

Section III

When you are finished with this section, you will be able to:

- Define medication order (p 2)
- Define prescribing practitioner (p 2)
- Define PRN Protocol (p 3)
- Describe the process for administering a PRN medication (p 4)
- List the “Seven Important Questions” (p 6)
- Translate common abbreviations (p 7)
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- Transcribe medication orders (p 17)
- List the considerations for administering and maintaining controlled medications (p 21)
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Medication Orders

A **medication order** is written directions provided by a prescribing practitioner for a specific medication to be administered to an individual. The prescribing practitioner may also give a medication order verbally to a **licensed person** such as a pharmacist or a nurse.

Examples of some different types of medication orders are:

- Copy of a written prescription
- Written order on a consultation form, signed by the practitioner
- Written list of medication orders, signed by the practitioner
- Copy of a pharmacy call-in order, given to you by the pharmacist*
- A verbal order given to a **licensed person***
- Electronic prescriptions signed electronically via a secured system

What do we mean when we use the term "**prescribing practitioner**"?

This is a term that describes the various health care professionals who can give medication orders.

The following health care professionals are "prescribing practitioners":

- Physicians (MD, DO)
- Nurse Practitioners (APRN, NP)
- Dentists (DMD, DDS)
- Physician's Assistants (PA)
- Optometrist (OD)
- Podiatrist (DPM)

As an authorized provider, **you must have a medication order** in order to administer medications to individuals.

You may **not** take verbal medication orders from a prescribing practitioner. This is outside the scope of what you can do as an authorized provider.

**These orders need to be cosigned by the prescribing practitioner for verification purposes.*

PRN Medication Orders

PRN medications are given on an "**as needed**" basis for specific **signs & symptoms**. Signs or symptoms of illness or discomfort can include:

- Tiredness
- Increased anxiety or agitation
- Headache
- Earache
- Redness in a cut or a scrape
- Coughing
- Sneezing
- Fever
- Itching
- Cramping

PRN medications may be prescription medications or over-the-counter medications (non-prescription).

In order to give a PRN medication, you **must** have a medication order and a **PRN Protocol**.

The PRN Protocol gives you directions about how to administer an **as needed** medication.

For example:

Mary has a medication order and a PRN protocol for Tylenol, 650 mg by mouth every four hours **as needed** for pain or fever.

Mary has a headache. You have checked the medication log to see that Mary has not received any Tylenol within the past 4 hours.

According to the PRN protocol, the specific symptoms that Mary can have the Tylenol for are "pain" and "fever".

This means that you can give Mary Tylenol for her headache.

When administering a PRN medication, you must follow the medication order and the directions in the PRN Protocol.

A **PRN protocol** is needed for PRN medication orders because, unlike medications that are ordered on a regular daily basis, you have to know when a PRN medication should be given.

The PRN Protocol gives you additional information about the medication order and helps you to understand when and how much of the medication to give.

ONLY the prescribing practitioner or a nurse trainer can write or approve the PRN protocol.

The PRN protocol will include:

- All of the information found in the medication order, **plus:**
- The specific signs and symptoms that the medication should be given for
- A maximum daily dosage
- Any special instructions, such as when to call a nurse or the prescribing practitioner

You must follow the PRN Protocol exactly when giving a PRN medication.

This is the procedure that you will follow when an individual is showing signs or symptoms of illness:

1. Check to see if the individual has a medication order and PRN protocol for the signs or symptoms that the individual is showing.
2. If there is no medication order or PRN protocol for the signs or symptoms of illness or discomfort that the individual is showing, follow your agency's policy or procedure for notifying a supervisor or nurse.
3. If there is a medication order and PRN protocol for the signs and symptoms that the individual has, check the medication log to see when the medication was last given.
4. If the medication has not been administered or if enough time has elapsed since it was last given, administer the PRN medication **according to the PRN protocol**, following the Six Rights and the Three Checks.

5. Write a note about why the PRN medication was given.
6. Watch to see if the PRN medication has taken care of the signs or symptoms of illness and **you must document the effect** of the PRN medication on the individual.



If you have any question about giving a PRN medication, and call the nurse trainer or prescribing practitioner.

Please answer the following questions about PRN protocols:

1. What is a PRN Protocol?
2. What should you do if an individual is showing signs or symptoms of illness or discomfort?
3. What if an individual is showing signs or symptoms of illness or discomfort and they do not have a PRN Protocol? What should you do?
4. What kind of special instructions might you find in a PRN protocol?
5. Do you need to document the effect of the PRN medication?
Yes or No



The Seven Important Questions

Whenever a medication is ordered for an individual, you must get the answers to the Seven Important Questions before you can give the medication:

1. What is the name of the medication?

2. What is the purpose of the medication?

What is the medication supposed to do?

3. What effect will the medication have on the individual?

How will I know that it is working?

4. How long will it take the medication to work?

Will it take hours, days or weeks to work?

5. What are the side effects, adverse reactions and/or signs of over dosage of this medication?

What are the signs or symptoms of these?

Are blood levels or other blood tests needed to monitor the effects of this drug?

6. Are there any interactions with the medications that the individual is taking?

Based on review of the individual's medications, are there any medications that will interact with this medication?

7. Are there any special administration or storage instructions for this medication?

Does this medication need to be given with meals, before meals, with water or with milk?

Is this medication a controlled medication?

Does this medication need to be refrigerated?

You must get this information from the prescribing practitioner and the pharmacist and keep the information in the medication log so that you can review it frequently.

Remember: never give a medication if you do not have all of the information that you need to give the medication safely!

In order to "translate" medication orders, you need to know the common abbreviations that are used when a prescription or medication order is written.

The most common abbreviations are listed below*:

***Note the JCAHO "DO NOT USE" list.**

qd= daily	q=every	pr=rectal
bid=twice daily	a=before	
tid=three times daily	p=after	
qid=four times daily	hr or h= hours	
prn=as needed	gtts= drops	
qod=every other day	Ears:	Eyes:
i=one	AU=both ears	OU=both eyes
ii=two	AD=right ear	OD=right eye
iii=three	AS=left ear	OS=left eye
iv=four		
v=five		
D/C or disc=discontinue		
w/=with		
c=with ac=before meals		
s=without pc=after meals		
po=by mouth, per oral		
hs=bedtime, hour of sleep		
top=topically		

The **problem** with abbreviations is that it is sometimes difficult to understand what an abbreviation means. You may find an abbreviation that you are not familiar with. The medication order may not be written neatly and you can't figure out what the order or abbreviation is.

This can (and does) lead to mistakes in how the pharmacist fills the medication order and mistakes in how the medication is given.

If you do not understand an abbreviation, or any part of a medication order,  .

Ask the prescribing practitioner, pharmacist or nurse for help.

Official “Do Not Use” List

Although the NH Board of Nursing has endorsed this list, prescribing practitioners still use these abbreviations, so it is important that you know what they are but that you “Do Not Use” them.

Do Not Use	<i>Potential Problem</i>	Use Instead
U, 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)	Mistaken for each other	Write "daily"
Q.O.D., QOD, q.o.d, qod (every other day)	Period after the Q mistaken for "I" and the "O" mistaken for "I"	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 MSO4 and MgSO4	Can mean morphine sulfate or magnesium sulfate Confused for one another	Write "morphine sulfate" Write "magnesium sulfate"

For more information

Visit <http://www.jointcommission.org/PatientSafety/DoNotUseList/>, contact the Standards Interpretation Group at (630) 792-5900, or complete the Standards Online Question Submission Form at <http://www.jointcommission.org/Standards/OnlineQuestionForm/>.

Liquid Measurements

A **teaspoon** is a common measured liquid amount.

The abbreviation is “**tsp**” or “**t**”.

A **Tablespoon** is another common liquid measurement.

It is abbreviated “**Tbsp**”, “**Tbs**” or “**T**”.

A tablespoon is bigger than a teaspoon.

3 teaspoons = 1 Tablespoon.

If you mix these two up, you would give the individual the wrong dose!

The use of a regular household teaspoon or tablespoon is not the same as a measured teaspoon or measured tablespoon.

You may be familiar with the **metric system**.

A common way of measuring liquids in the metric system is a “**ml**” (**milliliter**).

You may see the abbreviation “ml” and the abbreviation “cc” (cubic centimeter) used interchangeably.

The most appropriate liquid measure is the “ml”, but generally speaking, the “ml” and the “cc” can be used in place of each other.

In the metric system, **1 cc = 1 ml.**

We’ve talked about teaspoon, tablespoon, cc, and ml.

Here are some equivalents for you to remember:

1 teaspoon (tsp.) = 5 mls

1 Tablespoon (Tbs.) = 15 mls

2 Tablespoons (Tbs.) = 30mls

One ounce = 30mls

A **medicine cup** with liquid measures marked on the side **or other pharmacist-approved measuring device** provides the most accurate measurement.

If you do not have an approved measuring device, ask the pharmacist to recommend one or give one to you.

Often, pharmacy-measuring spoons are given free when a liquid medication is dispensed.

Practice Exercise: Fill in the blanks

2 teaspoons = _____ mls

10 mls = _____ teaspoons

1 ml = _____ cc

1 Tablespoon = _____ teaspoons

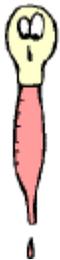
The abbreviation for teaspoon is _____

The abbreviation for Tablespoon is _____

2 Tablespoons= _____ ounce



Some liquid medications are ordered by the number of **drops** or are to be given in a certain amount with a **dropper**. Others may be measured using a syringe.



Since medication droppers come in different sizes, you must ask the pharmacist for the dropper that goes with the medication that you are giving.

Liquid medication orders

Medication orders for **liquid medications** are similar in many ways to the medication orders that you get for pills.

There are some important things to consider for liquid medications.

Medication orders for liquid medications contain information about the **strength or concentration** of the drug in the liquid.

Liquid medication orders also contain information about the **amount** of the liquid medication to be given.

For example, you have a medication order that reads:

Penicillin VK oral suspension, 125mg/5ml, 250 mg po tid x 10 days

(a liquid suspension is a type of liquid that must be shaken well before you give it)

The **strength or concentration** of the Penicillin VK in the liquid is 125mg for every 5mls of liquid.

The **dosage** is 250 mg.

The **amount** that you would need to give to equal **250mg** of Penicillin VK is **10mls**.

The directions on the prescription label will say:

Take 2 tsps (10 ml) by mouth 3 times a day for 10 days

**Practice Exercise:
Translating Medication Orders**



Write your answers under each numbered example.

1) Tegretol 200 mg 2 tabs po bid

- a. How many milligrams of Tegretol are in each tablet?
- b. What is the dosage of Tegretol that needs to be given in milligrams?
- c. What is the route?
- d. How many times per day will you be giving the Tegretol?

2) Erythromycin 333 mg 1 tab po qid X 10 days.

- a. What is the route?
- b. How many times per day will you be giving the Erythromycin?
- c. Over the 10-day period, how many dosages (total) of the Erythromycin will be given?

3) Digoxin 0.25 mg tab 1 po qam and hold for pulse less than 60

- a. At what time of day is the Digoxin to be given?
- b. What do you need to do before you can give the Digoxin?
- c. How many times per day is the Digoxin given?
- d. What do you need to do if the pulse rate is less than 60 beats per minute?

4) Acetaminophen 325 mg tabs 2 po or 650 mg pr q4h prn for headache or fever

- a. How many milligrams are in each Acetaminophen tablet?
- b. What is the Acetaminophen dosage that needs to be given in milligrams?
- c. Under what conditions would you give the Acetaminophen?
- d. What routes could be used to administer the Acetaminophen?

5) Hydrocortisone 1% cream thin layer to (L) inner wrist area tid

- a. What is the concentration of the Hydrocortisone cream?
- b. What is the route?
- c. Where should the cream be applied?
- d. How many times per day?

6) Dilantin Infatabs 150 mg tabs, 2 tabs po tid

- a. What is the Dilantin dosage that needs to be given in milligrams?
- b. How often should it be given?

7) Dilantin 100 mg caps 1 po qod at 8 am

- a. How often is the Dilantin to be given?
- b. At what time of day?
- c. How many times per day?

8) Maalox 30 ml po before meals and at hs

- a. How would you measure this medication?
- b. If you were using tablespoon measurements, how many tablespoons would you need to give to equal 30 ml?
- c. At what times of the day is this medication given?

9) Debrox 4 gtts AD 1x week

- a. What is the route?
- b. How often is the Debrox given?
- c. What is the dosage that needs to be given?

Translating Liquid Medication Orders

You have a new order for Jeff Smith. The medication order says:

“Tegretol suspension 200 mg po bid”

You pick up the Tegretol liquid from the pharmacy.
The label on the bottle looks like this:

Town Pharmacy 100 Main Street Pineville, NH 00000 (617) 000-0000		
RX #:828291		
Jeff Smith		09/29/00
Carbamazepine suspension 100 mg/5 ml (I.C. Tegretol suspension) Take 2 teaspoons (10 ml) by mouth twice a day		
Lot #: PS 56721	E.D. 9/29/01	By Dr. B.J. Honeycutt Refills: 4



Practice Exercise: On the Tegretol label for Jeff Smith, above:

1. **Underline** the strength or concentration of the Tegretol liquid
2. **Circle** the amount of the liquid that should be given

The Medication Log

Each agency has its own unique medication log.

All medication logs will contain at least the following:

Individual's name

The guardian's name and contact information, if applicable

Allergies, if applicable

For each medication prescribed:

- Name
- Dosage
- Frequency
- Route
- Prescribing Practitioner name
- Order date
- Special Considerations in administering the medication, if applicable, as directed by the prescribing practitioner or the pharmacist.
- Date and time of administration
- A place for you to sign in to show your initials and signature

Now take some time to review the medication log used by your agency.

Transcribing a Medication Order

To “**transcribe**” means to write down or copy.

To transcribe a medication order, take the information from the prescribing practitioner's order and write it in the proper place on the Medication Log.

This is called making a **medication log entry**.

As an authorized provider, it is your responsibility to transcribe medication orders.

You may want to ask another authorized provider to double-check your work, if possible, after you have transcribed an order.

Remember:

All medication log entries must match the prescribing practitioner order and pharmacy label.

This means that:

- The medication log entry and the order must match
- The medication order and the prescription label must match
- The medication log entry and the prescription label must match

If the medication log entry, order and pharmacy label do not match, you

must  and **call the nurse trainer for clarification and** follow your agency's policy for reporting medication occurrences.

Scheduling Times to Give Medications

Some medication orders include a specific time of day that you are supposed to give the medication.

If this is the case, make sure to follow the order and transcribe the medication for that time of day.

Remember that:

- Some medications will interact if taken together, and
- Some medications must be given:
 - before meals (ac) on an empty stomach or
 - after meals (pc) so that there will be food in the stomach

If the medication order does not include a specific time or times to give the medication, consult with the nurse trainer or the pharmacist to determine the best time(s) to give the medication.

Also consider:

When does the individual take other meds? Try to schedule medications so that they will have the least impact on the individual's daily activities.

If you must choose a time of day that differs from the time that other medications are administered, **beware!** New or "off-time" meds are more likely to be forgotten or overlooked.

If the person is receiving enteral feedings, you must ask the pharmacist if the medication and the feeding will interact. If the answer is yes, you will need to separate the enteral feeding and the medication by at least 30 minutes.

Practice Exercise: Transcribe these medication orders onto your agency's medication log

1.

Joe Snow, MD
555 Sunny St.
Rainy Day, CA 02333

NAME: Nancy Jones DATE: 00/00/00
ADDRESS: _____ DOB: 10/5/55

Zyprexa 5 mg

Take 2 tabs PO QHS

Dispense: 60 tabs

Refills: 2

**SIGNATURE OF
PRESCRIBING
PRACTITIONER: Joe Snow MD**

2.

Fanny B. Hinde, MD
14 True Lane
Bird in Hand, CA 54321

NAME: Nancy Jones DATE: 00/00/00
ADDRESS: _____ DOB: 10/5/55

Augmentin 875 mg.

*Take 1 tab PO BID
For 14 days*

Dispense 28 tabs

Refills 0

**SIGNATURE OF
PRESCRIBING
PRACTITIONER: Fanny B Hinde MD**

3.

Dan LeMan, MD
333 Ladyview Dr.
Muscle Beach, CA 04333

NAME: Nancy Jones DATE: 00/00/00
ADDRESS: _____ DOB: 10/5/55

Ativan 0.5 mg

*Take 1 tab PO QHS and
1 TAB q4H PRN for extreme anxiety*

Dispense: 60 tabs

Refills: 2

**SIGNATURE OF
PRESCRIBING
PRACTITIONER: DanLeMan, MD**



4.

Ima I. Ball, MD
1A Contact St.
Seeingstraight, CN 00044

NAME: Nancy Jones DATE: 00/00/00
ADDRESS: _____ DOB: 10/5/55

Dulcolax Suppository 10mg

*Administer 1 Suppository PR
QOD @ hs*

Dispense: 15

Refills: 4

**SIGNATURE OF
PRESCRIBING
PRACTITIONER: Ima I Ball MD**

5.

Ben A. Doctor, M.D.
625 Hospital Drive
Ambulance, TN 12312

NAME: Nancy Jones DATE: 00/00/00
ADDRESS: _____ DOB: 10/2/55

Triamcinolone cream 0.5mg

*Apply thin layer to rash on right
hand BID X 10 days*

Dispense: 1.5 oz.

Refills: 4

**SIGNATURE OF
PRESCRIBING
PRACTITIONER: Ben A Doctor, MD**

6.

Ben N. Gerry, A.R.N.P.
4242 Rocky Road
Hershey, CA 02123

NAME: Nancy Jones DATE: 00/00/00
ADDRESS: _____ DOB: 10/5/55

Diflucan 150 mg

*Take 1 tab PO 1X per month as needed
for vaginal discharge and itching.*

Dispense: # 3

Refills: 0

**SIGNATURE OF
PRESCRIBING
PRACTITIONER: Ben.N.Gerry, ARNP**



Controlled Medications

- If you are not sure if a medication is a controlled medication, ask the pharmacist. This is one of the "Seven Important Questions" that you have learned.
- A controlled medication log must be started **as soon as a controlled medication is received** from the pharmacy.
- Controlled medications must be counted as soon as they are received from the pharmacy, and the count must be documented on the controlled medication log. Always "physically" count the pills. Never "assume" that the bottle or supply contains the number of pills listed on the label.
- Controlled medications must be counted **before administering** the medication to confirm that the count is correct before giving the medication.
- Controlled medication must be **counted at least daily, even if not given**, and documented on the controlled medication log.
- Controlled medications must be **disposed of by a minimum of two people and one of the people must be a nurse or other licensed person.**
- Controlled medications must be kept under **double-lock** (in a locked container within a locked container or cabinet.)
- If a controlled medication **order is discontinued** by the prescribing practitioner **or if the medication supply has expired**, you must **continue to count the supply daily** until a nurse or other licensed professional is available to dispose of the medication.

Each agency has its own unique controlled medication log. Take time now to review your agency's controlled medication log.

In the terminology of the United States Drug Enforcement Administration, **diversion** is the use of prescription drugs for recreational purposes. Narcotic diversion is a felony, and the Bureau of Developmental Services takes very seriously any suspicions of drug diversion.

Counting Controlled Medications:

Some pharmacies dispense controlled medications in pill bottles. This means that you must pour the pills out of the bottle in order to count them. You should use a pill counting tray like the one shown below to do this.



The pill counting tray helps you to count the pills and pour them back into the bottle without spilling them. When you use a pill counting tray, be sure that the tray is clean and dry before you pour the pills onto it. You also need to remember to wash your hands before you count medications and avoid touching the pills with your hands. Use a clean and dry knife or other utensil to move the pills around.

If you do not have a pill counting tray, you can use a clean and dry plate or a clean paper plate to pour the pills onto.

Some pharmacies dispense controlled medications in what is called a "unit dose" or in containers that allow you to see and count the pills without opening the container. These are very helpful and can make counting easier.

Any incident involving a controlled medication must be reported immediately according to your agency's policy or procedure for reporting medication occurrences.

Use this space to list 5 different things that you must do when you are working with controlled medications:

- 1.
- 2.
- 3.
- 4.
- 5.



Documentation

Documentation (record keeping) is very important.

Whenever medication is administered, you must remember to:

1. **Always** follow the medication log exactly when you are giving medications and sign off on the medication log **immediately**.
2. **Double-check** the medication log after you have given medications and again at the end of the day to make sure that your documentation is complete.
3. Some general principles for documentation are listed below:

It is important that all documentation:

- Can be read and understood by others
 - Is complete, with no blanks left to be filled in later
 - Is done in blue or black ink. ***Do not use whiteout! Do not write over, scribble over or cross out mistakes.***
4. If you make a mistake documenting, or if you forget to document when you have given a medication, you should **circle the error in ink and write a note of explanation on the log.**

Please answer the following questions about documentation:

1. When do you sign off on the med log?
2. Is it OK to go back the next day to initial the medication log?
3. Can documentation be done in pencil?
4. If you make a mistake documenting, what should you do?
5. Why is it important to double-check your medication log documentation after you give meds?

