DHS 83.20 CBRF Medication Administration Training

PARTICIPANT GUIDE

Approved by:
DHS Division of Quality Assurance
Bureau of Assisted Living (BAL)

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Important Note

Participants must successfully complete this 10-hour training, including a final test, to meet the requirements of DHS 83.20 (2)(d) *Medication administration and management.*

This standardized training material is the only curriculum approved by the WI Department of Health Services to meet the requirement listed above. In addition, the training must be delivered by an instructor approved by the Wisconsin CBRF Training Registry, University of Wisconsin-Green Bay. To view the registry of approved instructors, go to: www.uwgb.edu/cbrf-registry

Participants who successfully complete this training will be added to a registry located at www.uwgb.edu/cbrf-registry

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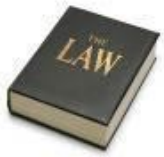
CBRF Medication Administration Training Overview



In Wisconsin, community-based residential facilities (CBRFs) are regulated by the Department of Health Services (DHS) Division of Quality Assurance (DQA). The rules for CBRFs are outlined in state statute and more specifically defined in the Wisconsin Administrative Code, often called administrative rules.

Chapter DHS 83, Wisconsin Administrative Code, is the rule that defines the responsibilities and restrictions of CBRFs. DHS 83.20 allows individuals who successfully complete this training to administer medications to CBRF residents under certain conditions.

Exemptions from Training Requirements

The following CBRF employees are exempt from this medication administration training:

- Persons who completed a department-approved medication administration course prior to April 1, 2010
- Practitioners, licensed pharmacists, registered nurses or licensed practical nurses
- Certified nursing assistants (CNAs) who have completed a medication aide training program and are in good standing on the Wisconsin Nurse Aide Registry
- Student nurses currently enrolled in a nursing program who have successfully completed a medication administration course
- Other licensed health care professionals allowed to administer medication under Wisconsin law

A Note to Participants

As part of this training, you will receive a copy of this participant guide. Use the guide to make notes, write questions and underline or highlight important material. The participant guide is yours to keep and can serve as an important resource when you return to your job.

At the end of this training, you will complete a written test and skills demonstration test. You will be allowed to use your participant guide to complete the tests. It's important that you pay close attention to the materials, take notes as needed and ask questions if you don't understand.

Your instructor will also provide information for you to complete an online evaluation of the training. Please respond to the survey within a day or two of completing the training.

Training Topics

This training covers a wide range of topics, all designed to provide the information and skills necessary to properly administer medications to those in your care. Examples of topics include:

- Resident Rights
- Facility Policies and Procedures
- Delegated Procedures
- Medication Management
- Medical Terms and Abbreviations
- Medication Packaging, Labeling and Storage
- Types of Medications
- Medication Administration

This training is divided into four sections:

- The first section include basic terminology and reference tools, the role of the caregiver, resident rights, medication administration in CBRFs and legal issues.
- The second section will cover information about medications, including different types of medications and classifications of medication.
- The third section will cover a facility medication administration system, including documentation, medication errors, medication ordering, packaging, storage and delivery to a CBRF.
- In the fourth section, you will practice preparing and administering a medication as well as documenting the administration of the medication.

SECTION I: INTRODUCTION TO MEDICATION ADMINISTRATION

The administration of medication to residents is a serious responsibility. We have all heard stories about medication errors that led to disastrous results. A report from the Institute of Medicine of the National Academies estimated that approximately 800,000 drug-related injuries occur in long-term care facilities every year.

While many errors are minor, most are preventable. Errors occur at many levels, from prescription to administration. Our focus today is on the last step in the process – medication administration.

Think about administering medications to a resident in a CBRF. What are some of the ways errors can occur?

Scope of Medication Administration Duties: Role of the Caregiver

Non-licensed caregivers in Wisconsin CBRFs, sometimes referred to as resident assistants, are permitted to administer medication to residents under certain conditions upon successful completion of this department approved Medication Administration training course.

The 10-hour course must be taught by an authorized instructor. In addition, the caregiver's name must be listed on the state registry of staff approved to administer medications in CBRFs.

Reference Sources for Caregivers Who Administer Medications

Medication administration requires knowledge on many levels, from identifying medications and understanding their purpose to recognizing abbreviations and medical terminology.

Every CBRF must provide staff with written information on the purpose and side effects of medication.

Drug handbooks are available in both written and electronic formats. Online resources are typically more up-to-date, because of frequent changes within the medication world.

Pharmacy medication guides are another source of information. An example of one online guide published by the Federal Drug Administration (FDA) is located at: http://www.fda.gov/drugs/drugsafety/ucm085729.htm
Your facility may have other pharmacy medication guides available for your reference.

In addition, CBRFs should provide professional contacts to assist staff who are approved to administer medications.

Pharmacy staff are an excellent resource. If you are unsure about a prescription, its side effects, administration instructions, etc., call the pharmacist/pharmacy where the prescription was filled.

Phone an expert (RN, Pharmacist, Practitioner) when you have questions. Your facility should have contact numbers of professionals who can help you, especially if a registered nurse isn't employed by your facility or is not on duty at the time.

NOTE: If you are unfamiliar with any term used during this training, stop the instructor and ask for a definition.

One term that will be consistently used throughout the training is "practitioner." Although the terms "doctor" or "physician" might be more familiar, the word practitioner in this context is more appropriate. A practitioner is a person licensed in Wisconsin to prescribe and administer drugs or licensed in another state and recognized by this state as a person authorized to prescribe and administer drugs.

Honoring Resident Rights in Medication Administration

State law guarantees residents of CBRFs certain rights related to their care and treatment, including administration of their medications.

Residents have the right to:

- Receive medication as it is prescribed. This includes receiving the correct dose at the right time.
- Refuse medication, unless the medication has been ordered by a court.
- Participate in the planning of care and treatment, in order to be fully informed of care and treatment options.
- Refuse any care and treatment, unless it has been court-ordered.
- Make decisions relating to the care, activities, daily routines and other aspects of life to enhance the resident's self-reliance.

Sometimes a resident will have a guardian or an activated Power of Attorney who must be involved in the planning for the care and treatment of the resident. Even in those cases, the resident's choices should be honored as much as possible.

Residents must be treated with courtesy and respect at all times. They also have the right to privacy when any sort of care is provided. This includes maintaining confidentiality of any health records.

Medication Administration Differences

DHS 83 distinguishes between CBRFs that employ a registered nurse, practitioner, or pharmacist to coordinate and oversee the medication system and CBRFs that do not employ such an individual.

Staff-Administered *with* Supervision

If the facility employs a credentialed individual, typically a registered nurse, to supervise and oversee the medication administration system in your facility, that person will participate in the resident's care planning and will help develop goals related to the person's medical condition and medications. That particular individual who is approved to administer medications is allowed to remove medications from original containers and place the medications into other labeled containers for the caregiver to administer to residents.

Staff-Administered *without* Supervision

If there is no supervision by a registered nurse, practitioner or pharmacist, medications must be packaged in unit dose containers at the pharmacy. The only exception is over-the-counter medications which can be excluded from the unit dose requirement, unless the physician specifically orders unit dose.

Self-Administered

Upon admission, the CBRF is required to conduct an assessment of each new resident. Competent residents retain the right to self-administer medications but may request in writing that the CBRF manage and administer their medications.

In some cases, the person being admitted to the CBRF will not be competent to handle or self-administer medications. Competency is determined by the resident's physician. Both of these situations must be documented by the physician and placed in the resident's record.

When residents do self-administer medications, the medication should be in the control of the resident. The CBRF must provide a safe storage place for the medications in the resident's room.

CBRFs must provide instruction to those residents who show the ability and desire to learn to self-administer medications. This helps residents to become as independent as possible.

What system is currently in place at your facility?

Activity: Residents' Rights and Medication Administration

Let's combine what you've learned so far about residents' rights and the different ways medications are administered in a CBRF.

Consider the following scenario:

Mrs. Green has just moved into your CBRF. She is 89 years old and uses a walker for getting around the facility and a wheelchair for longer distances. She is mentally alert. She shares a room with Mrs. France, who is 78 years old, ambulatory and has mild dementia. Mrs. France needs supervision because she goes through other people's drawers, thinking they are her own.

At the time of admission, Mrs. Green tells the staff that she has taken her own medication for years and wishes to continue to do so, for as long as she can. She would like to be able to keep the medication in her room because that allows her to keep the routine she has established.

Staff are concerned because they fear that Mrs. France might go into Mrs. Green's drawers and find her medication. Mrs. France is confused enough that she might ingest the medication, thinking it's her own. For that reason, they feel that the CBRF has the responsibility to control Mrs. Green's medication, in spite of her wishes.

Jot down your responses to the following questions:

Does Mrs. Green have the right to self-administer her drugs? Why or why not?

_____

_____

Which of Mrs. France's rights might be violated if Mrs. Green's medications remain in their shared room?

_____

Does one right outweigh the other? Which one?

_____

_____

What else could the CBRF do to honor Mrs. Green's wishes?

_____

_____

Legal Responsibilities

The CBRF, the services it provides, and the actions of its staff are regulated by statutes and administrative rules in Wisconsin. These regulations are enforced by the DHS Division of Quality Assurance (DQA) and the Department of Safety and Professional Services (DSPS). DHS 83 is the state administrative code for CBRFs.

Penalties for CBRFs that violate the rules may include corrective action plans, monetary fines and even suspension or revocation of the facility's license. Penalties also exist for individuals working in CBRFs. Licensed staff (registered nurses, licensed practical nurses, occupational and speech therapists, etc.) are governed by the Wisconsin DSPS. Penalties for professional misconduct can include suspension, license termination and in severe cases, criminal prosecution.

Both licensed and non-licensed individuals, such as direct caregivers, are regulated by Wisconsin's Caregiver Law. Caregivers found to have abused or neglected a resident or misappropriated the property (including medications) of a resident may be barred from future employment in Wisconsin long-term care facilities. Illegal acts may also be prosecuted criminally.

The CBRF's policies and procedures must contain the written guidelines necessary for the legal operation of all aspects of the facility. For example, the CBRF must have policies and procedures related to medication management. Examples of these can include:

- Infection control
- Storage of medication, including Schedule II medications
- Medication errors
- Procedures for notifying the doctor or practitioner and receiving orders
- Documentation

These policies guide the process that you are to follow as a CBRF caregiver who will be administering medications. Therefore, it's critically important to understand the policies and know where to locate the written procedures at any time.

Nurse Delegation

Wisconsin statutes allow registered nurses (RNs) only (not LPNs) to delegate actions if they do the following:

- Delegate tasks equal to the education and demonstrated abilities of the person supervised
- Provide direction and assistance to those supervised
- Observe and monitor the activities of those supervised
- Evaluate the effectiveness of acts performed under supervision

DHS 83 permits non-licensed caregivers to administer certain forms of medication ***only*** when delegated and supervised by a registered nurse as outlined above. Those forms include injectables, nebulizers, stomal and enteral medications as well as medications, treatments or preparations delivered vaginally or rectally.

In other words, a caregiver approved to administer medications in a CBRF may only administer the following medications as described when delegated and supervised by an RN:

Medication Administration Procedure (delegated and supervised by RN)	Description
Injection	Medication administered using a needle. The most common injectable medication in a CBRF is insulin, prescribed for persons with diabetes.
Rectal or Vaginal	Medication inserted into the rectum or vagina.
Nebulizer	Medication that is inhaled in a vapor form from a machine. Often used to treat emphysema or asthma.
Stomal	Medication is administered through a stoma, an artificial opening usually in the abdomen.
Enteral	Medication is administered through an enteral or “feeding” tube commonly used to provide nutrition to residents unable to swallow.

Training and Supervision Related to Delegated Tasks

Any time an RN delegates a task to you, that person must provide the necessary training to you before you perform the task. You might assume that once you learn how to give an injection, you can then give all injections. This is not the case. You are only permitted to perform nurse delegated-tasks that are EXACTLY the same.

Each resident and each medication may be different. You may need training each time. For example, someone who receives a Vitamin B12 shot gets that injection in a different place on the body than someone who receives insulin. Make no assumptions and always ensure that you have the supervising RN's permission to administer medication using any of the methods described in the chart above.

Activity: Delegated Tasks

Consider the following scenario:

Oakgrove CBRF, in Acorn City, has 16 residents - all of them elderly. The administrator (Sue) is an RN, who oversees the medication administration system for the facility. Sue routinely delegates tasks to her caregiver staff that performs medication administration tasks.

Resident A has diabetes and receives the same unit dose of insulin by injection every day. Sue has trained the caregiver staff to administer the injection in all appropriate locations on Resident A's body.

For which of the following new residents would the caregivers need additional training? Check all that apply.

- Resident B moves in, and has the same diagnosis and also receives an identical insulin injection daily.
- Resident C moves in, has a diabetes diagnosis, but the dose varies daily because her treatment is different.
- Resident D moves in and gets a routine shot of Vitamin B.

SECTION II: THE FACTS ABOUT MEDICATIONS

In this section of the training we will cover the following:

- Recognizing the different types and forms of medications
- Understanding what factors can affect medications
- Distinguishing among classes of medications
- Understanding pain management systems

Dosage Forms

A dosage form is the physical form of the chemical compound used as a medication. Common dosage forms that you *are* allowed to administer after successfully completing this training are listed below:

Tablets (or Pills) are a mixture of substances that are pressed or compacted into a solid. Tablets (or pills) are the most common dosage form in use today by the general population. Tablets are typically given by mouth (orally). On occasion, a tablet is placed under the tongue (sublingually). Tablets vary widely in color and size. Some have numbers, letters or other markings on the tablet's surface to help distinguish them from other tablets.

Carefully follow instructions that come with tablets. For example, some must be crushed and mixed with food. Others should never be crushed and should only be given as a whole tablet. Tablets must be given whole unless you are specifically directed otherwise in writing by a practitioner or pharmacist.

Capsules are medication(s) placed into a relatively stable shell. They are taken orally. There are two types of capsules: hard-shelled and soft-shelled. The hard-shelled capsules are normally used for dry, powdered ingredients. Some cold medications may come in hard-shelled capsules. Soft-shelled capsules are used for oils and active ingredients that are dissolved or suspended in oil. Fish oil capsules are an example of soft-shelled capsules, which have a liquid inside.

Some people prefer capsules over pills and some medications are available in both forms. If you note that a resident is having difficulty swallowing one form of medication, notify the pharmacist or practitioner in case an alternate form is available.

Sometimes the practitioner's order or the pharmacy label will tell you to remove the contents of the capsule and mix it with food or liquid. Be careful to follow the

instructions carefully. Capsules should be given whole if there are no specific instructions to remove the contents.

Liquids are medications that are administered orally in liquid form. A common liquid medication is cough syrup. Other medications may be ordered as a liquid, if that option is available, for people who have difficulty swallowing tablets or capsules.

Powders are loose compounds that are usually mixed with liquid or food. Supplements often come in powder form.

Aerosols or Inhalers are dispensing systems that create an aerosol mist of liquid particles, including the prescribed medication. The medication is ingested or inhaled into the lungs. You will most often see these types of medications used with people who have asthma or other lung disorders.

Transdermal Patches are applied to the skin. The medication is absorbed through the skin and into the blood stream. Patches are often used to deliver medication for smoking cessation, motion sickness, and pain. A patch lasts for several days, and the medication is released over time.

Drops are liquid medications that are dispensed by the drop. The size of the drop varies and is controlled by the dispenser that comes with the medication. Drops are most often used to dispense eye, ear and nasal medications.

Ointments/Salves/Sprays are medications that are applied to the skin. Ointments and salves are cream-like and sprays are aerosol- based. Most treat skin conditions.

Dosage Forms Delegated by a Registered Nurse

Listed below are some additional forms of medications. You may only administer drugs in these dosage forms when delegated to you by a registered nurse as discussed previously.

Injectables are liquid medications injected into the body using a hypodermic needle.

Suppositories are medications shaped in an easily melted cone of material and placed in the rectum or vagina. The medication is then absorbed into the system.

Douches are medicated solutions flushed into the vagina under low pressure. Used primarily for treating vaginal and pelvic infections.

Enemas are fluids flushed into the rectum for cleansing or treatment.

Can you name some medications or supplements found at your pharmacy?

Purpose and Effects of Medications - Medication Terminology

Medications are prescribed for some of the following reasons:

- To promote health (vitamin or other nutritional supplement)
- To eliminate illness (antibiotics for infections)
- To control a disease (insulin for diabetes, Fosamax® for osteoporosis)
- To reduce symptoms related to an illness (cough syrup for bronchitis, acetaminophen for pain)

Part of your responsibility, in addition to administering medications, is to observe, document and report the effects of medication on a resident. Your observations determine whether the medication is having the desired therapeutic (helpful) effect or a negative effect.

In order to effectively carry out medication administration tasks, you must have knowledge of the following terms and an understanding of them as they relate to each medication that you administer: *drug indication, drug effects and actions, side effects, drug allergies and special administration information*. Let's review each of those terms:

Drug indication means the condition for which the drug is used. For example, osteoporosis (the condition) is an indication for Boniva® (the drug). Many drug classifications covered in this session treat several conditions.

Drug effect or action means the desired effect that a medication has on the body. The desired effect is the beneficial effect we want the drug to accomplish.

Be aware that, at times, the practitioner may prescribe combinations of medications because of the therapeutic drug interactions they produce together.

Observe, document and report the effects of the medication. Your observations are the major resource for the practitioner to know if the medication is working. Keep in mind that the effects produced by some drugs are critical to the continued health of the resident. Here's an example of a caregiver who failed to report the interruption of a resident's life-sustaining medication:

Mr. Gaston is a 78 year old man diagnosed with dementia and chronic respiratory problems who recently began to refuse his nebulizer treatments. After 3 days, Mr. Gaston started to have difficulty breathing. The CBRF, however, did not contact his physician until he had been without the medication for 7 days. The physician admitted Mr. Gaston to the hospital where he recuperated fully. When asked why the doctor was not notified for a week, caregiver Bill said that he figured the resident would ask for the medication if he needed it.

Side effect means any drug effect or action other than what is therapeutically intended. Many side effects can be minor, but others are quite harmful.

For example, some cold medicines list drowsiness as a side effect and warn not to drink alcohol or drive while taking the medication. An elderly person in your care may not be drinking or driving, but the drowsiness can result in unsteadiness and an increased risk of falling.

Side effects that are unexpected and result in temporary or permanent harm are called "adverse effects." Adverse drug reactions occur more frequently among the elderly and may be mistaken for other conditions.

The information that comes with the medication will outline potential side effects. Common examples include nausea, diarrhea, unsteadiness, confusion or upset stomach. All medications have the potential to cause side effects.

Some side effects, balanced against the drug's effectiveness, may be justified. For example, if the medication is improving a resident's condition but causes temporary unsteadiness, the practitioner may determine that the benefit of taking the medication outweighs the risks (side effects). This is referred to as a risk-benefit analysis.

Observing, documenting and reporting side effects become even more important when a new medication or change in dosage is ordered for a resident. For example, suppose that a resident has just begun taking a new medication, which is causing diarrhea and vomiting. Failing to observe, document or report those symptoms could quickly lead to dehydration. Review this devastating case study of a caregiver who ignored side effects:

Mrs. Halstead was prescribed a new medication that had a listed side effect of causing renal (kidney) failure. Over a period of two days, while caregiver Susan was working, Mrs. Halstead experienced a significant change of condition including vomiting, abdominal pain, nausea, disorientation, cold and clammy skin and a significant drop in blood pressure.

Three days later, when the pain, nausea, disorientation and other symptoms continued, she notified Mrs. Halstead's practitioner. Per the doctor's order, Mrs. Halstead was admitted to the hospital. She was diagnosed with septic shock, peritonitis secondary to acute inflammation or infection of the gallbladder and acute renal failure. She required extensive medical management and surgery but remained in poor condition and died in the hospital four days later.

Caregiver Susan later stated that she never connected the change in Mrs. Halstead's condition with the side effects of the new medication.

Drug allergies are a group of symptoms caused by an allergic reaction to a medication. Typical symptoms consist of a rash or itching. Any time a resident exhibits an allergic reaction, notify the supervisor and prescribing practitioner as soon as possible. A severe allergic reaction consists of throat swelling and breathing difficulty. This is a life threatening emergency.

Specific administration information refers to information found on the prescription label itself or separate instructions included with the prescription. On the label, you will most likely find specific directions for administering the medication. The information and instructions will vary with each medication. Follow the instructions closely. Do not vary the administration technique unless directed by a practitioner.

Common instructions include:

- Crush
- Do not crush
- Take with food
- Take on an empty stomach
- Take with a full glass of water
- Remain lying down for 30 minutes after taking
- Do NOT lie down for 30 minutes after taking
- Take one tablet daily
- Take 3 times per day

As you can see, instructions vary widely. Failing to follow administration instructions can impact the effectiveness of the drug.

For example, time-release medications are intended to release small amounts of a drug over time. Crushing a time-release medication releases the entire drug immediately.

Although you are not permitted to vary the administration technique, you should report concerns about techniques to your supervisor, the practitioner or pharmacist. If, for example, you observe that a resident has difficulty swallowing a large tablet, inform the appropriate practitioner or pharmacist who can determine whether an alternative dosage form or administration technique is permitted.

Special Note: At times, the administration instructions may require or allow mixing the medication with food or a beverage. However, you are never allowed to mix medications with the intent to hide the medication from the resident. Residents have the right to a) know what medications they are taking and b) to refuse medications. Therefore, hiding medications from residents is a violation of resident rights. In rare circumstances, medications may be administered to a resident without his/her knowledge if ordered by the court.

Consider this example of a caregiver who misread or ignored the administration instructions:

Mrs. Cassata just returned to the facility from having hip surgery. Her physician prescribed pain medication. The physician's order allowed her to have 1-2 tablets every 3-4 hours as needed. During her second night home, Mrs. Cassata requested pain medication at 2:30 a.m. When she asked for 2 pills, Caregiver Brenda responded that she could only have one. At 5:30 a.m., Mrs. Cassata complained of continued pain, but was told she couldn't have another pill until 6:00 a.m. Brenda documented that Mrs. Cassata was in a lot of pain and that the medication wasn't working.

Factors that Impact Drug Effectiveness

Age

Many CBRF residents are elderly. As people age, changes in their bodies occur that may affect the way medications are metabolized. The added presence of a chronic illness will likely worsen the body's ability to distribute and clear the medication. The result is a higher risk of adverse reactions and toxic effects. Elderly people often take many different medications for a variety of health conditions.

Drug Interactions

When a resident takes two or more drugs at one time, the drugs may interact with each other. The chance for interaction is greater as more medications are added. Each medication has side effects that can reduce or intensify the effect of another. Each medical provider with whom the resident interacts – doctors, dentists, chiropractors, etc.

-must have access to a complete list of the resident's medications, vitamins and supplements.

While it is up to the prescriber to be aware of possible drug interactions, you must be aware that drug interactions can occur. If you believe that a prescriber may be unaware of a resident's complete medication history or you believe you are seeing a potential drug interaction, contact your supervisor or the practitioner.

Fluids

Medications may be less effective when a person is not well-hydrated. Encourage residents to drink fluids as they take their oral medications, as well as throughout the day unless otherwise directed. Maintaining fluid intake can prevent dehydration, which is a serious condition resulting from inadequate fluid in the body. Diuretics can cause elderly people to lose fluid. Other medications, such as Benadryl®, can have a side effect of dry mouth.

Kidney Function

Many drugs are excreted through the kidneys. If the kidneys are not functioning well, a high blood level of the drug can develop. The amount of the drug rises to a toxic level and the resident can become seriously ill. Other medications can directly damage the kidneys. Persons taking certain medications may require regular lab monitoring of their kidney function or blood levels.

Activity: Drug Effects

Why might the prescription label include an instruction to crush the medication?

Should you crush a pill if there is no specific instruction/order? Why or why not? What if the person has trouble swallowing the pill? Is it OK then?

A resident begins having diarrhea after starting a new medication. What should you do and why?

A resident is receiving a pain reliever for frequent headaches. After giving the medication for two days, it does not seem to be working. What should you do now? What should you have been doing over the past two days?

Classes of Commonly Used Drugs

Medication classes are based on their primary purpose. The list below includes examples of drugs by class, usage, effects and side effects, and administration instructions.

This list does not include all classes of medications but focuses on classes of drugs most commonly prescribed for CBRF residents. Every CBRF must have a drug reference tool, which provides an important resource for caregivers. The prescription label is the best resource for specific drug information.

Analgesic Medications

Analgesics are pain relievers and are divided into the three categories below: acetaminophen, nonsteroidal anti-inflammatories (NSAIDs) and opioid analgesics. Some are available as over-the-counter medications and some can only be obtained with a practitioner's order.

Acetaminophen

Examples	Tylenol ®
Used for	Pain or fever
Drug Effects and Actions	Relieves mild to moderate pain
Side Effects	Increased risk of liver toxicity, confusion, dizziness
Specific Administration Information	Varies based on specific medication.

Nonsteroidal anti-inflammatory drugs (NSAIDs):

Examples	Aspirin Ibuprofen Naproxen Celebrex®
Used for	Mild to moderate pain Fever Reduce blood clotting to help prevent strokes & heart attacks Headaches Arthritis pain Inflammation
Drug Effects and Actions	Analgesic Antipyretic (lowering body temperature and pain relief) Anti-inflammatory
Side Effects	Gastrointestinal (GI) distress Vomiting Diarrhea Increased blood pressure
Specific Administration Information	Varies based on specific medication. Practitioner may request monitoring for symptoms of hemorrhaging or blood in stool.

Opioid (Narcotic) Analgesics

Examples	Codeine Fentanyl Morphine Oxycodone
Used for	Relief of severe to chronic pain
Drug Effects and actions	Decreases perception of pain Decreases reaction to pain Increases pain tolerance
Side Effects	Drop in respiration Drop in cognitive status Constipation Urinary retention Reflux Dry mouth, blurred vision, confusion
Specific Administration Information	Varies based on specific medication.

Many people become constipated when taking narcotics and a preventive program needs to be implemented. The person's bowel elimination needs to be closely monitored. The practitioner will often order a laxative at the same time.

Antibiotic Medications

Antibiotics are medications given to kill infections. Prescriptions are typically time limited (e.g., to be taken for ten days). In order for the medication to be completely effective, the person must take all the medication. Diarrhea can occur and may require treatment.

Examples	Amoxicillin Erythromycin Cipro®/Ciprofloxacin
Used for	Infections
Drug Effects and Actions	Kills or inhibits the growth of bacteria
Side Effects	Diarrhea Fever Nausea Seizures
Specific Administration Information	Varies based on specific medication.

Some people may build up a resistance to antibiotics over time. Monitor the resident for signs that the medication is not relieving the infection.

Anticoagulant Medications

Anticoagulants (commonly called “blood thinners”) are medications that slow the clotting time of blood. The effect of the medication is monitored by regular blood testing. Because of the effects of this medication, monitor the resident for any signs of bleeding including bruising and tarry stools. The elderly may be even more susceptible to side effects.

Examples	Warfarin Coumadin®
Used for	Stop blood from clotting Deep vein thrombosis Pulmonary embolism Myocardial infarctions Strokes
Drug Effects and Actions	The medication helps prevent coagulation (clotting) of the blood.
Side Effects	Bleeding Dizziness Fatigue Headache
Specific Administration Information	Varies based on specific medication.

Anticonvulsant Medications

Anticonvulsant medications are used primarily for people who suffer from seizures. Carefully document any seizures including time, duration and intensity. This information will tell the prescribing practitioner if the medication is effective or if the dose needs to be adjusted. Routine lab tests will also help to determine the effectiveness of the medication.

Examples	Carbamazepine Topiramate Valproic acid Zonisamide Gabapentin
Used for	Seizure disorder Mood stabilization
Drug Effects and Actions	Convulsive activity is decreased through action on the motor cortex.
Side Effects	Confusion Dizziness Insomnia Nervousness Fatigue GI upset Behavior changes
Specific Administration Information	Varies based on specific medication.

Anticonvulsant medication is also sometimes used to treat other conditions such as bi-polar disorder due to its ability to stabilize mood. If the medication is used for other conditions than its primary purpose, the practitioner's order should state that so that staff can monitor its effectiveness.

Antidepressant Medications

Antidepressants are primarily used to treat depression, but can also be prescribed to treat anxiety disorders and obsessive-compulsive disorders. The use of antidepressants with the elderly has increased over the past several years. Some of that increase is due to better diagnosis of depression among the elderly and subsequent treatment of that depression.

Examples	Prozac ® Zoloft ® Remeron ® Cymbalta®
Used for	Depression Obsessive compulsive disorder
Drug Effects and Actions	Medication blocks the reuptake of neurotransmitters such as norepinephrine and serotonin, or blocks the enzymes that break down the neurotransmitters.
Side Effects	Nausea GI disturbance Lethargy, fatigue Dizziness Decreased or increased appetite
Specific Administration Information	The prescribing practitioner may request monitoring for depression, weight loss, changes in sleeping patterns or for the specific behavior that the medication was given for.

Elderly individuals tend to take multiple medications that can interact with antidepressants, increasing the potential for adverse effects. It is important to monitor, document and report changes in health, behavior and fall occurrence.

Some healthcare experts believe that antidepressants are over-prescribed. This can happen when a medication is ordered for a single behavioral incident and continued for many years. For example, an isolated period of sadness or crying may result in the use of an antidepressant that is continued indefinitely. Another example is the long-term use of sleep aids originally prescribed for a brief or temporary period of sleeplessness.

Antidiabetic Medications

Diabetes is divided into two types - Type 1 and Type 2. Type 1 diabetes is the result of the body failing to produce insulin, which the body needs to control the amount of glucose (sugar) in the blood. It is estimated that 5 – 10% of diabetics in America have Type 1 diabetes. Most require regular insulin injections. Type 2 diabetes results from insulin resistance. This is a condition in which the body fails to use insulin properly. Most Americans with diabetes have Type 2 diabetes and, of those, over half are over the age of 65.

Examples	Insulin Metformin	
Used for	Diabetes	
Drug Effects and Actions	Lowers glucose levels in the blood	
Side Effects	Hypoglycemia Confusion Seizures Headache	Fast heart rate Sweating Thirst
Specific Administration Information	Medications are available in both oral and injectable forms. Oral medications may be administered by CBRF staff that have successfully completed this course. Injectable forms may only be administered when delegated by a registered nurse.	

Unless their blood sugars are well controlled, persons with diabetes are at increased risk for serious and long-term complications. Uncontrolled high blood sugars can lead to blindness, stroke, heart disease, kidney disease, foot and leg amputations and infections. On the other hand, hypoglycemia is low blood sugar and requires immediate treatment. It can be caused by taking too much insulin or other glucose-lowering medication or by taking either of them too soon before eating. Persons taking insulin need to have their blood sugars monitored on a regular basis.

The goal of treatment is to achieve proper blood glucose levels, thereby reducing the likelihood of complications. Education, diet, exercise and medications are all components of good diabetes treatment.

In the elderly population, diet and exercise can be a challenge. Very often, weight loss may not be a primary objective for the elderly. Rather, nutritional planning should focus on a balanced diet that provides appropriate vitamins, minerals and caloric needs. Limitations like arthritis and heart failure may impede exercise; in those cases, individualized alternatives to address fitness should be considered.

Antifungal Medications

Fungal infections or diseases can be contracted from spores usually found in the environment, such as in soil, animal droppings, decaying materials, or moist areas. These infections can be on the body, in the lungs, or even in the blood.

Examples	Tinactin ® Lamisil®
Used for	Fungal infections such as athlete's foot or ringworm
Drug Effects and Actions	Medication destroys the fungal organisms that cause the infection.
Side Effects	Skin irritation Rash Hives Itching Difficulty breathing Tightness in the chest
Specific Administration Information	For external application only.

Most of these medications are available as over-the-counter medications, but require a practitioner's order if administered by CBRF staff.

Antiparkinson Medications

Antiparkinson drugs are used to treat symptoms of Parkinsonism, a group of disorders that share four main symptoms: tremor or trembling in the hands, arms, legs, jaw, and face; stiffness or rigidity of the arms, legs, and trunk; slowness of movement; and poor balance and coordination. Parkinson's disease is the most common form of Parkinsonism and is seen more frequently with advancing age.

Examples	Carbidopa Mirapex®
Used for	Treat or relieve symptoms of Parkinson's disease
Drug Effects and Actions	Increased dopamine activity or reduced acetylcholine activity in the central nervous system
Side Effects	Hallucination Central Nervous System (CNS) depression Nausea Behavior changes Low blood pressure
Specific Administration Information	The prescribing practitioner may request monitoring of blood pressure, behavior changes or for tremors.

Individuals taking antiparkinson medications can experience increased motor (muscle activity) complications as the disease progresses. Dyskinesia (involuntary, rapidly flowing movements of the limbs, trunk and/or head) becomes more common. Motor skill level can change rapidly. For example, an individual may go from ambulatory to immobile in the same day. Parkinson's patients may also experience a "wearing-off" phenomenon when the medication loses its effectiveness.

The presentation of dyskinesia may be a sign that the dosage is too high. However, lowering dosages can worsen the Parkinson symptoms. It is a delicate balancing act that the practitioner must monitor closely. The job of CBRF staff administering medications is to monitor and document the side effects noted above and make sure the practitioner receives updates on a continuous basis.

Antipsychotic Medications

Antipsychotic medications are sometimes referred to as neuroleptics. Over the past several years it has become more common to prescribe antipsychotic medications for behaviors resulting from dementia. Although antipsychotics are used for behaviors, the medications are not approved for this use. Administration information contains specific warnings about the use of antipsychotics to address behaviors in the elderly. Residents with dementia who are placed on an antipsychotic for behaviors should be made aware of the risk these medications may pose.

Examples	Haldol® Seroquel ® Zyprexa ® Risperdal ® Abilify®
Used for	Treatment for symptoms of psychosis, including schizophrenia, bipolar disorder, organic brain syndromes and other conditions
Drug Effects and Actions	The medication tends to block receptors in the dopamine pathways, which can reduce symptoms of many behaviors, such as reducing auditory and visual hallucinations, delusions, agitation and bizarre behaviors.
Side Effects	Tardive dyskinesia: abnormal movements such as constant leg movements or tremors are more common with Haldol®, less common with newer medications Hypotension, Weight gain, Drooling, Mask-like face, Sedation, Falls, Cognitive or ADL changes
Specific Administration Information	Varies based on specific medication.

Staff should closely monitor any resident taking antipsychotics for evidence of side effects. These might look like symptoms of Parkinson's disease and include tremors, shuffling gait and drooling. Another symptom might be severe restlessness with the inability to sit still.

Sometimes people develop permanent side effects called tardive dyskinesia. The word tardive means "late" or "delayed," so these symptoms usually appear after the person has been taking the medication for one to two years or longer. These side effects can include facial grimacing, chewing movements, tongue protrusion and blinking.

When antipsychotics are used for dementia behaviors, it is imperative that CBRF staff observe, document and report data on that behavior to help the practitioner determine the effectiveness of the medication. In addition to the medication, other interventions are necessary to address the frequency and severity of behaviors.

Cardiovascular Medications

The cardiovascular system includes both the heart and the blood vessels, so a wide range of both diseases and medications exist in this category. Each medication has a specific purpose. For example, the medication prescribed for angina (chest pain or discomfort) is different from the medication prescribed for edema (excess fluid between tissue cells).

Examples	Prinivil® Cardizem® Digoxin Lopressor® Lasix® Nitroglycerin
Used for	Hypertension (high blood pressure) Angina Congestive Heart Failure (CHF) Edema
Drug Effects and Actions	Alleviates symptoms caused by cardiovascular diseases such as arteriosclerosis, coronary artery disease, heart valve disease, arrhythmia and heart failure. Actual action varies according to specific condition.
Side Effects	Chest pain Hypotension (low blood pressure) Headache Dizziness Lethargy
Specific Administration Information	The prescribing practitioner may request daily pulse checks.

People with cardiovascular disease may often be encouraged to adhere to a certain diet and participate as much as possible in routine exercise.

Cholesterol Medications

Cholesterol medications lower the level of cholesterol in the blood. Cholesterol levels are determined by blood tests. If a person's cholesterol is high, practitioners usually recommend a combination of diet, exercise and medication. Chronic high cholesterol can lead to other health problems, such as coronary artery disease.

Examples	Lovastatin Fenofibrate Crestor® Lipitor® Zocor®
Used for	High cholesterol
Drug Effects and Actions	Lowers the levels of cholesterol in the blood
Side Effects	Headache Muscle pain Weakness
Specific Administration Information	Varies according to specific medication.

Cognitive Enhancers

Cognitive enhancers improve the quality of life in the early stages of dementia and typically only work for a certain length of time.

Examples	Aricept® Exelon® Razadyne®
Used for	Alzheimer's disease, dementia
Drug Effects and Actions	Improves the function of nerve cells in the brain.
Side Effects	Nausea Diarrhea Insomnia Fatigue Muscle cramps Anorexia Dizziness
Specific Administration Information	Varies according to specific medication.

Gastrointestinal Medications

The gastrointestinal (GI) tract is the system of organs that takes in food, digests it to extract energy and nutrients, and expels the rest. The upper GI refers to the area from the mouth down to the stomach and the lower GI refers to the bowel and intestines.

Examples	Carafate ® Reglan® Tagamet® Zantac® Prilosec®
Used for	GERD (Gastro-Esophageal Reflux Disease) Ulcers Crohn's disease Irritable Bowel Syndrome GI distress
Drug Effects and Actions	Medications work in different ways to ease symptoms of GI distress or ulcers.
Side Effects	Diarrhea Nausea Abdominal pain Behavior or cognitive changes
Specific Administration Information	Typically must be administered at a specific time relative to eating, in order to achieve maximum effectiveness.

Gastrointestinal medications tend to have a coating or calming effect on the organs. Because of this, many of the medications require specific administration timing, e.g. before meals or with food.

Ophthalmic Medications

Ophthalmic means *of or relating to the eye and its diseases*. Ophthalmic medications treat conditions of the eye.

Examples	Alrex® Xalatan® Timolol
Used for	Eye infections Swelling and irritation Post eye surgery Glaucoma
Drug Effects and Actions	Can relieve symptoms of irritation, treat infections and/or aid in healing. Reduces intraocular pressure.
Side Effects	Blurred vision, signs of new infections, burning when using the eye drops, dizziness
Specific Administration Information	Some medications must be shaken prior to administration. Allow 1 minute between drops of the same medication and 5 minutes between drops of two different eye medications.

Because some medications may cause blurriness for a short period of time, additional supervision may be required.

Osteoporosis Medications

Osteoporosis medications treat the thinning of bone tissue and loss of bone density over time. There are no symptoms in the early stages of the disease. As the disease progresses, sufferers may experience neck or low back pain, stooped posture or fractures - even with little or no trauma.

Examples	Boniva® Evista® Fosamax®
Used for	Osteoporosis
Drug Effects and Actions	Works to reverse or slow down bone loss
Side Effects	GI complications
Specific Administration Information	Most medications need to be taken on an empty stomach, with a glass of water, 30-60 minutes before a meal.

Treatment for osteoporosis is often two-fold: 1) control the pain associated with the disease (not discussed here) and 2) slow down the bone loss. Note the specific administration information above which is very exact.

Additional treatment for people with osteoporosis may include routine exercise and sufficient calcium intake in the form of food and/or pills. Elderly people who suffer from osteoporosis are at high risk for falls and fractures related to those falls. Increased monitoring may be needed to protect them from injury.

Respiratory Medications

Respiratory refers to the act or process of inhaling and exhaling; breathing.

Examples	Albuterol Beclovent® Atrovent® Advair®
Used for	COPD (Chronic Obstructive Pulmonary Disease) Asthma Emphysema Bronchitis
Drug Effects and Actions	Relaxes muscles in the airway and increases air flow to the lungs
Side Effects	Edema Insomnia Behavior changes Increase in blood pressure Urinary difficulty Infections
Specific Administration Information	Many of these medications are given via an inhaler or nebulizer. Some inhalers need to be shaken before administration. Some should never be shaken, making it important to read the instructions that come with the medication. Medications given with a nebulizer must be delegated by an RN.

Some of these medications are taken on a regular basis. Others are given only when the person is exhibiting specific symptoms, such as shortness of breath. You may have heard of an “asthma attack” when the person is unable to “catch their breath.” In this event, rescue inhalers are often used.

Sedative and Hypnotic Medications

Sedative refers to a drug that is taken for its calming or sleep-inducing effect. Hypnotic drugs are most often used to induce sleep.

Examples	Ambien CR® Halcion® Restoril ® Lunesta®
Used for	Insomnia Sedative for medical or dental procedures
Drug Effects and Actions	Causes relaxation to allow a person to sleep
Side Effects	Change in behavior or cognitive function Dizziness Headache Confusion Falls Breathing problems
Specific Administration Information	The prescribing practitioner may require monitoring of effectiveness of medication (sleep).

Residents taking these medications are at increased risk of injury due to confusion, unsteadiness and falls. Carefully observe and document the medication effects so the prescribing practitioner can effectively analyze the risk benefit.

Thyroid Medications

Thyroid medication treats disorders of the thyroid, a gland located in the neck. The gland produces several hormones that help oxygen enter the cells and affect a person's metabolism. Thyroid medication replaces or supplements the hormone produced naturally by a healthy thyroid. Medication can be very effective in causing symptoms to lessen or disappear.

Examples	Synthroid® Levothyroxine
Used for	Hypothyroidism
Drug Effects and Actions	Replaces the hormone that is normally produced by the body's thyroid gland to regulate the body's energy and metabolism
Side Effects	Weight loss Rapid pulse Insomnia Tremor Nervousness
Specific Administration Information	Varies according to specific medication.

If left untreated, thyroid disease may cause complications including osteoporosis, muscle weakness, elevated cholesterol levels and subsequent heart disease.

A correct diagnosis of thyroid disease in the elderly is sometimes missed because the symptoms (fatigue, depression, forgetfulness, insomnia and appetite change) are those often associated with aging or other diseases. As a result, practitioners routinely screen for TSH (thyroid-stimulating hormone) levels through blood tests to determine if the thyroid is functioning properly.

Urinary Incontinence Medications

Urinary incontinence medications support bladder control, which often becomes an issue as people age. Urinary incontinence can cause skin irritations, loss of dignity and can reduce one's ability to remain independent.

Examples	Detrol® Enablex® Sanctura XR ®
Used for	Incontinence
Drug Effects and Actions	Reduces spasms of the bladder muscles
Side Effects	Urinary retention Reflux
Specific Administration Information	Varies according to specific medication.

Along with medication, people who have urinary incontinence should be encouraged to maintain a routine and frequent bathroom schedule to assist with control of the bladder. Caregivers should also monitor the person for urinary retention and potential urinary tract infections.

Activity: Using the Drug Classification Reference Tool

Look up the following medications assigned to you and report on the drug using the drug classification reference tool provided for the class.

- Furosemide
- Meperidine
- Ranitidine
- Tolectin
- Primidone
- Effexor

Your report should include:

1) the drug class of the medication
2) what the drug is used for
3) drug effects and actions
4) side effects
5) specific administration information

Medical Abbreviations

Most of us are familiar with common abbreviations like “St.” for street, or “qt.” for quart. We can often figure out an unfamiliar abbreviation because it’s based on a longer English word. However, many medical abbreviations are based on Latin and Greek words -- languages that few of us know.

Many medical abbreviations are still in use today, particularly in practitioner’s orders and prescriptions. Because of the error-prone nature of abbreviations, look up any abbreviations with which you are unfamiliar. In addition, seek clarification any time you have doubts about an abbreviation.

Misinterpreting medical abbreviations can result in serious medication errors. Although this is a well-documented concern, abbreviations are still used because they are thought to save time.

PRN Medications

PRN is the abbreviation of a Latin phrase meaning “as needed.” A medication order or a prescription label that indicates PRN must also specify maximum amounts that can be given over a set period of time. For example, 1-2 tablets every 3-4 hours. In a CBRF, this also includes over-the-counter medications requested by the resident.

If the PRN medication is written with a repeat order, the number of times a repeat dose may be administered must be clear.

Drugs that are frequently administered PRN (as needed) may include, but are not limited to the following:

- Analgesics (medications used for pain – for example Oxycodone, Vicodin® and Tylenol® or Acetaminophen)
- Anti-inflammatory drugs (medications used for inflammation and pain – for example Ibuprofen, Advil® or Aleve®)
- Sedatives or hypnotics (medications used for sleep – for example Lorazepam, Ambien® or Zolpidem)
- Antipsychotic medications (medications used for behaviors – for example Zyprexa® or Risperdal)
- Respiratory tract drugs (medications used for breathing problems – for example Albuterol or Proventil®)
- Gastrointestinal tract drugs (medications used for heartburn, constipation, etc. – for example Senna or Pepcid®)

NOTE: Antipsychotic medications are given to treat various psychoses, such as schizophrenia, bipolar disorder and other conditions. Anytime an antipsychotic medication is used on a PRN basis, the resident's individual service plan (ISP) must include the reason for the medication. The ISP must also include a detailed description of the behaviors that indicate the need for the medication.

Activity: Understanding Abbreviations

Look up the following medical abbreviations. Write what they stand for and the definitions. It is your responsibility to read medical abbreviations correctly. For example, did the order say "ac" or "ad"? If you are unsure, check with the writer.

tid _____

bid _____

qid _____

fl _____

mg _____

po _____

pm _____

ac _____

qh _____

hs _____

noc _____

q _____

pc _____

Abbreviations – Do Not Use List

One of the Joint Commission's National Patient Safety Goals is to eliminate dangerous abbreviations. Posted on their website is an official "Do Not Use" list:

Do Not Use	Potential Problem	Use Instead
U or u (unit)	Mistaken for "0" (zero), the number 4 (four) or "cc"	Write "unit"
IU (International Unit)	Mistaken for IV (intravenous) or the number 10 (ten)	Write "International Unit"
Q.D., QD, q.d., qd (daily) Q.O.D., QOD, q.o.d., qod (every other day)	Mistaken for each other. The period after the Q can be mistaken for "I" and the "o" mistaken for "I"	Write "daily" Write "every other day"
Trailing zero (X.0 mg) Lack of leading zero (.X mg)	Decimal point is missed	Write X mg Write 0.X mg
MS	Can mean morphine sulfate or magnesium sulfate	Write "morphine sulfate" Write "magnesium sulfate"

Those being considered for possible future inclusion to the list:

Do Not Use	Potential Problem	Use Instead
> (greater than) < (less than)	Misinterpreted as the number "7" (seven) or the letter "L" Also confused for one another	Write "greater than" Write "less than"
Abbreviations for drug names	Misinterpreted due to similar abbreviations for multiple drugs	Write drug names in full
@	Mistaken for the number "2" (two)	Write "at"
cc	Mistaken for U (units) when poorly written	Write "mL" or "ml" or "milliliters" ("mL" is preferred)

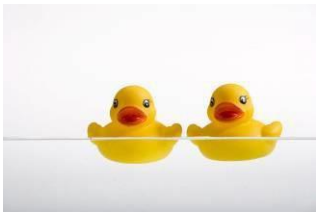
Double-check these abbreviations anytime you read one, due to the high risk of error.

Generic vs. Trade Name Drugs

"Generic" refers to the name assigned to a new drug by the manufacturer who first developed it. An example is "acetaminophen." "Trade Name" or "brand name" refers to a name that is trademarked by the manufacturer. For example, Tylenol® is a trade name for acetaminophen.

The pharmacist must use the version of the drug specified in the order by the practitioner. Generic may be substituted for a trade/brand name if permitted by the practitioner.

Medications: Look Alike/Sound Alike



Some very different medications are spelled almost the same. Others have names that sound alike. Medications that sound alike or look alike, combined with the number of people involved in the medication process, can result in medication errors. As an example, look at the potential for confusion and error with these medications:

Zantac® ↔ Xanax®

Zantac® ↔ Zyrtec®

Zestril® ↔ Zyprexa®

Zestril® ↔ Zetia®

Zocor® ↔ Zyrtec®

There are numerous opportunities for errors to occur in the medication process. The prescriber first orders a medication (hand-written or via phone), which is filled by a pharmacy, conveyed to a CBRF and then added to the medication regimen of a specific resident. The final step in the process, the actual administration of the drug, is performed by the caregiver.

Think about the results of confusing one medication for another:

- The resident receives a medication that may be harmful
- The resident receives the wrong medication in an amount recommended for the original medication
- The resident does not receive the benefit of the intended medication

One way to avoid errors is to check the prescription label. Many will state the purpose of the drug. If you believe the medication is wrong for the resident, don't hesitate to contact a licensed professional to clarify.

Activity: Look Alike/Sound Alike Medications

As the "last line of defense" for residents, caregivers have the final responsibility for ensuring that the drug they administer is the drug that was intended. Consider this example:

Sarah is an 85 year-old resident of a CBRF. She currently takes ibuprofen for mild arthritis pain and Avandia® for Type 2 diabetes. Sarah recently began to complain of depression. After a conversation with her doctor, they decided that Celexa®, an antidepressant, might be an appropriate medication for Sarah to try.

The RN at the clinic phoned in the prescription to Sarah's pharmacy. The order was filled by the pharmacy and delivered to the CBRF. Somewhere along the line, a mistake was made. The medication delivered to the CBRF for Sarah turned out to be Celebrex® instead of Celexa®.

Joseph, a caregiver at the CBRF, knowing Sarah's medication regimen, wondered why the doctor would prescribe Celebrex when Sarah was already taking the non-steroidal anti-inflammatory drug ibuprofen.

What should Joseph do after suspecting the error?

_____

_____

What could have been some of the negative consequences for Sarah if the caregiver had not noticed the medication error?

_____

_____

Pain Management

Pain management is a difficult process. There are no lab values and no defining tests one can use to determine how much medication to give. Treatment requires a trusting relationship, open communication and education… a true team approach. Take advantage of the tools that are available to improve pain management and the quality of life of those individuals who receive pain treatments.

According to the National Institutes of Health (NIH), pain affects more Americans than diabetes, heart disease and cancer *combined*.

A survey by the National Center for Health Statistics (2006) revealed that 26% of adults experienced pain lasting more than 24 hours in the month prior, and 10% experienced the same pain for a year or more.

Adults age 45 – 64 were the most likely to report pain lasting more than 24 hours (30%). Adults age 65 and over were the least likely to report pain (21%). Women are more likely than men to report pain.

Chronic pain is the most common cause of long term disability and is one reason why many of the people we care for become residents in our CBRFs.

Causes of Pain

As people age, some contract diseases and conditions that cause pain. Think about the residents at your facility. Do they say they are having pain? Do they look or act like they may be in pain? What do you think the cause of their pain might be?

The elderly are among the most undertreated for pain. Of those living in residential facilities, between 71-83% report at least one pain-related problem.

As a caregiver, you may hear many complaints about pain. We may admire a person for having a “high” pain tolerance while becoming impatient with a person who chronically complains of pain. The ability to tolerate pain varies widely. NIH scientists have discovered a genetic difference that affects a person’s ability to tolerate acute pain. Maintain an empathetic approach to all residents and avoid making judgments about pain levels.

Some pain medications are more effective for certain people or for different types of pain. You must observe, document and report accurate information about a resident’s level of pain so that an effective pain management program can be devised by the practitioner.

Pain Management Scales

When a resident is taking pain medication or experiencing pain, a system to measure the level of the pain is often utilized. A pain management scale is used to:

- Measure the pain level of a person
- Measure the effects of pain medication
- Document the level of pain
- Compare pain levels of a person over time

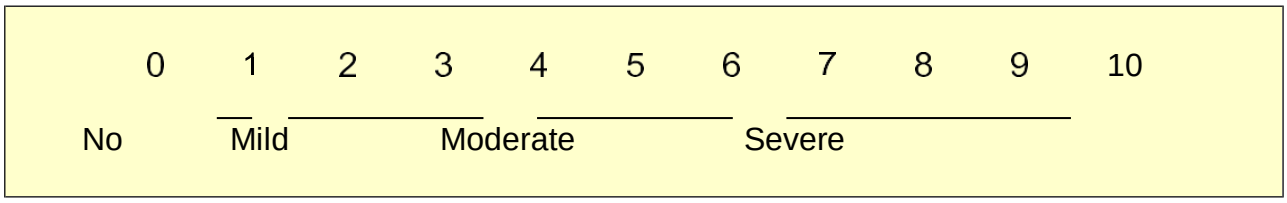
Numeric Rating System

A numeric system, often using the numbers one through ten, can be used to measure pain.

For example, a resident who is not taking pain medication may tell you that they are in pain. You might ask the resident, “On a scale of 1-10, with 10 being the most severe, how would you rate your pain?” For persons who might not process a verbal question, you might show the person a pain chart, and ask them to choose a level. Document the pain level and report the pain immediately.

For a person with a prescription for pain medication, ask the person to rate the pain level before administering the medication. After the medication has taken effect, ask again. Document both responses. Report immediately if pain has not lessened or lessened to a mild level.

Tracking the numbers gives you and the practitioner a common rating system to assess the overall effectiveness of the medication. Here is an example of a numeric pain assessment tool.



Wong-Baker Faces Pain Rating Scale

This scale is used for people who can't relate to the numbers. The resident is asked to point to the picture that most accurately reflects the current level of pain.

Checklist of Non-Verbal Indicators

Some CBRF residents may be unable to verbalize or rate their pain with words, numbers or pictures. Shown below is a checklist developed by the National Institutes of Health to help determine pain with non-verbal residents.

Indicator	With Movement	At Rest
Vocal Complaints – nonverbal expression of pain demonstrated by moans, groans, grunts, cries, gasps, sighs		
Facial Grimaces and Winces – furrowed brow, narrowed eyes, tightened lips, dropped jaw, clenched teeth, distorted expression		
Bracing – clutching or holding onto side rails, bed, tray table, or affected area during movement		
Restlessness – constant or intermittent shifting of position, rocking, intermittent or constant hand motions, inability to keep still		
Rubbing – massaging affected area		
Verbal Complaints – verbal expression of pain using words, e.g., “ouch” or “that hurts”, cursing during movement, or exclamations of protest, e.g., “stop: or “that’s enough.”		
-- Write a 0 if the behavior was not observed. **-- Write a 1 if the behavior even briefly occurred during activity or rest.** **(Results in a total score between 0 and 6)**		

This non-verbal checklist will allow practitioners to develop a pain management plan based on your documentation of the indicators demonstrated by the resident. The practitioner will also take into account any illnesses or conditions that may simulate pain indicators. For example, constant hand motions may be the result of tremors caused by Parkinson’s disease, not pain.

Pain Management Facility Policy

It is recommended that each facility have a policy or guidelines for recognizing pain and treating/managing pain. Let's discuss the policy and pain management tools.

Pain Management Medication

Analgesics are the most commonly used medication to treat pain. There are three categories:

Acetaminophen is used primarily for mild pain.

Non-steroidal anti-inflammatories (NSAIDs) are used for mild to moderate pain.

Opioids are used for severe and chronic pain.

As you will see in the next section, opioid drugs are considered controlled substances and must be closely monitored in the facility.

Controlled Substances

It's estimated that over 6 million people in America use prescription drugs, especially controlled substances, for non-medical purposes. In other words, the medication is "diverted" – used for another purpose or by a different person.

Because of the availability of prescription drugs in long-term care facilities, it's important that you are aware of the dangers and outcomes of diverting medication.

Federal Controlled Substances Act

The federal Controlled Substances Act created five schedules (lists) of drugs or other substances based on the substance's potential for abuse, accepted medical use, and the potential for dependence. A controlled substance is generally defined as a substance that is regulated by the government.

The lower the Schedule Number, the higher the risk for abuse and/or dependence.

Schedule I – The drug has a high potential for abuse, has no currently accepted medical use in treatment in the United States, and there is a lack of accepted safety for use of the drug under medical supervision.

Common Name Examples: heroin, marijuana, LSD, ecstasy

Schedule II – The drug has a high potential for abuse, has a currently accepted medical use in treatment in the United States or a currently accepted medical use with severe restrictions, and abuse of the drug may lead to severe psychological or physical dependence.

Examples of Schedule II narcotics include: combination products containing hydrocodone (Vicodin®), methadone (Dolophine®), meperidine (Demerol®), oxycodone (OxyContin®, Percocet®), and fentanyl (Sublimaze®, Duragesic®), morphine, opium and codeine.

Schedule III – The drug has a potential for abuse less than the drugs in schedules I and II, has currently accepted medical use in treatment in the United States, and abuse of the drug or other substance may lead to moderate or low physical dependence or high psychological dependence.

Examples of Schedule III narcotics include: products containing not more than 90 milligrams of codeine per dosage unit (Tylenol with Codeine), and buprenorphine (Suboxone®).

Schedule IV – The drug has a low potential for abuse relative to the drugs or other substances in schedule III, has a currently accepted medical use in treatment in the United States, and abuse of the drug may lead to limited physical dependence or psychological dependence relative to the drugs or other substances in schedule III.

Examples include: alprazolam (Xanax®), carisoprodol (Soma®), clonazepam (Klonopin®), clorazepate (Tranxene®), diazepam (Valium®), lorazepam (Ativan®), midazolam (Versed®), temazepam (Restoril®), and triazolam (Halcion®).

Schedule V – Substances in this schedule have a low potential for abuse relative to substances listed in Schedule IV and consist primarily of preparations containing limited quantities of certain narcotics.

Examples include: cough preparations containing not more than 200 milligrams of codeine per 100 milliliters or per 100 grams (Robitussin AC®, Phenergan with Codeine), and ezogabine.

Commonly Abused Prescription Medications

There are three types of prescription drugs that are most commonly abused because of the effects they may produce. Most are classified as Schedule II drugs:

Opioids are most often prescribed to treat pain. They have a high risk for addiction and overdose. Opioids become even more dangerous when abusers override the newer time-release versions by crushing the pills and snorting or injecting the medication to increase the effect. Used or discarded Fentanyl® patches are attractive to abusers because a significant level of the drug remains. Theft of liquids is often disguised by refilling the container with another non-medical liquid.

Dangers: Opioid abuse can lead to respiratory distress and even death, especially when combined with other drugs, including alcohol.

Central Nervous System (CNS) Depressants are used to treat anxiety and sleep disorders. In addition to becoming addictive, they pose the added danger of significant withdrawal symptoms if a long-term user stops taking them abruptly.

Dangers: Overdose can cause significant breathing problems or death, especially when combined with other drugs, including alcohol.

Stimulants are prescribed to treat certain sleep disorders and attention deficit hyperactivity disorder (ADHD). Stimulants are not likely to be prescribed for the average resident in long-term care.

Dangers: Abusing stimulants can lead to dangerously high body temperature, seizure and cardiovascular distress.

The Wisconsin Division of Quality Assurance estimates that four of the most commonly diverted medications in long-term care settings are:

- Oxycodone
- Morphine
- Fentanyl
- Hydrocodone products

Increasing Awareness: Recognizing Red Flags

The following "red flags" may indicate that a person is drug-impaired and/or may be diverting a resident's medications for personal use. It's important to note that these signs are not absolute proof, just indicators. However, observing several signs in one person demonstrates a need for further action.

- Excessive absenteeism, especially last minute call-ins or no shows
- Frequent disappearances from the work site, e.g., unexplained or questionable absences; long trips to the bathroom or secured area where drugs are kept
- Insistence on caring for specific residents who are prescribed controlled substances, especially residents with cognitive impairments
- A history of theft, shoplifting, multiple small claims for unpaid bills, disorderly conduct or driving infractions
- Poor interpersonal relations with co-workers, supervisors, and residents' family members. Interestingly, residents who have been victims of medication diversion often report liking the perpetrator.
- Sloppy record keeping, frequently "forgetting" to chart or count medications
- Failure to complete tasks on time
- Volunteering to work nights or in settings with few other staff
- A consistent decline in personal hygiene and appearance
- Personality changes or mood swings, depression, lack of impulse control, etc.
- Visits by friends or relatives of the caregiver, especially when few staff are on duty

What Caregivers Can Do

If you suspect that a co-worker is using drugs or diverting controlled substances, don't help the user avoid facing the consequences. In some cases, drug diversion results in a resident not receiving relief from pain. Report your suspicions to your supervisor right away. It may be hard to report to a supervisor, but not reporting endangers you, your job and those in your care.

Activity: Developing Best Practices

Many CBRFs have developed best practices to discourage/prevent diversion of medications by employees. For example:

- CBRF policies include appropriate medication administration and handling procedures into job duties of caregivers. For example, follow formal charting procedures; have 2 people count medications at the end of every shift, etc.
- They have the supervisor make unexpected rounds; stay in touch with staff and residents daily.
- Some facilities aggressively safeguard medications slated for disposal, count medications regularly, or require that staff with access to locked storage units maintain keys on his/her person.

What are some other best practices you have seen in your facility?

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Activity: Applying Best Practices

The following examples are based on cases reported to the Wisconsin Division of Quality Assurance. Keep in mind the best practices that we just discussed when completing this activity.

Example #1:

Laurie, a caregiver at a CBRF, was in resident Marie's room changing linens. While Marie was in the bathroom with the door closed, caregiver Michael entered Marie's room with a cupful of medications. Michael shouted through the door for Marie to be sure to take her meds and left the room.

After Laurie finished changing the linens, she began to think that it was suspicious that Michael was delivering the meds in the first place. Laurie knew that a different caregiver usually delivered Marie's meds. Laurie called the supervisor on duty who confirmed that an 80 mg dose of oxycodone was missing from the medication cup. Michael later stated he had taken the oxycodone to Marie in the bathroom. Both caregiver Laurie and resident Marie insisted that had not happened.

The facility supervisor asked Michael to provide a urine sample, which tested positive for oxycodone and morphine.

The facility reported the incident to the state as well as local law enforcement.

What best practices did the facility and staff demonstrate in this example?

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_____

Example #2:

CBRF administrator Judy had been receiving reports for about 6 weeks that medication counts were off or residents complained about not receiving PRN medications. The busy administrator wrote it off as sloppy record-keeping or forgetful residents.

After one resident's family complained loudly about their mother's claim of not receiving her pain medication, the administrator began to question staff. Caregiver Juanita admitted that she suspected that her co-worker, caregiver Ashley, might be taking medications. Both Juanita and Ashley had passed the Medication Administration course and were approved to administer medications.

Juanita had observed that Ashley insisted on delivering medications to certain residents and it seemed to Juanita that Ashley sometimes disappeared for long periods of time. Juanita said she didn't know what to do and never mentioned her suspicions to anyone. Shortly after the director began interviewing staff, Ashley quit her job. She is now working in a CBRF in a nearby city.

The director breathed a sigh of relief that Ashley was no longer her employee and considered the problem solved.

What best practices did the facility and staff fail to observe in this example?

_____

_____

Do you think a facility should report an incident to the state or law enforcement when a suspected caregiver quits or is fired? Why or why not?

_____

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Example #3:

Louise is a caregiver who starts her shift at 6:30 a.m. at a small CBRF. Her first task of the day is to count medications with caregiver Chai, who works nights. It seems Chai is always in a hurry to leave. He sometimes tries to convince Louise not to "waste time" counting meds. Louise usually gives in and just signs off on the medication count.

Today, Administrator Barbara asks to see Louise in her office. Barbara says that medication counts between the a.m. and p.m. shifts are indicating missing medications, most often Vicodin and Percocet.

On one hand, Louise is pretty sure that Chai is the one stealing medications. But if she discloses her suspicions to her supervisor, Louise will have to admit that she didn't really count the medication in the first place.

Why do you think Louise agreed to Chai's request?

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How could the CBRF have prevented this incident?

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Reporting Drug Diversion by Caregivers

Wisconsin's Caregiver Law

Wisconsin's Caregiver Law defines caregiver misconduct as abuse or neglect of a resident or misappropriation of a resident's property. Drug diversion meets the definition of misappropriation when the following criteria are met:

MISAPPROPRIATION OF PROPERTY
The intentional taking, carrying away, using, transferring, concealing or retaining possession of a client's movable property without the client's consent and with the intent to deprive the client of possession of the property.

Therefore, facilities regulated by the Division of Quality Assurance are required to report suspected cases of drug diversion to the state when the facts may meet the definition outlined above. As always, if in doubt, report it out!

If the Wisconsin Department of Health Services or the Department of Safety and Professional Services substantiates a finding of misappropriation against a caregiver, that caregiver may be temporarily or permanently barred from working in a health care facility. In effect, the caregiver loses not only his or her current job, but any opportunity for future jobs in the field of health care.

Criminal Charges and Penalties

In some cases, medication diversion may constitute caregiver misconduct, a criminal violation or both.

When caregivers divert prescription drugs belonging to a resident or a facility, local law enforcement may initiate investigations and file charges. The Wisconsin Department of Justice Medicaid Fraud Unit also prosecutes cases. There are a wide range of criminal charges that may be pursued depending on the facts of the case.

Contacting law enforcement in cases of suspected drug diversion is **strongly** encouraged by the Wisconsin Division of Quality Assurance.

Criminal charges and convictions in Wisconsin are permanently maintained by the Department of Justice Crime Information Bureau as law enforcement records. Caregiver background checks always include a query of these records. Therefore, even if a finding cannot be substantiated, there will still be a record of any criminal charges and/or convictions involving wrongdoing by a caregiver.

Consider the following incident:

During a routine traffic stop, a police officer discovers that the driver, Ashley, is in possession of a large bag of unidentified pills. Ashley admits to the officer that she took the pills from the healthcare facility where she works.

An interview of staff at the facility revealed that Ashley was sometimes responsible for destroying medications no longer used by residents. A co-worker admitted that Ashley had convinced him to sign the medication destruction form without actually witnessing the disposal of the medications.

The incident may not clearly meet the definition of caregiver misappropriation since the meds were no longer in the possession of the client. However, there is a clear violation of the law. In this case the caregiver was charged with multiple counts of Theft-Movable Property <$2500 (Class A Misdemeanor) and Possession of Illegally Obtained Prescription (Class U Misdemeanor).

Managers, supervisors and staff need to be aware of the potential for medication diversion, with special emphasis on Schedule II drugs.

SECTION III: MEDICATION MANAGEMENT

This section provides information about the required Medication Administration System including medication orders, storage, labeling, documentation and medication errors.

Medication Administration System Policies and Procedures

The CBRF must have written policies and procedures in place to provide consistent application of the medication administration system. In general, it is recommended that the facility have detailed policies for the following topics specific to medication administration:

- Medication orders, including telephone orders and how orders are taken and processed
- Medication packaging and the process used in the facility
- Medication administration by staff including specific procedures and documentation
- Monitoring for side effects
- Medication errors
- Medication storage, including storage and accountability for controlled substances
- Medication disposal

Medication Administration Records

The CBRF must keep a written medication record (often referred to as a MAR) for each resident. The MAR needs to contain every prescription or over-the-counter medication or dietary supplement taken by the resident. The MAR must be kept current at all times.

The MAR must be legible. It needs to clearly indicate the name of each medication, the dose, the route (how it is administered) if other than by mouth, and the day and time the medication is to be given. A new MAR is required each month. The MAR must contain the month and year.

Immediately after giving a medication, the person administering it needs to write his or her initials, in blue or black ink, in the appropriate place indicated. A corresponding signature needs to be available for identification purposes.

As we move forward in the training, you will learn more about the information contained in the medication administration record. You will also learn more about requirements for documentation in that record.

Medication Orders

DHS 83 requires a practitioner's order in each resident's chart or record for all prescription or over-the-counter medications.

Why do you think an order is required for over-the-counter medications, vitamins or supplements?

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There are several acceptable ways that a medication order may be documented in the resident's record. They include:

- An order that is mailed, faxed or hand delivered from the prescribing practitioner
- A medication administration record signed by the prescribing practitioner that is faxed, mailed or hand delivered
- A copy of a prescription that is faxed, mailed or hand-delivered by a pharmacist
- Pharmacists are allowed to provide copies of prescriptions to patients
- A medication administration record (MAR) signed by the pharmacist based on the signed prescription order that the pharmacist has on file

Medication may arrive at the facility in advance of a written order. However, documentation must be entered in the resident's record within two business days of the practitioner's order. While waiting for a written order, the facility may follow the instructions on the prescription label. This is only permitted when the pharmacy or prescribing practitioner is unavailable to provide a written order.

Changes to orders contained in a medication administration record may be entered by authorized facility staff but a written practitioner's order must document that change.

On occasion, an order may have a future start date. Note the future start date on the medication administration record so the medication is not administered early.

Once a medication is ordered, refills should be automatically delivered by the pharmacy on a pre-determined and routine basis. Bulk medications such as drops, topical creams, etc. should be re-ordered by the CBRF as needed. Typically they are re-ordered when there is a 3-5 day supply remaining.

If a resident leaves the facility or dies, the pharmacy should be notified immediately to discontinue the order.

NOTE: A medication order cannot be taken over the phone by a non-licensed person. If no RN is available, request that the practitioner call the pharmacy directly to place the order.

Transcription of Orders

It is recommended that each facility have a written policy regarding medication orders and what to do with practitioner's orders. Here are some general things to remember.

Transcribing is the process of entering the practitioner's medication order onto the medication administration record. The written order must be legible and accurate.

An order may be transcribed into the record when:

- New medication is ordered
- Medication is discontinued
- The dosage is changed, time is changed, etc.

Orders transcribed to the record must include the following information:

- Name of the resident
- Name of the medication (Check the practitioner's order or the label on the medication. Remember to check the spelling carefully.)
- Dosage
- Time(s) the medication is to be given
- Specific administration information given by the practitioner or the pharmacist

Medication Packaging Requirements

In a CBRF, medications may be packaged in either unit dose or multi-dose containers, depending on the type of supervision.

Every CBRF must have a written policy identifying the medication packaging system used by the CBRF. Residents may only select pharmacies capable of meeting the packaging requirements. This does not apply to residents who self-administer medications.

Unit Dose Packaging

In CBRFs without licensed supervision, medications must be packaged in unit doses by the pharmacy. Unit doses are usually packaged in a "blister pack" or similar container, based on the dosage instructions.

For example, if a prescription calls for two 50 mg. tablets to be given at 8:00 a.m., the blister pack for that dose may contain both pills. Such medication will usually come from the pharmacy as a large sheet of blister packs with specific labels.

Some medications cannot easily be packaged in unit doses. It would not be practical, for example, to put a single eye drop or one "dab" of cream in a unit dose package. In these instances, the pharmacy will send the prescription in a bottle, tube or similar container, with precise instructions for administration.

Over-the-counter medications may be excluded from unit dose packaging requirements, unless ordered by the practitioner.

NOTE: In CBRFs *with* supervision by an RN or another practitioner, medications may be packaged in single containers, like prescription bottles.

How are medications packaged in your CBRF?

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Medication Samples

Practitioners sometimes offer free samples of medication to a CBRF resident. If the resident self-administers medication, the use of samples is allowed. If the CBRF administers the resident's medications, the rules are a bit different.

In a CBRF with RN or other licensed supervision, the prescribing practitioner may send the samples to the facility in the original packaging. If there is no RN supervision, the practitioner or pharmacist must convert the sample to unit dose packaging. A pharmacist is allowed to repackage sample medications to meet the CBRFs unit dose packaging requirements.

If you are at all unsure, check with your supervisor before giving anyone a sample medication.

Labeling

Prescription medications must come from a licensed pharmacy or a physician with a label permanently attached to the outside of the container. A resident's medications may not be shared with others.

Label Requirements

At a minimum, a prescription label must include:

- The resident's name
- The name of the medication
- The name of the practitioner who ordered the medication
- The date of the prescription and the expiration date
- The strength of the medication, or dose
- Instructions for use of the prescribed drug or device, as written in the practitioner's order
- The symptom or purpose for which the drug is being prescribed when doctor's or practitioner's order includes that information

A medication label that includes the phrase "use as directed" should point to other, more precise administration instructions. Look for additional instructions on the medication administration record or in the resident's chart.

Medication Transfers

It is very common for people who live at home to transfer their medications from a prescription bottle to other daily or weekly pill containers, often called "medication planners." These containers serve as reminders to take their medications at the right time or on the right day.

In a CBRF, only certain individuals may transfer medications to a different container. They include:

- A resident who self-administers medication
- A practitioner, RN or pharmacist
- Another person to whom the practitioner, RN or pharmacist has delegated the task

- A caregiver who has successfully completed this training may transfer unit doses (only) of medication into a package for the resident to use during unplanned or non-routine events

Whenever medication is transferred to a different container, such as a medication planner, the container must be labeled with (at a minimum) the resident's name, medication name, dosage and instructions for use. The CBRF must retain the original container until the supply of transferred medication is exhausted.

Transfer of medication from the original container to another container for later administration is discouraged because of the risk for errors. CBRFs should consult with a pharmacist for alternative packaging solutions if medication transfer is being considered.

Expiration Dates

Expiration dates are the dates after which medications should no longer be used. Just like some perishable foods we purchase, prescription and over-the-counter medications display expiration dates on the labels. Administering expired medications may reduce the intended effects of the drug.

Check medication expiration dates, especially for drugs such as creams, drops or medications that are given only as needed (PRN). If an expiration date includes only a month and year, the actual expiration date is the last day of that month.

Activity: Review of Medication Packaging and Labeling

Please respond to the following questions:

Who can transfer prescription medications from one container to another?

_____

_____

When must medications be packaged in unit doses?

_____

_____

What information *must* be included on a prescription label?

_____

_____

Medication Procedures and Documentation

Caregivers who administer medication must promptly *document* in the resident record all of the following:

- Name of the scheduled or PRN medication, along with the dosage, date and time of administration
- Any time a medication was intentionally not given, given earlier than the usual administration time or given later than the usual administration time. The reason must be included in the documentation.
- Treatments
- Effects or side effects observed by the caregiver
- Symptoms reported by the resident
- The need for PRN medications and the resident's response (within 30 minutes of administering the medication)
- Refusal by the resident to take medication
- Omissions of medication
- Medication errors
- Drug reactions

Orders for blood pressure monitoring, lab tests or other activities may be ordered and must also be documented in the chart upon completion.

Special Documentation Requirements for PRN Psychotropic Medications

The CBRF administrator or designee must monitor and document the use of the PRN psychotropic medication at least once a month.

The administrator or designee is required to ensure that PRN psychotropic medications are:

- Administered only when the resident exhibits the behaviors identified by the prescribing practitioner and documented in the resident's record
- Not being used to discipline or punish a resident for a particular behavior
- Not used for staff convenience, e.g., merely to sedate a resident or make up for staffing shortages. **Note:** use of a psychotropic medication for discipline or convenience is known as a chemical restraint and is prohibited
- Reviewed for significant adverse side effects

Additional documentation for PRN psychotropic medications must include:

- The rationale for use
- The description of the behaviors requiring the PRN psychotropic medication
- The effectiveness of the medication
- The presence of any side effects
- Monitoring for inappropriate use of each psychotropic medication given PRN

Other Reporting and Documentation

Document and report all of the additional situations:

Abnormal signs, symptoms or behaviors even when you are unsure they are related to medication. Pay particular attention to the side effects of new medications.

Resident comments related to medications or side effects. These comments help practitioners make decisions on whether to continue or change a medication.

A change in condition may indicate a reaction to medication. Changes might include breathing problems, increased confusion, loss of ambulatory skills, vomiting, diarrhea, etc. **NOTE:** If the resident experiences any adverse drug reactions, report this immediately to the licensed practitioner, the supervising nurse or the pharmacist.

Refusing medication can seriously affect a resident's condition. When documenting a refusal, document the reason (if known) for the resident's refusal. **NOTE:** If the resident has refused the same medication for two consecutive days, you are required to report this immediately to a licensed practitioner, the supervising nurse or the pharmacist.

Medication Errors

Each facility should have a policy for responding to a medication error. It is considered a best practice for the facility to analyze errors for cause and take steps to prevent a reoccurrence. **NOTE:** You must report all medication administration errors immediately to a practitioner, supervising nurse or the pharmacist.

Many CBRF residents have chronic health conditions and take multiple medications. The high usage of prescription drugs, combined with age-related illnesses or conditions, increases the risk for medication errors and the effects of those errors. The purpose of reporting medication errors is not to assign blame but to provide immediate intervention for the resident affected by the medication error.

A medication error is defined by the Bureau of Assisted Living's Medication Management Initiative Workgroup as follows:

A medication error is a preventable event resulting in the incorrect administration of a medication, or harm or potential harm to a resident. The practitioner's written order identifies the prescribed medication, dose, time, and route of administration for the resident. An error occurs when the resident does not receive a medication as prescribed/ordered by the practitioner.

Causes of Medication Errors

Medication errors include:

- **Wrong medication** – a medication is given that is not prescribed or has been discontinued
- **Wrong dose** – a resident receives a medication in a dosage other than what was prescribed by the practitioner
- **Wrong time/omission** – a resident does not receive medication at the time prescribed by the practitioner
- **Wrong route** – a resident receives medication via a route other than what was prescribed by the practitioner
- **Wrong technique** – a medication is given without regard to special instructions, e.g., crushing a medication that is to be given whole, giving a medication without food when food is ordered, not waiting the appropriate length of time between dosages

Activity: Recognizing Medication Errors

Unfortunately, medication errors can happen all too frequently. Let's review a situation in which a caregiver makes several errors. Start out by reviewing the orders below for two residents.

Mrs. Peach has the following orders:

Baby aspirin, 81 mg per day. Give with food at breakfast.

Fosamax, 10 mg per day. Take with water. Do not eat or drink and remain upright for at least 30 minutes after taking pill.

Alrex 0.2% Ophthalmic Susp. 10 ML. Instill one drop in each eye daily. Shake well before using.

Mr. Munson has the following orders:

Metformin 500 mg tabs. Take one tablet by mouth at evening meal to lower blood sugar. Take with food. Swallow whole – do not crush or chew.

Epinephrine 0.22 mg. Two inhalations, four times daily. Inhalations should be at least one minute apart.

Caregiver Susan is preparing to administer the medications for these residents. She gives Mrs. Peach her Fosamax at 7:45 a.m. during breakfast.

She gives Metformin and baby aspirin to Mr. Munson at the same time.

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At 8 a.m., Susan returns to Mrs. Peach's room to administer her eye drops. She asks Mrs. Peach to lie on the bed and administers one drop to each eye.

Susan goes back to Mr. Munson and administers his epinephrine. She administers two inhalations one minute apart. Mr. Munson asks for a third dose because he doesn't feel the first two were sufficient. Susan administers a third one, per his request.

Which of Susan's actions are considered medication errors? Why do you think so? Note your ideas below:

_____

_____

_____

Ways to Prevent Medication Errors

Medication errors can include mistakes involving prescription drugs, over-the-counter products, vitamins, minerals, or herbal supplements. Here are some best practices to help prevent errors:

- Clarify any order that is incomplete, illegible or unclear
- Ensure that you fully understand orders before administering medications
- Prepare the medications for one resident at a time. To avoid confusion, give the medications immediately after they are prepared.
- Complete the entire medication administration for one resident before moving on to another person
- Avoid unnecessary distractions while administering medications
- Make sure you are trained to complete the tasks you are asked to do
- Make sure you have sufficient time to complete the medication tasks without interruption
- Make sure you understand and follow proper medication procedures
- Do not allow other inexperienced, untrained staff to administer medications
- Make sure you have access to medication resources (i.e. drug books, pharmacy drug information)
- Teach residents about their medications and listen to residents who question a medication
- Don’t take shortcuts

Medication Storage

DHS 83 requires that medications are secured in accordance with laws and regulations to prevent access by unauthorized persons. Controlled substances must be stored and secured according to state and federal laws and regulations to prevent diversion.

Appropriate storage is important for several reasons:

- Improper storage may reduce the effects of the medication
- Improper storage may increase the potential for medication errors
- Unsecured medications may be ingested accidentally by other residents or diverted by others for non-medical use

Storage of Staff-Administered Medication

Staff-administered medications must be locked in a room or cabinet. Storage areas should guard against exposure to direct sunlight, extreme temperatures or high humidity.

Keys to storage areas must be limited to staff whose job duties require access. The CBRF must designate, in writing, the names or job descriptions of employees with access.

Storage of Self-Administered Medication

When a resident self-administers medication, prescribed and over-the-counter medications and dietary supplements remain under the control of the resident. The CBRF must provide a secure place for the storage of medications in the resident's room.

However, medications that are under the control of the resident may pose risks to other residents or provide an opportunity for misappropriation by other residents, visitors or staff.

Storage of self-administered medications must promote both the independence of the resident and the safety of other residents. Storage should also limit access by unauthorized users. Whatever the solution, it is the facility's responsibility to balance the safety of all residents with the rights of any individual resident.

Refrigeration

Refrigerated medications that share space with food must be labeled and placed in a locked container. This requirement is intended to protect residents and staff from accidental ingestion of medication and prevent medication diversion.

Proximity to Chemicals

The CBRF may not store prescription or over-the-counter medications or dietary supplements next to chemicals or other contaminants.

Spilled chemicals or leaking containers might contaminate the drug, posing a risk to the resident. Examples of chemicals found in CBRFs include solutions such as ammonia, bleach and other cleaning supplies.

Internal and External Separation

The CBRF must physically separate medications for internal consumption from medications for external application.

Storing external and internal medications separately helps to prevent a resident from accidentally ingesting an external medication. It also helps to avoid leakage or transfer of one medication onto another.

Although regulations do not require separation by route of administration, when a resident is receiving items that appear similar in packaging like ear drops or eye drops, separating these medications can prevent medication errors.

Controlled Substances

Controlled substances must be stored in a separate, locked and securely fastened box or drawer or in a permanently fixed compartment within the locked medication area.

Because of the risks associated with Schedule II drugs, extra security is required. Controlled substances must be locked in containers that are not easily moved or carried out of the facility.

Record and Auditing for Schedule II Drugs

The CBRF must maintain a proof-of-use record for Schedule II drugs, subject to 21 USC 812 (c), and Wisconsin's Uniform Controlled Substances Act, ch. 961, Stats. The record must contain:

- Date and time administered
- Resident's name
- Practitioner's name
- Dose

- Signature of the person administering the dose
- Remaining balance of the drug

The administrator or designee must audit, sign and date the proof-of-use records on a daily basis.

Destruction and Disposal of Medications

Medications are discontinued for a variety of reasons. When a resident is discharged, the resident's medications are sent with the resident. This assures continuity of the medication regimen and discourages waste. If a resident is moving to another facility or returning home, a copy of the medication administration record should also accompany the medication.

In other circumstances, the CBRF must develop and implement a policy for disposing of unused, discontinued, outdated or recalled medications in compliance with federal, state and local standards or laws.

Medications that cannot be returned to the pharmacy must be separated from other medication in current use in the facility and stored in a locked area. Access must be limited to the administrator or designee. The administrator or designee and one other employee must witness, sign, and date the record of destruction. The record must include the medication name, strength and amount.

Witnessing and signing a record of medication destruction is a responsibility not to be taken lightly!

Note: The CBRF may retain a resident's discontinued medication for no more than 30 days, unless ordered in writing by a practitioner or pharmacist. Orders to retain a medication must be reissued every 30 days.

Activity: Medication Storage and Disposal

What is the primary reason for keeping medications in their original containers?

Where and how should all medication administered by facility staff be stored?

Why are medications that are swallowed stored separately from those that are applied externally?

How do storage requirements for controlled substances differ from those for other medications?

How long is a CBRF allowed to retain medications that are no longer being administered? What are some of the rules for disposing of medications?

CBRF Review and Monitoring Responsibilities

The CBRF is required to conduct additional reviews and monitor the medication administration system to ensure the effectiveness of each resident's medication regimen.

Medication Regimen Review

If medications are staff-administered, the CBRF must arrange for a pharmacist or a physician to review each resident's medication regimen. This review must occur:

- Within 30 days before or 30 days after the resident's admission
- Whenever there is a significant change in medication
- At least every 12 months

The CBRF must send a copy of the report to any prescribing practitioner when irregularities are found in their patient's medication regimen. The practitioner may assist the CBRF in addressing problems or improving the regimen.

Medication Review for Scheduled Psychotropic Medication

If a resident is taking regularly scheduled psychotropic medications, there are additional requirements for oversight:

- The resident must be reassessed by a pharmacist, practitioner, or a registered nurse, as needed, but at least quarterly for the desired responses and possible side effects of the medication
- The results of the assessments must be documented in the resident's record
- The CBRF must ensure all resident care staff understand the potential benefits and side effects of the medication

Documentation in the resident's record will assist the reviewer by providing information such as the frequency of behaviors targeted by the medication and any observed side effects.

Annual Review Requirements

At least annually, there must be an on-site review of the CBRF's medication administration and storage systems. The review may be completed by a physician, pharmacist or registered nurse. The purpose is to ensure the effectiveness of the entire medication administration system. The reviewer must submit a written report to the CBRF that includes the findings. The CBRF must respond to any irregularities, suggestions or other information included in the report.

Other Monitoring

The managers in your facility have primary responsibility for oversight of the medication program. In addition, your facility's pharmacist can also provide some additional assistance.

Facility Management: The supervisor(s) in your facility plays a role in the overall medication management program. This can include:

- Staff training and orientation
- Policy and procedure development
- Supervision of staff
- Performing audits of the medication system and observing staff performing medication passes

Pharmacist: Consultant pharmacists can be incorporated into the medication management process in assisted living facilities to help ensure safe and accurate administration of medications. A consultant pharmacist can:

- Provide listings or descriptions of recommended doses, medication interactions and medications posing the most significant risks
- Assist facilities with the development and implementation of policies and procedures related to medication management
- Provide in-service training to new and existing staff members on medication-related issues
- Observe medication administration by facility staff and provide feedback to administration and to the staff
- Establish procedures to ensure security of controlled substances and conduct periodic audits to identify system weaknesses or evidence of diversion or theft
- Provide information to the facility for monitoring residents for side effects, appropriate laboratory test results and potential adverse consequences of the medication regimen
- Review the resident's medication regimen for positive outcomes and appropriate medication administration
- Increase awareness of polypharmacy (too many forms of a medication) or unnecessary medications which may result from orders from multiple practitioners

SECTION IV: MEDICATION ADMINISTRATION

As you have learned, medication administration is much more than the act of administering medication to a resident. Each time you prepare to administer a medication, you must apply the principles covered earlier in the training. Let's review some of the major topics:

- Follow the requirements set forth in your CBRF's medication administration system
- Know which medications you are allowed to administer after successfully completing this course versus those that you may only administer when delegated by a registered nurse or practitioner
- Understand the medication you are administering, including its classification, the intended use of the medication, effects, side effects, and special administration instructions
- Appropriately use resources to define terms, abbreviations, drug classifications, etc.
- Understand the medication ordering system, the pharmacy packaging and labeling system, along with proper storage techniques
- Identify resources for answering questions or reporting required information such as medication errors or changes in the condition of the resident

The most important advice for any person tasked with administering medication is this:

If in doubt, check it out!

In this last section, you will learn how to administer medications allowed under the regulations. You will also learn to apply the Six Rights of Medication Administration each time you administer a medication to a resident and understand the documentation required in the medication administration record. Finally, you will have an opportunity to practice reading an order and administering a medication properly in a training setting.

The Six Rights of Medication Administration

The safest way to administer medications is to observe a series of steps known as "the six rights." Medication errors are less likely to occur if these steps are followed. You need to apply all of the six rights every time you give any medication.

As we review each right below, you will see examples of medication errors that resulted when a right was ignored. The examples are based on actual incidents observed by state survey staff in CBRFs throughout Wisconsin.

#1 – Right Individual

Make sure that you are assisting the correct resident.

- Ask the resident's name
- Check with another staff member if you are not sure of the resident's identity
- If a photo of the resident is available, confirm identity in that manner

Do not rely on the resident to confirm his/her name. You may be unaware of the residents' ability to process your question.

Wrong Person: Caregiver Ann works in a large CBRF and recently began administering medications to residents on a different floor. She entered Mrs. Green's room and asked the resident, "You're Mrs. Green, right? I don't think we've met before."

The resident shook her head so Ann gave the woman the medications. Shortly after that, Ann discovered that she had given Mrs. Green's medications to Miss Johnson, a resident who often wanders into unoccupied rooms.

The medication error resulted in Miss Johnson becoming unresponsive. She required hospitalization in the intensive care unit.

#2 – Right Drug

Be sure that you are giving the right drug

- Read the medication label carefully. Check the spelling of the medication.
- Read the medication administration record (also called a “MAR”) carefully. Make sure that the medication name on the label matches the name of the medication that is transcribed on the MAR from the doctor’s order.

Prepare the medications for one resident at a time. It is best to give the medications as soon as possible after they are prepared to avoid confusion. Complete the entire medication administration for one resident before moving on to another.

Wrong Drug: Mr. Chan received the incorrect medication on Friday evening and Saturday morning.

The facility sent the wrong medications with Mr. Chan during an outing with his nephew. As a result, Mr. Chan had serious adverse effects and required emergency medical care. Caregiver Brenda said, “I was so caught up in getting things ready for Mr. Chan that I grabbed the wrong medications.”

After Mr. Chan was hospitalized, his nephew checked the wrappers from the medications and discovered they were labeled with another resident's name. The medications that Mr. Chan received in error included two anticonvulsants and an antipsychotic medication.

#3 – Right Dose

Dosage equals strength and amount. The right dose means how much of the medication to give to the resident at one time.

- Read the dose on the pharmacy label
- Compare the dose on the label to the order transcribed to the MAR

Double-check dosage amounts by comparing with the order. Although medications that are unit dosed should come to the facility in the correct dosage, double check by comparing them with the order.

Wrong Dose: Miss Farmer's physician ordered a change in the amount of warfarin (Coumadin®) she was to receive. Facility staff administered the previously prescribed dosages in addition to the new dosage amounts for 14 days.

As a result of the continuing medication error, Miss Farmer sustained an acute upper gastrointestinal bleed and was hospitalized for 6 days. Facility staff did not discover the error until Miss Farmer was hospitalized.

#4 – Right Time

Be sure the drug is given at the correct time.

- Read the pharmacy label for the time when the drug is to be given
- Compare the time on the label to the time contained in the order transcribed to the MAR

The "right time" could be a specific time (for example, give at 6:00 a.m.). More often, it will be a period of the day. For example:

- Before breakfast
- Before bedtime
- 30 minutes after eating
- 3 times a day

Add specific times to the resident's record to avoid confusion. Clarify any confusing instructions with the pharmacist or the practitioner who ordered the medication.

If an order specifies a time, a 60-minute window (either way) is usually allowed. For example, if the administration time is listed as 7:00 a.m., the medication may be given between 6:00 and 8:00 a.m.

Wrong Time: Mr. Martinez had an order for Depakote® (for bipolar disorder). His physician changed the medication from pill form to liquid. He was to receive 2 teaspoons every morning and 4 teaspoons at night.

Lab tests two months later revealed that Mr. Martinez did not have a therapeutic blood level of Depakote®. It was then that the facility discovered that the medication had been placed in a bin that contained PRN medications instead of the bin that stored Mr. Martinez's scheduled medications. By placing it in the PRN bin, Mr. Martinez did not receive the medication as it was scheduled.

#5 – Right Route

"Route" means the way a medication goes into the body. Most medication is taken by mouth and swallowed but others enter the body by other methods. Be sure that the correct route is used.

- Read the pharmacy label for the route the medication is to be given.
- Compare the label with the order transcribed to the MAR.

Examples of different routes:

- Under the tongue (sublingual)
- Into eyes, ears or nose
- Onto the skin (topical solutions)
- Into the lungs (inhalants)

Wrong Route: Ear drops to soften cerumen (ear wax) were administered into Mrs. Singer's eyes on 2 occasions by different caregivers. Neither error was documented.

The medication was to be discontinued after 7 nights, but the drops were not removed from the medication cart. The first error occurred during these 7 days. The second error occurred approximately one month later. Caregiver Joe admitted that he did not look at the label and did not note that they were discontinued. He also stated that the ear drops were in with the other eye drops.

Mrs. Singer told the surveyor that it had happened twice and that it stung and burned each time. She also stated that she told staff to forget about it and not to write about it because staff would "think I'm a crybaby or something."

#6 – Right Documentation

After you have finished administering a medication, you must document in the resident's medication administration record. You may also need to document in the resident's chart.

- Make sure you are documenting in the correct record
- Document immediately to ensure accuracy
- Document the right medication

Documentation provides the opportunity to make sure the first five steps have been followed. In addition, document the resident's reaction or response to the medication especially with a new medication or when you observe a different response.

Only staff approved to administer medications may document in the medication administration record.

Wrong documentation: Mr. Granger experienced a tonic-clonic seizure that lasted over 35 minutes. When Mr. Granger was discharged, the family was given his remaining medications. They noted that he had not received 5 doses of his Dilantin® (anti-seizure medication). The medications were still in the blister pack.

The family also received a copy of the medication administration records on which caregiver Anita documented that she gave Mr. Granger his medications, even though he didn't receive them on the five days in question.

Anita later admitted that she routinely documented that she had given all medication to a resident without really checking.

Standard Precautions

Standard precautions are ways of doing your work to lower the chance of spreading disease. They consist of hand hygiene, protective equipment, care of the environment and safe injection practices. They are based on the principle that all blood, body fluids, secretions, excretions except sweat, non-intact skin and mucous membranes may be capable of transmitting infection.

Practicing good hand hygiene techniques is especially important when administering medications. Hand hygiene includes both washing with soap and water or using alcohol gel.

Always use soap and water if your hands are visibly dirty, before preparing food and after using the restroom.

These are the recommendations of the Centers for Disease Control:

You Must Perform Hand Hygiene

Before:

- Having contact with residents
- Putting on gloves
- Caring for any invasive device, such as a catheter
- Handling food
- Administering medication

Right after:

- Having contact with a resident's skin
- Having contact with body fluids (even when gloves are worn)
- Having contact with resident items such as dressings, dirty laundry, dishes or trash
- Taking off gloves
- Moving from parts of the resident's body that could be contaminated to parts of the resident's body that are clean
- Using the restroom
- Coughing or sneezing
- Smoking

Hand Washing Procedure

- Wet hands with water
- Apply soap
- Rub hands together for at least 20 seconds, covering all surfaces, focusing on fingertips and fingernails
- Rinse under running water and dry with disposable towel
- Use the towel to turn off the faucet

Hand Rub (Hand Gel) Procedure

- Apply to palm of one hand (the amount used depends on specific hand rub product)
- Rub hands together, covering all parts of the hand, especially fingertips and fingernails.
- Use enough rub to require at least 15 seconds to dry

Which is More Effective at Killing Bacteria?

Alcohol-based rub is the preferred method for hand hygiene. The exceptions are when your hands are visibly dirty or contaminated, or there is a Norovirus outbreak in your facility. In those cases, wash with soap and water.

Other benefits include:

- Less damaging to the skin than soap and water, resulting in less dryness and irritation
- Require less time than washing hands with soap and water
- Bottles/dispensers can be placed at the point of care so they are more accessible

Rules for Wearing Gloves

Wear clean gloves when:

- Touching blood or any other body fluid
- Caring for any invasive device, such as a catheter
- Having contact with items that could contain body fluids such as dressings, dirty laundry, dishes or trash
- Moving from parts of the resident's body that could be contaminated to parts of the resident's body that are clean

- Your CBRF's policy requires the use of gloves

Always follow these rules:

- Carefully remove used gloves so that the outer surface never touches your skin
- Wear gloves that fit – gloves that are too small or too big can tear
- Wash your hands after glove removal
- **Never wear the same gloves for the care of more than one resident!**
- **Never reuse gloves!**

Routes and Procedures Demonstration

In this part of the training, students will learn how to properly administer medications using a variety of different routes and procedures including oral medications, oral inhalers, eye drops, eye ointment, ear drops, nasal medications, skin patches and topical medications.

In this activity, the facilitator will explain and demonstrate each procedure, using the steps outlined below. All students will have the opportunity to practice each procedure.

Activity: Oral Medications

Medications that are swallowed are the most common dosage form. Oral medications can include tablets, capsules, and liquid medications, such as cough syrup.

Instructions for administering oral medications:

Read the specific instructions that come with the prescription or the medication, e.g., give with food, crush the medication, etc. Unless specified otherwise, give all oral medications with sufficient fluid to completely ingest the medication.

Wash hands or use hand gel.

Administer oral medications to a resident in an upright position. If that is not possible, elevate the resident's head at least 30 degrees.

Remove the pill from the bottle, blister pack or other packaging. Place in a medication cup or on a spoon.

Place the medication into the mouth using the cup or spoon. (Residents who are able should complete this task themselves.) Do not use bare fingers.

Unless otherwise directed, encourage the resident to drink fluids with the medication. Observe to make sure the medication has been swallowed.

If the medication is to be placed under the person's tongue (sublingually), ask the resident to raise his/her tongue and place the pill under the tongue. (Residents who are able should complete this task themselves.)

When administering liquid medications in multi-dose bottles, measure the prescribed dose into a dosing cup or a syringe. If using a cup, make sure it is placed on a flat surface and the liquid is measured at eye level. Do NOT pour excess liquid back into the bottle.

Wash hands or use hand gel when finished.

Activity: Oral Inhalers

An oral inhaler is a dispensing system that creates an aerosol mist of liquid particles, including the prescribed medication. The medication is ingested, or inhaled, into the lungs. These medications usually treat asthma or other lung disorders.

Instructions for administering medication via an inhaler:

Read the specific instructions that come with the prescription or the medication.

Wash hands or use hand gel.

Warm the canister to hand temperature. Remove the cap and hold the inhaler upright.

Shake the inhaler (if instructed to do so).

Ask the resident to tilt his/her head back slightly and breathe out.

Hold the inhaler up to the resident's mouth; use of a spacer device is recommended.

Ask the resident to:
- breathe in slowly as the inhaler is pressed to release the medication.

- continue to breathe in slowly for 3 to 5 seconds after the medication has been released.

- hold his/her breath for 10 seconds to allow the medication to go into the lungs.

- slowly exhale through the nose.

If more than one puff is ordered, allow at least one minute between puffs to maximize the benefit of the medication.

Replace the cap for storage.

Wash hands or use hand gel when finished.

NOTE: Nebulizers are different from oral inhalers. A caregiver who has successfully completed this course may not administer nebulizer treatments unless the task is delegated by a registered nurse. Not all inhalers require a minute between puffs. For some inhalers, the second puff can occur less than or more than one minute. You should obtain the specific time information from the pharmacy.

Activity: Eye/Ophthalmic Drops

An eye drop is medication that is placed directly onto the eye.

Instructions for administering eye drops:

Read the specific instructions that come with the prescription or the medication.

Wash hands or use hand gel.

Check the dropper for chips or cracks.

Avoid touching the dropper tip to the eye or any other surface.

Ask the resident to lean his/her head back.

With one hand, pull down the lower eyelid to form a pouch, instructing the resident to look up.

Gently squeeze a single drop into the pouch.

Instruct the resident to close the eye slowly to allow for even distribution over the surface of the eye.

Ask the resident to keep the eye gently closed for 2-3 minutes to allow the medication to absorb into the eye.

Gently wipe off excess solution in the eye area with sterile cotton or gauze pad.

If more than one drop of the medication is ordered, wait at least 5 minutes before giving the second drop to maximize absorption.

Wash hands or use hand gel.

Additional information:

Some eye drops have a very short “life”. Be sure to check the expiration date.

Some eye drops will cause short term vision changes; be aware of this to keep the resident safe.

Activity: Eye Ointment

Eye ointment is a medication applied to the eye, but in a form other than drops.

Instructions for administering eye ointment:

Read the specific instructions that come with the prescription or the medication.

Wash hands or use hand gel.

Remove the cap from the tube and place it on a clean, dry surface.

Tilt the resident's head back.

With one hand, pull down the lower eyelid to form a pouch and instruct the resident to look up.

With the other hand, apply a thin line of ointment into the pouch. DO NOT let the medication tube touch the eye or any other surface.

Instruct the resident to close the eye and rotate the eyeball to allow for even distribution of the ointment.

Keep the eyes closed for 1 to 2 minutes. Remind the resident not to blink or to squeeze the eyelids shut, as this will force the medication out of the eye.

Gently wipe off excess ointment in the eye area with sterile cotton or gauze.

Wash hands or use hand gel when finished.

Activity: Ear Drops

Ear drops are administered into the ear canal. The medication is absorbed through the skin of the ear canal and membranes of the eardrum. Ear drops are primarily used to treat wax build-up and inflammations or infections of the ear.

Instructions for administering ear drops:

Read the specific directions that come with the prescription or the medication.

Wash hands or use hand gel.

Ask the resident to lie on his or her side with the infected ear up.

Draw the prescribed amount of solution into the dropper and hold it in an upright position.

Gently pull the lobe of the ear up and back to open the ear canal.

Hold the medicine dropper just above the entrance to the ear canal and squeeze out the medication.

Release the ear and ask the resident to remain still for five minutes to allow absorption of the eardrops. During this time, replace the cap and keep the bottle tightly closed. DO NOT rinse the dropper after use.

Repeat the procedure on the other ear if ordered.

Gently wipe any leakage of the medication with sterile cotton or gauze.

Wash hands or use hand gel when finished.

Additional information:

Do not place the medicine dropper tip or cotton swabs directly into the ear canal, as this can traumatize the skin of the ear canal.

Do not touch anything with the tip of the medicine dropper to prevent contamination.

If the resident experiences pain from the eardrops, stop using and contact the doctor.

Activity: Nasal Medications

Nasal medications are sprays or drops that are put into the nasal cavity or nose.

Instructions for use of nasal sprays:

Read the specific directions that come with the prescription or the medication.

Wash hands or use hand gel.

Have the resident clear his or her nasal passages with gentle nose blowing.

Gently shake the container, if needed.

Use one finger to gently close the nostril that is not receiving medication by pressing on the side of the nostril.

Place the tip of the spray into the open nostril pointing away from the nasal septum (midline) and direct the spray straight back, not up into the tip of the nose.

Activate the spray, instructing the resident to breathe in through the nose deeply as you spray in the medicine. Remind resident to exhale through the mouth.

Ask the resident to tilt the head back for several seconds while the drug penetrates.

Wipe any excess drainage immediately. Remind resident to avoid blowing the nose for 15 minutes.

Rinse the outside of the container with hot water and dry with a clean tissue, keeping the container pointed down to prevent water from getting into the container.

Wash hands or use hand gel when finished.

Additional information:

Unlike eye drops and inhalers, no wait time is required between nasal sprays because the medication is applied directly to the affected area. In addition, nasal passages can hold a large amount of medication, eliminating the waiting time. But you should still allow the resident time to inhale the medication.

Activity: Transdermal Medication Patches

Medication contained in an adhesive transdermal patch is released over time through the skin and into the bloodstream. The patches are often used to deliver medication to treat motion sickness, smoking, and pain.

Instructions for applying a medication patch:

Read the specific directions that come with the prescription. Proper application techniques vary widely among different medications. Do not assume the instructions are the same for all patches. Determine the location on the body for placement and the length of time the patch is to remain on the skin.

Wash hands or use hand gel, and put on gloves.

Clean the selected area according to the manufacturer's directions.

Remove the patch from its protective covering. Without touching the adhesive, remove the clear plastic backing.

Use the palm of the hand to apply the patch and press firmly for about 10 seconds. Check that the patch adheres well, especially around the edges. Write the date and the time on the patch, then initial it.

Remove gloves, wash hands or use hand gel when finished.

Additional Information:

Check the patch routinely to make sure it is still adhered to the skin. When placing a new patch, place it in a slightly different area of the required body location to help reduce skin irritation.

When removing a patch, it may still have some of the medication remaining on the patch. The patch should be cut up or physically destroyed according to facility policy.

Activity: Topical Medications

Topical medications are applied externally and absorbed through the skin. Several preparations are available including ointments, gels, creams, lotions or sprays.

Instructions for proper use and application:

Read the specific instructions for use that come with the prescription and the medication.

Wash hands or use hand gel.

Wear gloves when administering ointments, gels, creams or lotions.

Make sure the area is clean prior to the application.

Apply the medication according to the instructions for use.

Do not let the medication container touch the area being treated (to prevent contamination).

Remove gloves and wash hands or use hand gel when finished.

Using the Medication Administration Record

Each caregiver who successfully completes this class must be able to read and understand a medication administration record. The facilitator will provide each student with a copy of a medication administration record.

Review the record carefully. If you are unsure of any part of the record, use your reference tools (e.g. the drug tool) or ask your instructor to clarify. After you feel you understand the record, you will be asked to verbalize the information contained in the record. Information might include:

- Each medication the person is to receive according to time of day. For example, Mrs. G. receives *x* and *y* at 7 a.m.
- The name of the medication and the dosage
- The proper route (e.g. oral, nose, ear, skin patch, etc.)
- Any special administration instructions
- Any PRN medication orders the person has and under what conditions you would administer that medication
- The information you would document after you administered the medication, e.g. the name of the medication, dosage, date and time of medication taken or treatments performed including your initials. Any side effects observed by the employee or symptoms reported by the resident must be documented. The need for any PRN medication and the resident's response must also be documented.

Medication Administration Process Steps

You've learned how to administer medications allowed by the regulations and how to use the medication administration record appropriately. Let's talk now about the steps that you must take each and every time you administer a medication to a resident.

- Unlock the medication cabinet/cart but keep it in sight
- Observe the first 5 medication rights: the right resident, the right medication, the right dose, the right route, the right time
- Check the medication 3 times: when selecting the medication, removing it from the container and before administering it to the resident
- Practice hand hygiene
- Put on gloves, if indicated. Never touch the medication with a bare hand.
- Tell the resident what you are going to do; give the resident your full attention
- Be respectful of the resident's privacy
- Administer the medication as directed, giving the resident any directions during the procedure, if indicated
- Allow the resident to assist with the process as much as possible
- Observe the resident to ensure that the medication was ingested if taken orally
- Remove gloves, if worn
- Repeat hand hygiene
- Document required information immediately after administering any medication

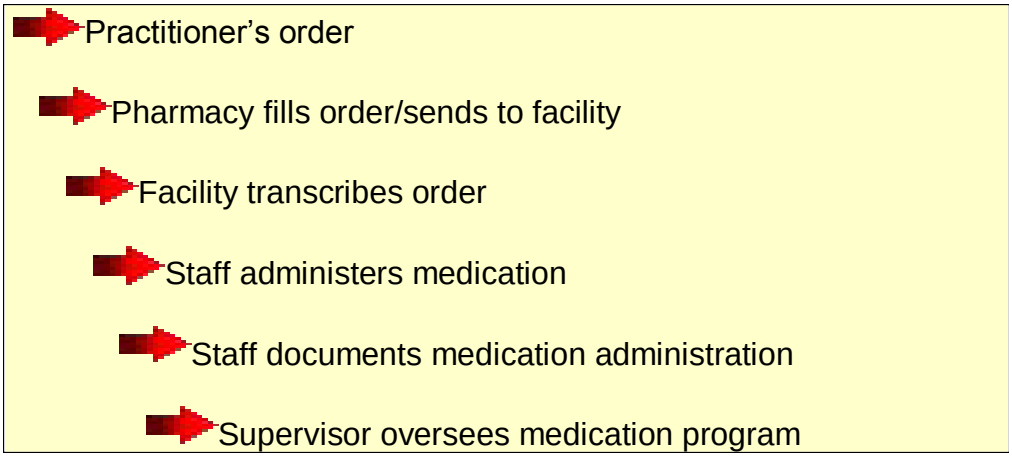
Activity: Administering Medications

The instructor will offer a sample medication order for each student to read, administer, and document. Be sure to use the process steps when demonstrating the administration.

Students will take turns playing the caregiver who administers the medication, the resident who takes the medication and the coach who provides tips to the team. When you are finished, document the medication administration in the space provided below. The "caregiver" and the "resident" may collaborate on the administration technique, the process steps and the documentation.

Activity: Understanding the Medication Process

Many individuals and entities are involved in the medication process in a CBRF. The journey begins with the practitioner's order and ends when the caregiver (under supervision) administers the medication.



Errors can occur at any stage of the medication process. Review the following scenarios and discuss where in the process an error likely occurred. Remember that most errors are unintentional and could be remedied with better communication.

Each scenario is based on situations that the Division of Quality Assurance investigated in CBRFs.

Scenario One

Mrs. Lorenz began taking Aricept® 45 days ago. The medication was delivered to the CBRF in a blister pack containing 30 tablets with one tablet to be administered daily at bedtime. The prescription allowed 4 refills.

Today, caregiver Joan noticed that Mrs. Lorenz had not received the Aricept medication for the last 15 days.

Where in the process did the error(s) occur? Why do you think so?

- Practitioner's order
- Pharmacy fills order/sends to facility
- Facility transcribes order
- Staff administers medication
- Staff documents medication administration
- Supervisor oversees medication program

Scenario Two

The Oakdale CBRF was cited because residents there did not receive their medications. In addition, many of the prescribed treatments were not completed.

Caregiver Connie reported, "How can they make me pass meds to 54 people and expect me to get done...I have treatments to do, too."

Where in the process did the error(s) occur? Why do you think so?

- Practitioner's order
- Pharmacy fills order/sends to facility
- Facility transcribes order
- Staff administers medication
- Staff documents medication administration
- Supervisor oversees medication program

Scenario Three

Mr. Donohue had a prescription for 150 mg of Trazodone once a day. On Thursday, he received 300 mg of the medication.

Caregiver Francis administered one dose of 150 mg. to Mr. Donohue at 3:00 pm and caregiver Jonah administered another dose of Trazodone 150 mg at bedtime.

Where in the process did the error(s) occur? Why do you think so?

- Practitioner's order
- Pharmacy fills order/sends to facility
- Facility transcribes order
- Staff administers medication
- Staff documents medication administration
- Supervisor oversees medication program

Scenario Four

Miss Erlich has an order for an antipsychotic medication. She often refuses to take the medication or questions why she has to take it.

Caregiver Bernice was observed concealing Miss Erlich's medications by crushing them and mixing them in a cup of coffee. Caregiver Bernice did not inform Miss Erlich that her medications were in the coffee.

While being interviewed later, Caregiver Bernice stated that staff routinely hides the medications in Miss Erlich's coffee so she can't refuse or question what she is taking.

Note: There is no court order authorizing the administration of medications without Miss Erlich's knowledge or consent.

Where in the process did the error(s) occur? Why do you think so?

- Practitioner's order
- Pharmacy fills order/sends to facility
- Facility transcribes order
- Staff administers medication
- Staff documents medication administration
- Supervisor oversees medication program

Scenario Five

Mr. Palmer's physician ordered 0.2 mg of desmopressin to be given at bedtime. The clinic RN transcribed the order with a higher dose when she called the pharmacy. The pharmacy label incorrectly stated to administer 2 tablets per day instead of one.

Caregiver Carla gave Mr. Palmer extra doses of the medication on two separate days based on the inaccurate information provided on the pharmacy label.

On the second day, Mr. Palmer was found unconscious on the floor with blood flowing from his mouth (it appeared he struck the metal bed when falling to the floor). The resident experienced a seizure en route to the hospital.

Where in the process did the error(s) occur? Why do you think so?

- Practitioner's order
- Pharmacy fills order/sends to facility
- Facility transcribes order
- Staff administers medication
- Staff documents medication administration
- Supervisor oversees medication program

Scenario Six

Mrs. Gray had orders for treatment on her buttocks due to a bedsore. She had to be admitted to the hospital because the bedsore became progressively worse.

Caregiver Claudia documented that treatment had been provided on days when she was not at work. She reported she "may have filled in the blanks."

Where in the process did the error(s) occur? Why do you think so?

- Practitioner's order
- Pharmacy fills order/sends to facility
- Facility transcribes order
- Staff administers medication
- Staff documents medication administration
- Supervisor oversees medication program

_____

_____

Some of the examples were intentional acts, but most were the result of errors or miscommunication along the way. This activity highlights the opportunity for errors and demonstrates the importance of questioning any step in the process when you believe an error has been made.

Resources

The following are resources used for this curriculum. These resources may also provide valuable information about current standards and practices. Instructors and students are encouraged to explore the resources to increase program knowledge.

DQA Pharmacy Review Resources for Surveyors
http://dhs.wisconsin.gov/rl_DSL/MedManagement/asstlvgMMI.htm

DQA Pharmacy Newsletter

DQA Memo Series
BQA Memo 04-026: Physician Orders and Medications
http://dhs.wisconsin.gov/rl_dsl/Publications/04-026.htm

National Patient Safety Goal – Look Alike/Sound Alike Drugs
http://www.ismp.org/Tools/confuseddrugnames.pdf

Pharmacy Examining Board, ch. 450, Wis Stats
http://www.legis.state.wi.us

Community Based Residential Facilities -- DHS 83 http://www.legis.state.wi.us

Standards of Practice for Registered Nurses and Licensed Practical Nurses – N6
http://www.legis.state.wi.us

National Patient Safety Goal – Implementation Tips for Eliminating Dangerous Abbreviations
http://www.jointcommission.org/sentinel_event_alert_issue_23_medication_errors_related_to_potentially_dangerous_abbreviations/

DQA Assisted Living Medication Management Initiative
http://dhs.wisconsin.gov/rl_DSL/MedManagement/asstlvgMMI.htm

Schedules of Controlled Substances http://www.deadiversion.usdoj.gov/schedules/
Uniform Controlled Substances Act http://www.legis.state.wi.us/Statutes/Stat0961.pdf

“Preventing Medication Diversion,” Division of Quality Assurance and University of Wisconsin – Oshkosh Center for Career Development
http://www.uwosh.edu/ccdet/caregiver/topical.htm

Fact Sheet on Pain Management, National Institutes of Health
www.nih.gov

NIH Pain Consortium, National Institutes of Health
www.nih.gov

MedLinePlus, National Library of Medicine, National Institutes of Health
http://medlineplus.gov

Centers for Disease Control and Prevention
http://www.cdc.gov

DQA List of Common Controlled Substances
http://dhs.wisconsin.gov/rl_DSL/MedManagement/contrldSubsts.pdf

Controlled Substances Quick Reference for Schedule, DQA
http://dhs.wisconsin.gov/rl_DSL/MedManagement/contrldSubsts.pdf

Medication Administration
http://www.safemedication.com/safemed/MedicationTipsTools/HowtoAdminister.aspx

Recommendations to Enhance Accuracy of Administration of Medications, National Coordinating Council for Medication Error Reporting and Prevention
http://www.nccmerp.org

Institute of Medicine of the National Academies
http://www.iom.edu