



Standard Medication Administration Training Course Transcript

Lesson 5: Recording and Storage of Medications



Title Slide

(no narration)

Welcome

Slide 1 – This is Lesson 5 of the Commonwealth of Pennsylvania Medication Administration Training Course, "Recording and Storage of Medication".

Lesson Objectives

Slide 2 -

- By the end of this lesson you will be able to:
- Describe the information on a pharmacy label.
- List the "5 Rights" of medication administration.
- Identify resources where you can find additional information about medications.
- Explain what a medication record is and the information on it.

Slide 3 -

You will be able to also:

- Enter a medication on a medication record.
- Identify the proper storage practices for medications.
- State the general principles for counting medications.
- Explain how to properly dispose of medications.

Medication Cycle

Slide 4 – In the last lesson, you learned about visiting and communicating with the health care practitioner. You also learned about what the health care practitioner puts on the prescription order for medication that goes to the pharmacy to be filled. The next step in the Medication Cycles relates to the recording and storage of medications. Let's take a look at how a pharmacist shares the prescription information with the people administering the medication.

What is a Pharmacy Label?

Slide 5 – The pharmacist uses the information on the prescription to make a label for the medication. The pharmacist translates the prescription from the health care practitioner into language that can be read and understood by a layperson.

The pharmacy label contains the same information as the prescription, including the "5 Rights" that you learned about in the previous lesson. Remember that these are important in the safe administration of medication. Also, the pharmacy label contains other useful information which will be introduced in this lesson. Details such as the expiration date of the medication or the number of refills that are left are important though they are not used for the daily administration of medication. Let's talk about the 5 rights in a little more detail.

Slide 6 – The first right is the **right individual**. The name on the pharmacy label should be the same name as the individual receiving the medication. It must match the name on the prescription or order. For example, if the prescription reads, Frederick Smith, then the pharmacy label must also read Frederick Smith and not Fred Smith, Freddy Smith or F. Smith. When you get a prescription, you must always look at the name and make sure that it is for the right individual.

Slide 7 – The next right is the right medication. The name of the medication is another piece of information on the pharmacy label. Medications have both brand names and generic names as you learned in lesson 4. Sometimes the pharmacist will give the individual the brand name version and other times they may give the individual a generic version. Pharmacists may list both the brand and generic names on the pharmacy label or might only list the generic name. Because medications have more than one name, the medication name on the prescription or order and other information from the health care



practitioner's visit may not match the information on the pharmacy label; however, it is important to make sure that they are the same. You may need to ask the pharmacist to verify that it is the same medication that the health care practitioner ordered. An example of this, where the medications are in fact the same, is the brand name medication Effexor and the same medication listed by its generic name, venlafaxine.

Slide 8 – The third right is the **right dose**. The dose of the medication is the amount that you will administer to the individual, determined by the health care practitioner. Medication comes in different forms and strengths. Some medications come in liquid form, while others come in tablets or capsules. The tablets, capsules and liquid forms of medications may come in different strengths. The strength reflects how much medication is in each tablet or capsule or volume of liquid. The dose is the amount of medication that the individual is to receive at a particular time. Usually both dose and strength are measured in milligrams. The pharmacist dispenses the amount of pills, capsules or liquid required to make the dose ordered by the health care practitioner.

Slide 9 – Let's look closer at how to determine the right dose. For example, Sarah, a 70-year-old with high cholesterol, has been put on simvastatin, brand name Zocor, by her health care practitioner to treat this condition. She was prescribed to take **one** 20 mg tablet at night. So, the tablet strength is 20 mg and in this case, the dose is also 20 mg. The pharmacy label on her medication will indicate that she will take **one** 20 mg tablet.

Slide 10 – The dose and strength will not always match. If Sarah's health care practitioner increased Sarah's prescription to take 40 mg, then the dose would be two 20mg tablets or 40 mg while the strength of each tablet would continue to be 20 mg. Remember the strength reflects how much medication is in each tablet or capsule or volume of liquid and the dose reflects the amount of medication that the individual is to receive at a particular time.

Slide 11 – What the pharmacist dispenses may not always match what is written on the order or prescription. For example, if the health care practitioner ordered 20 mg or one 20 mg tablet of simvastatin and the pharmacist is only able to get 10 mg tablets, then the prescription will be filled with twice as many 10 mg tablets. The pharmacy label will read "take two 10 mg tablets even though the prescription or order says take one 20 mg tablet.

Slide 12 – You must pay attention to both the strength and the dose.

Slide 13 – Doses for liquid medications must be measured in an accurate manner. The pharmacy label will include the volume of medication that corresponds to the correct dose. An oral dosing device must be used to accurately measure liquid medication. There are many kinds of devices to measure liquid medication including: dosing syringes, droppers, measured cups and measured spoons. All of these devices are more accurate than using tableware or an unmeasured cup. Only measured devices should be used to administer liquid medication. The pharmacist can give guidance on the best measured device to use.

Slide 14 – Another important thing to know about medication doses is that they can be different depending on the individual who will be taking the medication. Older adults do not metabolize medication as efficiently as younger individuals and often are prescribed lower doses. Many medications will require adjustment of the dose to reach the most effective treatment. Adjustment of the dose means that the health care practitioner may start with one dose, and then increase or decrease the dose until reaching the best dose. Aside from administering the medication, you have an important role in the health care practitioner's decision to adjust medication doses since you are present to observe the effects of the medication on the individual. Your observations will help the health care practitioner make future



decisions about medication dose adjustment.

Slide 15 – The fourth right is the right time. The time the medication is administered is an important piece of information. This is another place where what is written on the prescription or order will be translated by the pharmacist. Health care practitioners use abbreviations like TID meaning three times a day, but the pharmacist will write out "three times a day" on the pharmacy label. You are not expected to know the abbreviations.

Slide 16 – Usually neither the prescription nor the pharmacy label will specify the exact times that the medication should be given. Instead the label will read "three times a day" or "in the morning." If the exact time is not specified, then your agency should have a policy or procedure that explains what is meant by three times a day. For example, some agencies or entities may use 8 am, noon, and 8 pm for medication that is prescribed three times a day. The agency must establish specific times to administer medication to represent three times a day or four times a day. Breakfast, lunch and dinner are not acceptable as times of administration. Typically, you will have a period of time to administer medication since you may have to give medication to more than one individual at a specified time. The accepted practice for time is a range usually one hour before to one hour after the specified time. With this strategy, an 8 am medication may be administered any time between 7 am and 9 am. This range should also be specified in your agency's policies and procedures. The times specified for frequencies of medication administration may differ depending on the service location. Be sure that you know these times for the locations where you will be working.

Slide 17 – Certain medications may require different instructions for administering them. A medication that must be taken on an empty stomach needs to be administered before the individual eats, regardless of the agency times of administration. Other medications may be ordered to be given as needed with a specific time period between doses. Pain medication such as ibuprofen should only be given as frequently as permitted by instructions. Individuals with wheezing or asthma that need nebulized medication may have an order or prescription with instructions to give two doses, 30 minutes apart, and if the individual is still wheezing to call the health care practitioner. Both of these examples require times that need to be more flexible than the typical hours of administration. Your agency should have policies and procedures that address these situations as they arise.

Slide 18 – The fifth right is the right route. The route of administration is how the medication will be taken. Many medications that we are familiar with are in pill or liquid form and are taken by mouth, but there are many other routes of administration. Creams and ointments, also called topicals, are put on the skin. Suppositories go into the rectum or vagina. Medications come in drop form for eyes, ears, and nose. Some individuals don't eat by mouth and instead, have a gastrostomy or jejunostomy tube through which they get their medication. Insulin is administered subcutaneously or under the skin. Other medications are administered into the muscle, and this route is called intramuscular or IM. Sprays and inhalants are used, as are pills that are dissolved either under the tongue or in the cheek. Some medication also may be administered via a patch that is attached to the skin. Each of these routes of administration will be specified on the prescription and the pharmacy label.

Slide 19 – You will be taught to administer medication by mouth in this course but will be allowed to administer medication by other routes. Often, additional instruction from a health care practitioner or trainer will be necessary when giving medication by other routes. The principles of medication administration are the same regardless of the route that the medication will be given. There are some routes of administration that you will likely not be using. Be sure that you are familiar with the regulations that apply to your service location.

Special Instructions



Slide 20 - There may be other information on the pharmacy label that is not technically part of the 5 Rights but is required for safe administration of medication. These are called special instructions and provide additional information about how to administer the medication. Some medications, such as digoxin, require a measurement to be taken before giving the medication. A pharmacy label for digoxin should include special instructions from the health care practitioner to administer the medication only if the heart rate is above a certain number. The pharmacist may also add special instructions about a particular medication such as making sure to take with a lot of water, or not to take with milk or dairy products. There may be special instructions about how to handle and store the medication, such as the temperature at which it should be stored. There may be some methods or techniques that you may have to apply when giving medication. There may be medications that require steps for preparation prior to administration. For example, some medication comes in a sprinkle form with a capsule that is designed to be broken and sprinkled on the top of a food, such as applesauce. The health care practitioner may order some medications to be crushed. In some cases, you may have to divide pills in half to make a lower dose. In addition to special instructions for preparing medication, there may be special instructions for administering them. Some medications cause stomach upset and the individual must sit upright for half an hour after taking it. You must pay close attention to any special instructions on the pharmacy label.

What else is on a Pharmacy Label?

Slide 21 – In addition to the 5 Rights, there is other information present on the pharmacy label. Some is for the pharmacist to use and some is required by law. You may not need to use this information to administer medication on a daily basis, although the information will be helpful when refilling the medication or if there is a problem. The additional information includes the following:

- The name of the health care practitioner: This information is included so you know who the health care practitioner is if there is an issue with the order or prescription.
- The date the prescription was filled by the pharmacist.
- The number of refills remaining: The number of refills is the number of times that the pharmacy can give a new supply of this medication to the individual before contacting the health care practitioner for a new prescription. There also may be a prescription number on the pharmacy label. This information is useful to know when you can contact the pharmacy directly to refill the medication. When there are no refills left, then the health care practitioner must provide a new prescription. Not all medications are allowed to be refilled and must have a new order or prescription each time.
- The number or amount of medication dispensed: This amount indicates how much medication is present in the container when it is dispensed. This is listed as QTY, or quantity. Medications taken daily typically will be dispensed in 30 to 90 day amounts. Medications such as antibiotics will be given for a specific number of days such as 5 or 7 days.
- Pharmacy information: The label will have the information about the pharmacy and pharmacist who dispensed the medication, including the address and telephone number as well as the pharmacist's name. This is how you contact the pharmacy if there is an issue.
- Manufacturer information: The name of the manufacturer of the medication will be listed on the label.
- Expiration date: The date that the medication expires will be on the label. Medication must not be used past this date.



Slide 22 – Let's take a minute to review where the 5 Rights appear on the pharmacy label

- Click on the name of the individual whose prescription this is...
- Click on the name of the medication that is prescribed.
- Click on the dose or amount of medication to be administered.
- Click on when or how often the medication should be administered.
- Click on the route or how the medication should be administered.

Slide 23 – Once the pharmacist has filled the prescription an important part of your role is to make sure that the medication you have is the right medication. The following strategies can help make sure that the medication dispensed is correct. When you get the medication from the pharmacy, look at the pharmacy label and compare it to the health care practitioner visit form to make sure that you have the correct medication. Look at the 5 Rights: right individual, right medication, right dose, right time, and right route. Mistakes do happen and there have been occasions where an individual has received another individual's medication. For example, the right medication was dispensed, but the wrong individual is named on the label. Or, the wrong medication was dispensed, as in the case where the medication has a similar sounding name as another medication. In such a situation clonidine might be given for Klonopin, or fluoxetine might be given for fluoxamine. Verify that the medication has the correct name of the individual and is the medication intended for the individual. This protects the individual from receiving a medication that is not theirs.

Slide 24 – If you are familiar with the medication, look at it and make sure it looks like you expect. If it doesn't look the same, it may still be the same medication, since the same medication made by different companies may look different. If you don't know, or if it looks different, ask the pharmacist. If you have any concerns about the medication not being the right one, talk to the pharmacist.

Slide 25 – After you have received and verified the medication, it is important to obtain additional information about the medication. Knowing the desired and side effects of a medication is a critical part of your role in the medication cycle, and knowing what to look for helps to make you a better observer. In addition to knowing about the medication, being familiar with the medical condition being treated will also help you to observe.

Slide 26 – There are many options and resources where you can find accurate information about medications and their desired and side effects. The list below gives some examples of these resources:

- Nursing drug reference manuals
- Drug information sheets or package inserts that are obtained from the pharmacy Internet drug information sites, such as the Drug Information Portal of the US National Library of Medicine at https://druginfo.nlm.nih.gov. Your health care practitioner and pharmacist can recommend other reputable internet sites.

Slide 27 – Health care practitioners can give you some of the information about the medication during the appointment. Pharmacists will answer questions about medications.

Recording the Medication

Slides 28 – After you receive the medication from the pharmacy and you have made sure that it is the right one, then you must record that medication. Recording a medication means that it will be entered on the medication record. It may be a paper or an electronic document. This is the document that will be used to track each medication and its administration.

Slide 29 – Sometimes an agency will get preprinted medication records from the pharmacy, while other agencies may create their own medication record. Regardless of what kind of medication record you have and where you get it, you will need to know how to use the medication record and how to make



new entries for new medications or changes in medications. Even if you are not doing the original entries for medications you must know how to understand the entries and you ensure the entry is correct and matches the pharmacy label. You are an important part of preventing errors. Knowing these skills will help you fulfill that part of your role.

Slide 30 – The medication record is the communication tool used to keep track of medication administrations and to guide you through the steps of administering medication.

Slide 31 – All the information about the 5 Rights from the pharmacy label will be present on the medication record. The steps of the medication administration process involve checking the medication record (3) three times against the pharmacy label to assure that you are giving the right individual the right medication in the right dose at the right time by the right route.

What is on a Medication Record?

Slide 32 – A medication record is a document that contains the information about the medications and the individual. The medication record is needed to safely administer medication. Not only does it contain the "5 Rights", but it also has additional information related to the individual. All medication records contain this basic information, although they may look different or have information in different places on the medication record. The medication record documents administrations so that you can go back and look at whether an individual has received a medication.

Slide 33 - The other information on a medication record includes:

- Dates of Administration
- Special instructions
- Chronic diagnoses
- Allergies
- Health care practitioner

Medication records should have a minimum of extra information as it can be distracting and lead to errors. Let's practice creating a medication record and entering a medication.

Slide 34 – Peter Bowen received a prescription from his health care practitioner for amoxicillin. The pharmacist filled the prescription; you made sure that the pharmacy label matched the prescription. You are now ready to transfer the information from the pharmacy label onto the medication record. Using the pharmacy label presented we will show how to do this. Not all the information that is used to create a medication record is on the pharmacy label. Some information must be obtained from the individual's records. If you are using a medication record that is pre-printed by the pharmacy, some of this information may already be on the medication record. For providers using electronic medication records this information may already be present on the medication record. Even though this may already be in place, it is important that you know what needs to be there and how to add it to the medication record, if needed. In addition, you should review that information to make sure it is correct and up to date.

Slide 35 – First the name of the individual will be entered.

Slide 36 – Next list the chronic diagnoses.

Slide 37 – Allergies should be entered next.

Slide 38 – Include the names of all the health care practitioners.

Slide 39 – Make sure that the period of time that this medication record represents is indicated in the Dates of Administration.

Transcript



Slide 40 – Be sure that the individual's correct date of birth is present on the medication record.

Slide 41 – Now you are going to enter the information from the pharmacy label into the medication description box. For this example, the pharmacy label reads Amoxicillin 250 mg take 1 tablet 3 times a day by mouth for 7 days.

Slide 42 – List the hour of administration in the hour column. In this case, we will use three times per day to mean 8 am, 4 pm, and 8 pm.

Slide 43 – Peter Bowen received another prescription from his health care practitioner. The pharmacy label and the medication record must match. It is the responsibility of the designated person at the provider agency to transfer the pharmacy label information onto the medication record. Based on the pharmacy label on the slide, you will click where the information should be documented on the medication record as appropriate.

- Slide 44 Click where you would document the individual's name, Peter Bowen
- Slide 45 Click where you would document the diagnosis of Asthma
- Slide 46 Click where you would document Peter's allergies
- Slide 47 Click where you would document Peter's health care practitioner's name, Dr Leo Carr
- Slide 48 Click where you would enter the dates of administration for this month's medications
- Slide 49 Click where you would document Peter's prescription for Singulair 10 mg,
- Slide 50 Click where you would document the dose for Peter's prescription.
- Slide 51 Click where you would document the time of day the medication should be administered

Slide 52 – Click where you would document the route by which the medication should be administered. Now that you have completed a medication record with all of the information from the pharmacy label. Take a moment to review your work.

Storing Medication

Slide 53 – After you have received and recorded the medication, then you must put it away. There are things to think about so that you or your agency can find the best place for the medication to be stored. Each location that you work in may have a different storage area. When you go to work in an unfamiliar location, you should take time to locate the medications, medication record, and supplies you will need to use for medication administration.

While most bathrooms have what is termed a "medicine cabinet," that is not the best place to store medication because of the moisture that develops from the steam of a shower or tub.

Slide 54 – You should choose a place that is dry and convenient to where you will be administering medications. This applies to both prescription and over the counter medications. The other thing to think about is whether the individuals for whom you provide service can safely be around medication. For individuals who do not understand about poisonous substances or how medications are used, you will need to store medication where it will not be taken by accident. This requires that it be locked. In addition, medications that are controlled substances, which we defined in Lesson 4, must be counted and stored under a double lock.

Slide 55 – There are some medications that have special storage requirements, such as those that must be refrigerated. In this case, you may also need to lock or double lock these substances in a separate locked container inside the refrigerator. You may have medication stored in more than one location because of these different needs. You will need to think about the differences in storage locations and storage containers when you are preparing to administer medication. Consider how far will you have to walk from one storage location to another. Consider how long the medication will have to be out of the



refrigerator when you are preparing to administer the medications.

Slides 56 – There are some basic rules about storage of medication that are used regardless of the environment.

- All medications must be kept in their original containers. Individuals that are selfadministering their medication may have their medication stored separately from others.
- Keep medication in a locked storage container that is designed for medication.
- Keep refrigerated medication in a locked container in the refrigerator.
- Heat, moisture, or light may affect how well the medication will work so medication should be stored where temperature, moisture, and light can be controlled.

Slides 57 -

- If a medication must be locked, keys should be kept with a staff person and not left unattended in a drawer or cabinet.
- Medications administered by different routes should be separated. They may be separated by different compartments or stored in separate containers or different plastic bags within the same container.
- Controlled substances must be locked twice. This could be a locked container inside a locked area such as a closet or file cabinet or a locked container within a locked container.

Slide 58 – Controlled substances are approached in a different fashion from other medications since they must be tracked and counted. This practice protects you and the agency, as these medications are identified by the Food and Drug Administration or FDA as having a higher incidence of potential for abuse. Controlled substances must be counted every time that the staff person responsible for medications begins or ends their shift. To be able to track these controlled medications, you must count them every time the staff person in that environment comes or leaves for the day. This way all of the doses can be accounted for whether or not they have been administered on that shift. If there is a missing dose, then you know on which shift the dose disappeared. This process of counting controlled medications is for your protection, the protection of your coworkers, and the protection of the individuals in the service location where you work.

The best practice for counting controlled substances is having two staff present and counting, one that is coming on duty and one going off. There are three different scenarios where a count of the medication must occur for controlled substances.

- The first is when a new medication or refill comes from the pharmacy. In addition to entering the information on the medication record, you must count that medication and document that count on the countable substances form that your agency uses.
- The second is when a staff person who administers medications comes or a staff person leaves, such as a shift change. You must then count each of the controlled substances and document that count on the form. This count will reflect any doses that would have been given between the time of the last count and this one.
- The third situation is when a controlled substance is discontinued. At this time, you must document the count of the substance and then return it to the pharmacy or dispose of it according to your agency policy. Any disposal must be carefully documented and witnessed by more than one staff person.

Transcript



Slide 59 – An additional part of the storage of medication is managing the medications and properly disposing of those that have expired or those that are no longer in use. Medications may be discontinued or remain when an individual leaves the program. It is unsafe to keep medication that is not being used and not likely to be used again. The discontinued medication could accidentally be administered to someone else and put them in danger. Therefore, it is safest to dispose of discontinued medication. There are significant risks with the levels of medications in many water and sewage treatment plants and Federal and State laws prohibit the flushing of unused medication.

Slide 60 – Each service location should have policies and procedures related to the proper disposal of medication. These policies and procedures will address pharmacy take-back programs where local pharmacies will take back unused medication and destroy it. Hazardous waste collection events may also occur in communities and medications can be dropped off at specified locations. Federal and state laws regulate the disposal of medications. Your local pharmacist, the Food and Drug Administration (FDA) and the PA Department of Environmental Protection have additional information about proper drug disposal.

Summary

Slide 61 – This lesson about Recording and Storage of Medication covered key points that included:

- The "5 Rights" provide the information needed to safely administer medications.
- The "5 Rights" are the key pieces of information present on the medication record.
- There is important information about the medication on the pharmacy label that will assist in the safe administration of medication to the individual.
- Safe storage of medication prevents accidental poisonings and protects the properties of the medication so that it will work the way that it was intended to work.

Slide 62 -

- Getting medication from the pharmacy on time is important so that it can be administered to the individual in a timely fashion.
- Checking to make sure that you have the correct medication from the pharmacy protects individuals from medication errors.
- You can get information about medications from multiple sources including the health care
 practitioner, the pharmacist, package inserts, drug information books, and on the internet.
 (One source is the Drug Information Portal of the US National Library of Medicine at
 https://druginfo.nlm.nih.gov also referenced earlier in this lesson.)
- Improper disposal of medication can cause significant risks.

Next Step

Slide 63 – Now that you have completed the lesson, it is time to take the quiz. Please click on the link below to access the quiz.