

Medication Pass Fundamentals Part 3:

Basics of Preparing and Administering Medications: Enteral, Topical, Inhaled Subcutaneous and Suppositories, Common Errors



Omnicare
Pharmacy Services

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To Access Resources:



Click on the “paperclip” button above the video player to open links to resources.

The image shows a screenshot of a video player and a presentation slide. The video player on the left is titled "Medication Pass Fundamentals Part 1: Preparation, Errors, Safety, Security and Controlled Substances (Copy)" and features Carrie Allen PharmD, CGP. It shows a woman in a pharmacy setting. The presentation slide on the right is titled "Medication Pass Fundamentals Part 1: Preparation, Errors, Safety, Security and Controlled Substances" and features Carrie Allen PharmD, CGP, BCPs, CCHP. It shows an elderly couple looking at a newspaper. A "Presentation Links" window is open over the slide, listing "Slides" and "Beers Criteria".

Intended Audience*

- Skilled Nursing Facilities (SNF), Assisted Living Facilities/Communities (ALF/ALC), any facility or community setting that offers medication pass as part of their services
- Clinical and non-clinical management: Directors of Nursing, Assistant Directors of Nursing, Regional Nurse Managers, Administrators
- Staff that are involved in performing medication passes or who are in training to perform medication pass: Registered Nurses (RN), Licensed Vocational or Professional Nurses (LVN, LPN), Certified Medication Aides or Technicians (CMA, CMT), etc.
- Staff that may require a refresher or re-training secondary to a medication error
- Facilities who have been permitted by their state governing body to use the training as part of a Plan of Correction

*Though much of this information is derived from regulations for SNF, these practices will decrease medication errors in any type of facility

Topics Covered



- Preparing and administering medications through the following routes:
 - Enteral
 - Inhaled
 - Topical
 - Transdermal
 - Subcutaneous injections
 - Suppositories
- Common Mishaps and Errors
- Key take away points from 3 part series

Route Specific Concerns

Enteral, Inhaled Medications (lung), Topical, Transdermal, Subcutaneous
Injections, Suppositories

Guidance to Surveyors on Enteral Medication Administration

- For administering medications via tube, the standard of practice is to administer each medication separately and flush the tubing between each medication.
- An exception would be if there is a physician's order that specifies a different flush schedule for an individual resident, for example because of a fluid restriction
- Failure to flush before and in between each medication administration is considered a single medication error and would be included in the calculation for medication errors exceeding 5%

Reference: DHHS, CMS Center for Clinical Standards and Quality/Survey & Certification Group Memorandum to State Survey Agency Directors. Clarification of guidance related to Medication Errors and Pharmacy Services. Ref: S&C: 13-02-NH. 11-02-12.
<http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-13-02.pdf>

Enteral - Preparation

- Must have an order to give medications via tube
- Finely crush medications (see 2nd video in series for information on crushing)
- Shake suspensions, dilute liquids and solid doses
- Prepare each medication to be given separately through the tube, do not cocktail unless otherwise ordered by the physician
- Before entering the room ensure you have multiple sets of gloves, a tray or other clean surface to hold supplies and plenty of paper towels



Enteral - Preparation

- Have resident in a private location, explain the procedure
- Place resident in proper position by having resident recline or elevate head of bed to 30- 45 degrees



- Check date on the syringe that will be used for checking placement and administering medications and flushes
- Wash hands and put on gloves

Enteral - Preparation

- If enteral feedings are being administered at the time of medication administration, stop the feeding by clamping the administration tube
- This is a good time to double check that you are not giving any medications that will interact with the enteral formula
 - For example, when giving Dilantin (phenytoin) suspension, tube feedings should be held 1 hour before and after administration

Enteral - Administration



- Check tube placement in accordance with facility policy
- Flush with at least 30 mL room temperature (RT) water prior to giving the 1st medication (or as orders dictate)
 - purified or distilled water is preferred
- May flush with less water if orders for fluid restriction are present
- Administer each medication separately
- Ensure all drug is emptied from the medication cup
- Allow medications to flow down the medication syringe into the tube via gravity

Enteral - Administration



- Flush with 30 mL of RT water after each individual medication is given (or as orders dictate)
- Alternative volumes for flushing in between medications may be appropriate for certain residents; this should be specified in the orders for that resident

***"There may be cases where flushing with 30 ml after each single medication is given may overload an individual with fluid, raising the risk of discomfort or stress on body functions."*

Enteral - Administration

- Flush with at least 30 mL of RT water after the last dose is administered (or orders dictate)
- Restart the enteral feeding as ordered, if applicable
- Clean medication syringe and return to storage location
- Dispose of gloves properly and wash hands
- Re-adjust head of bed for resident preference/needs





Enteral - Pointers

- Not all medications that can be taken orally can be given by tube*:
 - Extended release preparations (XL, XR, CD, CR, ER, SA, etc.)
 - Some immediate release preparations (e.g., sublingual tablets, Prevacid Solutabs)
- Be sure you have an order to give the medication via tube
- Check the “Should Not Crush” list/check with the pharmacist
- Consider asking the physician for alternative dose forms when capsules must be drained to administer the medication (time consuming and not as accurate)



Enteral - Pointers

- Dilute both solid and liquid medications (especially potassium) to*:
 -  safety and absorption
 -  risk for diarrhea and clogged tubing (e.g. secondary to high osmolality, excipients, sweeteners, etc.)
- Do not push medications through the tube
- Keep air out of tube
- Document and report clogged tubes



Enteral - Pointers

- If tube is clogged, first reposition, then you may try gentle pressure, warm water
- A measure of last resort is enzymatic removal* (e.g., pancrealipase tablet + sodium bicarbonate mixed with water)
- Avoid cranberry juice and carbonated beverages (e.g., cola) as a remedy, they can worsen the problem by precipitating protein from formulas*



*Reference: Toedter-Williams, N. Medication Administration through enteral feeding tubes.
Am J Health Syst Pharm. 2008;65(24):2347-2357

Enteral – Common Errors

- Failure to correctly position resident
- Failure to give all of the medication (e.g., left some in the cup)
- Failure to flush after each medication
- Failure to know fluid restrictions
- Giving medications with enteral formula
- Failure to address medication timing issues, drug-drug or drug enteral formula interactions (e.g., hold feedings and time meds correctly)



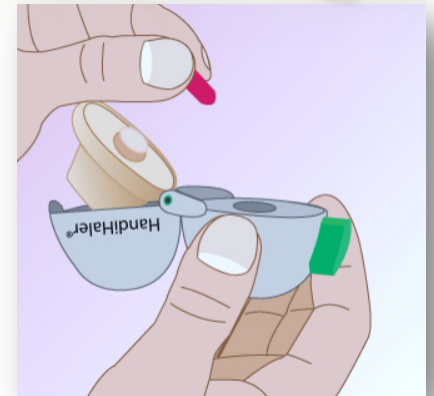
Enteral – Common Errors

- Failure to respect resident's right to privacy
- Infection control
 - Forgetting gloves
 - Forgetting hand washing
 - Failure to re-wash hands and re-glove after they have been contaminated
 - Setting the supplies/syringe on an unclean surface



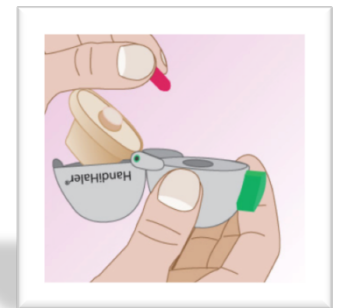
Inhalers - Preparation

- Bring an empty cup for resident to spit into
- Have resident in a private location, explain the procedure
- Have resident sit (or elevate head of bed)
- Wash hands and put on gloves
- Assemble unit per directions, if present, remove mouthpiece cover and inspect mouthpiece for presence of foreign objects
 - Metered dose inhalers (MDI): shake unit to disperse medication, prime the inhaler if it has not been used in a while or has been dropped (see manufacturer's instructions)
 - Dry powder inhalers: prepare dose in the apparatus (e.g., HandiHaler, Diskus)



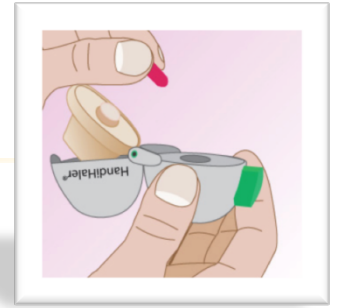
Inhalers - Administration

- Have resident exhale fully
- Place mouthpiece in front of mouth, in mouth, or use a spacer according to manufacturer's recommendations and physician orders
- Have resident inhale slowly and deeply through mouth, if using an MDI depress medication canister fully
- Have resident hold breath for 10 seconds or according to manufacturer's recommendations (or as long as possible)
- Have resident exhale slowly through pursed lips



Inhalers - Administration

- If more than one puff is required, (whether the same medication or a different medication) wait approximately a minute between puffs* (or as ordered by physician or per manufacturer's recommendations)
- Gargling or rinsing mouth after spraying will reduce drug absorption from the oral mucosa, this is mandatory if the preparation contains a steroid (e.g., Advair) to prevent thrush
- Rinse and dry mouthpiece, or wipe the mouthpiece of items that do not have a removable mouthpiece after each dose
- Properly dispose of gloves and wash hands



Nebulizers

- Follow facility policy for drug monitoring before and after treatment
- Bring an empty cup for resident to spit into
- Have resident in a private location, explain the procedure
- Have resident sit (or elevate head of bed)
- Wash hands and put on gloves
- Assemble unit per directions



Nebulizers

- Measure medication accurately (use a syringe if necessary); fill reservoir with medication
- Use hand held mouth piece or aerosol mask
- Place machine on firm, flat surface
- Turn on either compressed air or oxygen as ordered
- Instruct person to breath normally
- Monitor throughout treatment
- At completion of treatment allow resident to rinse mouth as needed
- Clean apparatus in accordance with device instructions
- Properly dispose of gloves and wash hands

Inhalers and Nebulizers – Common Errors

- Using an expired product
- Failure to have resident wait between puffs
- Failure to have resident rinse mouth after steroid
- Failure to clean apparatus after use
- Failure to observe resident during treatment
- Infection control
 - Forgetting gloves
 - Forgetting hand washing
 - Setting the inhaler on an unclean surface



Topicals



- Have resident in a private location, explain the procedure
- Wash hands and put on gloves
- Position and drape resident as needed
- Inspect condition of skin, wash affected areas with solvent or non-drying soap
- Pat skin dry or allow to air dry
- Prepare topical agent (some treatments will have to be prepared at the cart, outside of room)
 - Lotion –Shake lotion vigorously; pour into hand, let warm to body temperature
 - Cream - Squeeze or remove with tongue blade, use new tongue blade for each scoop; rub between hands to soften
 - Ointment - Place dollop of ointment between hands, use new tongue blade for each scoop of ointment; rub to soften.
 - Powder - Dust powder lightly with dispenser and apply between skin folds
 - Aerosol spray - Shake vigorously; hold at recommended distance to apply, ensure resident's eyes and face are protected

Topicals

- Apply topical agent to affected area
- Apply lotion, cream or ointment with long smooth strokes that follow direction of hair growth
- Re-position resident and cover skin with dressing if ordered by physician
- Dispose of soiled supplies properly
- Wash hands

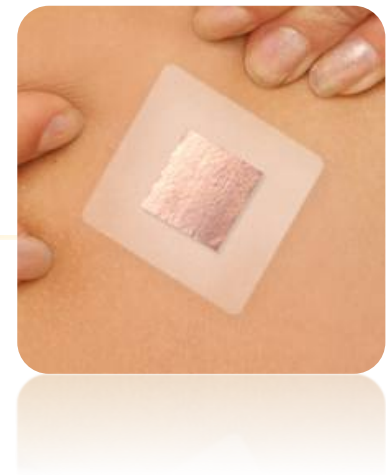


Topicals – Common Errors

- Infection control
 - Forgetting gloves
 - Forgetting hand washing
 - Preparing or applying the product in an undesignated area
 - Failure to use a new tongue blade for each scoop of medication
 - Touching the applicator to an unclean surface
- Privacy and dignity



Topical Transdermal



General

- Have resident in a private location, explain the procedure
- Wash hands and put on gloves
- Initial and date patch prior to applying to resident and not on the portion containing the medication
- Remove old patch and clean skin with wet gauze
- Apply new patch to intact skin and rotate sites as recommended by manufacturer
- If a patch becomes loosened, replace with new system or apply Tegaderm™ if recommended by manufacturer
- Properly dispose of gloves and old patch, wash hands

Note: different patches have different application sites and schedules, check manufacturer's directions

Topical Transdermal- Fentanyl (Duragesic)

- Place to non-irritated skin on upper torso (e.g., chest, back, flank, or upper arm)
- Clip (do not shave) hair at application site prior to application
- Replace every 72 hours, or as directed by physician
- Firmly press the transdermal system in place with the palm of the hand for 10 to 20 seconds, ensure the contact is complete, especially around the edges
- **The remaining fentanyl in a used patch is a potential vehicle of abuse and accidental overdose and warrants implementation of adequate disposal policies***
- Document drug administration and removal per Schedule II drug policy and procedure



*DHHS, CMS Center for Clinical Standards and Quality/Survey & Certification Group Memorandum to State Survey Agency Directors. Clarification of guidance related to Medication Errors and Pharmacy Services. Ref: S&C: 13-02-NH. 11-02-12.

Topical Transdermal- Fentanyl (Duragesic)



Fentanyl Disposal*🗑️🚽:

- Fold used or unused patch so that the adhesive side of the system adheres to itself then the system should be flushed down the toilet immediately upon removal, if your state permits
- If flushing is not permitted, dispose in a manner that prevents access by staff, residents and visitors, but is compliant with federal and state regulations as well as facility policies
- Two nurses should witness and document the disposal of used patches
- Destruction and associated documentation of unused Schedule II drugs should be completed per federal and state regulations

*<http://www.fda.gov/drugs/resourcesforyou/consumers/buyingusingmedicinesafely/ensuringsafeuseofmedicine/safedisposalofmedicines/ucm186187.htm>

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<http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-13-02.pdf>

©Duragesic Prescribing Information. Janssen Pharmaceuticals Inc. Revised April 2014

Topical Transdermal – Common Errors

- Failure to dispose of product properly
- Failure to remove old patch
- Failure to date and initial patch
- Failure to rotate sites
- Failure to change patch on the correct schedule
- Infection control
 - Forgetting gloves
 - Forgetting hand washing



Subcutaneous Injections*

- Have resident in a private location, explain the procedure
- Wash hands and put on gloves
- Draw up medication
- Select an appropriate injection site (check for tenderness, swelling or masses); **rotate site** from previous injection
- Position and drape resident as needed
- Clean site, with antiseptic/alcohol swab



*Note: Intravenous medication administration is not covered in this presentation; it is covered in IV training workshops provided through Omnicare or through your facility

Subcutaneous Injections*

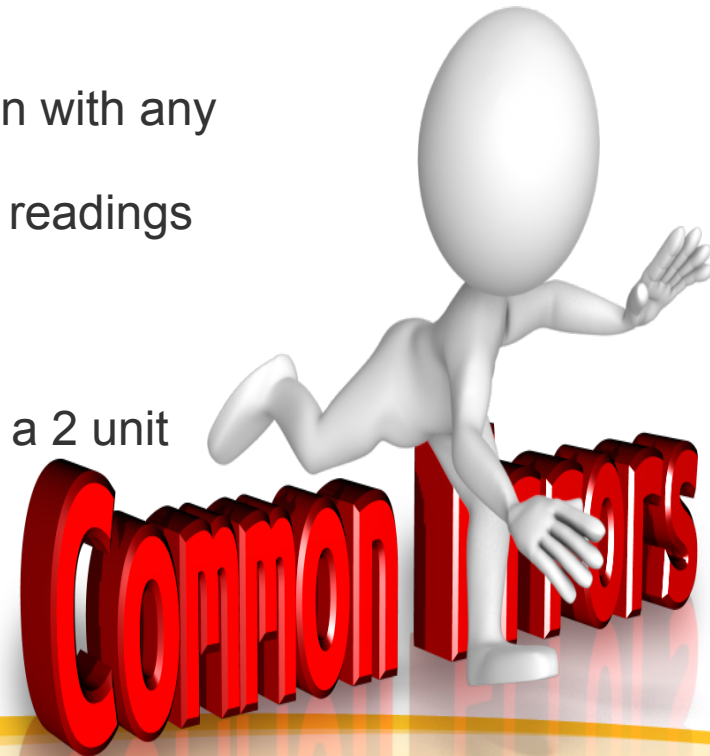
- With non-dominant hand, spread skin tight or pinch skin around injection site
- Position needle with bevel up in dominant hand
- Insert needle in a quick motion at 45 or 90 degree angle to skin surface
- Pull back on plunger slightly to aspirate for blood return; if none, begin slowly injecting drug
- After injection, remove needle, while placing antiseptic swab just above injection site
- Massage gently; excluding certain medications such as: heparin, low molecular weight heparins [e.g., enoxaparin (Lovenox), dalteparin (Fragmin)] or fondaparinux (Arixtra)
- Check site for bleeding or bruising
- Dispose of equipment and gloves according to facility policy and use a Sharps container as applicable
- Wash hands



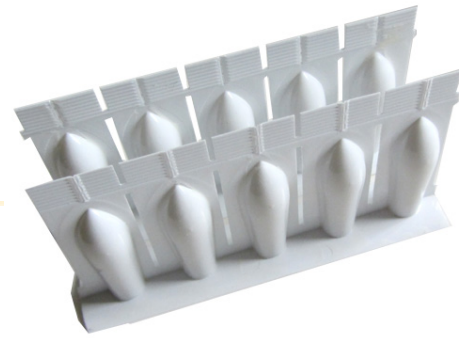
*Note: Intravenous medication administration is not covered in this presentation; it is covered in IV training workshops provided through Omnicare or through your facility

Subcutaneous Injections– Common Errors

- Recapping needles and improper disposal of needles
- Improper dosing (drawing up incorrect dose)
- Infection control
 - Forgetting gloves
 - Forgetting hand washing
- Insulin specific:
 - Mixing insulins improperly; mixing basal insulin with any other insulin
 - Holding basal insulin based on blood glucose readings without a physician's order
- Specific to insulin pens:
 - Failure to prime the pen before each use with a 2 unit air shot
 - Using needle more than once
 - Failure to hold the button for 5-10 seconds



Rectal Suppository



- Have resident in a private location, explain the procedure
- Wash hands and put on gloves
- Have resident lie on side with upper leg flexed upward
- Drape and position resident as needed
- Remove suppository from foil wrapper and coat rounded end with lubricant
- Have resident take slow deep breaths through the mouth to relax anal sphincter
- Retract buttocks with non-dominant hand. With gloved index finger, gently insert suppository through anus, past internal anal sphincter and against rectal wall
- Withdraw finger and wipe anal area
- Discard glove by turning them inside out and dispose according to facility policy
- Have resident remain flat or on side for 5 minutes.
- If administering a laxative, encourage retention for 20 minutes, if possible, for maximum effect
- Wash hands

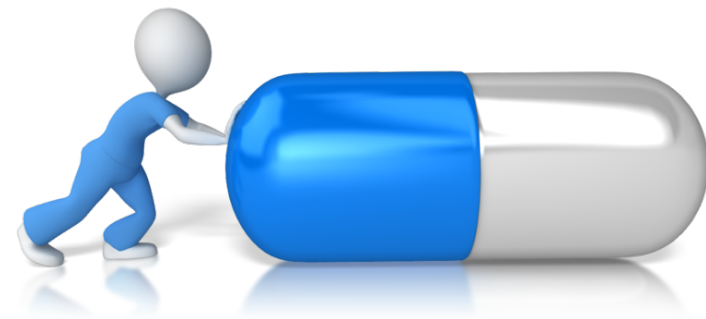
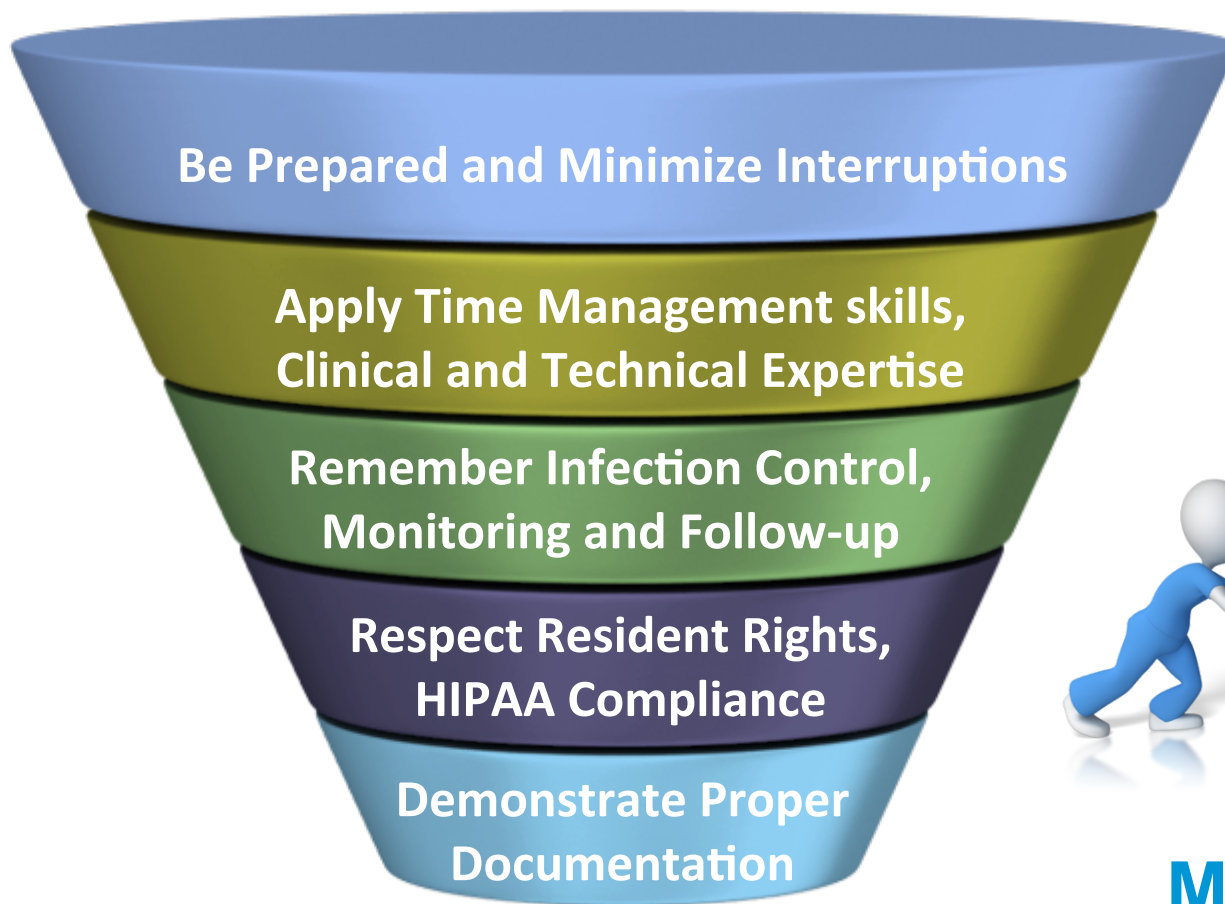
Vaginal Suppositories, Creams and Gels

- Have resident in a private location, explain the procedure
- Wash hands and put on gloves
- Position resident in the dorsal recumbent position (lying on back)
- Drape and position as needed
- Suppositories: With gloved hands, remove suppository from wrapper and lubricate
 - Use dominant hand to gently retract labial folds and insert suppository with forefinger, directing suppository first downwards toward spine, then up and back towards cervix
- Creams and gels: Squeeze tube to fill applicator
 - Insert applicator as directed for medication administration
 - *Wash applicator with warm soapy water if to be reused*
- Remove and discard gloves according to facility policy
- Provide sanitary pad
- Wash hands

Suppositories, Creams, Gels – Common Errors

- Administering an expired product
- Improper storage of suppository
 - refrigerated vs. non-refrigerated
- Infection control
 - Forgetting gloves
 - Forgetting hand washing
 - Setting applicator or unwrapped suppository on bed sheets or other unclean surface prior to administration





Medication Pass

Summary of Key Points in
the Process

Resources

- Omniview: Omnicare Facility Procedural Manual and Medication Administration Policies
- Centers for Medicare and Medicaid Services. State Operations Manual, Appendix PP Guidance to Surveyors.
https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf
- DHHS, CMS Center for Clinical Standards and Quality/Survey & Certification Group Memorandum to State Survey Agency Directors. Clarification of guidance related to Medication Errors and Pharmacy Services. Ref: S&C: 13-02-NH. 11-02-12.
<http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-13-02.pdf>
- *Bankhead R, Boulatta J, Brantley S, et al. Journal of Parenteral and Enteral Nutrition. A.S.P.E.N. Enteral Nutrition Practice Recommendations . 2009. 33 (122)
<http://pen.sagepub.com>
- Toedter-Williams, N. Medication Administration through enteral feeding tubes. Am J Health Syst Pharm. 2008;65(24):2347-2357
http://www.medscape.com/viewarticle/585397_10
- Duragesic Prescribing Information. Janssen Pharmaceuticals Inc. Revised April 2014.
<http://www.fda.gov/drugs/resourcesforyou/consumers/buyingusingmedicinesafely/ensuringsafeuseofmedicine/safedisposalofmedicines/ucm186187.htm>