Chapter 34 – Medication Administration
PROCEDURE FOR POURING LIQUID MEDICATIONS

Follow principles of the six rights of medication administration to prevent medication errors.

Hand hygiene.
Pour the desired dose into a graduated medicine cup. **CAREFULLY CHECK THE DRUG AND THE DOSAGE AMOUNT AGAINST THE MAR'S.**

The exact level of the dose is read at the lowest point of the MENISCUS (the curved upper surface) of the liquid in the cup when held at eye level.

Always pour the liquid out the side of the bottle away from the label so that any residual liquid will not run down the label and distort the words on it.

Do not pour over the MAR sheet because a spill may occur. A MAR that cannot be read will have to be reprinted.

Wipe residual medication from the neck of the medication bottle with a clean paper towel if needed.

Medication Cup will be labeled ~~C~~

Pt. initials
Drug Name
Amount
Time

If you pour too much into Med Cup you cannot Pour excess into the Med. bottle.

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STEPS 34-1 INSTILLING OTIC MEDICATION

Follow principles of the six rights of medication administration to prevent medication errors.

Hand hygiene and apply non-sterile gloves if the patient is having ear drainage.

Position into a side-lying position with the affected ear up.

If drainage is present to outer ear, clean with a cotton tipped applicator. (avoid putting the cotton tipped applicator into the ear canal.)

Remove the cap, place upside down on clean surface.

Straighten the ear canal. Children younger than 3 years, pull the ear lobe downward and slightly back. For adults, pull the pinna upward and back.

Instill the prescribed amount of drops into the ear canal by holding the dropper 1 cm above the canal. (do not touch the dropper to the ear canal). Do not force medication into the canal.

Have patient remain in side-lying position with affected ear up for up to 10 minutes. Apply gentle massage or pressure to the tragus of ear with finger to help promote absorption of medication.

If medication is ordered for both ears, do not have patient reposition for instillation of medication into the second ear until after 10 minutes have passed from instillation into first ear.

May place cotton in the external meatus to prevent the medication from escaping after lying in position for 10 minutes.

UNEXPECTED OUTCOMES	RELATED INTERVENTIONS
Ear canal is inflamed, swollen, tender to touch. Drainage present.	Symptoms of infection present; notify MD.
Hearing acuity continues to be reduced.	Obstruction within canal continues. Notify MD.
Cerumen is occluding ear canal	Impacted cerumen in ear canal, may need irrigation for removal.

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SKILL 34-2 INSTILLING EYE MEDICATION

Follow principles of the six rights of medication administration to prevent medication errors.

An error with an eye medication can cause significant damage.
The word *ophthalmic* must be clearly visible on the medication container.
Eye medications must be kept sterile.

Hand hygiene and non-sterile gloves.

Assessment of eye(s) for inflammation, swelling, discharge, change in vision
Gently clean eye from inner to outer canthus

Remove cap from the eye medication and place it upside down on the table to protect sterility of the cap.

With patient lying supine or sitting with neck hyperextended and tilted slightly to the side of the affected eye (unless contraindicated) have patient look upward toward the ceiling.

Hold tissue or gauze in your non-dominate hand and place on patient's cheek bone just below the lower eyelid. Gently press downward with thumb or forefinger to expose the lower conjunctival sac.

Hold the eyedropper approximately 1 – 2 cm above the conjunctival sac and administer the prescribed number of drops. Have patient close eye gently.

DO NOT PLACE DROPS ON THE CORNEA.
If the medication has systemic effects block the nasolacrimal duct for 1-2 minutes with a clean tissue.
The nasolacrimal duct is located at the inner canthus.

Replace the cap onto the bottle without contaminating the dropper tip.

EYE OINTMENT

Follow principles of the six rights of medication administration to prevent medication errors.

An error with an eye medication can cause significant damage.
The word *ophthalmic* must be clearly visible on the medication container.
Eye medications must be kept sterile.

Hand hygiene and non-sterile gloves.

Assessment of eye(s) for inflammation, swelling, discharge, change in vision
Gently clean eye from inner to outer canthus

Remove cap and place it upside down on the table to protect the sterility of the cap.

With patient lying supine or sitting with neck hyperextended (unless contraindicated) have patient look upward toward the ceiling.

Hold tissue in your non-dominate hand and place on patient's cheek bone just below the lower eyelid.
Gently press downward with thumb or forefinger to expose the lower conjunctival sac.

Apply a thin ribbon of ointment along the entire length of the visible conjunctival sac.

Have patient close eye gently and move eye side to side and up and down to distribute the medication.
Remove excess ointment with a tissue.

DO NOT PLACE OINTMENT ON THE CORNEA.
If the medication has systemic effects block the nasolacrimal duct for 30 to 60 seconds with a clean tissue. The nasolacrimal duct is located at the inner canthus.

Replace the cap onto the bottle without contaminating the dropper tip.

UNEXPECTED OUTCOMES	RELATED INTERVENTIONS
Complains of burning or pain or experiences local side effects (headache, bloodshot eyes, local eye irritation). The drug concentration and the patient's sensitivity both influence the chances of side effects developing.	Eye drops may have been instilled onto the cornea, or the dropper touched the surface of the eye. Notify the prescriber for a possible adjustment in medication type and dosage.
Experiences systemic effects from drops (increased heart rate &b/p from epinephrine, decreased heart rate and b/p from timolol.	Notify prescriber immediately. Remain with the patient. Assess vital signs. Withhold further doses. Systemic absorption through tear duct can cause potentially dangerous effects. Ophthalmic anesthetics and antibiotics may cause the same type of adverse reactions as systemically administered drugs. (anaphylactic reaction).

Chapter 34 – Medication Administration
Nasal Instillations

Follow principles of the six rights of medication administration to prevent medication errors.

Have the patient clear nasal passages as much as possible by blowing their nose

For nose drops: Position the patient supine with the head off the bed and the neck hyperextended (in the sniffer position)

Hold the dropper 1 cm above the nare and instill the prescribed number of drops into the nare.

Have patient remain supine with the head back for 5 minutes.

Nasal Spray (atomizer bottle): position the patient in sitting position with the head tilted slightly forward.

Insert tip of nasal spray into one nare and occlude the opposite nare with a finger.

Have patient inhale with mouth closed while instilling the nasal spray into their nostril.

Do not have patient blow their nose after the administration of the nasal spray for several minutes.

The tip of the bottle that was placed into the nose should be wiped clean before the cap is replaced.

Steps 34-2
Inserting a Rectal Suppository

Follow principles of the six rights of medication administration to prevent medication errors.

Suppositories are kept in the refrigerator and not removed until use.

Wash hand and don non-sterile gloves.

Have patient assume a left Sim's position and drape to expose the buttocks.

Remove the foil wrapper from the suppository and apply a small amount of water-soluble lubricant to the rounded tip of the suppository.

Limit handling time of the suppository due to it will soften making it difficult to insert and possibly losing some of the medication.

With the non-dominate hand lift the top gluteal fold to expose the anus.

Ask the patient to take a deep breath and relax as you insert the suppository through the anus into the rectum.
Always directing the suppository towards the umbilicus.

Gently push the suppository along the wall of the rectum with your index finger as far as you can reach and hold in place for a few seconds.

Continue to have the patient take slow deep breaths.

Wipe excess lubricant from anal area.

If the suppository is for bowel evacuation – try to have the patient hold the suppository in place for at least 20 minutes.
This allows the suppository medication to melt and to be absorbed or stimulate the bowel for evacuation.

Remove gloves and wash hands.

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Skill 34-3 Topical Medication – To Apply Anti-anginal Ointment

Follow principles of the six rights of medication administration to prevent medication errors.

Wash hand and don non-sterile gloves. To prevent topical exposure of the medication onto your bare skin and experiencing effects of the medication.

Date, time, and initial the patch prior to applying the medication.

Measure out the physician prescribed dosage of ointment onto the paper measuring guide.
The dosage will be prescribed in inches (1 inch, 1.5 inches, etc.)

The measurement must be exactly what is ordered by the physician.

Before applying the patch, the previous application patch must be removed and residual ointment washed off of the skin.
The residual ointment would increase the dosage the patient is to receive.

Rotate the sites with each application, use the chest, back, and upper arms and apply to areas that are as hairless as possible.
Hair growth will prevent the medication from making contact with the skin.

Gently apply the current paper measuring guide with the prescribed dosage to the patient's skin distributing the ointment over a 2 inch area. Do not rub it into the skin.

Tape the paper in place around the edges, or place a piece of plastic wrap over the paper and tape it into place.

Remove gloves and wash hands.

The effect of medication from a transdermal patch will begin in about 30 minutes and may remain in the system for 30 minutes after the patch is removed.

Using Metered Dose Inhalers

Follow principles of the six rights of medication administration to prevent medication errors.

Teach the patient to always take the bronchodilator first to open the airways so that the corticosteroid will be absorbed better.
Wait 2 to 5 minutes between the 2 drugs to allow for the effect of the bronchodilator to occur.

Assess respiratory rate, depth, pattern, and effort. Auscultate lung sounds for adventitious sounds.

Assess patient's ability to hold, manipulate, and depress canister and inhaler.

Position the patient upright

Shake the inhaler several time to mix the medication in the canister

Hold inhaler in dominate hand.

Instruct patient to position the inhaler in one of two ways:

1. Place the mouthpiece in mouth with opening directed toward the back of the throat, closing lips tightly around it.
2. Position the mouthpiece 1 – 2inches in front of widely opened mouth with opening of inhaler toward back of throat. Lips should NOT be touching the mouth piece.
   (positioning the mouthpiece 2 – 4 cm from the mouth is the BEST way to deliver the medication without a spacer)

Have patient take a deep breath and exhale completely emptying the lungs as much as possible.

With the inhaler positioned as explained above, compress the canister while inhaling slowly and deeply through the mouth.

HOLD THE BREATH FOR 10 SECONDS OR LONGER IS ABLE TO ALLOW THE MEDICATION TO BE ABSORBED THROUGH THE PULMONARY MUCOSA

Remove the MDI and exhale through pursed lips.

If the ordered dose is 2 puffs from the inhaler, instruct the patient to wait for 1 MINUTE between puffs.

Using a Spacer Device:

a spacer device traps medication released from the MDI; patient then inhales the drug from the device. These devices improve delivery of correct dose of inhaled medication.

A spacer is helpful for small children or the elderly that have difficulty coordinating the inhalation while compressing the canister.