has satisfactorily completed the procedure 'PREPARE, ADMINISTER, REPORT, AND RECORD TOPICAL MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD TRANSDERMAL PATCHES

EQUIPMENT:

1. Medication tray
2. MAR/Medication card
3. Medication (Transdermal patch)
4. 2 pair of gloves.
5. Tissues
6. Small plastic trash bag

NOTE: This procedure must be separate from administration of oral medications.

CAUTION: Follow specific manufacturer's instructions before applying a new transdermal patch.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands. Use facility approved antibacterial hand cleanser if hand-washing facilities are not available.		
2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies. Obtain vital signs if required.		
3. Assemble equipment: individual medication tray, medication record/ card, tissue, small plastic trash bag, transdermal patch, and two (2) pair of gloves.		
4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medication with which you are not familiar.		
5. Remove medication from container.		
6. Check label with medication record/card again.		
7. Prepare the medication and place on the same tray with identification.		
8. Check the label on the container a third time.		
9. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.		
10. Carry tray to resident's room.		
11. Knock on the resident's door and wait for permission before entering.		
12. Identify yourself, and explain your purpose as you approach the resident with the medication.		

13. Identify resident by calling his/her name and checking ID bracelet, picture or with knowledgeable third person.		
14. Wash hands and put on gloves.		
15. Position resident, exposing only the area to which the medication will be applied and explain the procedure.		
16. Locate and remove any old patches. CAUTION: Follow specific manufacturer's instructions when removing old patches.		
17. Clean any residual medication from the skin with a tissue.		
18. Remove gloves pulling the glove over the use Transdermal patch and place gloves and used patch in a small plastic trash bag. Dispose of the trash bag according to facility policy. CAUTION: DO NOT PLACE IN RESIDENT'S TRASH CAN! Old Transdermal patches must be disposed of properly. They are very hazardous to children and animals. Never touch the medication on the transdermal patches.		
19. Wash hands and put on gloves.		
20. Open drug packet and remove disk.		
21. Label Transdermal patch with date, time, and your initials.		
22. Apply disk to appropriate, dry, clean, and hairless site. NOTE: Sites should be rotated to avoid irritation. CAUTION: Apply the system promptly upon its removal from the protective pouch to prevent evaporative loss of medication. Do not use if Protective pouch has been opened or damaged.		
23. Remove and dispose of gloves in an appropriate container.		
24. Wash hands immediately.		
25. Report unusual symptoms to the licensed nurse. Report and record essential information.		

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD TRANSDERMAL PATCHES" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS: NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD ORAL METERED DOSE INHALER MEDICATIONS

EQUIPMENT:

1. Medication tray
2. MAR/Medication card
3. Medication
4. Gloves
5. Tissues
6. Glass of water if needed

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands. Use facility approved antibacterial hand cleanser if hand-washing facilities are not available.		
2. Review and verify medication administration records/medication cards with physician's order according to facility policy. Check for allergies.		
3. Assemble equipment: medication tray, medication record/card, medication, tissues, gloves, glass of water (if needed).		
4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications with which you are not familiar.		
5. Remove medication from container.		
6. Check label with medication record/card again.		
7. Prepare the medication and place on the same tray with identification.		
8. Check the label on the container a third time.		
9. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.		
10. Carry the tray to resident's room.		
11. Knock on the resident's door and wait for permission to enter.		
12. Identify yourself and explain your purpose as you approach the resident with the medication.		
13. Identify resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.		
14. Position the resident sitting or lying with head of bed elevated at least 30 degrees.		
15. Remove cap from mouthpiece.		

16. Shake container vigorously.		
17. Position container upside down.		
18. Tilt resident's head back (hyperextend) slightly.		
19. Instruct resident to breathe out.		
20. Closed mouth technique: A. Instruct resident to close lips on inhaler and to be inhaling slowly. Activate inhaler after resident begins inhaling.		
21. Open mouth technique (optional for steroid inhalers): A. Inhaler is held 1-2 inches from mouth. Activate inhaler at same time resident begins inhaling slowly.		
22. Instruct resident to hold breath 5-10 seconds or as long as possible.		
23. Instruct resident to breathe out slowly (generally no audible breath sounds.		
24. Wait at least one minute before giving a second inhalation (if ordered) of the same medication. Shake container before each administration. If giving two different medications, wait at least 5 minutes before administering the second medication.		
25. For steroid inhalers, have resident rinse mouth after use to minimize fungus overgrowth and dry mouth. NOTE: If resident is using a bronchodilator, it should be used several minutes before the steroid is administered to enhance penetration of the steroid into the bronchial tree.		
27. Wash hands.		
28. Read label again as medication is returned to cart or storage area.		
29. Report unusual symptoms to the licensed nurse. Report and record essential information. NOTE: Follow manufacturer's instructions for administration of discus inhalers such as Advair.		

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD ORAL METERED DOSE INHALER MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD NASAL MEDICATIONS

EQUIPMENT

1. Medication tray
2. MAR/Medication card
3. Medication
4. Tissues
5. Gloves
6. Alcohol wipes

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.		
2. Review and verify medication administration records/cards with physician's orders according to facility policy. Check for allergies.		
3. Assemble equipment: medication tray, medication record/card, medication, tissues, alcohol wipes, and gloves.		
4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications with which you are not familiar.		
5. Remove medication from container.		
7. Check label with medication record/card again.		
8. Prepare the medication and place on the same tray with identification. new pumps should be opened and primed prior to initial use.		
9. Check the label on the container a third time.		
10. Document the medication on the MAR according to facility policy, making sure that the MAR is signed. Alternate nostrils and record nostril treated on MAR.		
11. Place tissues and alcohol wipes on the tray.		
12. Carry tray to the resident's room.		
13. Knock on the resident's door and wait for permission before entering.		
14. Identify yourself and explain your purpose as your approach the resident with the medication.		
15. Identify the resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.		
16. Wash hands and put on gloves.		

17. Observe for nasal secretions. Instruct resident to blow nose gently and wipe clean.		
18. Position the resident: A. Lying down for nose drops. B. Sitting up for nasal spray with head tilted back slightly.		
19. Read medication record/card and medication label again.		
20. Administer the dosage: A. Drop the number of drops into the nose toward the septum without touching the nasal membrane. B. Insert nasal spray nozzle gently into the nose and spray.		
21. Wipe away excess medication with tissue.		
22. Instruct resident NOT to blow nose or sniff for a few minutes.		
23. Wipe nozzle of spray with alcohol wipe.		
24. Remove and dispose of gloves properly. Wash hands immediately.		
25. Read label again with returning the medication to external storage area.		
26. Report unusual symptoms to the licensed nurse. Report and record essential information.		

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD NASAL MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD VAGINAL MEDICATIONS

EQUIPMENT:

1. Medication tray
2. MAR/Medication card
3. Medication
4. Water soluble lubricant
5. Medication cup
6. Paper towels
7. Tissues
8. Gloves

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID FOLLOWING	YES	NO
1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.		
2. Review and verify medication record/card with physician's order according to facility policy. Check for allergies.		
3. Assemble equipment: medication tray, medication record/card, medication, tissues, gloves, water soluble lubricant, tissues and paper towels.		
4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area.. Review medication reference materials for any medications with which you are not familiar.		
5. Remove medication from container.		
6. Check label with medication record/card again.		
7. Prepare the medication and place on the same tray with identification.		
8. Check the label on the container a third time.		
10. Squeeze small amount of water-soluble lubricant on paper towel (if needed).		
11. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.		
12. Read label again when returning the medication container to the external storage area.		
13. Carry tray to resident's room.		
14. Knock on the resident's room and wait for permission to enter.		

15. Identify yourself, and explain your purpose as you approach the resident with the medication.		
16. Identify resident by calling her name and checking ID bracelet, picture, or with knowledgeable third person.		
17. Provide privacy.		
18. Position resident on back with knees raised or in another appropriate position and cover the legs to provide warmth.		
19. Remove wrapper from suppository or applicator.		
20. Lubricate suppository or applicator (if needed).		
21. Ask resident to relax and breathe deeply.		
22. Retract labia expose vaginal orifice with one hand. Observe for any unusual symptoms or drainage.		
23. Insert applicator or suppository into the full length of the vagina.		
24. Remove applicator slowly.		
25. Wipe excess lubricant from vagina with tissues.		
26. Dispose of disposable applicator, tissues, and paper towels according to facility policy.		
27. If using a reusable applicator, clean applicator according to manufacturer's guidelines.		
28. Remove gloves and dispose of in an appropriate container; wash hands.		
29. Return reusable applicator to external storage area.		
30. Report unusual symptoms to the licensed nurse. Report and record essential information.		

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD VAGINAL MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

PREPARE, ADMINISTER, REPORT, AND RECORD RECTAL MEDICATIONS

EQUIPMENT:

1. Medication tray
2. MAR/Medication record
3. Medication
4. Gloves
5. Water-soluble lubricant
6. Tissues
7. Paper towels
8. Medication cup

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.		
2. Review and verify medication administration records/cards with physician's order according to facility policy. Check for allergies.		
3. Assemble equipment: medication tray, medication record/card, medication, gloves, water soluble lubricant, tissues, paper towels.		
4. Check medication record/card with label when removing medication from resident's individual compartment in external storage area. Review medication reference materials for any medications you are not familiar with.		
5. Remove medication from container.		
7. Check label with medication record/card again.		
8. Prepare the medication and place on the same tray with identification.		
9. Check the label on the container a third time.		
10. Squeeze small amount of water-soluble lubricant on paper towel.		
11. Document the medication on the MAR according to facility policy, making sure that the MAR is signed.		
12. Read label again when returning the medication container to the external storage area.		
13. Carry tray to resident's room.		
14. Knock on the resident's door and wait for permission to enter.		
15. Identify yourself, and explain your purpose as your approach the resident with the medication.		

16. Identify resident by calling his/her name and checking ID bracelet, picture, or with a knowledgeable third person.		
17. Provide privacy.		
18. Wash hands and put on gloves.		
19. Position resident on left side and expose only the buttocks area. Note: make sure resident is clean of urine or feces. If necessary, provide peri care. If peri-care is given, remove gloves, wash hands, and put on clean gloves for administration.		
20. Remove wrapper from suppository or applicator.		
21. Lubricate suppository or applicator.		
22. Ask resident to relax and to breathe through mouth. Explain to resident that he/she will feel pressure on the rectum but that he/she should not try to push or defecate.		
23. Separate buttocks and insert suppository into rectum beyond the sphincter and against rectal wall (up to middle joint of finger). CAUTION: Do not embed suppository into fecal material.		
24. Remove finger.		
25. Wipe excess lubricant from anus.		
26. Remove gloves and discard in appropriate container.		
27. Wash hands.		
28. Make the resident comfortable with the call light within reach.		
29. Observe resident every five to ten minutes following insertion for results if necessary for medication administered.		
30. Report unusual symptoms to the licensed nurse. Report and record essential information.		

The student has satisfactorily completed the procedure "PREPARE, ADMINISTER, REPORT, AND RECORD RECTAL MEDICATIONS" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

LESSON PLAN: 13

COURSE TITLE: MEDICATION TECHNICIAN

UNIT IV: PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

NAME OF STUDENT: _____

ADMINISTER OXYGEN BY NASAL CANNULA

EQUIPMENT:

1. MAR/Medication card
2. Oxygen tank on cart or concentrator with flowmeter
3. Humidifier jar, if ordered
4. Nasal cannula
5. Oxygen in use/NO SMOKING sign
6. Sterile distilled water or other solution (if needed)

NOTE: This procedure must be separate from administration of oral medications.

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands or use facility approved antibacterial hand cleanser if handwashing facilities are not available.		
2. Review and verify medication administration records/cards with physician's order according to facility policy.		
3. Assemble equipment: O_2 tank on cart or oxygen concentrator with flowmeter, nasal cannula, humidifier, Oxygen in Use/NO SMOKING sign, and sterile distilled water (if needed).		
4. If a humidifier is needed, fill humidifier to mark with sterile distilled water unless otherwise ordered. A humidifier is not usually required if the resident is receiving oxygen at less than 3L/min.		
5. Take equipment to the resident's room.		
6. Identify yourself, and explain your purpose as you approach the resident.		
7. Identify the resident by calling his/her name and checking ID tag, picture, or with knowledgeable third person.		
8. Place oxygen tank or concentrator at the bedside near the head of bed. CAUTION: Anchor tanks according to facility policy.		
9. Connect cannula and tubing to oxygen system.		
10. Turn the system on and set flow rate at number of liters per minute as ordered by the physician. NOTE: Make sure oxygen is flowing through the cannula.		
11. Place tips of cannula into the resident's nose. CAUTION: Tips should not extend into the nose more than one inch.		

12. Adjust tubing to resident's comfort, snug enough to secure the cannula in the nose but not tight enough to cause pressure on the resident's ears.		
13. Adjust flow rate as ordered.		
14. Check vital signs and observe for unusual symptoms.		
15. Post the NO SMOKING sign in sight of visitors and the resident and instruct them not to smoke.		
16. Observe resident frequently for: a. Proper rate of flow. b. Proper adjustment of cannula tubing. c. Condition of skin under cannula tubing. d. Shortness of breath or difficulty breathing. e. Change in mental status.		
17. Report unusual symptoms to the licensed nurse. Report and record essential information.		

The student has satisfactorily completed the procedure "ADMINISTER OXYGEN BY NASAL CANNULA" according to the steps outlined.

_____

Instructor's Signature Date
(Verifying Satisfactory Completion)

MEDICATION ADMINISTRATION ERRORS

Medication safety is a significant part of the overall concern about the safety of the U.S. healthcare system. In 1999 the Institute of Medicine (IOM) released a report titled "To Err Is Human: Building a Safer Health System." The report estimated that medication errors cause 7,000 deaths annually. In Missouri the most frequently cited deficiency during Medicare certification surveys of LTCFs includes problems with communication of physician orders and medication administration records.

Many factors contribute to medication errors. This document provides examples of typical medication errors, and hazards that may lead to errors, based on medication orders and medication labeling. The examples may not all be applicable to the LTCF setting, but illustrate potential hazards that may occur with other medications.

Liquid Dosage Forms

Liquid products provide potential hazards for many reasons, including:

- The order may specify only a volume dose rather than a mg dose
- The strength or concentration may not be specified in the order, and multiple concentrations may be available
- Droppers or other dosing implements may be marked specifically for one product and are not interchangeable with others
- Products of the same concentration may be labeled and packaged differently
- The prescriber may incorrectly use a term such as elixir, syrup, solution, drops or concentrate that implies a specific product or concentration
- Labeling on the package may not clearly identify the product
- Different concentrations may be dispensed for orders written at different times

Because of the hazards of multiple concentrations and multiple types of preparations, orders should always include the specific mg dose to be administered. The order should include the specific concentration or brand name to be used when either of these is an important factor for dispensing or administering. Pharmacy labeling should always include the concentration.

Other reported errors in administering liquids due to misreading orders or labels also include:

- Administer as teaspoonful(s) when ordered as mL
- Administer as mL when ordered as mg
- Administer ten-fold overdose when order written without "leading zero" in front of decimal point (written .5 mL instead of 0.5 mL, administer 5 mL)
- Administer ten-fold overdose when order written with "trailing zero" after decimal point (written 1.0 mL instead of 1 mL, administer 10 mL)
- Unit dose cups of different drugs from the same manufacturer, especially generic labeled drugs, often have very similar labels and are the same physical size. Different dose quantities of the same drug are also packaged in the same physical size containers.

Opioid (narcotic) liquid products, primarily morphine and oxycodone, have been involved in dispensing and administering errors because of their multiple products with similar names,

the same concentration for different drugs, same size containers, and similar package labels. Available products include:

- Morphine 10 mg/5 mL
- Morphine 20 mg/5 mL Roxanol
- Morphine 20 mg/mL Roxanol, Roxanol T
- Morphine 100 mg/5 mL Roxanol 100
- Oxycodone 5 mg/5 mL Roxicodone
- Oxycodone 20 mg/mL Roxicodone Intensol
- Oxycodone 5 mg/5 mL w/acetaminophen Roxicet

Errors have resulted in massive opioid overdoses because products vary up to twenty times in potency.

Chloral hydrate is available in both 250 mg/5 mL and 500 mg/5 mL concentrations. Many medication errors, including fatal overdoses, have been reported. Problem order examples are:

- Chloral hydrate 5 cc prn sedation
- Chloral hydrate 500 mg 30 " before office visit
- Chloral hydrate 250 mg/5 mL, 12 mL before procedure

In the second example, the physician meant the "symbol to represent minutes (although it actually means seconds), but the pharmacist read it as cc. In the third example the pharmacist dispensed 120 mL, a common dispensing quantity, rather than 12 mL, for a single dose.

Acetaminophen is available in several concentrations from many manufacturers variously labeled as liquids, solutions, elixirs, suspensions, concentrates, and drops. For example:

- 80 mg/0.8 mL Drops
- 80 mg/1.66 mL Liquiprin Drops
- 80 mg/2.5 mL Elixir
- 80 mg/5 mL Elixir
- 100 mg/mL Tylenol Infant Drops, Tempra 1
- 120 mg/5 mL Elixir
- 160 mg/5 mL Suspension, Tylenol Children's Elixir, Tempra 2 Syrup
- 500 mg/15 mL Tylenol Extra Strength Liquid

Many errors have been reported because orders were written specifying only the volume amount to administer, e.g. "Tylenol 10 cc prn fever," or "Tylenol syrup 1 tsp." On at least one brand the concentration is listed on the outer carton and not on the bottle, and the dropper does not contain an mg dose graduation. Some facilities may keep this medication as a non-prescription stock item, and keep only one concentration. The Tylenol Infant Drops bottle is designed to admit a dropper, but prevent pouring from the bottle.

Ferrous sulfate iron supplement liquid products are available as:

- 90 mg/5 mL (18 mg of elemental iron/5 mL) syrup
- 220 mg/5 mL (44 mg elemental iron/5 mL) elixir

- 75 mg/0.6 mL (15 mg elemental iron/0.6 mL) drops

One product is labeled as both "Ferrous Sulfate Solution" and "Iron Supplement Drops." It is very important for orders for these products to be clear and complete. Both the mg dose and the concentration should be specified in the order to eliminate confusion about ferrous sulfate vs. elemental iron doses, e.g.: "Ferrous sulfate 220 mg/5 mL, 220 mg 3 times daily" or "Elemental iron 15 mg/0.6 mL, 30 mg 3 times daily."

Look-alike Names

Same indication for use

The available list of look-alike names is quite extensive. Some of these have the same indication for use, which may contribute to comfort in a wrong interpretation. For example, Procet and Percocet are both analgesics, and Panlor DC and Synalgos DC also are both analgesics.

Same strength, same dosing frequency

Look-alikes available in the same strength, and with similar dosing frequencies, make differentiation difficult. Reminyl (for Alzheimer's) and Amaryl (antidiabetic) are both available as 4 mg tablets and may have the same dosing frequency.

No indication for use specified in order

A look-alike product Occlusal (a salicylic acid solution for removal of warts and calluses) was improperly ordered instead of Ocuflox (an antibiotic solution for ophthalmic use), with the instructions to "Use as directed." Without an indication for use or specific directions, the pharmacist was not aware that the wrong product had been ordered, but an inquiry prevented possible serious damage to an eye.

Use TALLman Letters

The FDA recommends that manufacturers use TALLman letters to help differentiate look-alike names. Pharmacies, facilities, and individuals would also benefit from using this concept. Each facility should develop a list of look-alike names commonly used in the facility and the recommended TALLman format.

- Chlorpropamide chlorproPAMIDE
- Chlorpromazine chlorproMAZINE
- Tolazamide TOLAZamide
- Tolbutamide TOLBUTamide

Combination Products

Products that contain multiple active ingredients are often available in a single, fixed combination with a name that does not include a strength, such as:

- Tylox (oxycodone 5 mg/acetaminophen 500 mg)
- Roxicet Solution (oxycodone 5 mg/acetaminophen 325 mg per 5 mL)
- Lortab Elixir (hydrocodone 7.5 mg/acetaminophen 500 mg per 15 mL)

Orders for higher doses may specify the dose of the primary ingredient, such as "Tylox 10 mg," which requires knowledge of the content of the dosage form.

When more than one strength of a combination is available the name may include the strength of the active ingredients, or may be a variation of the basic name that indicates a different strength, such as:

- Lortab 2.5/500 (hydrocodone 2.5 mg/acetaminophen 500 mg)
- Lortab 5/500 (hydrocodone 5 mg/acetaminophen 500 mg)

- Lorcet HD (hydrocodone 5 mg/acetaminophen 500 mg)
- Lorcet Plus (hydrocodone 7.5 mg/acetaminophen 650 mg)
- Lorcet 10/650 (hydrocodone 10 mg/acetaminophen 650 mg)

- Vicodin (hydrocodone 5 mg/acetaminophen 500 mg)
- Vicodin ES (hydrocodone 7.5 mg/acetaminophen 750 mg)
- Vicodin HP (hydrocodone 10 mg/acetaminophen 660 mg)

- Roxicet (oxycodone 5 mg/acetaminophen 325 mg)
- Roxicet 5/500 (oxycodone 5 mg/acetaminophen 500 mg)
- Roxilox (oxycodone 5 mg/acetaminophen 500 mg)

Codeine and acetaminophen or aspirin combination products have traditionally been named with the abbreviation "No." indicating the codeine content, for example:

- Tylenol with Codeine No. 1 (codeine 7.5 mg/ acetaminophen 325 mg)
- Tylenol with Codeine No. 2 (codeine 15 mg/ acetaminophen 325 mg)
- Tylenol with Codeine No. 3 (codeine 30 mg/ acetaminophen 325 mg)
- Tylenol with Codeine No. 4 (codeine 60 mg/ acetaminophen 325 mg)

The product "Tylenol with Codeine No. 3," for example, is commonly referred to as "Tylenol #3." Errors occur when codeine 30 mg/acetaminophen is ordered as "Tylenol #3," and three tablets of plain Tylenol are administered.

It is important that the content of any combination product is known by the prescriber, dispenser, and person administering, and that the dose is clearly specified. The dispensed product should be clearly labeled with the brand name and the strength of the product.

"Extended Release" Products

Various terms, including "extended release" and "sustained release," indicate dosage forms that provide drug availability from a single dose over an extended time period. Although the terms are used generically they may have specific meanings within brand names. It is important to differentiate between orders for "immediate release" and various "extended release" dosage forms of the same drug, as the same strength may be available in multiple forms.

Most immediate release forms are not identified as such, although one company does identify some products with an IR suffix. "Extended release" products usually include a suffix such as ER, CR, TR, SR, CD, SA, LA, XL, XT or Contin. The suffixes do not imply an equivalent meaning between different drugs or different brands. Some products from a single manufacturer may have more than one extended release form. Different suffixes may indicate a different dosage form, different length of action, or different indication for use:

- Cardizem (immediate release tablet) 30, 60, 90, 120 mg
- Cardizem SR (sustained release capsule) 60, 90, 120 mg
- Cardizem CD (extended release capsule) 120, 180, 240, 300, 360 mg
- Cardizem LA (extended release tablet) 120, 180, 240, 300, 360, 420 mg

Multiple units of the same "extended release" dosage form do not always produce the same effect as a single unit of the same dose and dosage form. For example, two 25 mg units may be equivalent to one 50 mg unit, but three 25 mg units may not be equivalent to one 75 mg unit. Do not combine units for changes in dose unless authorized by the physician or pharmacist.

Verbal Communications and Sound-Alike Names: "Read Back"

One of the most valuable methods of eliminating medication errors based on communication problems is the "read back" procedure for telephone orders, and it is a 2005 JCAHO Long Term Care National Patient Safety Goal. This procedure is commonly used in some industrial and service sectors, but healthcare personnel have traditionally been "too busy" to do this.

The person receiving the order should write the order down and "read it back," including the spelling of any drug name that might be confusing and stating in words the meaning of any abbreviations used. "Reading back" rather than "repeating back" assures that the receiver has both heard and transcribed the order correctly. Any corrections should be written and confirmed by again "reading back."

Prohibited Abbreviations

Each facility should develop a list of abbreviations that may not be used in the facility in handwritten, pre-printed, or electronic format. Please review the list of error-prone, dangerous abbreviations and their possible misinterpretations in the separate document. The nine most dangerous abbreviations that should never be used are:

- U
- IU
- QD
- QOD
- Trailing zero after decimal point (2.0 mg)
- Lack of leading zero before decimal point (.2 mg)
- MS
- MSO4
- MgSO4

Additional high-risk abbreviations and suggested replacements include:

- ug mcg
- HS half-strength or at bedtime
- TIW 3 times weekly or three times weekly
- SC Sub-Q, subQ or subcutaneously
- SQ Sub-Q, subQ or subcutaneously

- D/C discharge or discontinue
- cc mL
- AS left ear
- AD right ear
- AU both ears
- OS left eye
- OD right eye
- OU both eyes

Do not abbreviate any drug names.

Microgram vs Milligram & Confusing Decimal Point

Levothyroxine is often ordered in micrograms rather than milligrams, requiring conversions that often result in decimal point errors, especially when performed mentally (25 mcg = 0.025 mg, 250 mcg = 0.25 mg). The pharmacy label should always include the term used in the order.

Levothyroxine is available in strengths from 0.025 mg to 0.3 mg, and specific doses may require the use of multiple tablets or multiple strengths. Orders for 0.25 mg have often been erroneously written or dispensed instead of 0.025 mg, resulting in ten-fold overdoses.

Leading/Trailing Zero

Omitting a leading zero or adding a trailing zero, as described earlier. A levothyroxine order for "Levoxyl, 25 iQD" was intended to be 0.25 mg (250 mcg) but was dispensed as 25 mcg (0.025 mg). Orders such as "Synthroid 25.0 mcg" are also interpreted as 250 mcg. An order for "levothyroxine 0.75 mg," which is an extremely high dose, should have been 0.075 mg.

An agreement between the facility, prescribers and pharmacies to use consistent terminology and format in orders and labels would help alleviate the problems associated with micrograms/milligrams, decimal points and zeros.

Spacing, Commas and Punctuation

Use proper spacing between words, numbers, and punctuation. Numbers written closely to names can be misinterpreted. Place commas and periods or decimal points appropriately close to the words or numbers they are used with:

- propranolol20mg is easily misread as 120 mg
- 10U has been misread as 100
- Levoxyl . 25 was misread as Levoxyl 25

Commas should be properly spaced for dose numbers expressed in thousands. Do not use the Latin abbreviation M to express thousands, as it is sometimes used as an English abbreviation for millions:

- 5,000 units, instead of 5000 units or 5 M units

Use the word thousands for doses in the hundreds of thousands:

- 150 thousand units, instead of 150000 units or 150,000 units

Write out the word million for doses expressed in millions:

- 5 million units, instead of 5000000 units or 5,000,000 units or 5 M units

Do not use periods after dosage unit abbreviations. An unnecessary period can be misread as the numeral 1 if written poorly:

- mg instead of mg.
- mL instead of mL.

Best Practices

There are many valuable "best practices" recommendations to prevent communication errors, such as facility requirements for order format, terminology, prohibited abbreviations, a specific process for clarifying any unclear order, labeling, limiting concentrations used, and use of automated technology.

Persons interpreting medication orders should be aware of the concept of "confirmation bias," where a person selects what is familiar or expected, rather than what is actual. It is human nature to associate items by certain characteristics, and familiarity with certain products may cause a person to see what they think it is, rather than what it is.

The CMT can help prevent medication errors by being alert to the types of medications and orders that are prone to misunderstanding and by confirming basic information about the medication and resident prior to administering.

ADMINISTERING SUBLINGUAL AND BUCCAL MEDICATIONS

I. Sublingual and Buccal Medications

A. This route is used when rapid action is desired, or when a drug is specifically designed to be easily absorbed into blood vessels under the tongue (sublingual) or between the cheek and gums (buccal), such as Nitroglycerine, Isordil, etc. The tablets are completely soluble. They cannot be swallowed to obtain the same rapid effect.

B. For sublingual, instruct the resident to hold the tablet under his/her tongue until it's completely absorbed. Tell the resident not to move the tablet with the tongue to other parts of the mouth.

C. For buccal, be sure the tablet is placed between the cheek and gums, ask the resident to close mouth, and hold the tablet there until it's absorbed.

D. For both, remember to tell the resident not to drink water or swallow excessively until the tablet is completely absorbed.

USE OF AEROSOL HOLDING CHAMBER

These devices are also known as spacers and are portable drug delivery systems that help spray inhalers deliver medication to the lungs. They are designed to improve the delivery of these medications by making it easier for you to use them.

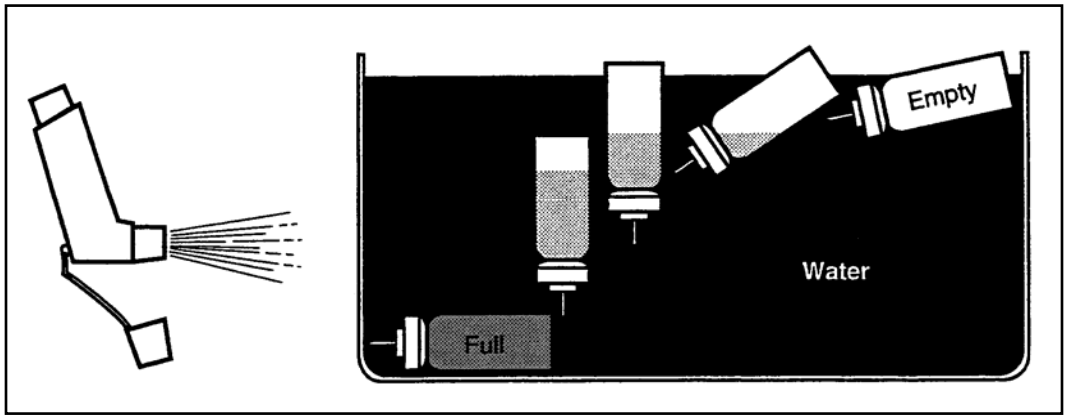
If you are using a spray inhaler alone, you may not be giving all of the required medication. These spray inhalers provide a convenient and effective method for delivering drugs, but they are not easy to use correctly. You must carefully time each breath while squeezing the inhaler canister downward. If your timing is incorrect, the full dose of medication may not be delivered deep within the lungs.

Aerosol Holding Chambers make it simpler to use spray inhalers correctly. After you press down on the inhaler canister, medication is released and stored in the Aerosol Chamber, giving the resident a chance to breath in the medication in two breaths. This does away with the need to carefully coordinate taking a breath and releasing the spray.

Commercial Products:

a) Inspirease has a special feature to help teach better breathing technique. When used correctly (taking a slow, deep breath that helps get the medication deep within the lungs), the bag will collapse and a whistling sound will not be heard. However, if the resident breathes too fast (a common mistake that can reduce the effectiveness of the treatment), a whistling sound can be heard. The whistling sound indicates that the resident should breathe slower.

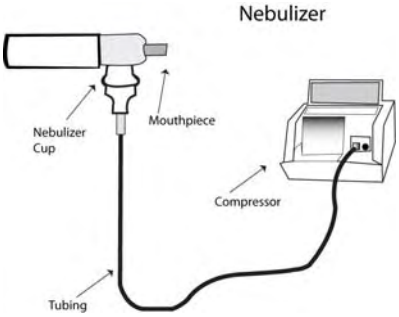
b) Aerochamber and Aerochamber with Mask have special features to help teach better breathing technique. When used correctly (taking a slow, deep breath that helps get the medication deep within the lungs), a whistling sound will not be heard. However, if the resident breathes too fast (a common mistake that can reduce the effectiveness of the treatment), a whistling sound can be heard. The whistling sound indicates that the resident should breathe slower.



1. How to determine the amount of medication remaining in an inhaler.

ADMINISTERING MEDICATIONS USING A NEBULIZER

The Certified Medication Technican may administer inhalec medications using a nebulizer if permitted by facility policy. Due to variances in equipment, the facility must provide the Certified medication Tecnician with training on the operation of the nebulizer system(s) being used in the facility prior to their use. Documentation of this training and competency in use of the equipment must be placed in the employee's record.



Medications such as bronchodilators, mucolytics and corticosteroids are often administered using a nebulizer, or a "breathing machine". A nebulizer consists of a small plastic cup with a screw-top lid for the liquid medication and a source for compressed air. As the air flows into the nebulizer, the liquid medication turns into a mist. When inhaled the medication has a better chance to reach the small airways. This increases the medication's effectiveness.

The treatment can be done with a mask placed over the resident's mouth and nose or a mouthpiece. The resident can relax and breathe normally during the treatment, continuing until no mist is left. Most nebulizer treatments last between 5 and 20 minutes depending on the medication ordered.