

WorldVistA Pharmacy Drug File ReadMe

OVERVIEW

The purpose of this README is to highlight the general approach to drug entry and to review some of the potential results should the provider use the prescription method improperly. This document provides an overview to maintaining the WorldVistA Pharmacy Drug File and should not be taken as a definitive guide. This README is not a substitute for a competent pharmacy data entry specialist or the VA Pharmacy Data Management User Manual. The user assumes all risks related to using this README and the pharmacy modules within WorldVistA.

AUTO-FINISHING BENEFITS AND CAVEATS

Medical prescriptions are known to have a high error rate mainly because of poor handwriting and possible drug or allergy interactions with the prescribed medication. The WorldVistA EHR comes with a sophisticated drug-drug, drug-allergy, and drug-lab monitoring check system. This feature is automated within WorldVistA EHR and has been proven to reduce medication errors in the Veterans Administration setting. WorldVistA has prescription auto-finishing that enables the outpatient provider to generate legible scripts that print out automatically. The auto-finishing module can be used to fax prescriptions directly to a pharmacy.

If used improperly, the system can generate its own unique errors. The key to using this system effectively and safely is provider education in its proper use, the proper entry of drugs, drug dosages, drug forms and the proper creation of pharmacy orderable items within the WorldVistA EHR. If a provider cannot find the proper dose or strength for a particular drug and types a dose or strength into the script builder freehand, unpredictable results may occur. These results include inaccurate strengths or doses or conflicting strengths or dosages printed on the prescription.

The person responsible for the data entry of drugs, drug dosages, drug forms and creation of pharmacy orderable items must be a professional thoroughly familiar with pharmaceuticals, including NDC classification, drug forms, drug classes, potential drug interactions, maximum dosages, side effects, etc. The person must also be thoroughly familiar with the pharmacy data management (PDM) user manual found here:

[http://www.va.gov/vdl/documents/Clinical/Pharm-Data_Mgmnt_\(PDM\)/pss_1_um_r0707.pdf](http://www.va.gov/vdl/documents/Clinical/Pharm-Data_Mgmnt_(PDM)/pss_1_um_r0707.pdf)

KEY PRICIPLES OF DRUG FILE MAINTENACE

1. All drugs that the provider may need must be entered into the database before the provider can prescribe them from WorldVistA EHR.
2. The drugs are entered separately by strength and form (tablet, liquid, capsule.)
3. All dosages orders must be entered into the database before hand. The dosages are linked to the drug/strength. Half tablets, etc. can be entered according to the instructions in the PDM manual.
4. A drug entered into the system must then be linked to an orderable item to be available in CPRS. The desired outcome is an orderable item for one drug form that allows the prescriber to select from all the desired strengths.

VIEWING ORDERABLE ITEMS USING CPRS

The following screens show how pharmacy data can be viewed in Computerized Patient Record System (CPRS)

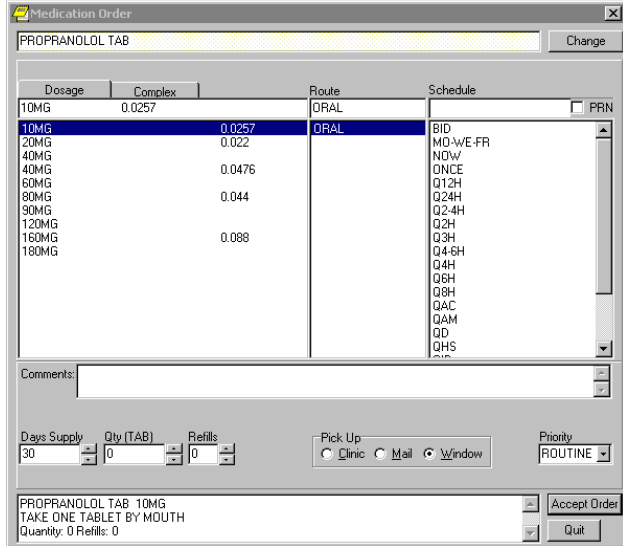


Figure 1: Shows the propranolol tablets as the orderable item by dosage.

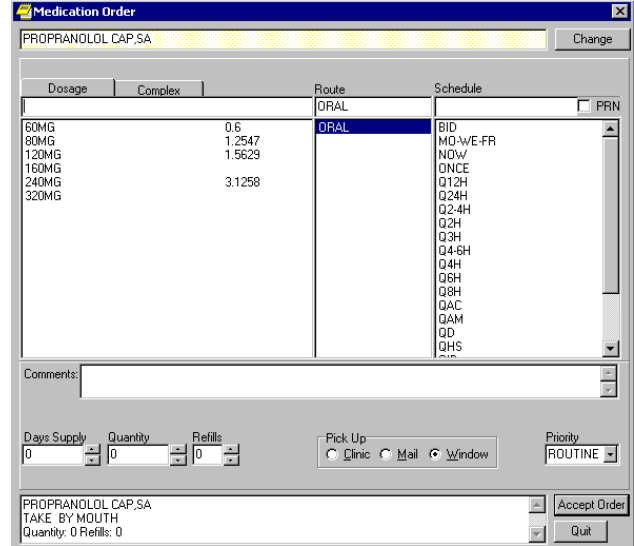


Figure 2: Shows the propranolol capsules as the orderable item by dosage.

Note: there is an orderable item for all propranolol tablet strengths and all propranolol capsules strengths. Not shown are propranolol injectable and propranolol liquid that are also orderable items.

The next screen illustrates looking up the medication using the trade name INDERAL:

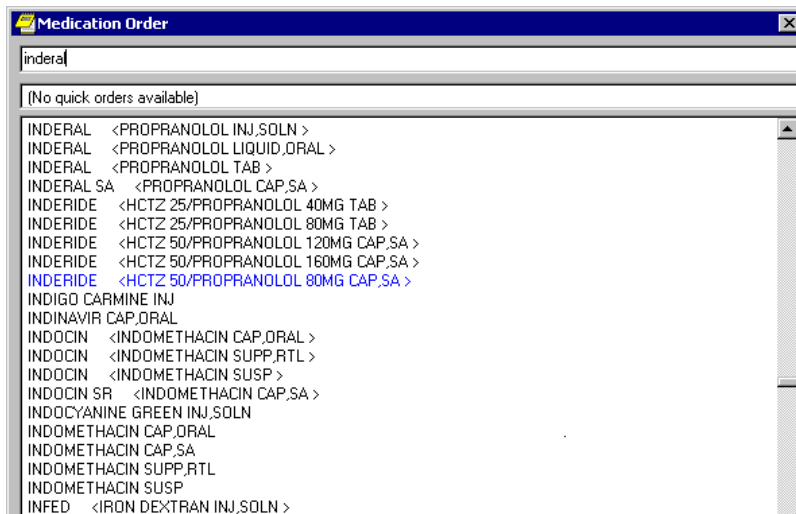


Figure 3: When added as a synonym, the trade name can be used to lookup the drug.

Both generics and trade names are ideally cross indexed for maximum convenience. Some providers will know the trade names while others will know the generic names.

ENTERING ORDERABLE ITEMS IN WORLDVISTA EHR

The following screens show how pharmacy data can be entered into the WorldVista EHR terminal interface.

```
Select Pharmacy Data Management Option: DRUG
  1 Drug Enter/Edit
  2 Drug Interaction Management
  3 Drug Text Enter/Edit
CHOOSE 1-3: 1 Drug Enter/Edit

Select DRUG GENERIC NAME: PROPRA
  1 PROPRANOLOL 10MG S.T.          CV100
  2 PROPRANOLOL 40MG S.T.        CV100
  3 PROPRANOLOL 80MG S.T.        CV100
  4 PROPRANOLOL TABS,80MG.PINACIDIL STUDY          STUDY DRUG
CHOOSE 1-4: 2 PROPRANOLOL 40MG S.T.          CV100

*****
This entry is marked for the following PHARMACY packages:
  Outpatient
  Unit Dose
  Non-VA Med
  GENERIC NAME: PROPRANOLOL 40MG S.T. Replace
  VA CLASSIFICATION: CV100//<Enter>
  DEA, SPECIAL HDLG: 6F//<Enter>
  NATIONAL FORMULARY INDICATOR: YES
  LOCAL NON-FORMULARY: <Enter>
  VISN NON-FORMULARY: <Enter>
  Select DRUG TEXT ENTRY: <Enter>
  Select FORMULARY ALTERNATIVE: <Enter>
  Select SYNONYM: 000719179613// <Enter>
    SYNONYM: 000719179613//<Enter>
    INTENDED USE: DRUG ACCOUNTABILITY// <Enter>
    NDC CODE: 000719-1796-13// <Enter>
  Select SYNONYM: <Enter>
  MESSAGE: <Enter>
  RESTRICTION: <Enter>
  FSN: 6505-00-221-3393A//<Enter>
  NDC: 719-1796-13// <Enter>
  INACTIVE DATE: <Enter>
  WARNING LABEL SOURCE is 'NEW'.
  The following WARNING LABEL may continue to be used for a limited time for some
  external interfaces.
  WARNING LABEL: <Enter>

Current Warning labels for PROPRANOLOL 40MG S.T.
Labels will print in the order in which they appear for local and CMOP fills:

13N It is very important that you take or use this exactly as directed. Do
not skip doses or discontinue unless directed by your doctor.

9N Some non-prescription drugs may aggravate your condition. Read all labels
carefully. If a warning appears, check with your doctor.

Pharmacy fill card display: DRUG WARNING 13N,9N
NOTE: Because the NEW WARNING LABEL LIST field is empty, the warnings above
are the warnings that our national data source distributes for this drug.

Would you like to edit this list of warnings? N// <Enter> 0
ORDER UNIT: BT// <Enter>
PRICE PER ORDER UNIT: 50.34//<Enter>
DISPENSE UNIT: <Enter>
DISPENSE UNITS PER ORDER UNIT: 1000// <Enter>
PRICE PER DISPENSE UNIT: 0.050
DAW CODE: 0// <Enter> - NO PRODUCT SELECTION INDICATED

    points to PROPRANOLOL HCL 40MG TAB in the National Drug file.

This drug has already been matched and classified with the National Drug
file. In addition, if the dosage form changes as a result of rematching,
you will have to match/rematch to Orderable Item.
```

Figure 4: Adding propranolol in WorldVista EHR

There are special rules regarding the coding of scheduled narcotics and attention needs to be given to whether certain drugs may be refilled or not. For instance, the data specialist may want to allow VICODIN to be refilled, but not PERCOCET. See the Pharmacy Data Management User Manual.

Entering the proper trade names with their respective NDCs at the synonym prompt is encouraged to allow lookup with either the trade name or generic name.

If a provider cannot find the proper dose or strength for a particular drug and types a dose or strength into the script builder freehand, unpredictable results may occur. These results include inaccurate strengths or doses or conflicting strengths or dosages printed on the prescription.

The system enables the specialist to mark a drug/strength combination as “formulary.” Also, some legacy medications are marked for a national formulary. This can result in unwanted prescription results. Example, if LIPITOR 40 mg is “on formulary” and LIPITOR 80 mg is not, the system will default to 2 tabs of 40 mg for an 80 mg strength, even though the data entry specialist has added LIPITOR 80 mg. The data specialist must remove LIPITOR 40 mg from the formulary, or create a special orderable item to circumvent this behavior. “National Formulary” drugs cannot be removed locally, so the data specialist may need programmer's help to remove a national formulary drug.

```
Do you wish to match/rematch to NATIONAL DRUG file? No//<Enter> (No)
Just a reminder...you are editing PROPRANOLOL 40MG S.T..

Strength from National Drug File match => 40 MG
Strength currently in the Drug File => 40 MG

Strength => 40 Unit => MG

POSSIBLE DOSAGES:
DISPENSE UNITS PER DOSE: 1 DOSE: 40 PACKAGE: IO
DISPENSE UNITS PER DOSE: 2 DOSE: 80 PACKAGE: IO
DISPENSE UNITS PER DOSE: .5 DOSE: 20 PACKAGE: IO

LOCAL POSSIBLE DOSAGES: <Enter>
OTHER LANGUAGE DOSAGE NAME <Enter>
Do you want to edit the dosages? N// YES
Changing the strength will update all possible dosages for this Drug.

STRENGTH: 40//<Enter>

Select DISPENSE UNITS PER DOSE: 0.5 20 IO

DISPENSE UNITS PER DOSE: 0.5// @
SURE YOU WANT TO DELETE THE ENTIRE '.5' DISPENSE UNITS PER DOSE? Y (Yes)

Select DISPENSE UNITS PER DOSE: <Enter>

Enter/Edit Local Possible Dosages? N// <Enter> 0

*****
This entry is marked for the following PHARMACY packages:
  Outpatient
  Unit Dose
  Non-VA Med

MARK THIS DRUG AND EDIT IT FOR:
O - Outpatient
U - Unit Dose
X - Non-VA Med

Enter your choice(s) separated by commas : 0
** You are NOW editing OUTPATIENT fields. **

AN Outpatient Pharmacy ITEM? Yes//<Enter> (Yes)
CORRESPONDING INPATIENT DRUG: <Enter>
MAXIMUM DOSE PER DAY: <Enter>
LOCAL NON-FORMULARY: <Enter>
NORMAL AMOUNT TO ORDER: 4// <Enter>
SOURCE OF SUPPLY: 1P//<Enter>
CURRENT INVENTORY: -3822//<Enter>
ACTION PROFILE MESSAGE (OP): <Enter>
MESSAGE: <Enter>

QUANTITY DISPENSE MESSAGE: <Enter>
OP EXTERNAL DISPENSE: <Enter>

Do you wish to mark to transmit to CMOP?
Enter Yes or No: NO
Do you wish to mark/unmark as a LAB MONITOR or CLOZAPINE DRUG?
Enter Yes or No: NO

** You are NOW in the ORDERABLE ITEM matching for the dispense drug. **

PROPRANOLOL 40MG S.T. is already matched to
  PROPRANOLOL TAB

Do you want to match to a different Orderable Item? No// <Enter>
Select DRUG GENERIC NAME:
```

Figure 5: Adding a drug dosage in WorldVistA EHR (continued)

The software will then try to match the newly entered drug to an orderable item. One can also create a new orderable item to match the drug.

Example: Editing Pharmacy Orderable Items (continued)

```
IBUPROFEN TAB
Is this OK? YES// <Enter>
Match Complete!
    Now editing Orderable Item:
    IBUPROFEN  TAB
This Orderable Item is Formulary.
This Orderable Item is marked as a Non-VA Med.
Select OI-DRUG TEXT ENTRY: <Enter>
INACTIVE DATE: <Enter>
DAY (nD) or DOSE (nL) LIMIT: 7D// <Enter>
MED ROUTE: <Enter>
SCHEDULE TYPE: PRN// <Enter>
SCHEDULE: BID// <Enter>
PATIENT INSTRUCTIONS: WF// <Enter>
OTHER LANGUAGE INSTRUCTIONS: CON ALIMENTO
Select SYNONYM: <Enter>
```

Figure 6: Matching Ibuprofen 800mg to IBUPROFEN TAB