LESSON PLAN: 11

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-11 OR DEMONSTRATION:

BASIC GUIDELINES
(Lesson Title)

OBJECTIVES – THE STUDENT WILL BE ABLE TO:

1. Identify general principles in medication administration.
2. Identify responsibilities in preparing medications.
3. Identify responsibilities in administering medications.
4. Identify what should be reported to the charge nurse.
5. Identify information to be recorded on medication chart.
6. List the five "Rights" of medication administration.
7. Identify different medication errors.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. Video Presentation "General Principles of Drug Administration in the Long-Term Care Facility."
2. HO 29: Do Not Crush List.
3. HO 30: Incident Report Form.
4. HO 31: Guidelines for "Leave of Absence" (LOA) Medications for Long-Term Care Facilities.

INFORMATIONAL ASSIGNMENT

Read Lesson Plan 11 prior to class and be prepared to discuss the information presented.

INTRODUCTION:

Medications are an important part of the care plan for residents in long term care facilities. Medication errors cause 7,000 deaths annually and account for 20% of all medical errors. In Missouri, the most frequent deficiencies in LTC facilities are related to medications. By following the general principles for medication administration, the risk of errors and resident injuries can be dramatically reduced.

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OUTLINE:

I. General Principles of Medication Administration

A. Concentrate on safe preparation and administration of medications. Avoid distractions and interruptions.

B. Wash hands or cleanse hands with antibacterial gel before preparing medication and before and after resident contact. Use gloves when necessary.

C. Note the diagnosis and reason for each medication.

D. Note resident allergies.

E. Know the medications – if in doubt consult the supervising nurse, reference book, pharmacist, or physician. Do not give a medication until you know

1. Normal dosages.
2. Expected results.
3. Common side effects.
4. Contraindications for use.
5. Specific guidelines for administration (e.g., give with food; give ½ hour before meals, etc.).

F. Administer only medications that you have prepared.

G. Prepare, administer, and record medications within one hour before or after the scheduled time. If unable to complete the medication pass in the time permitted, notify the charge nurse immediately.

H. Review new medication orders with a licensed nurse or pharmacist before giving initial dose for verbal or telephone orders.

I. Know how to check the physician's order with the MAR. The order should include:

1. Name of the drug.
2. Dosage and form to be administered.
3. Route of administration (if other than oral).

4. Frequency of administration.

5. PRN orders must also include the reason to give the medication and time parameters such as “every 4 hours prn pain.” Always check with the licensed nurse before giving prn medications.

J. Clean up after medication administration.

1. Clean medication trays, the top of the cart, inside of drawers and cabinets.

2. Wipe up spills or drips from liquid containers paying special attention to labels.

3. Make sure all medications are stored properly.

4. Verify all medications are appropriately secured in a locked cart, medicine room, or cabinet.

5. Empty the trash container on the medication cart.

6. Restock supplies such as medicine cups or spoons as needed.

II. Five Rights of Medication Administration

To avoid medication errors, remember the five “Rights” of Medication Administration.

A. Right resident.

B. Right drug.

C. Right dose.

D. Right route.

E. Right time.

In recent years "Right Charting" has been considered by some to be a “right” as well, however, documentation errors are viewed differently than actual errors in the administration of the medication.

III. Preparation of Medications

A. Arrive in your work area on time and ready to begin work.

B. Obtain report from CMT on the previous shift and the charge nurse.

C. Complete the controlled substance count per facility policy.

D. Wash hands or cleanse with antibacterial gel.

E. Gather all necessary equipment such as stethoscope and BP cuff to avoid interruption.

F. Check medication cart for supplies such as medicine cups and applesauce; restock as needed.

G. Clean, organize and set up your work surface.

H. Follow acceptable Infection Control guidelines.

1. Wash hands or cleanse with antibacterial gel prior to preparing medications and before and after resident contact.

2. Avoid touching tablets or capsules. From a container, pour into the lid then dispense into a medication cup. From a punch card, dispense directly into the medication cup.

I. Compare label of medications bottle or unit dose package with the medication card or medication administration record (MAR). The information must match exactly.

1. Check the resident's name.

2. Check the name of drug, dosage form, and designated route of administration.

3. Check the expiration date on the medication.

4. Check the MAR for resident allergies.

5. Check the label three times and compare with MAR; they must match exactly.

a. Check when taking the medication from storage.

b. Check before removing the medication from the package.

c. Check when returning the medication to storage.

6. Always store medications in the container in which they were received from pharmacy.

7. Any medication that is expired should be set aside for disposal. Medications must be destroyed in the facility by a pharmacist and a licensed nurse or two licensed nurses. Follow facility policies and regulations regarding medication disposal.

8. Return any container that is damaged, incorrect, or with illegible label to pharmacy for re-labeling.

NOTE: Only the pharmacist can put a new label on the container. The CMT is not permitted to write on the label but may apply a change of direction sticker.

9. Be cautious when reading label of look-alike or sound-alike medications.

J. Check medication for deterioration – abnormal color, smell, or texture.

K. Follow manufacturer's guidelines for administration of medications. (e.g., administer on an empty stomach, resident to remain upright for 30 minutes after administration, etc.).

L. Preparing tablets.

1. Crushing.

a. A doctor's order is required to crush medications.

b. Any medications appearing on the "DO NOT CRUSH" list should not be crushed (e.g., enteric coated, time released) (HO 29).

2. Most medications can be mixed in a small amount of food (e.g., applesauce) for easier swallowing. Never place medications on the resident's meal tray.

3. Follow the facility policy and procedure and manufacturer's instructions for crushing medications. There are many different types of pill crushers on the market. Make sure to thoroughly clean the pill crusher before and after each use to minimize the chance of medication contamination.

CAUTION: Be certain it is not contraindicated before mixing medications with food.

M. Preparing liquid medications.

1. Observe the physical appearance of the product. Check the label for special handling and administration instructions such as "shake well" or "do not shake."

2. Remove the cap from the bottle and set it upside down on a clean surface to avoid contaminating the cap.

3. Hold the bottle with the label next to palm of your hand so you pour out of the bottle on the opposite side of label. This prevents medication from running down the bottle and obscuring the label.

4. Use the proper measuring device: a calibrated medicine cup, dropper, or syringe.

5. Place the medication cup on a flat surface at eye level. Read the measurement at the bottom of meniscus, the lowest point of the liquid in the cup.

6. When liquid medications are supplied in a pre-measured cup, remove the lid carefully so as not to spill the contents.

7. Dilute in proper liquids when required by manufacturer's guidelines (e.g., potassium chloride (KCl) liquid in juice or water).

N. Prepare and organize tray in order of administration (traditional).

O. Prepare and administer one resident's medications at a time (unit dose; also called modified unit dose or modified traditional).

P. Transport medications safely. All medications should be clearly identified.

Q. Never allow a medicine tray or unlocked medication cart out of your sight. Lock the cart if you cannot see it.

R. Never leave medications unattended on top of the cart.

S. Cover or close MAR to maintain privacy of the resident's records.

IV. Administration of Medications

A. Knock on the door before entering the resident's room and wait for permission to enter.

B. Identify yourself and explain your purpose.

C. Identify the resident – compare with the med card or MAR.

1. ID band.

2. Current picture identification.

3. Third party identifies resident.

4. Have the resident tell you his/her name (may be done in addition to one of the above).

D. Make necessary resident observations prior to administering medication (e.g., check apical pulse prior to dispensing digoxin or check blood pressure according to doctor's orders prior to dispensing antihypertensive).

E. Do not dispense medication or punch medication from the bubble card until you see the resident.

F. Give the resident adequate water. Encourage the resident to take a drink before taking medication to lubricate throat and assist in swallowing medications.

G. Stay with the resident (assist as necessary) until all medications are taken.

1. Verify consumption of the medication; do not delegate responsibility to another.

2. Never leave medications at the resident's bedside to be taken later.

3. Discard the empty medication cup in the resident's room and wash hands or use antibacterial gel before moving on to the next resident.

H. Administer in a systematic pattern to avoid omissions.

I. Administering tablets or capsules.

1. Sublingual – placed under the tongue to dissolve; NO water is given.

2. Buccal – placed between check and gum to dissolve; NO water is given.

3. Lozenges – placed in the mouth to dissolve, NO water is given.

J. Administering liquids

1. Measure carefully before giving.

2. Cough medication – unless the resident is on a fluid restriction, encourage increased water intake before giving cough medication. Cough medications should be given after other ordered medications and should NOT be followed by water or other liquids.

K. Follow facility's policy for medication administration when resident is away from the premises.

V. Report to the Licensed Nurse

A. Unusual symptoms new to the resident – hold medication.

B. Abnormal vital signs – hold medication.

C. Refusal to take a medication or suspicion that resident is not swallowing medications.

D. Administration problems.

E. Adverse drug reaction.

F. Medication error.

G. Any PRN medications given and results.

V. Principles of Medication Documentation

A. Purposes of documentation.

1. Communication tool with other healthcare team members.

2. Legal document – permanent record of care the resident received.

3. Reimbursement from government agencies or insurance companies.

B. Medications should be recorded as they are dispensed to each resident by the person who administered the medication.

C. What to record.

1. Name of drug.

2. Dosage and dosage form.

3. Time medication was given.

4. Route by which the medication was given.

5. Initial and name of person administering the medication.

D. Refusal/omission of a dose.

1. Circle the time the dose should have been given and place your initials inside of the circle.

2. Document why the medication was omitted on the back of the MAR.

3. Notify the charge nurse of what medications were omitted and why.

E. PRN medications.

1. On front of MAR initial under the date the medication was given.

2. On the back of the MAR document.

a. Date and time medication was given.

b. Name, dosage and route of medication.

c. Why medication was given. If given for pain, include the pain scale or behavior indicators.

d. Results of the prn medication.

3. Signature.

VI. Medication Errors

A. Errors may be charting or documentation errors.

1. Inaccurate spelling of the resident's or doctor’s name.

2. Failure to record a resident's or doctor’s full name on subsequent MAR or physician order sheets.

3. No date (include month, day and year).

4. Wrong date.

5. Failure to record an unusual condition, symptom, reaction, or PRN results.

6. Failure to chart medications when given.

7. Failure to get doctor’s signature on verbal orders.

8. Failure to sign a record when required.

9. Failure to identify initials on medication record.

10. Failure to chart a change in a medication order.

11. Failure to chart refusal of a medication.

B. May be an actual medication error. Types of medication errors:

1. Wrong resident – medication is given to the wrong person.

2. Omission – any dose of medication that is not given as ordered by the physician.

3. Wrong dosage – any dose that is either above or below the correct dosage.

4. Extra dosage – any dose that is given in excess of the total number of times ordered by the physician.

5. Unordered drug – the administration of any medication not ordered for that resident.

6. Wrong dosage form – a dosage form which is different from the form ordered by the physician.

7. Wrong time – any medications given more than 1 hour before or after it was schedule to be given. This does not include PRN orders.

8. Wrong route of administration – the administration of a drug by a different route than was specified by the physician (e.g., giving by mouth a drug ordered by injection).

C. All medication errors require the completion of an incident report form (per facility policy) and should be reported to the charge nurse immediately (HO 30).

VIII. Leave of Absence Medication (HO 31)

A. LOA medications are provided when the resident will be away from the facility at the time he/she is scheduled to receive a medication.

B. Each facility develops a policy and procedure for providing LOA medication.

C. Facility staff are not permitted to repackage or dispense medication.

IX. Summary and Conclusion

A. General principles of medication administration.

B. Preparation of medications.

C. Administration of medications.

D. Report to the licensed nurse.

E. Record on medication chart.

F. Five rights of medication administration.

G. Medication error.

In this lesson, we've covered key points in the administration of medications that can virtually eliminate medication errors. Remember the five "RIGHTS" to medication administration, concentrate and avoid interruptions, and know about your resident and his/her drug regimen.

DO NOT CRUSH LIST

Abbreviations

CD controlled dose
CR controlled release
CRT controlled release tablet
LA long acting
NG nasogastric
SA sustained action
SR sustained release
TD time delayed
TR time release
XL extended release
XR extended release

TYPE	REASONS FOR THE FORMULATION
Enteric-coated	Designed to pass through the stomach intact with drug being released in the intestines to: (1) prevent destruction of drug by stomach acids (2) prevent stomach irritation (3) delay onset of action
Extended-release	Designed to release drug over an extended period of time. Such products include: (1) multiple-layer tablets releasing drug as each layer is dissolved (2) mixed release pellets that dissolve at different time intervals (3) special matrixes that are themselves inert, but slowly release drug from the matrix
Sublingual	Designed to dissolve quickly in oral fluids for rapid absorption by the abundant blood supply of the mouth
Miscellaneous	Drugs that (1) produce oral mucosa irritation (2) are extremely bitter (3) contain dyes or inherently could stain teeth and mucosal tissue (4) drugs that, if handled without adequate protection, are potentially cacinogenic

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Aciphex	Tablet	Show-release
Accutane	Capsule	Mucous membrane irritant
Actiq	Lozenge	Show-release; NOTE: this lollipop delivery system requires the patient to slowly allow dissolution
Actonel	Tablet	Irritant; NOTE: chewed, crushed, or sucked tablets; may cause oropharyngeal irritation
Adalat CC	Tablet	Slow-release
Adderall XR	Capsule	Slow-release (a)
AeroHist Plus	Tablet	Slow-release (h)
Afeditab CR	Tablet	Slow-release
Alavert Allergy Sinus 12 Hour	Tablet	Slow-release
Allegra-D	Tablet	Slow-release
Allfen Jr	Tablet	Slow-release
Allfen Jr	Capsule	Slow-release (a)
Alprazolam ER	Tablet	Slow-release
Altoprev	Tablet	Slow-release
Ambien CR	Tablet	Slow-release
Aptivus	Capsule	NOTE: oil emulsion within spheres; taste
Aquatab C	Tablet	Slow-release (h)
Aquatab D	Tablet	Slow-release (h)
Arthrotec	Tablet	Enteric-coated
Asacol	Tablet	Slow-release
Ascriptin A/D	Tablet	Enteric-coated
Augmentin XR	Tablet	Slow-release (b,h)
Avinza	Capsule	Slow-release (a; not pudding)

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Avodart	Capsule	NOTE: drug may cause fetal abnormalities; women who are, or may become, pregnant should not handle capsules; all women should use caution in handling capsules, especially leaking capsules
Azulfidine EN-tabs	Tablet	Enteric-coated
Bayer Enteric-coated	Caplet	Enteric-coated
Bayer Low Adult	Tablet	Enteric-coated
Bayer Regular Strength	Caplet	Enteric-coated
Bellahist-D LA	Tablet	Slow-release
Biaxin-XL	Tablet	Slow-release
Bidhist	Tablet	Slow-release
Bidhist-D	Tablet	Slow-release
Biltricide	Tablet	Taste (h)
Bisa-Lax	Tablet	Enteric-coated (c)
Biohist LA	Tablet	Slow-release (h)
Bisac-Evac	Tablet	Enteric-coated (c)
Bisacodyl	Tablet	Enteric-coated (c)
Boniva	Tablet	Irritant: do not chew or suck; NOTE: potential for oropharyngeal ulceration
Bromfed PD	Capsule	Slow-release
Budeprion SR	Tablet	Slow-release
Calan SR	Tablet	Slow-release (h)
Carbatrol	Capsule	Slow-release (a)
Cardene SR	Capsule	Slow-release
Cardizem	Tablet	NOTE: although no described as slow release in the package insert, the drug has a coating that is intended to release the drug over a period of approximately 3 hours
Cardizem CD	Capsule	Slow-release
Cardizem LA	Tablet	Slow-release
Cardura XL	Tablet	Slow-release
CartiaXT	Capsule	Slow-release
Cefaclor Extended-Release	Tablet	Slow-release
Ceftin	Tablet	Taste (b); NOTE: use suspension for children
Cefuroxime	Tablet	Taste (b); NOTE: use suspension for children
CellCept	Capsule	Teratogenic potential (i)
CellCept	Tablet	Teratogenic potential (i)
Charcoal Plus	Tablet	Enteric-coated
Chlor-Trimeton 12-Hour	Tablet	Slow-release (b)
Cipro XR	Tablet	Slow-release
Claritin-D 12 Hour	Tablet	Slow-release
Claritin-D 24 Hour	Tablet	Slow-release
Colace	Capsule	Taste (e)
Colestid	Tablet	Slow-release
Concerta	Tablet	Slow-release
Commit	Lozenge	NOTE: integrity compromised by chewing or crushing

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Coreg CR	Capsule	Slow-release
Cotazym-S	Capsule	Enteric-coated (a)
Covera-HS	Tablet	Slow-release
Creon 5, 10, 20	Capsule	Slow-release (a)
Crixivan	Capsule	Taste; NOTE: Capsule may be opened and mixed with fruit puree (eg, banana)
Cymbalta	Capsule	Slow-release
Cytoxan	Tablet	NOTE: drug may be crushed by company recommends using injection
Cytovene	Capsule	Skin irritant
Dallergy	Tablet	Slow-release (b,h)
Dallergy JR	Capsule	Slow-release
Deconamine SR	Capsule	Slow-release (b)
Depakene	Capsule	Slow-release mucous membrane irritant (b)
Depakote	Tablet	Slow-release
Depakote ER	Tablet	Slow-release
Detrol LA	Capsule	Slow-release
Dilacor XR	Capsule	Slow-release
Dilatrate-SR	Capsule	Slow-release
Dilt-CD	Capsule	Slow-release
Dilt-XR	Capsule	Slow-release
Diltia XT	Capsule	Slow-release
Ditropan XL	Tablet	Slow-release
Doxidan	Tablet	Enteric-coated (c)
Drisdol	Capsule	Liquid-filled (d)
DriHist SR	Tablet	Slow-release (h)
Drixoral Cold/Allergy	Tablet	Slow-release
Drixoral Nondrowsy	Tablet	Slow-release
Drixoral Allergy Sinus	Tablet	Slow-release
Droxia	Capsule	NOTE: exposure to the powder may cause serious skin toxicities; health care workers should wear gloves to administer
Drysec	Tablet	Slow-release (h)
Dulcolax	Tablet	Enteric-coated (c)
Dulcolax	Capsule	Liquid-filled
DuraHist	Tablet	Slow-release (h)
DuraHist D	Tablet	Slow-release (h)
Duraphen II	Tablet	Slow-release (h)
Duraphen II DM	Tablet	Slow-release (h)
Duraphen Forte	Tablet	Slow-release (h)
Duratuss	Tablet	Slow-release (h)
Duratuss A	Tablet	Slow-release (h)
Duratuss PE	Tablet	Slow-release (h)
DynaCirc CR	Tablet	Slow-release
Dynex	Tablet	Slow-release (h)

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Easprin	Tablet	Enteric-coated
EC-Naproxyn	Tablet	Enteric-coated
Ecotrin Adult Low Strength	Tablet	Enteric-coated
Ecotrin Maximum Strength	Tablet	Enteric-coated
Ecotrin Regular Strength	Tablet	Enteric-coated
Ed A-Hist	Tablet	Slow-release (b)
E.E.S. 400	Tablet	Enteric-coated (b)
Effer-K	Tablet	Effervescent tablet (f)
Effervescent Potassium	Tablet	Effervescent tablet (f)
Effexor XR	Capsule	Slow-release
Efidac/24 Pseudoephedrine	Tablet	Slow-release
Efidac/24	Tablet	Slow-release
E-Myan	Tablet	Enteric-coated
Enablex	Tablet	Slow-release
Entex LA	Capsule	Slow-release (b)
Entex PSE	Capsule	Slow-release
Entocort EC	Capsule	Enteric-coated (a)
Equetro	Capsule	Slow-release (a)
Ergomar	Tablet	Sublingual form (g)
Eryc	Capsule	Enteric-coated (a)
Ery-Tab	Tablet	Enteric-coated
Erythrocin Stearate	Tablet	Enteric-coated
Erythronycin Base	Tablet	Enteric-coated
Evista	Tablet	Taste; teratogenic potential (i)
ExeFen PD	Tablet	Slow-release (h)
Extendryl JR	Capsule	Slow-release
Extendryl SR	Capsule	Slow-release (b)
Faldene	Capsule	Mucous membrane irritant
Feen-a-mint	Tablet	Enteric-coated (c)
Fentora	Tablet	NOTE: buccal tablet; swallow whole
Feosol	Tablet	Enteric-coated (b)
Feratab	Tablet	Enteric-coated (b)
Fergon	Tablet	Enteric-coated
Fero-Grad 500 mg	Tablet	Slow-release
Ferro-Sequels	Tablet	Slow-release
Flagyl ER	Tablet	Slow-release
Fleet Laxative	Tablet	Enteric-coated (c)
Flomax	Capsule	Slow-release
Focalin XR	Capsule	Slow-release (a)
Fosamax	Tablet	Mucous membrane irritant
Geocillin	Tablet	Taste
Gleevec	Tablet	Taste (h); NOTE: may be dissolved in water or apple juice
Glipizide	Tablet	Slow-release
Glucophage XR	Tablet	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Glucotrol XL	Tablet	Slow-release
Glumetza	Tablet	Slow-release
Guaifed	Capsule	Slow-release
Guaifed-PD	Capsule	Slow-release
Guaifenesin/Pseudoephedrine	Tablet	Slow-release
Guaifenex DM	Tablet	Slow-release (h)
Guaifenex GP	Tablet	Slow-release
Guaifenex PSE	Tablet	Slow-release (h)
Guaimax-D	Tablet	Slow-release
H9600 SR	Tablet	Slow-release
Halfprin 81	Tablet	Enteric-coated
Heartline	Tablet	Enteric-coated
Hista-Vent DA	Tablet	Slow-release (h)
Hydrea	Capsule	NOTE: exposure to the powder may cause serious skin toxicities; health care workers should wear gloves to administer
Imdur	Tablet	Slow-release (h)
Inderal LA	Capsule	Slow-release
Indocin SR	Capsule	Slow-release (a,b)
Innopran XL	Capsule	Slow-release
Invega	Tablet	Slow-release
Ionamin	Capsule	Slow-release
Isochron	Tablet	Slow-release
Isoptin SR	Tablet	Slow-release (h)
Isordil Sublingual	Tablet	Sublingual form (g)
Isosorbide Dinitrate Sublingual	Tablet	Sublingual form (g)
Isosorbide SR	Tablet	Slow-release
K+8	Tablet	Slow-release (b)
K+10	Tablet	Slow-release (b)
Kadian	Capsule	Slow-release (a); NOTE: give via NG tubes
Kaletra	Tablet	Film-coated
Kaon CL-10	Tablet	Slow-release (b)
Keppra	Tablet	Slow-release (b)
Ketek	Tablet	Slow-release (b)
Klor-Con	Tablet	Slow-release (b)
Klor-Con M	Tablet	Slow-release (b,h)
Klotrix	Tablet	Slow-release
K-Lyte	Tablet	Effervescent tablet (f)
K-Lyte CL	Tablet	Effervescent tablet (f)
K-Lyte DS	Tablet	Effervescent tablet (f)
K-Tab	Tablet	Slow-release (b)
Lescol XL	Tablet	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Levbid	Tablet	Slow-release (h)
Levsinex Timecaps	Capsule	Slow-release
Lexxel	Tablet	Slow-release
Lialda	Tablet	Slow-release
Lipram 4500	Capsule	Enteric-coated (a)
Lipram PN 10, 16, 20	Capsule	Enteric-coated, slow-release 9a)
Lipram UL 12, 18, 20	Capsule	Enteric-coated, slow-release (a)
Liquibid-D 1200	Tablet	Slow-release (h)
Liquibid-PD	Tablet	Slow-release (h)
Lithobid	Tablet	Slow-release
Lodrane 24	Capsule	Slow-release
LoHist 12 Hour	Tablet	Slow-release
Maxifed DM	Tablet	Slow-release (h)
Maxifed DMX	Tablet	Slow-release (h)
MAXIPHEN DM	Tablet	Slow-release (h)
Medent-DM	Tablet	Slow-release
Mestinon Timespan	Tablet	Slow-release (b)
Metadate ER	Tablet	Slow-release
Metadate CD	Capsule	Slow-release (a)
Methylin ER	Tablet	Slow-release
Micro K Extendcaps	Capsule	Slow-release (a,b)
Miraphen PSE	Tablet	Slow-release
Modane	Tablet	Enteric-coated (c)
Morphine sulfate extended-release	Tablet	Slow-release
Motrin	Tablet	Taste (e)
MS Contin	Tablet	Slow-release (b)
Mucinex	Tablet	Slow-release
Mucinex DM	Tablet	Slow-release
Muco-Fen-DM	Tablet	Slow-release (h)
Myfortic	Tablet	Slow-release
Naprelan	Tablet	Slow-release
Nasatab LA	Tablet	Slow-release (h)
Nexium	Capsule	Slow-release (a)
Niaspan	Tablet	Slow-release
Nicotinic Acid	Capsule	Slow-release (h)
Nicotinic Acid	Tablet	Slow-release (h)
Nifediac CC	Tablet	Slow-release
Nifedical XL	Tablet	Slow-release
NitroQuick	Tablet	Sublingual route (g)
Nitrostat	Tablet	Sublingual route (g)
Norpace CR	Capsule	Slow-release form within a special capsule
Ondrox	Tablet	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Opana ER	Tablet	Slow-release; NOTE: tablet disruption may cause a potentially fatal overdose of oxymorphone
Oracea	Capsule	Slow-release
Oramorph SR	Tablet	Slow-release (b)
Oxycontin	Tablet	Slow-release; NOTE: tablet disruption may cause potentially fatal overdose of oxycodone
Palcaps (all)	Capsule	Enteric-coated (a)
Pancrease MT	Capsule	Enteric-coated (a)
Pancrecarb MS	Capsule	Enteric-coated (a)
Pancrelipase	Capsule	Enteric-coated (a)
Panocaps	Capsule	Enteric-coated (a)
Panocaps MT	Capsule	Enteric-coated (a)
Paxil CR	Tablet	Slow-release
Pentasa	Capsule	Slow-release
PhenaVent D	Tablet	Slow-release (h)
PhenaVent LA	Capsle	Slow-release
Plendil	Tablet	Slow-release
Pre-Hist-D	Tablet	Slow-release (h)
Prevacid	Capsule	Slow-release
Prevacid Solu Tab	Tablet	Orally disintegrating; NOTE: do not swallow; dissolve in water only and dispense via dosing syringe or NT tube
Prevacid Suspension	Suspension	Slow-release; NOTE: contains enteric-coated granules; mix with water only; not fur use in NG tubes
Prilosec	Capsule	Slow-release
Philosec OTC	Tablet	Slow-release
Procanbid	Tablet	Slow-release
Procardia XL	Tablet	Slow-release
Profen II	Tablet	Slow-release (h)
Profen II DM	Tablet	Slow-release (h)
Profen Forte	Tablet	Slow-release (h)
Profen Forte DM	Tablet	Slow-release (h)
Propecia	Tablet	NOTE: women who are, or may become, pregnant should not handle crushed or broken
Proquin XR	Tablet	Slow-release
Proscar	Tablet	NOTE: women who are, or may become, pregnant should not handle crushed or broken
Protonix	Tablet	Slow-release
Prozac Weekly	Tablet	Enteric-coated
Pseudo CM TR	Tablet	Slow-release (h)
Pseudovent	Capsule	Slow-release (a)
Pseudovent 400	Capsule	Slow-release (a)
Pseudovent-PED	Capsule	Slow-release 9a)
Pseudovent DM	Tablet	Slow-release (h)
PYtest	Capsule	NOTE: radiopharmaceutical
QDall	Capsule	Slow-release
QDall AR	Capsule	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Ralix	Tablet	Slow-release (h)
Renaex	Tablet	Slow-release
Razadyne ER	Capsule	Slow-release (b)
Renagel	Tablet	NOTE: tablets expand in liquid if broken or crushed
Rescon	Tablet	Slow-release (h)
Rescon JR	Tablet	Slow-release (h)
Rescon MX	Tablet	Slow-release (h)
Respa-1st	Tablet	Slow-release (h)
Respa-DM	Tablet	Slow-release (h)
Respahist	Capsule	Slow-release (a)
Respaire 120 SR	Capsule	Slow-release
Respaire 60 SR	Capsule	Slow-release
Ritalin LA	Capsule	Slow-release (a)
Ritalin SR	Tablet	Slow-release
R-Tanna	Tablet	Slow-release
Rythmol SR	Capsule	Slow-release
Sinemet CR	Tablet	Slow-release (h)
SINUventPE	Tablet	Slow-release (h0
Slo-Niacin	Tablet	Slow-release (h)
Solodyn	Tablet	Slow-release
Somnote	Capsule	Liquid-filled
Sprycel	Tablet	Film-coated; NOTE: active ingredients are surrounded by a wax matrix to prevent health care exposure; women who are, or may become, pregnant should not handle crushed or broken tablets
Stahist	Tablet	Slow-release
Strattera	Capsule	NOTE: capsule contents can cause ocular irritation
Sudafed 12 hour	Capsule	Slow-release (b)
Sudafed 24 hour	Capsule	Slow-release (b)
Sular	Tablet	Slow-release
SymaxDuotab	Tablet	Slow-release
Symax SR	Tablet	Slow-release
Taztia XT	Capsule	Slow-release 9a)
Tegretol-XR	Tablet	Slow-release
Temodar	Capsule	NOTE: if capsules are accidentally opened or damaged, rigorous precautions should be taken to avoid inhalation or contact of contents with the skin or mucous membranes (i)
Tessalon Perles	Capsule	NOTE: swallow whole; temporary local anesthesia of the oral mucosa and choking could occur
Theo-24	Capsule	Slow-release; NOTE: contains beads that dissolve throughout the GI tract
Tiazac	Capsule	Slow-release (a)
Topamax	Tablet	Taste
Toprol XL	Tablet	Slow-release (h)
Touro CC-LD	Tablet	Slow-release (h)
Touro LA-LD	Tablet	Slow-release (h)

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Tracleer	Tablet	NOTE: women who are, or may become, pregnant should not handle crushed or broken tablets
Trental	Tablet	Slow-release
Tylenol Arthritis	Tablet	Slow-release
Ultram ER	Tablet	Slow-release; NOTE: tablet disruption may cause a potentially fatal overdose of tramadol
Uniphyl	Tablt	Slow-release
Urocit-K	Tablet	Wax-coated
Uroxatral	Tablet	Slow-release
Valcyte	Tablet	Teratogenic and irritant potential (i)
Verapamil SR	Tablet	Slow-release (h)
Verelan	Capsule	Slow-release (a)
Verelan PM	Capsule	Slow-release (a)
VesiCare	Tablet	Enteric-coated
Videx EC	Capsule	Slow-release
Voltaren XR	Tablet	Slow-release
VoSpireER	Tablet	Slow-release
Wellbutrin SR	Tablet	Slow-release
Wellbutrin XL	Tablet	Slow-release
Xanax XR	Tablet	Slow-release
Zolinza	Capsule	NOTE: irritant; avoid contact with skin or mucous membranes; avoid contact with crushed or broken tablets
ZORprin	Tablet	Slow-release
Zyban	Tablet	Slow-release

Key:

(a) Capsule may be opened and the contents taken without crushing or chewing; soft food such as applesauce or pudding may facilitate administration; contents may generally be administered via NG tube using an appropriate fluid provided entire contents are washed down the tube.
(b) Liquid dosage forms of the product are available; however, dose, frequency of administration, and manufacturers may differ from that of the solid dosage form.
(c) Antacids and/or milk may prematurely dissolve the coating of the tablet.
(d) Capsule may be opened and the liquid contents removed for administration.
(e) The taste of this product in a liquid form would likely be unacceptable to the patient; administration via NG tube should be acceptable.
(f) Effervescent tablets must be dissolved in the amount of dilluent recommended by the manufacturer.
(g) Tablets are made to disintegrate under the tongue.

(h) Tablet is scored and may be broken in half without affecting release characteristics.
(i) Skin contact may enhance tumor production; avoid direct contact.

Disclaimer: This listing is not meant to represent all products, either by generic or trade name. The author encourages manufacturers, pharmacists, nurses, and other health professionals to notify him of any changes or updates.

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INCIDENT REPORT FORM

(Report all accidents or incidents even if no apparent injury)

Last Name	First Name	Middle Name
Room No.	Bed No.	Admission No.

Date of accident or incident _____ 20___ Time _____ a.m./p.m.

Was it necessary to notify physician? ☐ Yes ☐ No Time of Notification _____ a.m./p.m.

Name of physician _____ Name of supervising nurse _____

Describe nature of accident or incident and injuries received: _____

_____

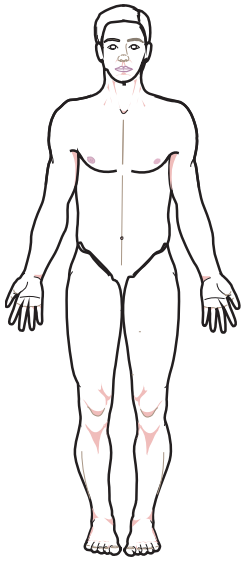
_____

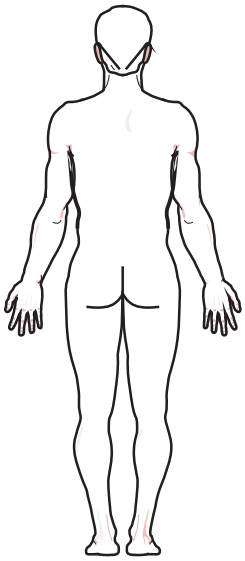
_____

_____

_____

Illustrate on the diagram position or place of injury, if any:





Date report written _____ 20 ___ Time _____ a.m./p.m.

Signed _____
(PHYSICIAN OR NURSE)

GUIDELINES FOR "LEAVE OF ABSENCE" (LOA) MEDICATIONS FOR LONG-TERM CARE FACILITIES

Medications must be provided for administration when a resident goes on a leave of absence from the facility. The facility should have policies and procedures for providing leave of absence medications that may include the following:

- The facility should inform physicians of the policies and procedures. The facility may have a policy that limits the quantity of medication sent with a resident without approval of the physician. The physician should be consulted when it is necessary to send a larger quantity if there is concern about resident or family ability to properly handle this quantity related to administering, storing, security, intentional overdose, or return of remaining medication to the facility.

- An authorized facility medication staff member should review current medication orders with the resident or responsible person. When necessary, such as when there are complex instructions or changes in dose, the staff member should provide information regarding administration in writing in addition to the medication label.

- A facility nurse should consult with the physician if a resident is a candidate for special options to accommodate routine absences such as sheltered workshops, school, or other limited absences. These options may include changes in administration times or doses, or omission of doses, when clinically appropriate.

- The facility should inform residents and their families of the policies and procedures.

- The facility should keep a record of the medications and quantities sent with the resident and returned, and the resident or responsible person should sign for the medications. This is especially important for controlled substances.

- Medications returned to the facility should be inspected to see if they are suitable for continued use. They should not be combined with medications in other containers. Containers should be identified as having been sent with the resident and should not later be returned to the pharmacy for reuse.

Facility staff are not allowed by law to repackage or dispense medications. The following options are available to provide leave of absence medications:

- An authorized facility medication staff member may send prescription medication cards or other multiple-dose prescription containers with the resident if the containers are labeled by the pharmacy with instructions for use.

- The pharmacy may provide an appropriate quantity of each medication separately packaged and labeled for home use as part of the regular monthly refill.

- The resident's family or the facility may obtain separate prescriptions for home storage, or for individual leave quantities.

- The pharmacy may provide an appropriate quantity of each medication separately packaged and labeled for a resident who attends school or a sheltered workshop. This supply may be sent with the resident and returned daily or maintained at the school or workshop. The facility is responsible to assure that medications are stored and administered properly at the school or workshop.

LESSON PLAN: 11

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

Circle the letter of the best answer.

1. Which statement is NOT a general principle of medication administration?

    a. Concentrate when passing medications.
    b. Know how to check physicians order with the MAR.
    c. Prepare, administer, and record medications within one hour before or after scheduled time.
    d. Administer medications prepared by the licensed nurse.

2. Which statement is true in regard to preparing medications?

    a. Never shake liquid medications.
    b. Check the label three times.
    c. Every medication can be mixed with food.
    d. Always crush medications for residents who have trouble swallowing.

3. Which statement is NOT true in regard to administering medications?

    a. To save money, reuse medication cups.
    b. Verify consumption of medication.
    c. Identify resident with current I.D. band and medication card or MAR.
    d. Observe resident prior to giving medication.

4. Which of the following does NOT need to be reported to licensed nurse?

    a. Resident voided 200mL of clear amber urine.
    b. Blood pressure of 200/120.
    c. Complaints of dizziness.
    d. Refusal to take a medication.

5. When should you record medications given?

    a. Before you have prepared the medications.
    b. Immediately after giving unit dose medications
    c. At the end of your shift.
    d. The licensed nurse records which medications are given.

6. The medication technician gave a resident a medication at 8:00 a.m., noon, and 8:00 p.m. The resident was scheduled to receive the medication at 8:00 a.m. and 8:00 p.m. What kind of a medication error is this?

    a. Omissions.

b Wrong dosage.
c. Extra dose.
d. Wrong dosage form.

7. Failing to get the doctor's signature on verbal orders is what kind of an error?

a. Charting error.
b. Omissions.
c. Wrong time.
d. Unordered drug.

8. List the 5"rights" of medications administration.

LESSON PLAN: 12

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-12 OR DEMONSTRATION:

SPECIAL CATEGORIES OF DRUG ADMINISTRATION
(Lesson Title)

OBJECTIVES – THE STUDENT WILL BE ABLE TO:

1. Identify responsibilities of a medication technician in administering stat medications.

2. Identify responsibilities of a medication technician in administering PRN medication.

3. Identify responsibilities of a medication technician in administering emergency drugs.

4. Identify responsibilities of a medication technician in administering controlled drugs.

5. Identify responsibilities of a medication technician in administering stock drugs.

6. Describe parenteral drugs and why they are given.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. Suggested emergency tray.

2. Controlled substance record sheets (HO 16, HO 17).

3. Routine medication record sheets (HO 14).

4. Bottles of placebo tablets to simulate controlled drugs.

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 12 prior to class and be prepared to discuss the information presented.

INTRODUCTION:

There are special categories in drug administration that place certain limitations upon the medication technician. However, your observations will assist the charge nurse and the physician in the management of unusual situations which my often involve a life saving effort. This lesson deals with STAT, PRN, emergency, controlled substances, stock and parenteral drugs and the accountability systems associated with their administration.

LESSON PLAN: 12

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

OUTLINE:

I. Stat Medications

A. Definition – a medication with an order to be given immediately.

B. Safe preparation and administration.

1. Check order on order sheet.

2. Check for resident allergies.

3. Complete medication card as needed.

4. Review stat medication order with licensed nurse or pharmacist BEFORE giving medication.

5. Prepare and administer immediately.

6. Document the medication on the MAR immediately after administering.

C. Document and report stat medications.

1. Reason for administration.

2. Name of the drug.

3. Dosage and dosage form.

4. Date and time medication given.

5. Route.

6. Initials and name.

7. Follow-up observations when applicable.

II. PRN Medications (Stock, Individual, Controlled Drugs)

A. Definition – a medication that is ordered to be given as needed for a specific condition within a specified time frame.

NOTE: The CMT does not administer medications when the order includes

optional dosages, “PRN” administration frequency choices or other assessment requirements except as follows:

1. After an assessment by a licensed nurse when required by the physician’s order; or

2. Upon request of the resident. If there is a question regarding the safety of the resident’s request, the CMT shall consult with the resident’s physician, a pharmacist, or the licensed nurse.

B. Preparation and administration.

1. Identify resident’s need.

a. Vital signs if required.

b. Symptoms or complains specifically noted.

c. Utilize the facility approved pain scale for complaints of pain.

2. Check for valid PRN medication order; PRN decision made by charge nurse.

a. Time of last dose given.

b. Frequency allowed per doctor’s order.

c. Follow facility automatic stop order policy if applicable.

d. Give only for specific complaint and as ordered (e.g., if acetaminophen is ordered for an elevated temperature, it cannot be given for pain).

C. Document and report PRN medications.

1. Reason for administration.

2. Drug.

3. Dosage and dosage form.

4. Date and time.

5. Route of administration.

6. Initials and name of person giving medication.

7. Notify licensed nurse of results and document on the MAR.

8. Document Follow-up observations on the MAR as required including pain scale score and alternate interventions if symptoms or complaints not resolved.

III. Emergency Drug Supply (EDS)

A. Definitions:

1. A limited number of dosage units of prescription drugs for use in a true emergency.

2. Medications available for starting doses of a drug when the pharmacy cannot provide a prescription within a reasonable time based on the resident's clinical needs at the time. May be referred to as a "Starter dose."

3. True emergency drugs may be stored separately in a sealed tray or kit.

4. Non-emergency drugs are not intended to be used routinely for new orders. The licensed nurse should determine if the resident's clinical condition requires the use of starter doses from the EDS.

5. Over-the-counter (OTC) medications.

6. Medications used to provide first aid.

B. Policy.

1. A written policy must be in place.

2. Submitting a list of prescription drugs signed by a pharmacist to the Missouri Department of Health and Senior Services for approval is NO LONGER REQUIRED.

3. No controlled drugs are allowed in the EDS unless the facility has a registration number from the Missouri Bureau of Narcotics and Dangerous Drugs.

C. Storage.

1. Readily accessible.

2. In a locked area.

D. Preparation and administration (EMERGENCY USE ONLY).

1. Written physician's order is required.

2. Prepare and give as ordered.

3. The medication is signed out on the EDS log per facility policy so that the correct resident is billed for the medication. The EDS card is added to the resident's regularly scheduled medications. The information required when signing out an EDS card includes:

    a. Resident's name and room number.

    b. Date and time.

    c. Medication dose and strength.

    d. Signature of person removing card from the EDS.

E. Document and report (EDS).

1. Reason for administration.

2. Drug.

3. Dosage and dosage form.

4. Date and time.

5. Route of administration.

6. Initials and name of person administering drug.

7. Follow-up observations.

F. Restocking the emergency drug supply.

1. The pharmacy will check the EDS cards monthly and replace close-dated or outdated cards as needed.

2. If an EDS card has been used, but has not been billed to a resident, the card will be replaced and the pharmacy will bill the facility for the replacement card.

3. When the replacement EDS cards are returned to the facility from the pharmacy, the CMT or nurse will check them in on the EDS log as replaced and initial or sign as appropriate.

4. The CMT or nurse is responsible for returning the replacement EDS cards to the appropriate slot so that they are easily found when needed.

IV. Controlled Substances

A. Definition – drugs subject to regulations under the Controlled Substances Act.

B. Preparation and administration.

1. Identify resident's need.

a. Vital signs if required.

b. Symptoms or Complaints specifically noted.

c. Utilize the facility approved pain scale for complaints of pain.

2. Check for valid prn medication order. The decision to administer a prn medication is made by the licensed nurse.

a. Time of last dose given.

b. Frequency allowed per doctor's order.

c. Follow facility automatic stop order policy if applicable.

d. Give only for specific complaint and as ordered.

C. Policy

1. Storage.

a. Double lock – Schedule II drugs plus other drugs per facility policy.

b. Different key for each lock.

c. Only authorized nursing and pharmacy personnel may have access to the storage area and the keys shall be in the possession and control of an authorized person at all times.

d. Schedule II drugs may be stored with other drugs if they are packaged in single unit dose packaging, quantities are minimal, and missing doses can be readily detected.

2. Accountability.

a. Drug substances count.

1) Schedule II controlled substance schedule medications shall be counted and reconciled each shift.

2) Schedule IV controlled substance medications shall be counted and reconciled weekly or as needed to ensure accountability.

3) Inventories of controlled substances shall be counted and reconciled by two (2) medication personnel, one of whom is a licensed nurse or two (2) medication personnel, one of whom is the administrator when no nurse is available.

4) Records of receipt and disposition of all controlled substances must be in sufficient detail to enable reconciliation at least monthly per CMS guidelines and include the date, source of supply, resident name and prescription number when applicable, medication name and strength, quantity and signature of supplier and receiver.

5) Controlled substance inventory records shall be used to verify that all scheduled medications have been counted and reconciled by the shift coming on duty and the shift going off duty. These records shall be maintained separate from other records by the facility for at least two (2) years.

6) When self control of medication is approved, a record shall be made of all controlled substances transferred to and administered from the resident's room. Inventory count and reconciliation shall include controlled substances transferred to the resident's room.

b. Losses, suspected theft, or errors in administration of controlled substances must be immediately reported to the Director of Nursing.

c. Report discrepancies to authorities.

1) Missouri Department of Health and Senior Services section for Long-Term Care.

2) Missouri Bureau of Narcotics and Dangerous Drugs for discrepancies in the EDS.

3. Destruction of controlled substances.

a. Documentation of waste of controlled substances at the time of administration should include the reason for the waste and the signature of the authorized employee witness.

b. Destruction of a contaminated dose, unused, or outdated dose may be witnessed by two (2) licensed nurses or a licensed nurse and pharmacist.

D. Document and report on both the MAR and the individual controlled substance record.

1. Drug.

2. Dosage and dosage form.

3. Date and time.

4. Route of administration.

5. Initial and name.

6. Reason for administration if prn or stat.

7. Follow facility policy for accountability system.

V. Stock drugs

A. Definition – over-the-counter (OTC) or nonprescription drugs.

1. A list of all stock drugs should be posted in the medication room or nurses station.

2. Stock medications may be purchased in bulk sized bottles.

3. The notation “stock medication” may be written on the MAR to make it easier to locate medications during the medication pass.

B. Preparation and administration.

1. Identify resident’s need for PRN medications.

a. Obtain vital signs if required.

b. Symptoms or complaints specifically noted.

c. Utilize the facility approved pain scale for complaints of pain.

2. Check for a valid PRN medication order. The decision to administer a PRN medication is made by the licensed nurse.

a. Time of last dose given.

b. Frequency allowed per doctor’s order.

c. Follow facility automatic stop order policy if applicable.

d. Give only for specific complaint and as ordered.

C. Safety precautions.

1. Keep drugs in original container.

2. Remove unauthorized OTC drugs from resident's bedside according to facility policy. A doctor's order is required to leave any medication at the resident's bedside.

D. Document and report.

1. Reason for administration for PRN medication.

2. Drug.

3. Dosage and dosage form.

4. Date and time.

5. Route of administration.

6. Initials and name of person administering drug.

7. Follow-up observations for PRN medications.

VI. Parenteral Drugs

A. Definition – drugs not given in or through the digestive (enteral) system. Most commonly used to describe a drug given by injection (e.g., subcutaneous, intramuscular, IV). Except as noted below, the CMT is not permitted to administer medications by injection.

B. Primary types of administration (by licensed nurse).

1. Intradermal – under one layer of skin (e.g., PPD test).

2. Subcutaneous – under the skin (e.g., heparin).

EXCEPTION: Insulin MAY BE administered by medication technician who has successfully completed the state-approved course for insulin administration and is permitted to administer insulin by the employing facility's policy.

3. Intramuscular – into a muscle (e.g., hepatitis vaccine).

4. Intravenous – into a vein.

C. Reasons for parenteral drugs.

1. Rapid absorption.

2. Resident is nauseated or vomiting.

3. Mental and physical conditions.

4. Medication cannot be absorbed by GI tract or is inactivated when given orally.

VIII. Summary and Conclusion

A. Stat drugs.

B. PRN drugs.

C. Emergency drug supply.

D. Controlled substances.

E. Stock drugs.

F. Parenteral drugs.

The next lesson is on preparing and administering oral, ophthalmic, otic, topical, transdermal patch, oral metered dose inhaler, nasal, vaginal, and rectal medications. Also, administering oxygen by nasal cannula is covered.

LESSON PLAN: 12

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

Place an "X" in the blank provided if the following drug orders may be carried out by the medication technician, after consulting with the charge nurse.

___ 1. Aspirin 650 mg. q 4h. PRN for temperature over 101R.

___ 2. Demerol 50 mg. I.M. stat for abdominal pain.

___ 3. Mylanta 5 mL. p.o. BID, prn; indigestion.

___ 4. Nitroglycerin 0.3 mg. sublingually prn for chest pain.

___ 5. Aminophylline 250 mg. I.V. stat.

___ 6. Mycolog cream to left arm every 8 hours prn for itching.

___ 7. Codeine 30 mg. p.o. q 4h. prn; back pain.

___ 8. Cascara 5 mL h.s., prn; constipation.

___ 9. Morphine sulfate 15 mg. subcutaneously q 4h. prn for pain.

___ 10. Ampicillin 500 mg. p.o. stat.

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.

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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.

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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.

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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.

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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.

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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.

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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.

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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.

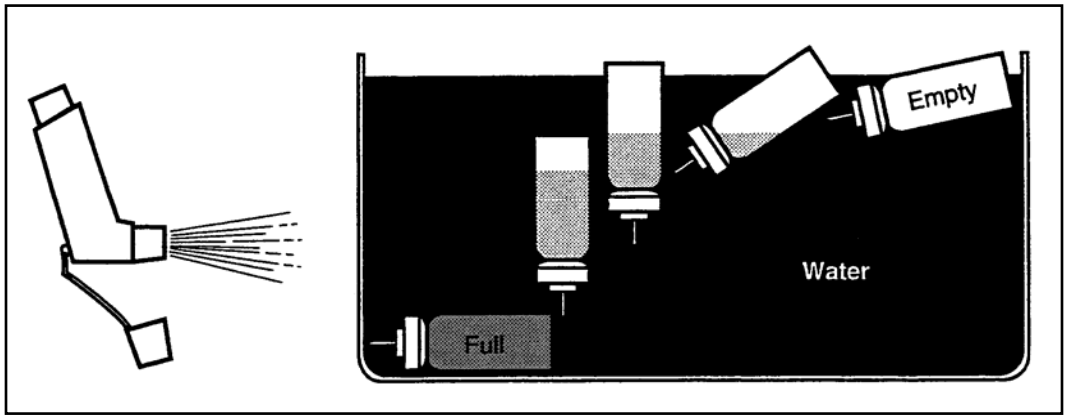
If you are using a spray inhaler alone, you may not be giving all of the required medication. These spray inhalers provide a convenient and effective method for delivering drugs, but they are not easy to use correctly. You must carefully time each breath while squeezing the inhaler canister downward.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

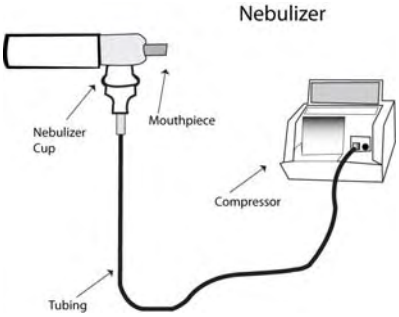
b) Aerochamber and Aerochamber with Mask have special features to help teach better breathing technique. When used correctly (taking a slow, deep breath that helps get the medication deep within the lungs), a whistling sound will not be heard. However, if the resident breathes too fast (a common mistake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