

Chapter 9

UNDERSTANDING AND INTERPRETING MEDICATION ORDERS

Learning Objectives

1. identify the components of a medication order
2. identify meanings of standard abbreviations used in medication administration
3. interpret a given medication order

Learning Objectives (Cont.)

4. identify abbreviation, acronyms, and symbols recommended by The Joint Commission (TJC) “Do Not Use” list, and Institute for Safe Medication Practices (ISMP’s) list of error-prone abbreviations, symbols, and dose designations
5. read and write correct medical notations

Understanding Orders

- ▶ Prior to implementation, a legal *written* order or prescription from a health care provider is required
- ▶ Types:
 - ▶ **Standing** order: **routine order**
 - ▶ Example: Ampicillin 1 g IV q6h for 4 doses
 - ▶ Often has preconditions which must be met
 - ▶ **prn** order: administered **as needed**
 - ▶ Example: Tylenol 650 mg po q4h prn for temp greater than 101° F
 - ▶ **Stat** order: administered **immediately**
 - ▶ Example: Ativan 2 mg IM stat
 - ▶ **Single (one-time)** order: administered **only once**
 - ▶ Example: Tdap 0.5 mL IM × 1

Understanding Orders (Cont.)

- ▶ “Physician’s Order Sheet” or “Order Sheet”
- ▶ Noted by nurse and “unit clerk”
- ▶ Transcribed to Medication Administration Record (MAR) or faxed to Pharmacy
- ▶ **Nurse who administers medication is accountable regardless of who transcribes to MAR**
- ▶ Some facilities utilize electronically generated MARs

Verbal Orders

- ▶ **Verbal** orders (from prescriber to nurse)
 - ▶ By telephone or in person
 - ▶ Error prone
 - ▶ Emergency situations by qualified staff
 - ▶ **WRITE it, READ it back, receive CONFIRMATION!!!**
 - ▶ Prescriber's signature required within 24 hours
- ▶ Errors may be prevented by using computerized physician order entry or fax transmission

Transcription of Medication Orders

- ▶ Memorization of acceptable common symbols and abbreviations is essential
 - ▶ Refer to Tables 11-1 and 11-2
- ▶ Some symbols have double meaning
 - ▶ ID = intradermal, also means initial dose
 - ▶ Reminder of TJC and ISMP guidelines
- ▶ **The nurse who administers an unsafe or incorrect medication shares the liability for injury and is responsible for the medication error**

Case Study

You call the physician to alert her that, despite the correct use of the PCA morphine, Mr. Ross is having persistent, uncontrolled pain at a level of 8 out of 10. She gives you new orders to increase the PCA settings. Before hanging up, you need to do what three things?

PCA – Patient Controlled Analgesia

Case Study (Cont.)

ANSWER:

1. Write the order
2. Read it back to the physician
3. Receive confirmation that the order is correct

Transcription of Orders

- ▶ Before transcribing, nurse must be familiar with reading and interpreting an order
- ▶ Nurse must memorize abbreviations and symbols used in medication orders
 - ▶ Refer to Tables 11-1, 11-2, and 11-3
- ▶ **Incorrect transcription is one of the main causes of medication orders**

Writing Medication Orders

▶ Seven *ESSENTIAL* components

1. Client's *full* name
2. Date and time written
3. Name of medication
4. Dosage
5. Route
6. Time and frequency
7. Signature of prescriber or proxy



If parts are missing—order is NOT legal and should NOT be filled!

CAUTION!
LOOK ALIKE
SOUND ALIKE DRUGS

Writing Medication Orders: Special Considerations

- ▶ Medication names
 - ▶ Trade = proprietary, followed by the registration symbol, ®.
 - ▶ Generic = “proper” or chemical name
 - ▶ **Caution = look-alike or sound-alike names**
- ▶ Dosage
 - ▶ Amount and strength clear
 - ▶ **The abbreviation “U” for units is on TJC’s Official “Do Not Use” List and on ISMP’s List of Error-Prone Abbreviations, Symbols, and Dose Designations.**
 - ▶ TJC = The Joint Commission
 - ▶ ISMP = Institute for Safe Medication Practices



500 Tablets

NDC 0087-6060-10



GLUCOPHAGE®
(metformin hydrochloride
tablets)

500
mg

Each tablet contains 500 mg of metformin hydrochloride.
See enclosed package insert for dosage information.

Caution: Federal law prohibits
dispensing without prescription.

Store between 15°–30° C (59°–86° F).

Dispense in light resistant container.

Glucophage is a registered trademark of LIPHA s.a.

Licensed to Bristol-Myers Squibb Company.

Distributed by

Bristol-Myers Squibb Company
Princeton, NJ 08543 USA

606010DRL-2
34-007102-01



Bristol-Myers Squibb Company

Figure 11-1 Glucophage label. Notice the two names. The first, *Glucophage*, is the trade name, identified by the registration symbol®. The name in smaller and different print is *metformin hydrochloride*, the generic or official name.

Selecting Drug Product

- Drug may be ordered by generic or brand name
- Abbreviations often used
- Lists of abbreviations that *cannot be used*
- Look-alike & sound-alike drug strategies
 - store in separate locations
 - additional labeling
 - tall man letters (example: buPROPion – busPIRone)

 **PLIVA**[®]

NDC 50111-327-01

**HydrALazine
Hydrochloride
Tablets, USP**

25 mg

Rx only

100 Tablets

 **PLIVA**[®]

NDC 50111-308-01

**HydroXYzine HCl
Tablets, USP**

25 mg

Rx only

100 Tablets

**NEW
Trade Dress
Temporary
Mark**

Tall Man Lettering in February 2015

Will be applied to:

- Inpatient medicine labels
- Shelf medicine labelling in ward imprest areas
- Shelf medicine labelling in dispensaries
- On-screen display of medicines during dispensing



Product Nbr	Product Description
559	Cefaclor (Ceclor) 125mg/5mL Suspension 100mL
560	Cefaclor (Ceclor) 250mg/5mL Suspension 75mL
557	Cefaclor (Ceclor CD) 375mg MR Tablet 10
3903	cefEPIME (DBL) 1g Injection 1
3904	cefEPIME (DBL) 2g Injection 1
567	cefOTAXIME (DBL) 1g Injection 10
568	cefOTAXIME (Sandoz) 500mg Injection 1
571	cefOXITIN (DBL) 1g Injection 5
575	cefTAZIDIME (DBL) 1g Injection 1
574	cefTAZIDIME (DBL) 2g Injection 1
582	cefTRIAxONE (ICP) 1g Injection 1
581	cefTRIAxONE (ICP) 500mg Injection 1
584	Cefuroxime (zinNat) 250mg Tablet 14

Writing Medication Orders: Special Considerations (Cont.)

- ▶ Route
 - ▶ **Very important, never assume**
- ▶ Frequency
- ▶ Standard abbreviations and meaning (q.i.d., t.i.d.)
- ▶ Signatures
 - ▶ Legibility and co-signing
- ▶ Special instructions
 - ▶ Hold if ...
 - ▶ ½ hour before ...
 - ▶ For blood pressure greater than ...



**NEVER ASSUME
CLARIFY IF IN
DOUBT!**

Case Study

You review the new order you have just received for Mr. Ross's pain. Before sending the order to the pharmacy, you make sure it has what seven essential components?

Case Study (Cont.)

ANSWER:

1. Client's *full* name
2. Date and time written
3. Name of medication
4. Dosage
5. Route
6. Time and frequency
7. Signature of prescriber or proxy

Interpreting a Medication Order

Written in following order:

1. Name of medication
2. Dosage
3. Route
4. Frequency

Example: Colace 100 mg p.o. t.i.d.

↓ ↓ ↓ ↓

(name) (dose) (route) (freq)

Organize the Following Antiemetic Orders in the Correct Sequence

- ▶ 25 mg PR Phenergan b.i.d.
- ▶ IV Reglan once 10 mg
- ▶ Daily p.o. Meclazine 25 mg

What Do the Following Abbreviations Stand for?

- ▶ prn
- ▶ q.i.d.
- ▶ hs
- ▶ SQ
- ▶ TD
- ▶ cc
- ▶ gtt
- ▶ NPO
- ▶ stat
- ▶ q8h
- ▶ IM
- ▶ IV
- ▶ NGT
- ▶ EC
- ▶ NS
- ▶ ID

What Do the Following Abbreviations Stand for?

- ▶ prn—as needed
- ▶ q.i.d. —four times per day
- ▶ hs—hour of sleep
- ▶ SQ—subcutaneously
- ▶ TD—transdermal
- ▶ cc—cubic centimeter
- ▶ gtt—drops
- ▶ NPO—nothing by mouth
- ▶ stat—immediately
- ▶ q8h—every eight hours
- ▶ IM—intramuscularly
- ▶ IV—intravenously
- ▶ NGT—nasogastric tube
- ▶ EC—enteric coated
- ▶ NS—normal saline
- ▶ ID—intradermal

Abbreviations banned as unsafe

- ▶ q.d. - Once daily
- ▶ May be mistaken for:
 - ▶ q.i.d.
 - ▶ q.o.d.
 - ▶ Use “daily” instead