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Pharmacy Pricing Engine
User Guide

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1.0	04/2008	Original Publication Date	C. Van Kirk
1.0	07/2008	Added Pricing Validator and Drug Wholesaler Upload sections	C. Van Kirk
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Pharmacy Pricing Engine Introduction

Welcome

The Pharmacy Pricing Engine application provides comprehensive management of drug pricing information. With Pharmacy Pricing Engine, you can configure pricing rules for categories of drugs according to your hospital's individual needs. The application also provides the information necessary to submit Medicare claims.

The Pharmacy Pricing Engine provides the following functionality:

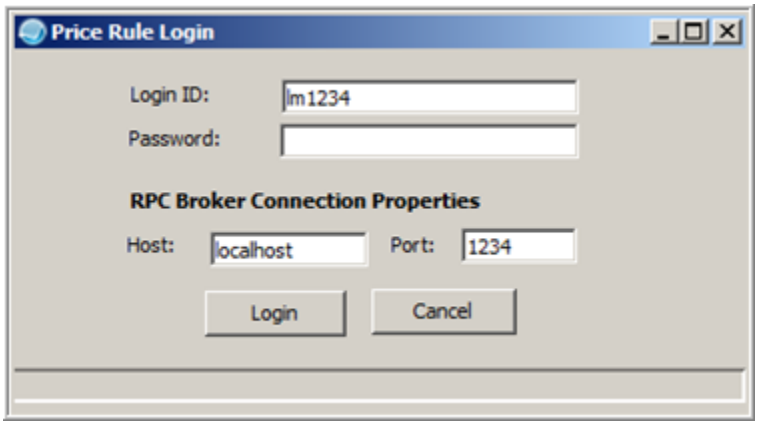
- Ability to create pricing rules based on dosage form, route, DEA class, or AHFS class.
- Ability to configure:
  - Price basis (Cost, AWP, WAC, or Direct)
  - Markup or markdown using either percentage or dollars
  - Multiplier
  - Minimum and maximum price
  - Compounding fee
  - Dispensing fee (either as a one-time charge per dispensing or for each component)
- Rounding the calculated price to the nearest cent, nickel, dime, quarter, or dollar

The Pharmacy Pricing Engine system also includes a Pricing Rule Validator that can be used to verify price rules and prices for drug items.

Log In/Exit

To log in to the Pharmacy Pricing Engine Wizard.

In the **Login** dialog box, enter your login ID and password.



The first window in the Price-Rule Wizard, the Price Rule List, displays.

To exit the Pharmacy Pricing Engine Wizard.

1. In any of the Wizard windows, click the **Close** button in the lower right corner.

Note: The **Finish** button also closes the application.

Understanding Price Rules

With Pharmacy Pricing Engine, you can develop unique price rules that allow various categories of drugs to be priced differently. Price rules can be configured based on route, dosage form, DEA Class, therapeutic (AHFS) class, or any combination of these elements.

For example, you can define different price rules for oral solids, oral liquids, topicals, or injectables. You can use a different price rule to handle inhalers, creams and ointments, and other multiple dose items. You can also define price rules for antibiotics, chemotherapy, or DEA Class II medications. You may have a price rule for Class II orals and another for Class II injectables, and you may also choose to price oral and injectable chemotherapy with different price rules. As you can see from these examples, the Pharmacy Pricing Engine application is very flexible and is easily adapted to your specific needs.

There are two major components of a price rule. The first component is the mathematical calculation, which includes choosing a price type such as AWP or Cost, and applying a markup or markdown, multiplier, dispensing or compounding fees, and minimum and maximum allowable values. More information on each of these can be found in Add a New Price Rule.

The second component is the ability to assign the price rule to the desired routes, dosage forms, DEA classes, or AHFS classes.

The Pharmacy Pricing Engine application makes it easy to assign or reassign drugs to price rules once you have created the rule. For example, you may have specific drugs that conform to a price rule you have already defined but which you have decided to price differently. In this case, you can create a new price rule and assign only those drugs to the new rule.

The only price rule preconfigured in Pharmacy Pricing Engine is the Default rule, which uses the AWP price. The Default price rule is assigned to an item that does not fit any price rule already defined. Items that apply to more than one price rule are also assigned to the Default price rule until chosen for another rule.

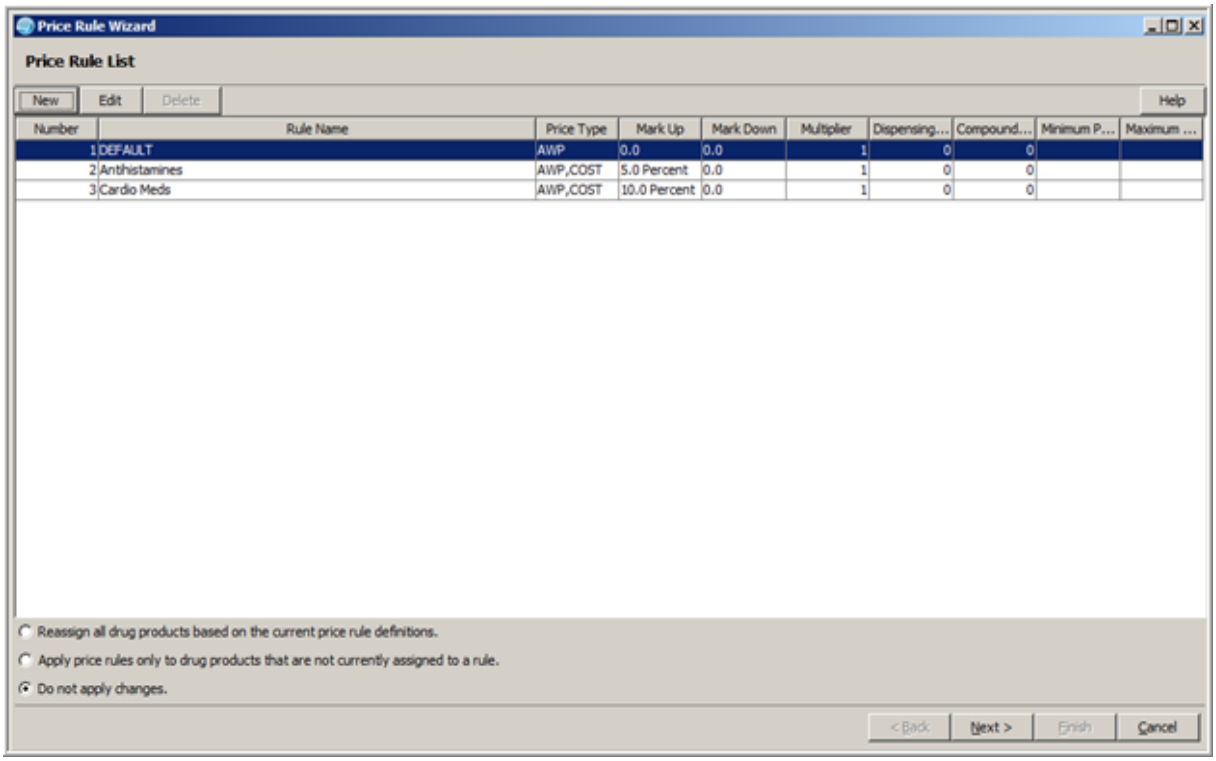
Initially, all drugs in the system are assigned to the Default price rule.

Procedures

Add a New Price Rule

You can select various combinations of pricing parameters, routes, dose forms, and classes to customize price rules according to your needs. The Pharmacy Pricing Engine system is very flexible. After you have named a rule and selected a price type, no other fields are required.

When you log in to the system, the Pricing Configuration Wizard displays the **Price Rule List** window. This is a summary listing of the currently defined pricing rules.

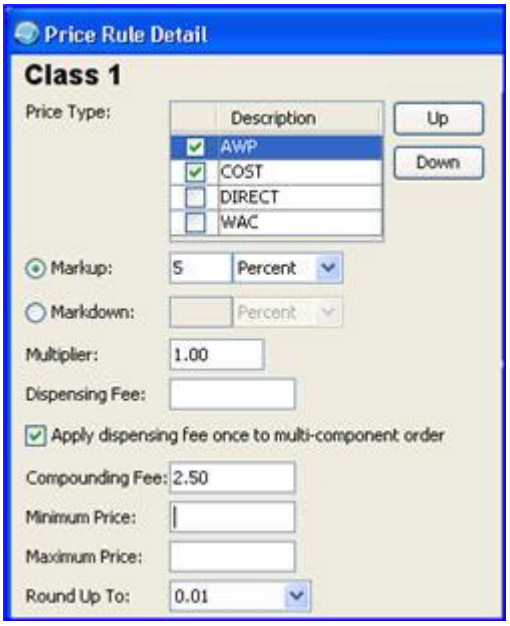


To create a new price rule, follow the steps below.

1. In the **Price Rule List** window, click **New**. The **Input** dialog box displays.

Type a name for your new rule. Use a name that is descriptive for easy recognition.

Click **OK**. The **Price Rule Detail** window displays. Use this screen to configure the pricing rule.

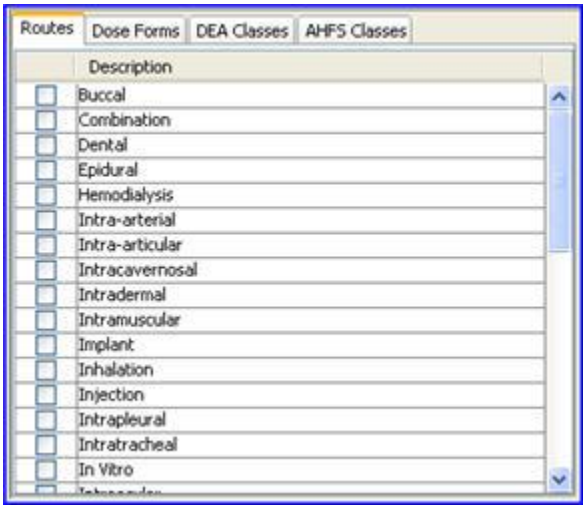


Select the pricing parameters for the new rule from the following choices.

FIELD	DATA ENTRY
Price Type	Select one, multiple, or all types. Use the **Up** and **Down** buttons to order them. During the calculation of a price, price types are evaluated in the order listed.
Markup/Markdown	Enter the markup or markdown amount. Select **Percent** or **Dollars**.
Multiplier	Enter the multiplier number. Enter portions of a whole number as decimals (2.5, 1.35, etc.)
Dispensing Fee	Enter as dollars and cents. This is a flat fee levied for dispensing the item.
Apply dispensing fee once to multi-component order	Click to apply the dispensing fee once to multiple-component orders (orders containing more than one drug ingredient, such as a compounded fee for IV fluid). If not checked, the fee is applied to each item in a multiple component order.
Compounding Fee	Enter an amount to be charged if the item is compounded.
Minimum/Maximum Price	Enter a minimum and/or maximum price for the rule, if desired.
Round Up To	Select an amount from the drop-down for price rounding. The default is 0.01

Note: Do **not** enter dollar signs for any currency field entry. This will cause an error. To correct, select the entire field entry, press the **Delete** key, and reenter the fee.

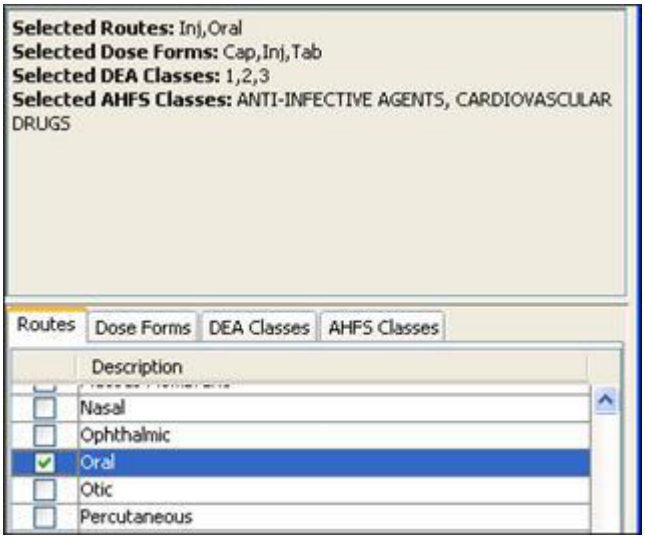
5. Next, select the classifications to apply to this rule, if any. Click the appropriate tab to display available selections (Routes, Dose Forms, DEA Classes, AHFS Classes).



6. Select the classifications for the new rule from the following choices.

FIELD	DATA ENTRY
Routes	Select one or more routes (oral, transdermal, injection, etc.). This refers to the route commonly associated with the drug as defined in the drug file. It is not the actual route defined in the medication order. No selection is required.
Dose Forms	Select one or more dose forms (tablet, gel, drops, etc.) No selection is required.
DEA Classes	Select one or more DEA classes. No selection is required.
AHFS Classes	Select the therapeutic class. You can select the entire class (for example, 08000000-Anti-Infectious Agents), or drill down to select a subclass (for example, 08360000-Urinary Anti-Infectives). To select multiple codes, hold the **Control** key while selecting codes. To select a contiguous range of codes, hold the **Shift** key and select a beginning and ending code for the range. No selection is required.

As you select the codes, the information screen displays a list of your current selections



7. When you are satisfied with the configuration, click **Save**. The **Price Rule List** window displays the newly-created price rule as the last entry in the list. Each price rule is assigned a number when it is created. You can change the order of the rules at any time. (See Reorder the Price Rule List.)

Number	Rule Name	Price Type	Mark Up	Mark Down	Multiplier	Dispensing...	Compoundi...	Minimum P...	Maximum ...
1	Cold Remedies	AWP	0.0	0.0	1	0	0		
2	DEFAULT	AWP	0.0	0.0	1	0	0		
3	Injectables	AWP	0.0	0.0	1	0	0		
4	Class 2	AWP	0.0	0.0	1	0	0		
5	Antihistamines	AWP,WAC,DI...	5.0 Percent	0.0	1	2.5	0	3.75	25
6	PharmProducts	AWP	12.0 Percent	0.0	1	0	0	2	75
7	Vitamins	AWP	10.0 Percent	0.0	1	0	0	2.5	27
8	Carols Rule	AWP,WAC,C...	5.0 Percent	0.0	1	10	5	2.5	25
9	Class 1	AWP,COST	5.0 Percent	0.0	1	0	2.5		

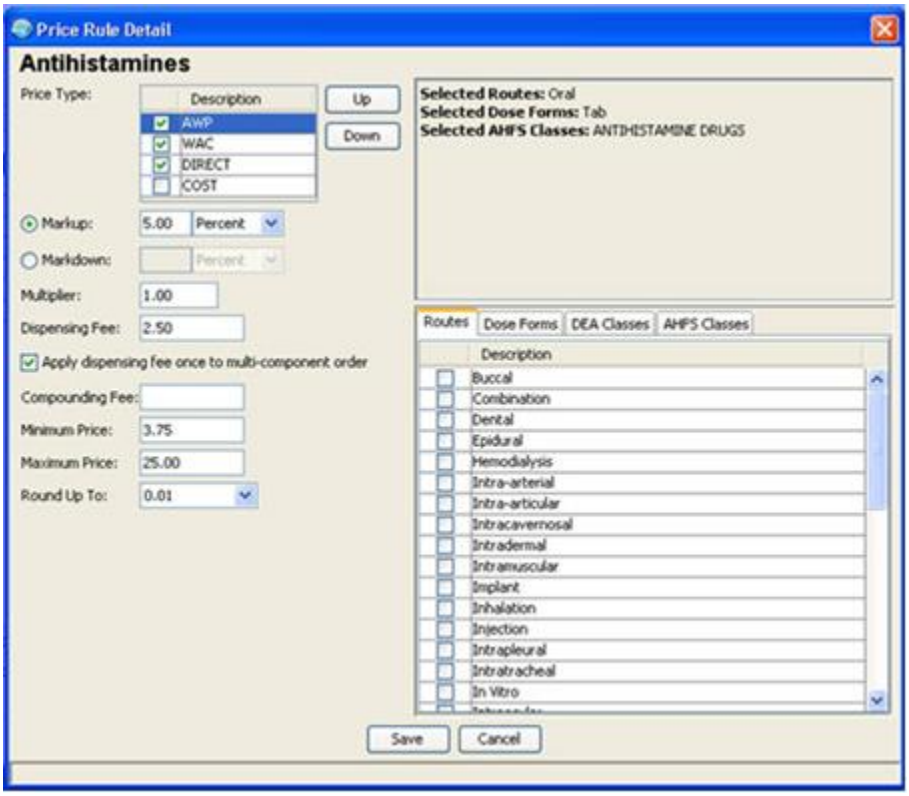
You can now assign items to your price rule.

Edit a Price Rule

You may edit a price rule at any time.

1. In the **Price Rule List** window (the first window of the Wizard), highlight the rule to be edited and do one of the following:
   - Double-click the rule, **or**
   - Click the **Edit** button

The **Price Rule Detail** window displays with the selected price rule showing the current rule definition.



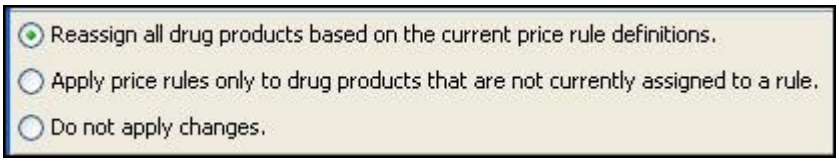
2. Make the desired changes to any of the pricing fields or the classifications.

> **Note:** For detailed information on field data entry and selections, see Add a Price Rule.

3. Click **Save**. To edit without saving changes, click **Cancel**.
4. After the edited price rule is saved, the **Price Rule List** window displays. You have several options.
   - You can evaluate and reassign all drug products based on all the price rules, including the new rule,

- You can evaluate all drug products and apply the price rules only to items that are not currently assigned to a price rule;
  OR
- You can choose not to apply the changes.

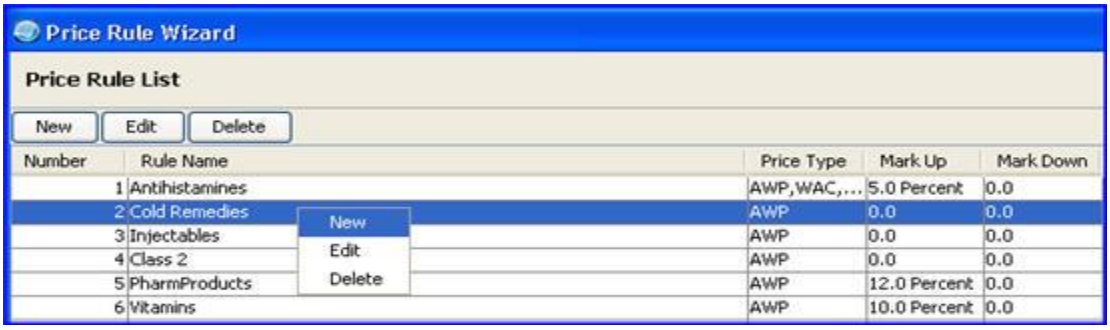
5. Make the appropriate selection as shown below.



Delete a Price Rule

Before you delete a price rule, ensure it is no longer needed. Once deleted, price rules cannot be reinstated; they must be recreated and reconfigured. Any drugs that were assigned to a deleted rule are reassigned to the Default price rule.

1. In the **Price Rule List** window (the first window of the Wizard), click to highlight the price rule to be deleted.



2. Do one of the following:

- Right-click anywhere in the highlighted row to display a drop-down menu. Select **Delete** from the menu;
  OR
- Click the **Delete** button in the toolbar.

A confirmation message displays.

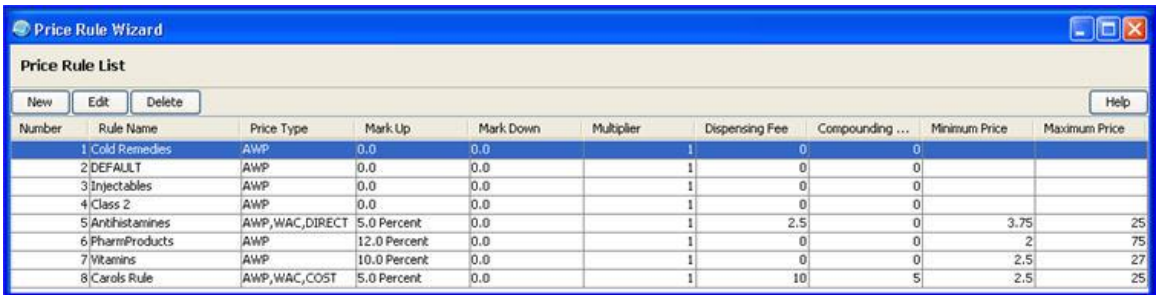
3. Click **Yes**. The pricing rule disappears from the **Price Rule List** window. If you change your mind, click **No** and the rule remains intact.

   Drugs previously assigned to the deleted price rule are reassigned to the Default price rule.

Assign Items to Price Rules

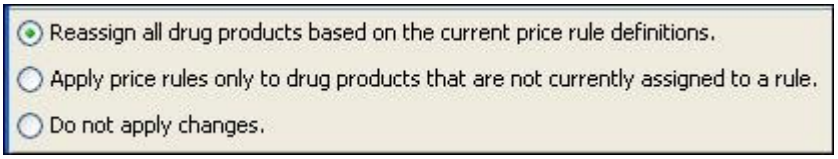
All drugs in your formulary are automatically assigned to the Default price rule until you create price rules and assign drugs to them. Once you have created a price rule, you can assign items to the new price rule as follows:

1. Select the desired price rule in the **Price Rule List** window.



Number	Rule Name	Price Type	Mark Up	Mark Down	Multiplier	Dispensing Fee	Compounding ...	Minimum Price	Maximum Price
1	Cold Remedies	AWP	0.0	0.0	1	0	0		
2	DEFAULT	AWP	0.0	0.0	1	0	0		
3	Injectables	AWP	0.0	0.0	1	0	0		
4	Class 2	AWP	0.0	0.0	1	0	0		
5	Antihistamines	AWP,WAC,DIRECT	5.0 Percent	0.0	1	2.5	0	3.75	25
6	PharmProducts	AWP	12.0 Percent	0.0	1	0	0	2	75
7	Vitamins	AWP	10.0 Percent	0.0	1	0	0	2.5	27
8	Carols Rule	AWP,WAC,COST	5.0 Percent	0.0	1	10	5	2.5	25

2. Select an assignment method from the choices at the bottom of the screen.



The first selection evaluates all drug products and assigns each to a price rule according to the current price rule definitions.

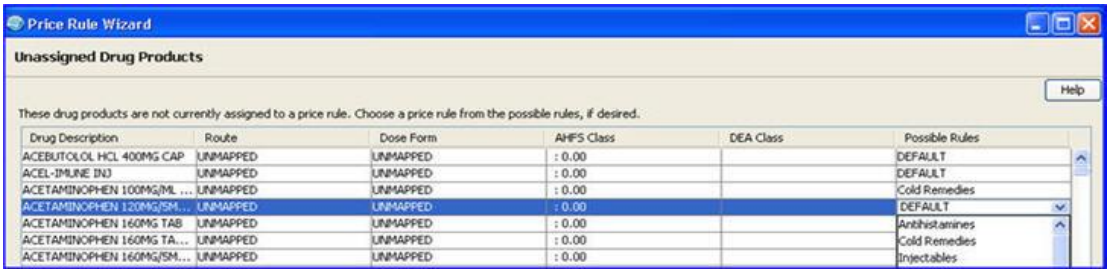
The second selection evaluates only drug products that are not currently assigned to a price rule and attempts to assign a price rule to them.

The third selection does not make any changes (for example, no drug product assignments are made).

3. Click **Next**. If you have selected the first or second option, the system runs through the list of drug items and categorizes them according to the price rule parameters and assignment option selected.

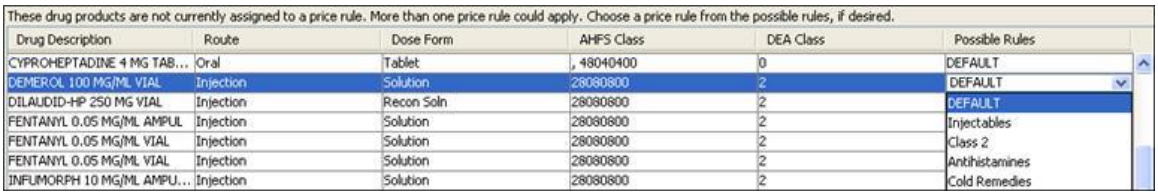
> **Note:** This process may take several minutes, depending upon the size of your drug formulary.

The next window in the Wizard, **Unassigned Drug Products**, displays with two grids. The first grid displays items that did not match any price rule and are assigned to the Default price rule.



The second grid displays items that are not assigned to a price rule but could qualify for several existing price rules. This occurs when you have defined overlapping rules.

For example, if you have a rule for injectables and a different rule for DEA Class II, then injectable drugs that are also Class II will be in this list. You may select either the Injectables rule or the Class II rule for these products, but not both.



4. In either grid, if you want to change an individual item to another price rule, select the item, click the drop-down menu under the **Possible Rules** column, and select another price rule. The new rule is applied to the item.

> **Note:** For additional methods of transferring items to another price rule, see Reassign Items to a Different Price Rule, below.

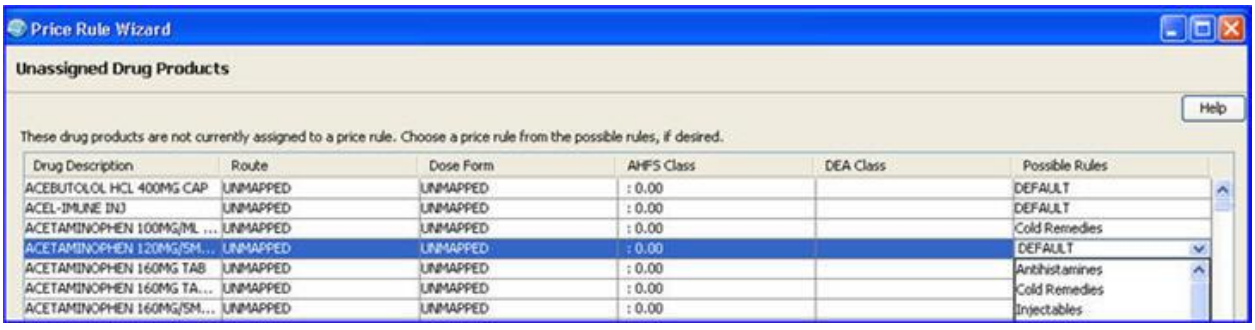
Reassign Items to a Different Price Rule

Drug items can be assigned to price rules when the rule is created. However, items can be reassigned to other price rules at any time. You can reassign items to new price rules using one of the following methods.

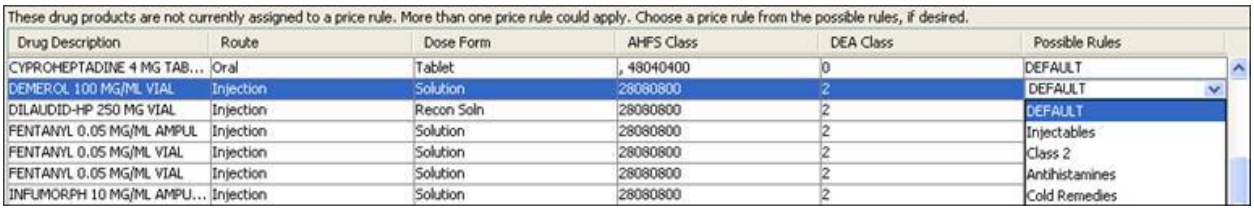
Reassign Drugs Using the Unassigned Drug Items Window

The second Price Rule Wizard window, **Unassigned Drug Items**, displays two grids with lists of drug items. Access this window from the initial Price Rule Wizard window (**Price Rule List**) by selecting either the option to reassign drug products or the option to apply price rules, and then clicking **Next**.

The first grid displays items that did not match any price rule and are assigned to the Default price rule.



The second grid displays items that are not assigned to a price rule but could qualify for several existing price rules. This occurs when you have defined overlapping rules. For example, if you have a rule for injectables and a different rule for DEA Class II, then injectable drugs that are also Class II will be in this list. You may select either the Injectables rule or the Class II rule for these products, but not both.



To change an individual item to another price rule, select the item, click the drop down menu under the **Possible Rules** column, and select another price rule. The new rule is applied to the item.

Reassign Drugs Using the Item Assignment by Price Rule *Window*

The **Item Assignment By Price Rule** window lists all your current price rules in tree form. Access this window by selecting **Do not apply changes** in the initial **Price Rule List** Wizard window and clicking **Next**. You can *drag and drop* any item from one price rule to another to change its assignment.

1. Click the plus sign next to any price rule to drill down and display the items underneath.

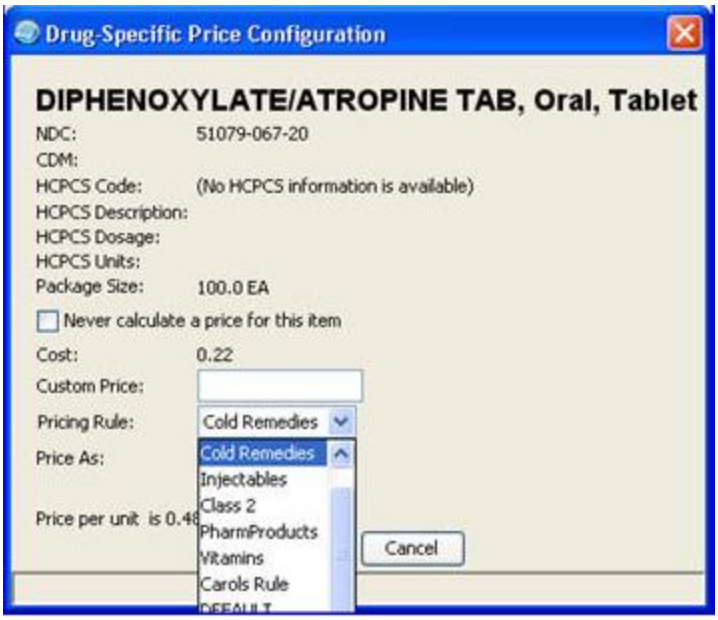
2. Click to highlight an item. While continuing to hold down the left mouse button, drag the item to the desired price rule. (Make sure the item is directly over the new price rule name and the name is highlighted.)
3. Release the mouse button. The item is now assigned to the new price rule.

   In the example shown, the item **Advil Cold & Sinus Caplet** has been moved from the **Cold Remedies** price rule (above) to the **Antihistamines** price rule (below).

Reassign Drugs using the Drug Specific Price Configuration window

1. Access the **Drug Specific Price Configuration** window by selecting "Do not apply changes" in the initial **Price Rule List** Wizard window and clicking **Next**.
2. In the **Item Assignment By Price Rule** window (tree view), drill down to find the item to be reassigned.

3. Double-click the selected item to display the **Drug Specific Price Configuration** window for that item.



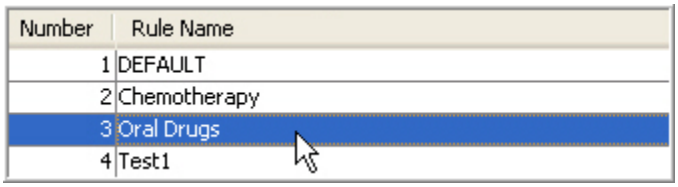
4. To change the price rule assignment, click the down arrow in the **Pricing Rule** field. The list of price rules displays.
5. Click to select a new rule.
6. Click S**ave.** The drug is reassigned to the new rule.

   To verify this change, look for the drug under the new rule in the **Item Assignment By Price Rule** window (tree view).

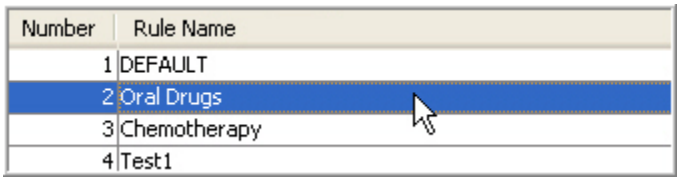
Reorder the Price Rule List

To change the display order of the rules in your price rule list:

1. Highlight the row you want to move.



2. Holding your mouse pointer on the row, drag it to the new location and release the pointer.



   The price rules and their corresponding numbers are automatically reordered.

Change Drug Specific Price Configurations

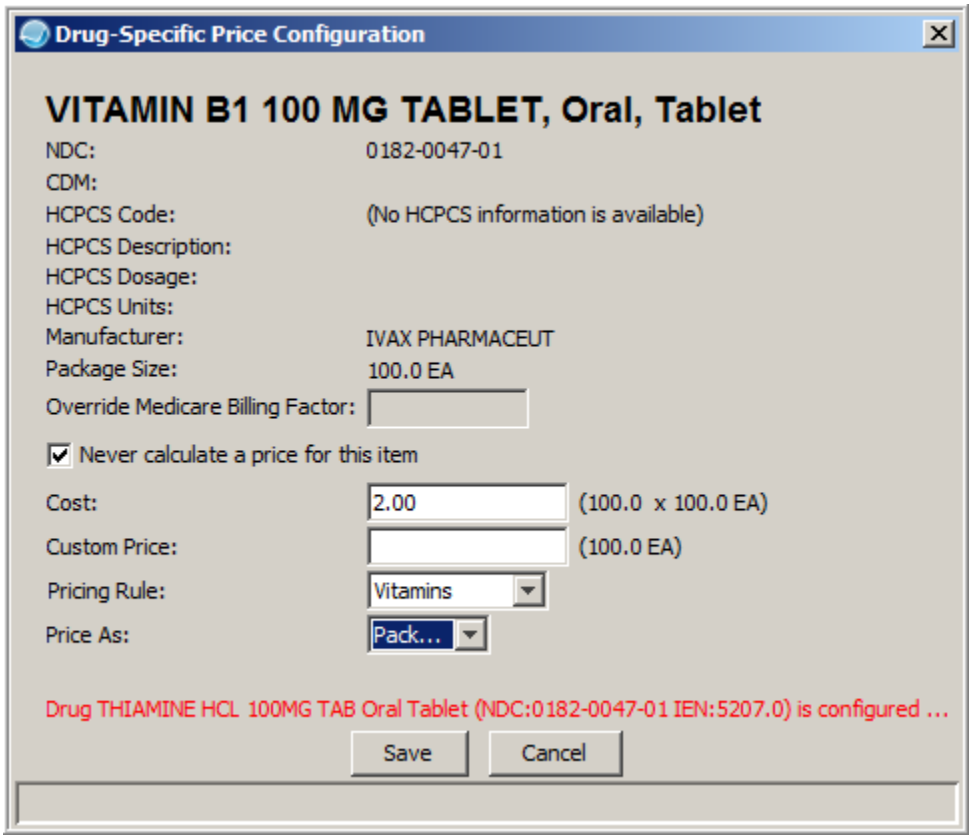
The Pharmacy Pricing Engine application enables you to change or override certain price rule parameters for an individual drug item. Using the **Drug Specific Price Configuration** window, you can make the following changes for a selected drug item:

- Select **Never calculate a price for this item**.
- Add a **cost** (if not provided by the wholesaler interface).
- Add a **custom price** for this item.
- Select a **different price rule**.
- Price the **item** as a **unit** or **package**.

Follow the procedures below to make any of the changes described.

1. Access the **Item Assignment By Price Rule** window (tree view) by selecting **Do not apply changes** in the initial **Price Rule List** window of the Wizard and clicking **Next**.

2. From the Item Assignment By Price Rule window, click to select the appropriate price rule and drill down to the individual drug items.
3. Select the desired item and double-click to display the Drug Specific Price Configuration window.



4. Check **Never calculate a price for this item** to exempt this item from the attached pricing rule. (This item will display in red text in the **Item Assignment By Price Rule** window [tree view] to indicate non-pricing.)
5. In the **Cost** field, enter the cost in **XX.XX format**. (You will not be able to enter data or modify the **Cost** field if cost information is already provided by the wholesaler interface.)
6. In the **Custom Price** field, enter your price for the item. (This item will display in ***bold italic*** text in the **Item Assignment By Price Rule** window [tree view] to indicate drug-specific configuration.)
7. In the **Pricing Rule** field, select another price rule from the drop-down box if desired.
8. In the **Price As** field, select **Unit** or **Package** as the method of calculating the price. The price displayed beneath this field is dynamic and changes according to the selection. Each item has a default **Price As** value based on information provided by First DataBank (FDB).

> **Note:** See Pharmacy Billing Calculations for more information on how the Pharmacy Pricing Engine calculates billing quantities, HCPCS quantities, and prices.

For more information on drug-specific data, see Drug Specific Price Configuration Window.

Pharmacy Billing Calculations

Overview

The Pharmacy Pricing Engine calculates the billing quantities, HCPCS quantities, and prices that are sent to the hospital's financial system. The pricing method (unit or package) selected when setting up the price rule determines how the billing quantity is expressed in the HL7 billing file.

Billing quantities for unit dose and multiple-component orders are automatically calculated by the Pharmacy Pricing Engine. Refer to the individual quantity methods listed below for information on how the Pricing Engine performs these calculations.

- Billing quantity
- HCPCS quantity

Billing Quantity Calculations

Unit Dose Orders

The billing quantity for Unit Dose orders is the product of the dispense drug's UNITS PER DOSE and the quantity dispensed.

Example:

- Drug: Prednisone 5 mg Tablet
- Dose: 10 mg
- Units per dose: 2
- Dispense quantity: 1 (dose)
- Billing quantity: UNITS PER DOSE (2) * dispense quantity (1) = **2**

UNITS PER DOSE is defined as the number of units (tablets, capsules, and so on) of the Dispense Drug selected to be given when the order is administered.

When ordering liquid oral or injectable dosage forms in a Unit Dose order, it is important to understand how the Units Per Dose value is determined. The Units Per Dose (U/D) calculation occurs during order entry and is based on how the order's dose is entered. Other factors that affect the U/D calculation include:

- BCMA Units/Dose configured in the Possible Dosages File.
- The drug Strength in the Drug File.
- User input when processing a free text dose or modified by the user during order processing

If the Dosage Ordered is selected from the list of Available Dosages, the system will populate Units Per Dose with the BCMA Units Per Dose value from the Possible Dosages file. If BCMA Units Per Dose is not set, Units Per Dose will be calculated as follows:

DOSAGE ORDERED / STRENGTH = UNITS PER DOSE

Example:

Three dosages have been setup in the Dosage File for the drug Adenosine 3mg/ml inj, 2ml

- **3 MG/1ML**
  Dispense Units per Dose: 1
  BCMA Units per Dose: 1
- **6 MG/2ML**
  Dispense Units per Dose: 2
  BCMA Units per Dose: 1
- **9 MG/3ML**
  Dispense Units per Dose: 3
  BCMA Units per Dose: 2

> **Note:** BMCA Units per Dose is set to '2' as it will require two 2ml vials to be dispensed and administered for a 9mg dose.

Scenario 1:

A unit dose order is entered for Adenosine with a dose of 9mg. The dose is selected from the list of Available Dosages. The Units Per Dose value is **2** (defaulted from BCMA Units per Dose).

Scenario 2:

Same order as above, except the user does not select a dosage from the list but enters a numeric (free text) dose, such as **9**. The Units Per Dose value is **3**, which was calculated as DOSAGE ORDERED / STRENGTH or 9 MG/3 MG.

Scenario 3:

Same order as above, except the user enters a free text dosage, such as **1 vial** or **1 amp**. The system prompts the user for Units Per Dose. If the user presses **Enter** past the UNITS PER DOSE: prompt without entering a value, a **1** is stored. A warning message is generated when free text is entered at the DOSAGE ORDERED: prompt and no value or an incorrect value is entered at the UNITS PER DOSE: prompt.

IV Solutions

If the pricing rule is set to price by unit, the billing quantity for IV solutions is expressed in terms of the volume (mL's) used in the order. See the calculation and example below.

Calculation: Billing quantity = IV solution volume * dispense quantity

Example:

- Drug: Dextrose 5%/Lactated Ringers 1000 ml
- Solution volume: 1000 (mL)
- Dispense quantity: 1 bag
- Billing quantity: solution volume (1000) * dispense quantity (1) = 1000

If the pricing rule is set to price by package, the billing quantity for IV solutions is expressed in terms of package units. See the calculation and example below.

Calculation: Billing quantity = (IV solution volume/pkg size) rounded up to package increment * dispense quantity

Example:

- Drug: Dextrose 5%/Lactated Ringers 1000 ml
- Solution volume: 750 (ML)
- Dispense quantity: 1 bag
- Billing quantity: solution volume (750) / pkg size (1000) = 0.75; rounded up to pkg increment (1) * dispense quantity (1) = 1

IV Additives

There are two drug forms that can be added to an IV-type order: liquid injectables, which are measured in mL's; and dry powder vials. The billing quantity calculation will vary depending on the drug form used in the order. For liquid injectables, the quantity should generally represent the number of mL's used for the dose. For dry vials, the quantity should generally represent the number of package units (for example, vials), but can also be expressed in terms of drug units (for example, MG, GM).

For liquid injectables where the pricing rule is set to price per unit, the billing quantity is expressed in terms of volume (or mL's). See the calculation and example below.

Calculation: Billing quantity = ([additive strength * drug volume] / drug strength) * dispense quantity

Example:

DOSE (IV Additive)		DRUG FILE			
		Parsed Unit			
Strength	**Unit**	**Strength**	**Str Unit**	**Volume**	**Unit**
20	MEQ	2	MEQ	1	ML

- Drug: Potassium Chloride 2 meq/ml inj
- Dose (or Additive Strength): 20 (MEQ)
- Dispense quantity: 1 vial
- Billing quantity = (dose (20) * drug volume (1)) / drug strength (2) = 10 (mL)

For liquid injectables where the pricing rule is set to price per package, the billing quantity is expressed in terms of package units.

Calculation: Billing quantity = (([additive strength * drug volume] /drug strength) / pkg size) rounded up to package increment * dispense quantity

Example:

Using the Potassium Chloride example above:

- Dose: 30 (MEQ)
- Package size = 10
- Billing quantity = (dose (30) * drug volume (1) / drug strength (2) = 15(ml) / package size (10ml) = 1.5; rounded up = 2 (10 ml packages)

For dry vial injectables where the pricing rule is set to price per unit, the billing quantity is expressed in terms of drug amount dispensed, such as MG or GM.

Calculation: Billing quantity = additive strength * dispense quantity

Example:

DOSE (IV Additive)		DRUG FILE			
		Parsed Unit			
Strength	**Unit**	**Strength**	**Str Unit**	**Volume**	**Unit**
30	MG	20	MG	1	VIAL

- Drug: Xigris 20 mg/vial inj
- Dose: 30 (MG)
- Drug strength = 20 (mg)
- Dispense quantity: 1
- Billing quantity = dose (30) * dispense quantity (1) = 30 (MG)

For dry vial injectables where the pricing rule is set to price per package, the billing quantity will be expressed in terms of package units (or vials)

Calculation: Billing quantity = (additive strength / drug strength) rounded up to package increment * dispense quantity

Example:

1. Same drug and dose as above
2. Billing quantity = dose (30) / drug strength (20) = 1.5 ; rounded up to 2 * dispense quantity (1) = 2 (2 x 20 mg vials)

The table below illustrates the calculated billing quantity (DFT FT1-10) values that are passed to the hospital's financial system.

Order Information			Drug File			Price	Pkg Size	Price Per	HL7 FT1-10		HL7 FT1-11
Drug	Dose	Qty Dispensed	Generic Name	Strength	Unit	(example)			Qty	(unit)	Price
Potassium Chloride Inj	20 MEQ	1	Potassium Chloride 2 mEq/ml Inj 1	2	MEQ/ML	0.04 per ml	10 (ml)	UNIT	10	(ml)	$0.40
	20 MEQ	2						UNIT	20	(ml)	$0.80
	30 MEQ	1						UNIT	15	(ml)	$0.60
	35 MEQ	2						UNIT	35	(ml)	$1.40
Potassium Chloride Inj	20 MEQ	1	Potassium Chloride 2 mEq/ml Inj 1	2	MEQ/ML		10 (ml)	PKG	1	(vials)	$0.40
	20 MEQ	2						PKG	2	(vials)	$0.80
	30 MEQ	1						PKG	2	(vials)	$0.80
	35 MEQ	2						PKG	4	(vials)	$1.60
Dextrose 5%	1000 ML	1	Dextrose 5% inj 1000 ML			0.01 per ml	1000 (ml)	UNIT	1000	(mls)	$10.00
	750 ML	1						UNIT	750	(mls)	$7.50
Dextrose 5%	1000 ML	1	Dextrose 5% inj 1000 ML			0.01 per ml	1000 (ml)	PKG	1	(bag)	$10.00
	750 ML	1						PKG	1	(bag)	$10.00
Xigris	20 MG	1	Xigris 20 mg/vial inj	20	MG/VIAL	1263.00/vial	1 (vial)	UNIT	20	(mg)	$1,263.00
	25 MG	1						UNIT	25	(mg)	$1,578.75
	25 MG	1						PKG	2	(vials)	$2,526.00
Cefazolin Inj	1.5 GM	1	Cefazolin NA 1 gm/vial	1	GM/VIAL	20.00/vial	1 (vial)	UNIT	1.5	(gm)	$30.00
	1.5 GM	2						UNIT	3	(gm)	$60.00
	1.5 GM	1						PKG	2	(vials)	$40.00

HCPCS Quantity Calculations

The pricing engine uses HCPCS data provided by CMS to determine the number of HCPCS billing units in a charge. The standard number of units billed is multiplied by a HCPCS factor to produce the HCPCS quantity. The calculation is listed below:

HCPCS Quantity = Factor * # of units billed

The Factor is calculated from values provided by CMS and FDB as follows:

HCPCS Billing Factor = HCPCS Billing Units per NDC / FDB PackagedrugPackageSize)

The *# of units billed* depends on the drug and its dose form (liquid injectable, dry vial, oral solid, etc), as well as the price method (package or unit) as shown below.

- **For dry vial injectables priced per package**, the # of units billed = billing quantity
- **For dry vial injectables priced per unit**, the # of units billed = billing quantity / drug strength (or the amount of drug in a vial)
- **For liquid injectables priced per package**, the # of units billed = billing quantity * package size
- **For liquid injectables priced per unit**, the # of units billed = billing quantity

Example of Dry Vial IV Additive

- Drug: Bleomycin 30 units/vial
- Dose: 15 units
- HCPCS billing unit is 15 unit increments
- Factor: 2 (meaning there are 2 – 15 unit increments in the 30 unit vial)
- Price per package:
- # of units billed = 1 (vial)

- HCPCS quantity = Factor (2) * # of units billed (1) = 2 (15 unit increments)
- Price per unit:
- # of units billed = dose (15) / drug strength (30) = 0.5
- HCPCS quantity: Factor (2) * # of units (0.5) = 1 (15 unit increment)

Example of Liquid IV Additive

- Drug: Potassium Chloride 2meq/ml 10 ml vial
- Dose: 30 mEq (15 ml)
- HCPCS billing unit is 2 mEq increments
- Factor: 1 (meaning 1 – 2 mEq increment per ML)
- Price per package
- # of units billed = billing quantity (2) * package size (10) = 20 (ml)
- HCPCS quantity = Factor (1) * # of units billed (20) = 20 (2 mEq increments)
- Price per unit
- # of units billed = billing quantity (15)
- HCPCS quantity: Factor (1) * # of units (15) = 15 (2 mEq increments)

The table below illustrates the calculated billing quantity (DFT FT1-10) values that are passed to the hospital's financial system.

Order Information			Drug File			Price	Pkg Size	Price Per	HL7 FT1-10		HL7 FT1-11
Drug	Dose	Qty Dispensed	Generic Name	Strength	Unit	(example)			Qty	(unit)	Price
Potassium Chloride Inj	20 MEQ	1	Potassium Chloride 2 mEq/ml Inj 1	2	MEQ/ML	0.04 per ml	10 (ml)	UNIT	10	(ml)	$0.40
	20 MEQ	2						UNIT	20	(ml)	$0.80
	30 MEQ	1						UNIT	15	(ml)	$0.60
	35 MEQ	2						UNIT	35	(ml)	$1.40
Potassium Chloride Inj	20 MEQ	1	Potassium Chloride 2 mEq/ml Inj 1	2	MEQ/ML		10 (ml)	PKG	1	(vials)	$0.40
	20 MEQ	2						PKG	2	(vials)	$0.80
	30 MEQ	1						PKG	2	(vials)	$0.80
	35 MEQ	2						PKG	4	(vials)	$1.60
Dextrose 5%	1000 ML	1	Dextrose 5% inj 1000 ML			0.01 per ml	1000 (ml)	UNIT	1000	(mls)	$10.00
	750 ML	1						UNIT	750	(mls)	$7.50
Dextrose 5%	1000 ML	1	Dextrose 5% inj 1000 ML			0.01 per ml	1000 (ml)	PKG	1	(bag)	$10.00
	750 ML	1						PKG	1	(bag)	$10.00
Xigris	20 MG	1	Xigris 20 mg/vial inj	20	MG/VIAL	1263.00/vial	1 (vial)	UNIT	20	(mg)	$1,263.00
	25 MG	1						UNIT	25	(mg)	$1,578.75
	25 MG	1						PKG	2	(vials)	$2,526.00
Cefazolin Inj	1.5 GM	1	Cefazolin NA 1 gm/vial	1	GM/VIAL	20.00/vial	1 (vial)	UNIT	1.5	(gm)	$30.00
	1.5 GM	2						UNIT	3	(gm)	$60.00
	1.5 GM	1						PKG	2	(vials)	$40.00

Due to occasional variation in the data available from FDB and CMS, an override value for the HCPCS billing factor can be stored at an individual drug level. This override value would be managed in the same manner as drug-specific price rules.

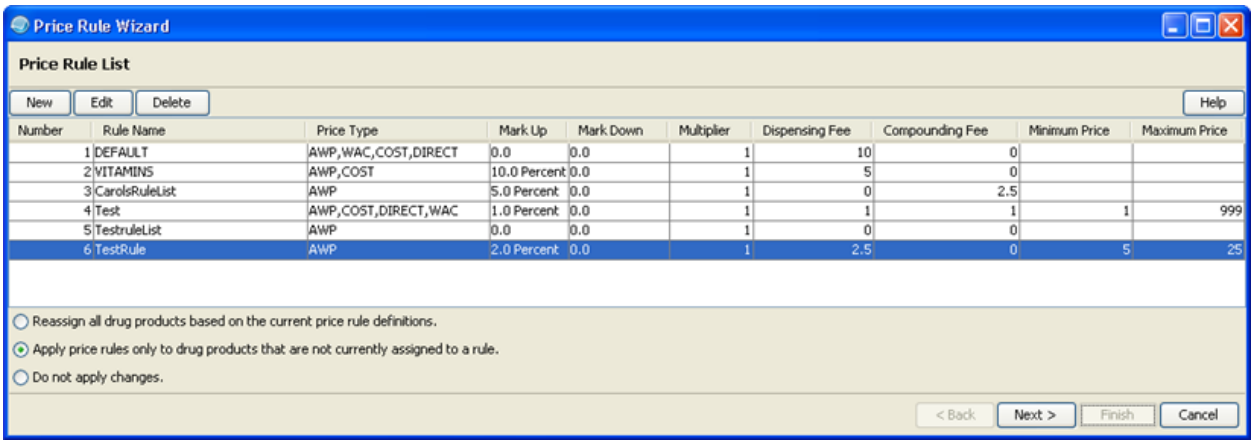
Screens

Price Rule List Window

The *Price Rule List* window is the first in a series of windows that comprise the Price Rule Configuration Wizard. This is the main or summary screen that displays a list of all current price rules with their summary information including price type, mark up/mark down, minimum/maximum price, multiplier, and so on.

From this screen, you can perform the following functions:

- Add a new price rule
- Edit a price rule
- Delete a price rule
- Reassign drugs and products to a different price rule
- Reorder the price rule list

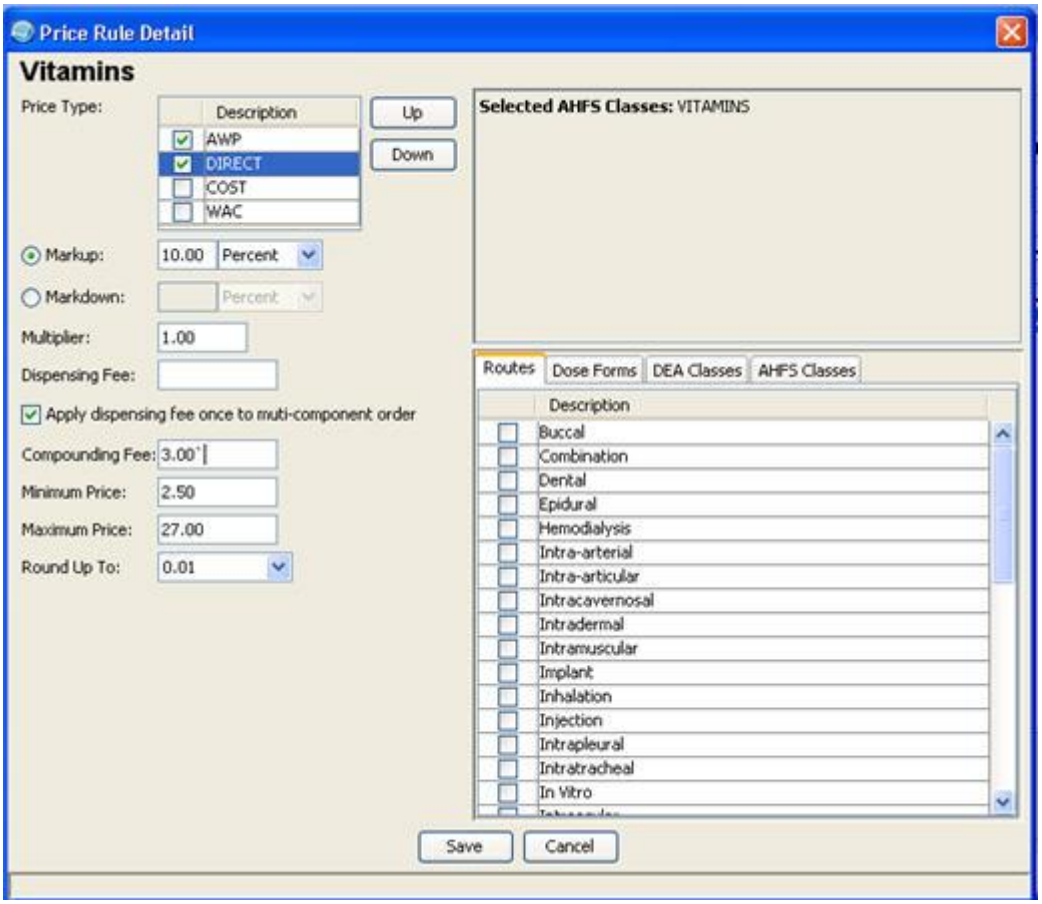


Price Rule Detail Window

The *Price Rule Detail* window is used to configure a new price rule or edit an existing price rule. This is where you select pricing parameters and the classifications for your price rule.

From this screen, you can perform the following functions:

- Create a price rule
- Edit a price rule



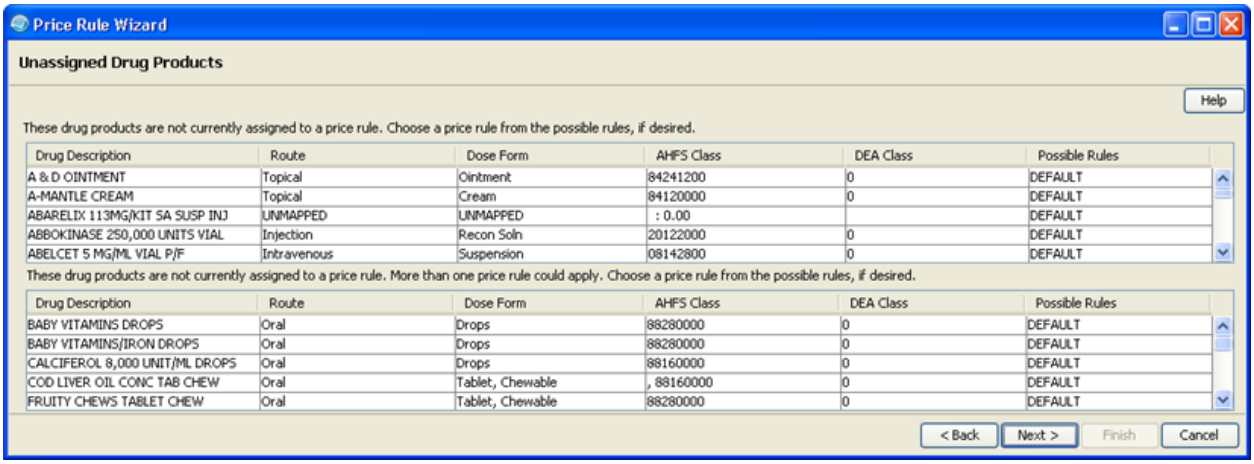
Unassigned Drug Products Window

This *Unassigned Drug Product*s window is part of the Price Rule Wizard. This window displays two grids, each containing a list of drug items. The first grid displays items that are not assigned to any price rule.

The second grid displays items that are not assigned to a price rule but could qualify for several existing price rules. This occurs when you have defined overlapping rules. For example, if you have a rule for injectables and a different rule for DEA Class II, then injectable drugs that are also Class II will be on this list. You may select either the Injectables rule or the Class II rule for these products, but not both.

From this screen, you can perform the following functions.

- Reassign items to a different price rule

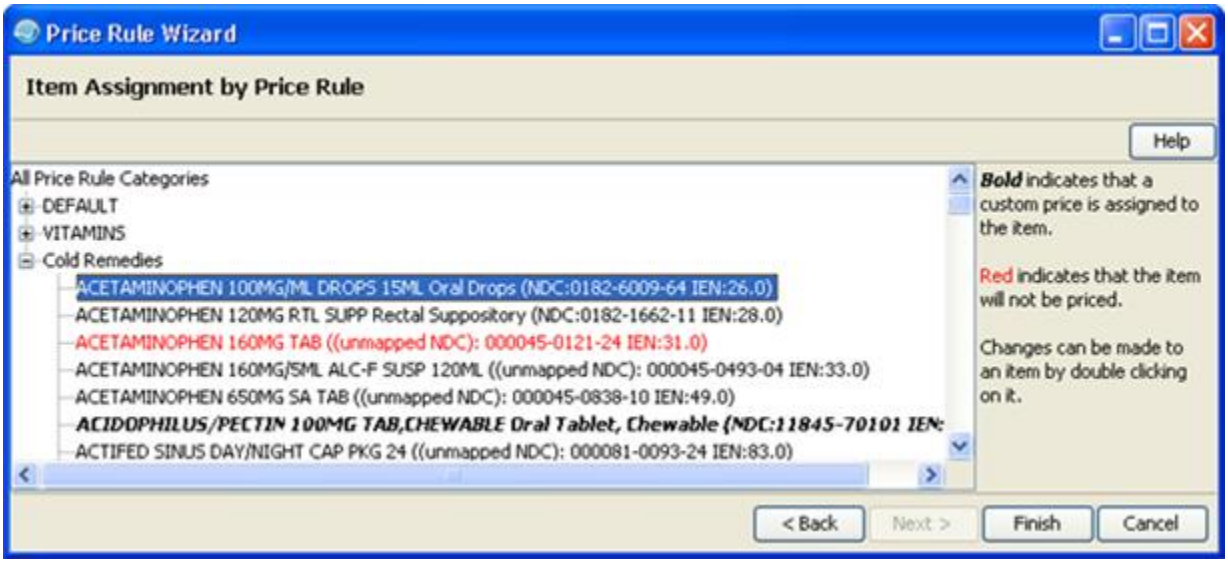


Item Assignment by Price Rule Window

The *Item Assignment By Price Rule* window displays a tree view showing all price rules. Click the plus sign to display the individual drug items assigned to each rule.

From this screen you can perform the following functions:

- Reassign items to other price rules by dragging and dropping them into another rule.
- View drug-specific information by double-clicking any drug item in the listing to display the *Drug Specific Price Configuration* window.



Drug Specific Price Configuration Window

The *Drug Specific Price Configuration* window displays specific information for individual drug items. This window allows you to view and edit individual data for a drug item.

From this window, you can perform the following functions:

- View the drug-specific price configuration for an item. (See the table below.)

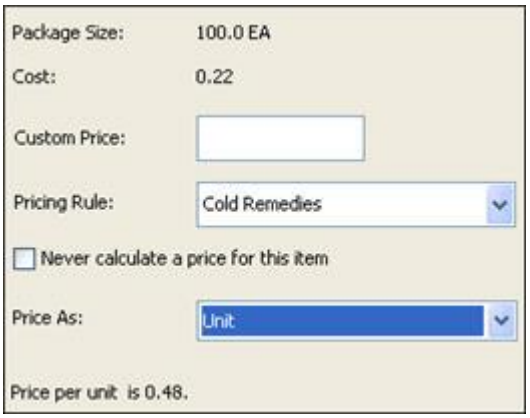
- Enter a cost (if not provided by the wholesaler interface).
- Reassign an item to a different price rule.
- Enter a custom price. (See Change Drug Specific Price Configuration.)
- Exempt an item from pricing. (See Change Drug Specific Price Configuration.)
- Calculate the item price as either Unit or Package. (See the table below.)

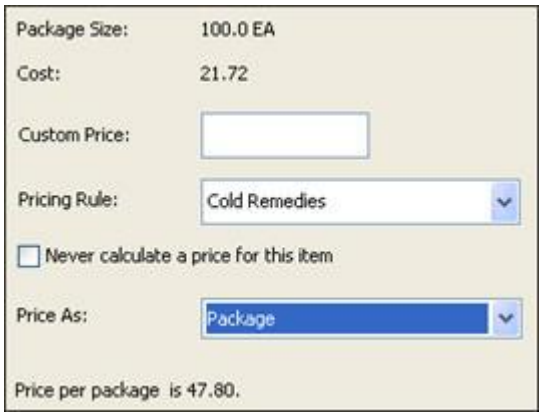
The following data displays in this window:

FIELD	DESCRIPTION
NDC (National Drug Code)	A product identifier assigned to all drugs.
CDM	A number to identify the Charge Description Master, a listing of procedures and services (including medications) that are billable. The CDM number is specific to an individual facility.
HCPCS	The Healthcare Common Procedure Coding System is a set of procedure codes based on the American Medical Association's current procedure terminology. These codes are used primarily for Medicare billing. If these fields are blank, it indicates no HCPCS data is available for this item.
Package Size	Indicates the number of units in a package.
Cost	This field displays the cost from the wholesaler interface. If this field is blank, you can enter your own cost.
Custom Price	This field is always blank. Enter a price here to override any price rule. The item will display in bold italics in the Price Rule Configurator (tree view) to indicate that a custom price is

FIELD	DESCRIPTION
	assigned.
Pricing Rule	The price rule assigned to this drug. You can change the price rule by selecting another price rule from the drop-down menu.
Never calculate a price for this item	Check the box to exempt this item from pricing. (The item will display in red text to indicate it is not priced.)
Price As	Select **Unit** to price the item per unit. Select **Package** to price the item per package. The cost and price information change accordingly. (See the examples below.) **Note:** For information on how prices are calculated for multi-component orders, see Pharmacy Billing Calculations.
Price per unit/package	This field is dynamic. It displays the current price of a unit or package, depending on what is selected in the Price As field.

Note: The price is dynamic and can be either a unit or package price. (For multi-component order pricing, see Pharmacy Billing Calculations.) In the Price As field, select either Unit or Package. In the examples below, the price changes according to the selection.





If a custom price has been configured for this item, it will display in the Custom Price field. A custom price overrides the assigned price rule.

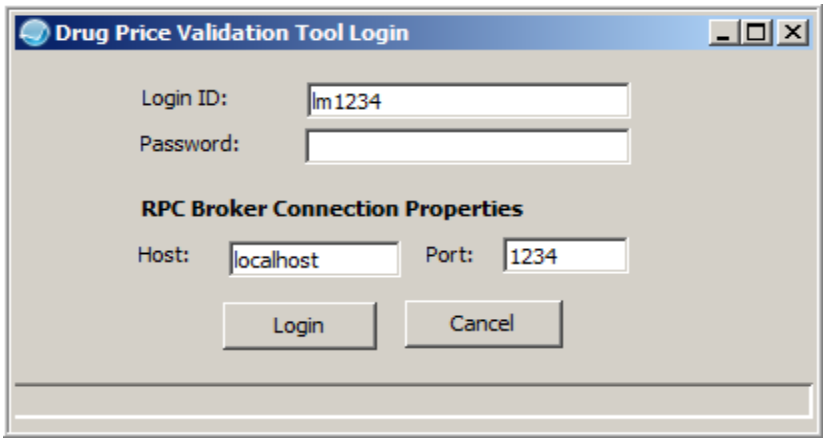
Pricing Rule Validator

The Pricing Rule Validator calculates the price of an item according to the pricing rule attached to that item and the parameters selected. You can enter various parameters as shown below, and the Validator displays the steps used to calculate the price.

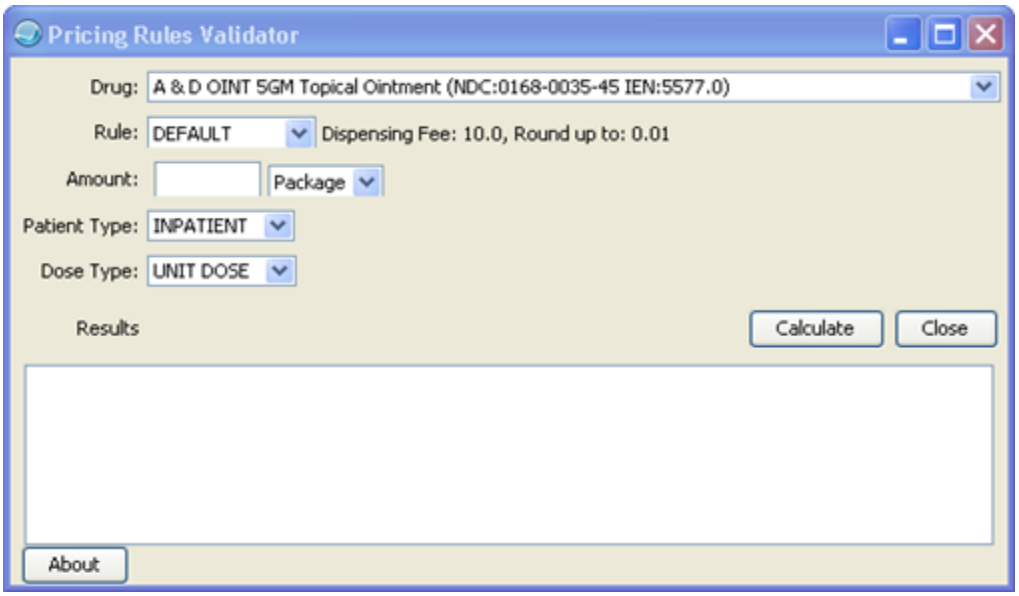
The Validator can be used to check the pricing of any drug or pharmacy item in your formulary that is attached to a pricing rule. Because the Validator shows the steps used to calculate the price, it is a valuable tool for verifying the accuracy of prices.

To use the Pricing Rule Validator:

1. Double-click the Validator icon on your desktop. The *Drug Price Validation Tool Login* screen displays.



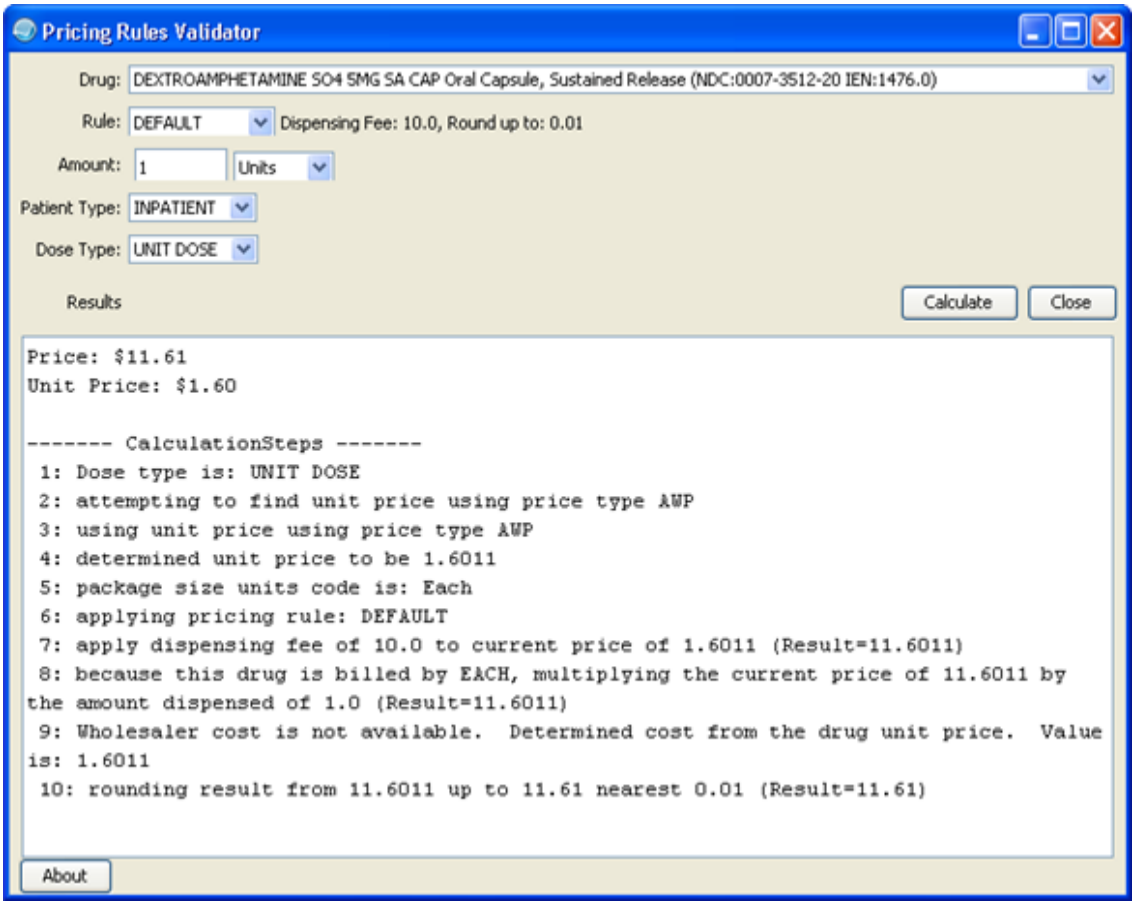
2. Once you have logged in, the Pricing Rules Validator dialog box appears.



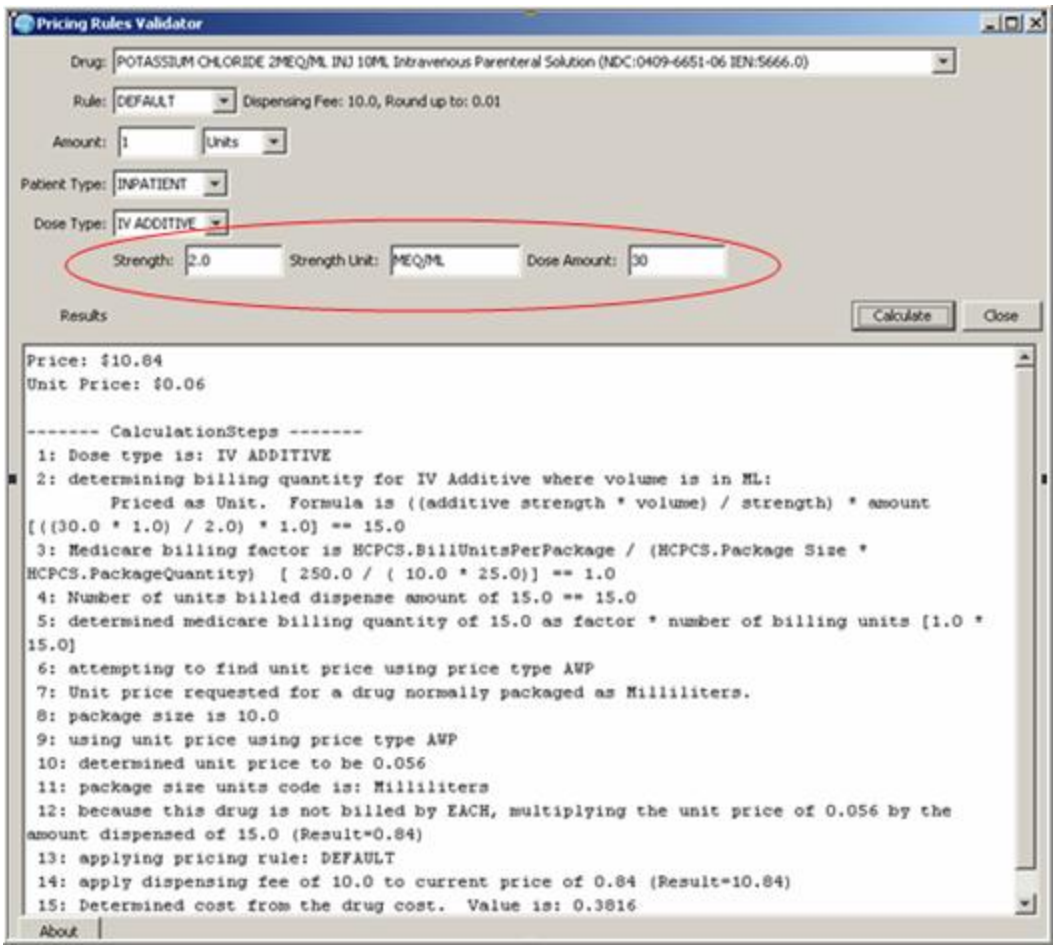
3. Enter the following parameters to display a price:

FIELD	Input
Drug	Click the arrow to display a drop-down menu where you can select the item to be priced.
Rule	Select the appropriate pricing rule from the drop-down menu. The rule that the drug is assigned to is defaulted.
Amount	Enter the number of units or packages.
Package/Unit	Select **Package** or **Unit** from the drop-down menu as appropriate.
Patient Type	Select **Inpatient** or **Outpatient** from the drop-down menu as appropriate.
Dose Type	Select the appropriate dose from the drop-down menu (Unit Dose, IV Solution, IV Additive). This field is dynamic and displays additional fields according to the Dose Type selected. See the examples below.

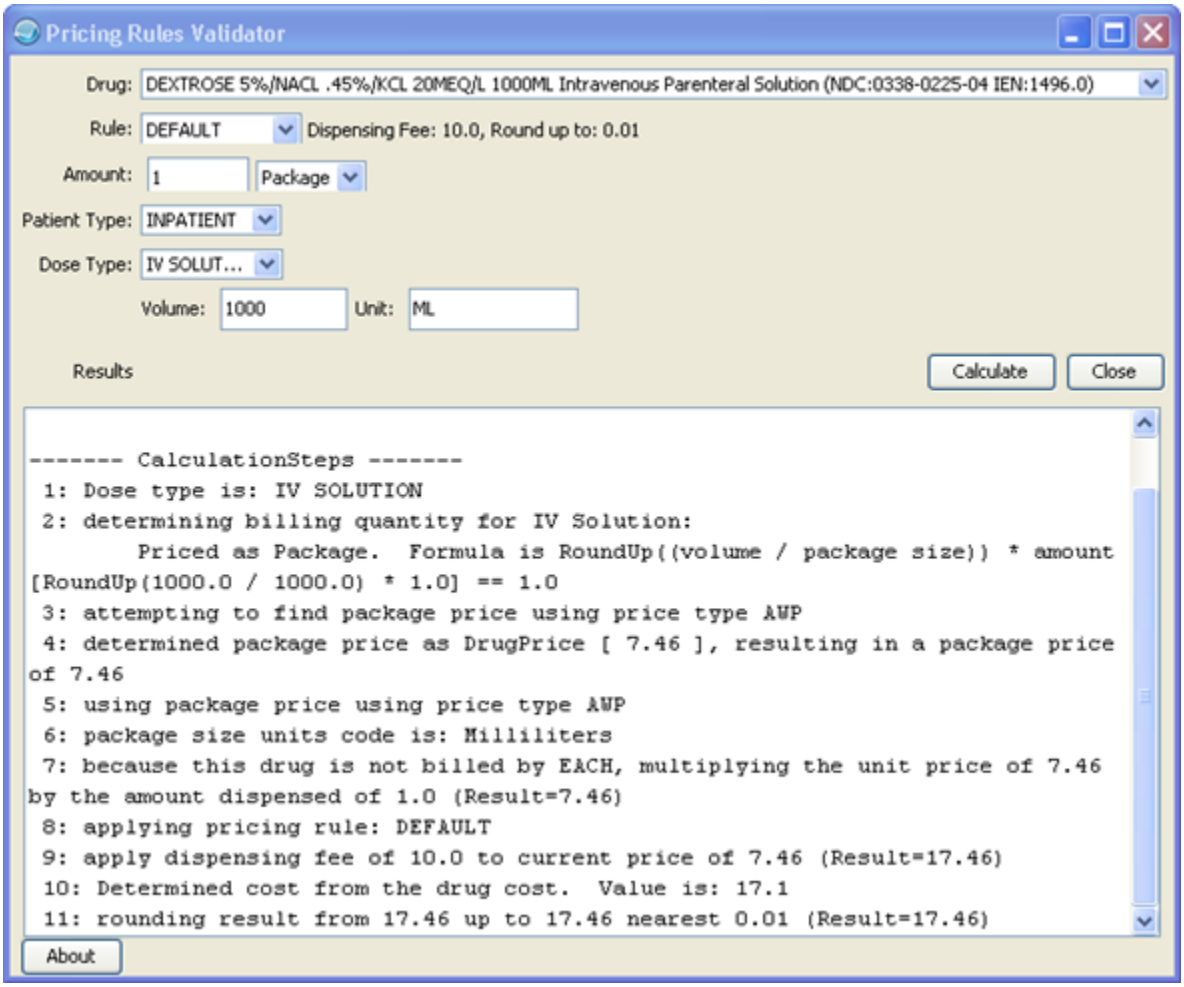
4. When you have finished selections, click **Calculate**. The pricing displays as well as the calculation steps that were used to arrive at those prices.



If the Dose Type is Additive, the system displays the drug Strength and Strength Unit from the drug file (see below). Enter a dose amount, such as 30 (which represents a dose of 30 mEq in the example below) and click **Calculate**.



If the Dose type is IV Solution, the system displays the Volume and Unit fields. Enter a volume and unit, such as 1000 ML (which represents the solution volume to be priced in the example below) and click **Continue**.


Pricing Rules Validator
Drug: DEXTROSE 5%/NACL .45%/KCL 20MEQ/L 1000ML Intravenous Parenteral Solution (NDC:0338-0225-04 IEN:1496.0)
Rule: DEFAULT
Dispensing Fee: 10.0, Round up to: 0.01
Amount: 1
Package
Patient Type: INPATIENT
Dose Type: IV SOLUT...
Volume: 1000
Unit: ML
Results
Calculate
Close
------- CalculationSteps -------
1: Dose type is: IV SOLUTION
2: determining billing quantity for IV Solution:
Priced as Package. Formula is RoundUp((volume / package size)) * amount
[RoundUp(1000.0 / 1000.0) * 1.0] == 1.0
3: attempting to find package price using price type AWP
4: determined package price as DrugPrice [7.46], resulting in a package price
of 7.46
5: using package price using price type AWP
6: package size units code is: Milliliters
7: because this drug is not billed by EACH, multiplying the unit price of 7.46
by the amount dispensed of 1.0 (Result=7.46)
8: applying pricing rule: DEFAULT
9: apply dispensing fee of 10.0 to current price of 7.46 (Result=17.46)
10: Determined cost from the drug cost. Value is: 17.1
11: rounding result from 17.46 up to 17.46 nearest 0.01 (Result=17.46)
About

Drug Wholesaler Upload

Overview

The Drug Wholesaler Upload is used to upload, process, and validate invoices received from a wholesaler in order to update drug inventories with quantities received and current prices, and to validate that the NDC codes are correct. This update process is managed by the OpenVista Drug Accountability Inventory Module which reads the invoice and performs the update.

The module uses the ASC X12 Protocol for Electronic Data Interchange (EDI).

The prerequisites for the Drug Wholesaler Upload are as follows:

- The wholesale ordering is performed on the OpenVista network with the PuTTY terminal emulation software installed.
- A network share must be defined where invoices can be assigned.
- Drugs must be added to the Drug Accountability Package in order to track their inventory.

An overview of the Drug Wholesaler Upload process is as follows:

- The user accesses the wholesaler ordering software and invokes the invoice file download program.
- The invoice file can be automatically or manually placed in the shared location that was set up.
- When the download is complete, the user opens the character terminal window and initiates the OpenVista wholesaler update process. This process locates the invoice file, validates it, and updates the drug files.

Set Up a Pharmacy Location

A Pharmacy Location must be defined in order to receive downloaded invoice files.

The Pharmacy Location Maintenance Menu [PSA PV LOCATION MENU] contains options that set up and edit pharmacy locations. You can do the following from this menu:

- Initialize and adjust the drug balances.
- Add a new drug to a pharmacy location or display existing drug balances.
- Enter and edit the drug stock and reorder levels with this menu.

The *Set Up/Edit a Pharmacy Location* option [PSA LOCATION EDIT] creates and edits a pharmacy location. Use this option to enter or edit the pharmacy location's name, location type, and drugs. If it is an inpatient pharmacy location, you can link and unlink wards. If it is an outpatient pharmacy location, you can link and unlink IV rooms.

To set up a pharmacy location:

1. Log on to the PuTTY terminal emulation software.
2. Access the following menus:
   - Type PHARMACY to access the Pharmacy Location Maintenance Menu.

- Type DRUG to access the Drug Accountability Menu.
- Select 2 or type PRIME to access the Prime Vendor Interface Menu.
- Type PHARMACY to access the Pharmacy Location Maintenance Menu.
- Type SET to access the Setup/Edit a Pharmacy Location Menu.
- Select the Pharmacy Location Maintenance Menu Option: 1 Set Up/Edit a Pharmacy Location.

3. In the *Set Up/Edit a Pharmacy Location* screen, select one of the following:
   - 1-INPATIENT
   - 2-OUTPATIENT
   - 3-COMBINED (IP/OP)

> **Note:** Select 3-COMBINED unless your facility has an outpatient clinic dispensing medications. If so, select option 2-OUTPATIENT. (This field is site-specific.) For 1-INPATIENT, enter YOUR HOSPITAL.

4. If COMBINED was selected, OpenVista displays the following message:

```
COMBINED (IP/OP) is set up to gather AR/WS dispensing data for YOUR
HOSPITAL. Do you want to change this? No//Yes
```

Select No. OpenVista displays the following message:

```
Do you want to add ALL wards or select a RANGE of wards? (A/R)
```

> **Note:** For collecting Unit Dose and IV dispensing data, add any ward in which such dispensing might occur. The only reason not to add a ward is if the dispensing at that ward should not update COMBINED (IP/OP). There is no harm in adding inactive wards.

Select R (RANGE). OpenVista displays the wards currently connected to COMBINED (IP/OP) with the following messages:

```
Do you want to change this? No//Yes.  Select NO.
```

OpenVista displays the following message:

```
Inpatient Dispensing Update?
```

Enter **YES** in this field before attempting to update a Drug Accountability Location with AR/WS dispensing.

Next, OpenVista asks you to select an outpatient site. Enter **??** to display the choices, and select the appropriate site(s).

OpenVista displays the following messages:

`Add/Edit drugs?` Select **NO**.

`Does the outpatient site dispense IVs to IV rooms`. Select **NO**.

`Maintain reorder levels`: Select **NO**.

`Days to keep invoice data`: Enter **120**.

`Inactive Date`: Enter the desired date.

Add a Drug to the Drug Accountability Module

Drugs must be added to the OpenVista Drug Accountability Inventory Module in order to track the inventory. You can add drugs to the inventory all at once prior to using the module (see the steps below), or you can add the drugs on an as-needed basis by uploading the invoices.

To add a drug to the inventory module:

1. In the terminal emulation software, select the following menus:
   - Drug Accountability Menu
   - Prime Vendor Interface Menu
   - Enter/Edit a Drug
2. In the *Enter/Edit a Drug* screen, enter the following data: (Data presented is sample data only.)

```
INPATIENT: LUTHERAN (IP) LUTHERAN HC (OP)

Select DRUG: azithromycin

1   AZITHROMYCIN 100MG/5ML SUSP 15ML    AM200
2   AZITHROMYCIN 1GM/PKT ORAL PWDR       AM200      HOME MED
3   AZITHROMYCIN 200MG/5ML SUSP 15ML     AM200
4   AZITHROMYCIN 250MG TAB                      AM200
5   AZITHROMYCIN 250MG TAB PKT 6              AM200     HOME MED
```

3. Press **Enter** to see more, '**^**' to exit this list, or:

   CHOOSE 1-5: 4 AZITHROMYCIN 250MG TAB   AM200

   Are you adding 'AZITHROMYCIN 250MG TAB' as a new DRUG? No// Y (**Yes**)

   INPATIENT: LUTHERAN (IP) LUTHERAN HC (OP)

   DRUG: AZITHROMYCIN 250MG TAB

   DRUG FILE info:
   - Order unit: PG
   - Dispense units per order unit: 30
   - Dispense unit: TAB

   Current Inventory from the DRUG file =

   Once an initial quantity is entered, it can only be updated by receiving, dispensing, adjusting, or transferring. The Current Inventory from the DRUG file is only offered as an initial balance and is NOT updated. This balance is updated during the upload process with the invoice quantity.

   Enter total TAB currently on hand: 1000

   Stock Level: 800

   Reorder Level: 200

   Current balance: 1000 TAB

   INACTIVATION DATE:

   INACTIVATION REASON:

Updating beginning balance and transaction history.

Select DRUG:

> **Note:** The fields for Stock Level and Reorder Level only needs to be populated if the parameter to "Maintain Reorder Levels" for that pharmacy location is set to **Yes**.

Prepare the Upload

To prepare for the invoice file upload, the following events must occur:

- The invoice file must be placed in a network shared location (aka Host File Server) that can be accessed by the server-based update program for processing.
- The invoice processor must "know" the filename of the invoice file. For example, INVOICEFILE.DAT. The system will ask you to enter the filename or accept the default (the name of the last uploaded file).

  > **Note:** The host filename field is case-sensitive.
- The invoice processor must have a signature code.
- The invoice processor must have the PSA ORDER key.
- The invoice file must be valid before it can be uploaded. To validate the invoice:
  - The X12 format must be checked for errors.
  - The same invoice number cannot be uploaded more than once.
  - The same order number can be uploaded more than once if the invoice number is unique.

Check the Invoice File for Errors

Prior to processing the upload, the invoice file should be checked for errors. Validation consists of checking the ANSI X12 format for syntax errors and verifying that the inventory location has a match in the database.

Check the following elements in the syntax validation:

SEGMENT	CHECK	COMMENDTS
ISA	ISA13 should be 9 characters in length.	Control number
IEA	IEA02 = ISA13	Trailer control number = Header Control number
GS	GS02 = ISA06, GS03 = ISA08, GS04 = ISA09, GS05 = ISA10	Sender Code, Receiver Code, Date, Time
GE	GS06 = GE02	Group control number
ST	ST02 should be 4 to 9 characters in length.	Transaction Set Control Number
SE	SE01 equal the number of segments (whatever the actual count is). SE02 = ST02	Trailer = Header (Tran Set Cont #)
N1	N101 should equal 'BY', 'DS' OR 'ST'	Number of line items

SEGMENT	CHECK	COMMENDTS
	The identifier segment 'N1' needs to come before the 'BY', 'DS' OR 'ST' segment.	
CTT	CTT01 = number of IT1 lines IT105 should equal 'DS'	
IT1	T107 should contain a value (NDC) and/ or IT111 should contain a value (UPC).	
Segment Sequence	Segments checked for correct order.	

Process the Upload

To process the wholesaler invoices, access the wholesaler's ordering software and invoke the invoice file download program. The invoice file is automatically placed in the shared pharmacy location. For more information, see Set Up a Pharmacy Location.

Once the download is complete, open the character terminal window (PuTTY) and initiate the OpenVista Wholesaler Update process. (See the steps below.) This process locates the invoice file, validates it, and updates the drug files.

To process the invoice upload:

1. Access the following menus: **Drug Accountability | Prime Vendor Interface Menu | Orders Menu (PSA Orders Menu) | Upload and Process X12 EDI Vendor Invoice.**
2. The system prompts you to choose from the following to process:
   - Enter **S** to select the line items to be edited. With this selection, you will have to know which information is missing or incorrect.
   - Enter **A** to automatically display only the line items with missing or incorrect information. With this selection, the software prompts you for a decision only at these items. The software may read some information as correct, however, such as quantity received when the bottle may have been broken in shipment. This information can be changed on the *Last Chance Edit* screen that displays after the software finishes automatic processing.

   Note: It is suggested that you select Automatic Display (**A**).
3. **If there is only one pharmacy location**, the software automatically assigns the invoice to that pharmacy. **If there is more than one active pharmacy location**, the system lists the active locations and prompts you to assign the invoice to one of the locations.
4. The software reads the uploaded invoice and matches the invoice line items to drugs in the DRUG file using the NDC in the invoice.
5. **If the quantity received is different from the invoice quantity**, you are prompted to enter an adjustment.

6. **If no match is found**, the National Drug File is searched for the NDC and the Vista product name for the NDC is located. The DRUG file is then searched for all drugs with that product name. Unmatched drugs are displayed for user selection. Select a drug from the DRUG file or enter the name of the supply item.
7. **If controlled substances are included in the invoice**, one of the following things will happen:
   - **If the invoice contains controlled substance drugs as well as non-controlled substance drugs**, assign a master vault and pharmacy location to the invoice. When the system assigns a pharmacy location, the message SOME CONTROLLED SUBSTANCES appears below the voice data to let you know that a master vault will be assigned.
   - **If all of the drugs are controlled substances**, assign the invoice to a master vault. The message **ALL CONTROLLED SUBSTANCES appears below the invoice data to let you know that a pharmacy location was not assigned.
   - **If no drugs were marked as controlled substance**s, the system assigns the invoice to a pharmacy location.
   - **If there is more than one active master vault**, the system lists the active ones prompts you to assign the invoice to one of the vaults.
   - **If there is only one master vault** and the invoice contains at least one drug that is marked as a controlled substance, the system automatically assigns the invoice to the master vault.
   - **If the vendor stock number (VSN) on the invoice is different** from the old VSN, you are prompted to confirm that the new VSN is correct.
8. Once the invoice status is changed to **Processed**, it is forwarded to a verifier. For more information, see Verify the Invoice.

Editing

You can edit the following:

- Invoice delivery date
- Pharmacy location
- Master vault
- Line item's drug
- Quantity received
- Order unit
- Dispense units per order unit
- Reorder level (If the pharmacy location or master vault is set up to track reorder levels.)

At the EDIT INVOICES prompt, enter **NO** to exit the option. If you enter **YES**, you will be able to select the invoice and line items to be edited plus have the ability to edit the assigned pharmacy location and/or master vault.

If you are changing the status of an invoice to **Processed**, this is the last time the system allows you to edit it before it goes to the verifier. If you are not changing the status of an invoice, you can still edit data.

Problems and Errors

If the system lists a drug that is incorrect and not received, choose SELECT ANOTHER DRUG, and choose the correct drug from the Drug file (#50). When you select the drug, the system clears the screen and displays the same line item with the selected drug's data. The following drug-specific data displays:

- Dispense Units
- Dispense Units per Order Unit
- Stock Level
- Reorder Level

If the system flags the pharmacy location or master vault to maintain stock levels the first time the drug is received, the processor may enter the stock and reorder levels. Anyone holding the [PSA ORDERS] key can process the invoice.

When the software detects no missing or incorrect data but you think the data is incorrect, answer **NO** at the DO YOU WANT TO CHANGE THE INVOICE'S STATUS TO PROCESSED prompt. The system will provide a chance to make corrections in the next screen.

- If you have no corrections to make, answer **YES**. You will still be able to make corrections in the next screen, but the system finds the edited information valid, changes the status to **Processed**, and passes the invoice to the verifier.
- If the software found missing or incorrect data, you cannot place the invoice in a processed status. You can edit the invoice's data by selecting the LAST CHANCE EDIT or by re-entering the option and then selecting **Automatic Display**.

Verify the Invoice

Once the invoice has been processed (see Process the Upload), it can be verified.

The person verifying the invoice must:

- Have the appropriate authority (PSA ORDERS key).
- Be different from the person who processed the invoice.
- Hold additional authorization (PSJ RPHARM key) if the invoice contains at least one controlled substance.

The verifier is ultimately responsible for the accuracy of the invoice. When the invoices are verified, the drug balances are updated in the pharmacy location and/or the master vault.

To verify the invoice:

1. Select the Verify Invoices option [PSA VERIFY INVOICES].

```
Select invoices to verify: (1-3): 1,3
1. Order#: C7564729 Invoice#: 1448168 Invoice Date: Jul 31, 2005 COMBINED
(IP/OP):ALABASTER VAMC IP (IP) ALABASTER VAMC OP (OP) MASTER VAULT: MASTER
VAULT 1

2. Order#: C7611902 Invoice#: 2165983 Invoice Date: Jul 03, 2005 COMBINED
(IP/OP):ALABASTER VAMC IP (IP) ALABASTER VAMC OP (OP) MASTER VAULT: MASTER
VAULT 1
Are you sure these invoices' status should be changed to Verified? N// YES
Order# C7564729 Invoice# 1448168's status has been changed to Verified!
Order#: C7611902 Invoice#: 2165983's status has been changed to Verified
```

2. At the ARE YOU SURE THESE INVOICES' STATUS SHOULD BE CHANGED TO VERIFIED prompt, enter **YES** if the listed invoices and corresponding pharmacy location or master vault are correct. Enter **N//** if you have chosen an incorrect invoice or if the listed information is incorrect. The system returns to the Verify Entire Invoice screen to reselect invoices.
3. Upon exiting this option, the system immediately runs a background job that adds the receipts to the drug balances in the pharmacy location or master vault. The system then changes the status to **Completed** and the New Drug Report runs.

```
The verified invoices contain new drugs for the assigned pharmacy location
and/or master vault. A report will print by pharmacy location/master vault
listing the new drugs. Use the Balance Adjustment option to enter an adjustment
that reflects the total dispense units on hand for each new drug.

DEVICE: HOME// [Select Print Device]
<<< NEW DRUG REPORT >>>
PHARMACY LOCATION

COMBINED (IP/OP): ALABASTER VAMC IP (IP) ALABASTER VAMC OP (OP)
================================================================
IMIPRAMINE HCL 50MG TAB
----------------------------------------------------------------
PENTOBARBITAL SODIUM 100MG CAP
```

Print Orders

To print the orders:

1. Select the **Print Orders** option [PSA PRINT ORDERS]. This option generates invoices by entering the order number, invoice number, or invoice status. The system locks this option with the [PSA ORDERS] key.
2. **If the system has not processed the invoice**, the **Prime Vendor Upload Report** prints.
3. **If the system has processed the invoice**, the **Prime Vendor Order Report** prints. When you chose to print by order number, the system allows you to keep inputting as many order numbers as needed. All invoices for that order will print.
4. When you chose to print by invoice number, the order number is the first prompt. This is because the vendors may use the same invoice number more than once for different orders. There can be one invoice number with different data for different orders.

Notes:

- If there is more than one invoice for the order, you will be able to enter them. If there is only one invoice for the order, the system automatically displays the invoice number.
- If you choose to print **Unprocessed** invoices, all of the uploaded invoices that have not been processed will print. If you choose **Processed**, all processed invoices that have not been verified will print.

Frequently Asked Questions

Q: Can a drug be uploaded and processed if it has not been added to the drug Accountability package beforehand?

A: Yes, but the user will be prompted to enter the Reorder level and Stock level during invoice processing if the parameter for *Maintain Reorder Levels* for the pharmacy location is set to **Yes**. After the upload, the drug is automatically added to the Drug Accountability package.

Q: If the NDC in the invoice is 11 digits and the NDC in the drug file is 12 digits, would they match during processing?

A: Yes, but the user will be asked to confirm the *new* NDC.

Q: Can an item be uploaded if the order unit in the invoice does not match the DRUG file?

A: Yes, but an error will display when a user attempts to verify the invoice stating that the order unit is invalid. The order unit must be edited before the invoice can be verified.

Q: Can an item match based on the UPC if the NDC and VSN on the invoice are not in the DRUG file?

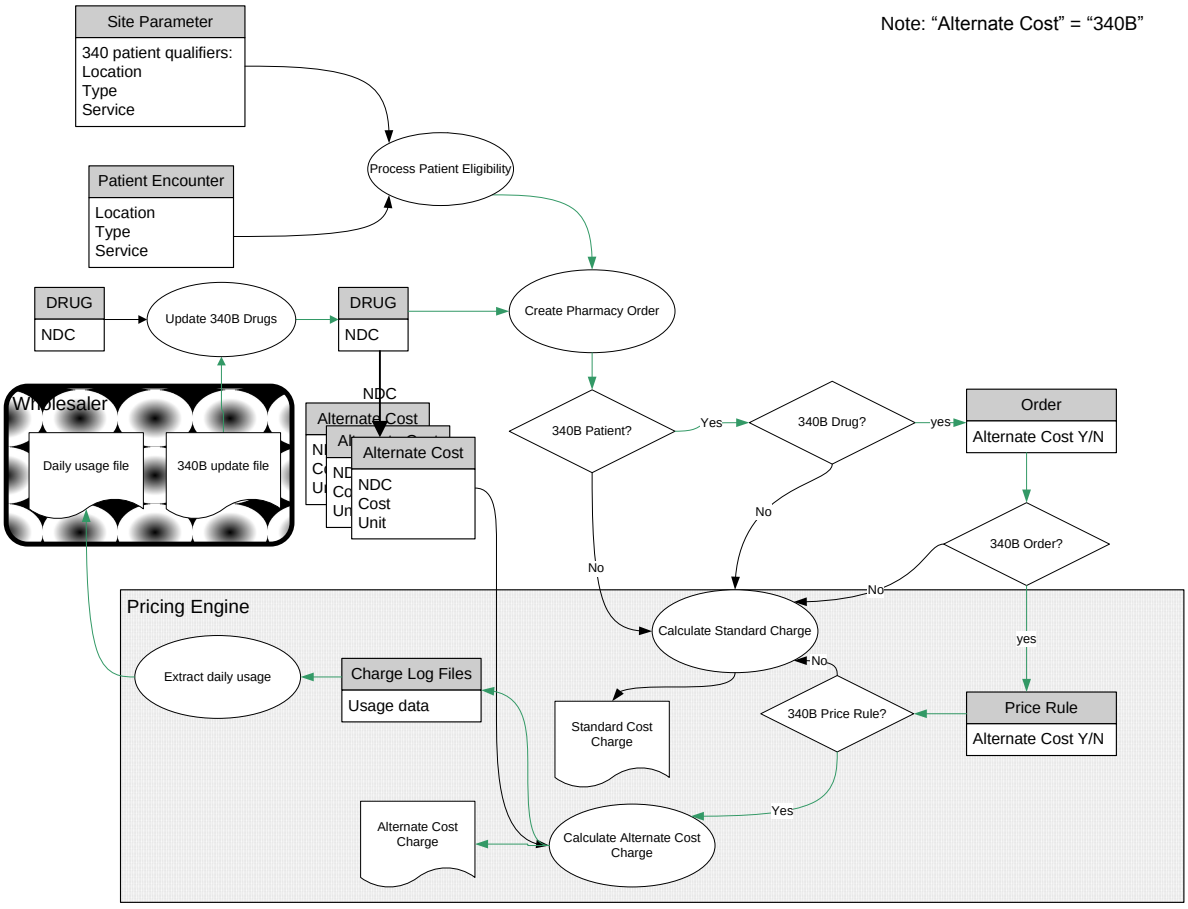
A: No. The drug is matched to a VA Product Name using the NDC and the user is asked to confirm.

Appendix A. 340B Drug Pricing Program

The 340B Drug Pricing Program is considered to be a specific instance of an Alternate Cost Program, where multiple wholesale prices exist for the same drug, depending on certain benefit program criteria. Since 340B is currently the only such program, the terms *Alternate Cost* and *340B* can be used interchangeably. This feature has operating components on the Pricing Engine and on the OpenVista server.

The Pharmacy Pricing Engine calculates the 340B charge and tracks all 340B activity. OpenVista manages patient eligibility criteria, drug alternate cost uploads from the wholesaler, and charge initiation when the chargeable event occurs.

Refer to the Alternate Cost Flowchart for an overview of the process and the relationship between the Pharmacy Pricing Engine and the OpenVista server. It also shows the inputs and outputs with the wholesaler. In lieu of maintaining separate physical inventories, a daily usage file can be sent to the wholesaler, who can then apply the discounted acquisition cost to the pharmacy based on actual usage.



Capabilities

This functionality enables facilities that serve 340B patients using the Inpatient Application to administer drugs to patients that receive those drugs as Outpatients.

Comprehensive 340B data processing solutions contain inventory, purchasing, pricing, bill-splitting, patient selection, drug file maintenance, auditing and reporting services. This first phase provides the following fundamental eligibility and pricing features:

- Calculate charges for a given drug with an alternate pricing rule in addition to a standard pricing rule (for example, more than one rule per drug).
- Maintain more than one acquisition cost per drug
- Upload alternate drug costs from wholesaler
- Define multiple criteria for patient 340B eligibility
- Ability to override inclusion in the program at an individual order level
- Generate a daily usage file to be transmitted to the wholesaler

Alternate Cost Calculation

When a new medication order is created, if the patient meets at least one of the eligibility criteria and the drug has a currently active Alternate Cost entry, then the order is flagged as Alternate Cost and the charge is calculated accordingly.

Disabling 340B at the Order Level

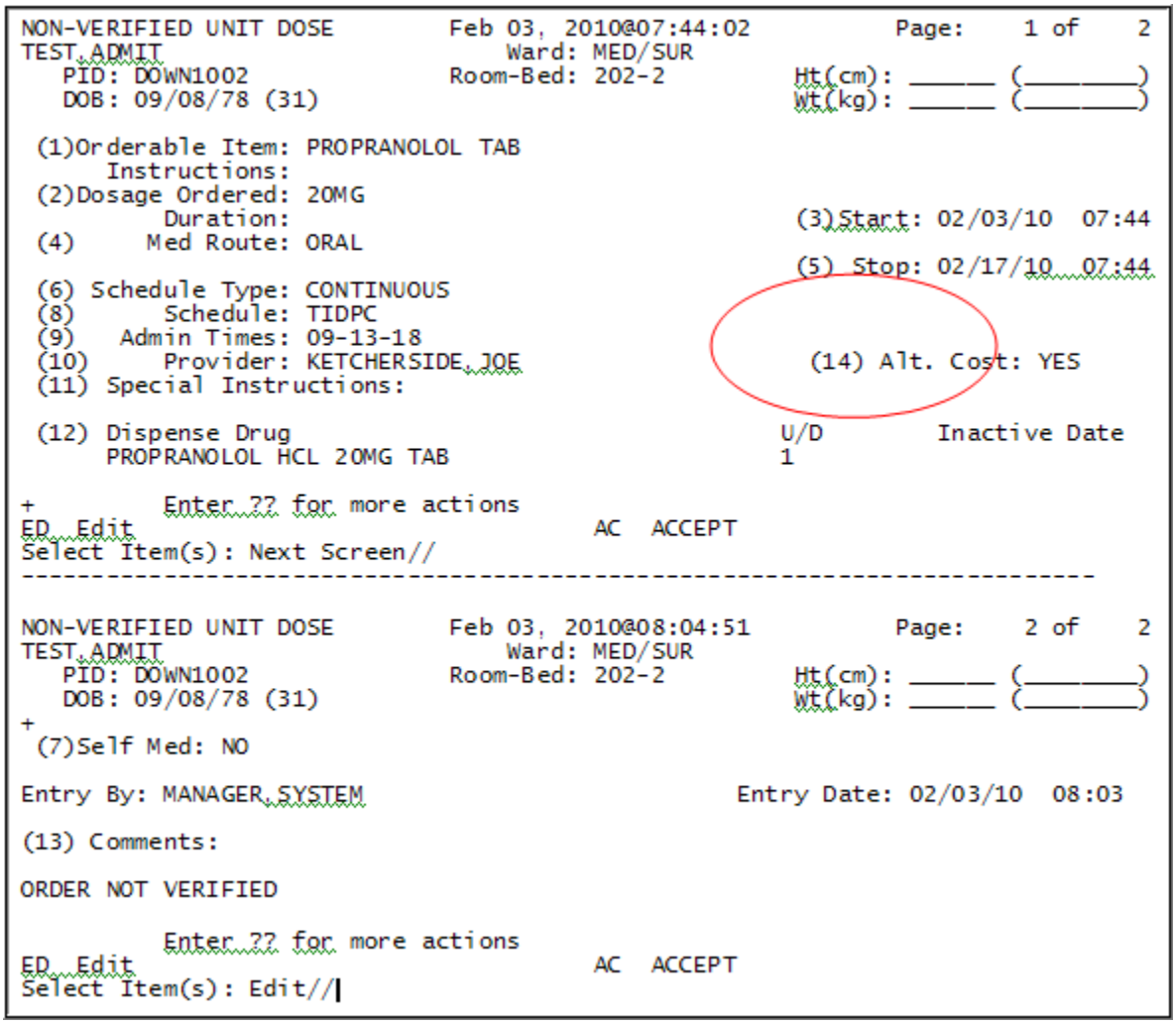
The Order Alternate Pricing Flag ultimately determines if the alternate cost pricing rule is used to calculate the charge for a particular order. The system uses logic and various parameters to arrive at a default, but the pharmacy must have the discretion to revert the charge from whatever is determined by the system to the opposite setting (normal-to-alternate or alternate-to-normal).

During order creation, review or modification detailed order display includes Alternate Cost pricing status of the order as a Yes/No field, and allows override when available.

The options that provide presentation of this field are:

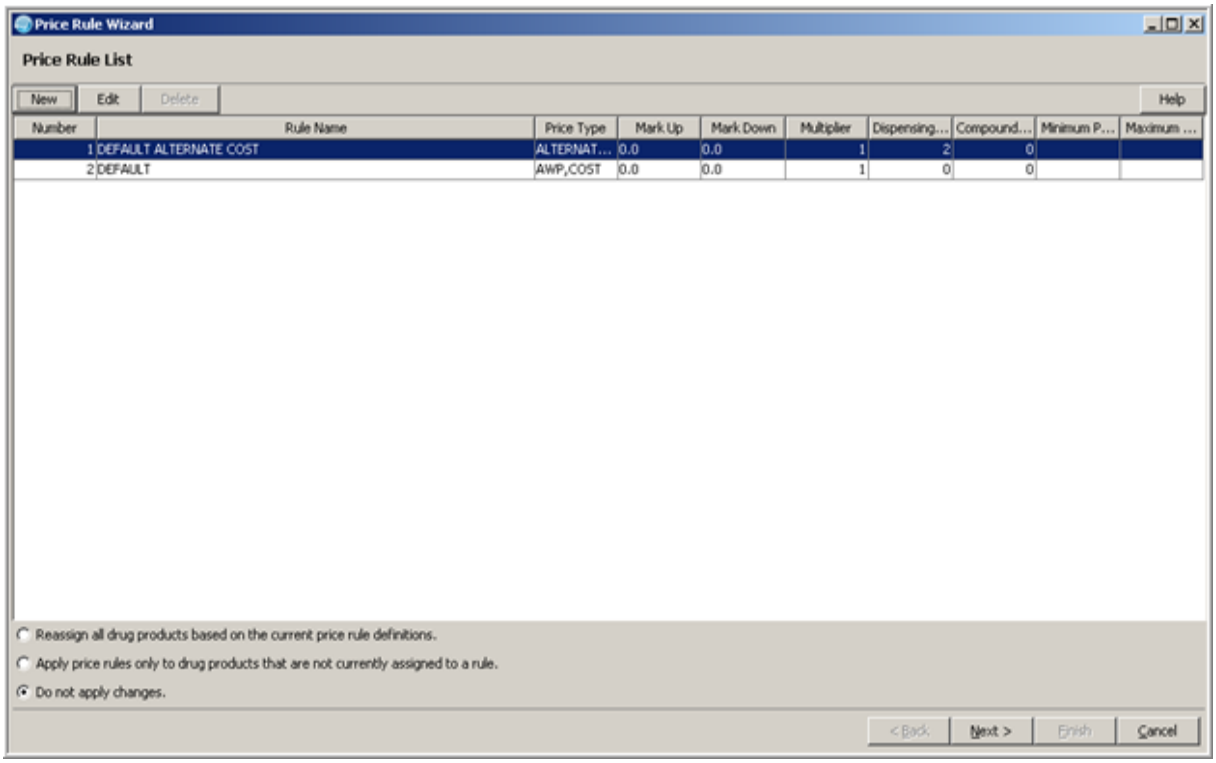
- PSJ OE – Inpatient Order Entry
- PSJU NE – Order Entry
- PSJU VBW – Non-Verified/Pending Orders

The following is the Order Detail Screen that appears after the serial prompts initiating the order entry process. This Edit View is where the 340B flag (Alternate Cost) is displayed and set on page 1 in the same column as the Stop Date (as shown, labeled (14)). The field does not appear at all when the order is not eligible.



Default Alternate Cost Rule (PE)

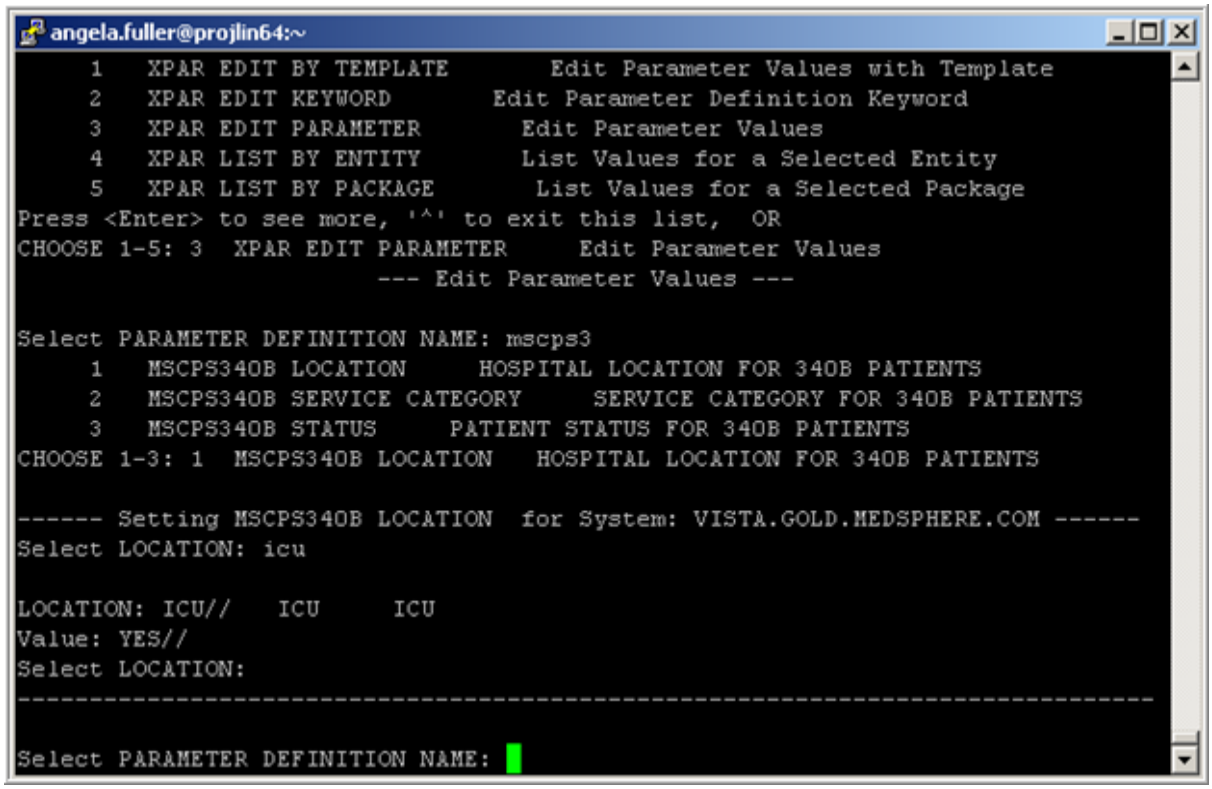
This is initially created by the installation. The 340B Rule is called Default Alternate Cost, and is similar to the Default Rule in that it is always available and cannot be deleted. Enter the desired charge formula calculation, which is usually the alternate cost as a base plus a fixed fee.



340B Patient Eligibility

Patients can be defined as *eligible for 340B* in OpenVista by setting the criteria as follows:

1. Use the **XPAR Edit Parameters Option** to select:
   - **MSCPS340B LOCATION** – Hospital Location for 340B Patients
   - **MSCPS340B SERVICE CATEGORY** – Service Category for 340B Patients
   - **MSCPS340B STATUS** – Patients Status for 340B Patients
2. Enter the **desired criteria** for **340B eligibility**. Multiple entries in a criterion and multiple criteria are allowed. If ANY of the criteria are met, then the patient is eligible.



340B Drugs and Costs

The Alternate Drug Cost information is kept in a file called Alternate Drug Cost. It is accessible for manual entry from FileMan. The Alternate Drug Cost file is linked to the drug by the NDC. In this first release, the system works with one active NDC as the Alternate drug. Multiple NDCs can be stored, but only one is active at a time.

Batch Loading 340B Drugs and Costs

Initially the Pharmacy obtains a file containing a list of eligible drugs and their 340B acquisition costs. The list for the upload must have five fields separated by pipe symbols (|). For example, Look-up NDC| NDC| drug name|cost|unit to which the cost applies (dispense unit). This file may come from the manufacturer, wholesaler, or may be prepared manually. The Drug file NDC (50.1,2) and the Alternate Cost NDC will be the same while that NDC is active. If there is a change to a different NDC, the current Alternate Cost NDC record becomes inactive, and the Drug file NDC will change to the new active NDC.

Batch File Upload

The Batch File Upload behaves like a delete-and-replace process, where all existing 340B prices are inactivated and the new list loaded. Manually altered entries are expected to be rare and temporary between updates. If a manual entry has been made and is not part of the next update, it will have to be re-entered after the update

The 340B price and unit are used in the Default Alternate Cost Rule when the order Alternate Cost Pricing Flag is set to yes.

When pricing a new order the *active* NDC and cost are used. The Pharmacy Pricing Engine may still use an *inactive* NDC/cost entry for retrospective charges.

Update File

The update uses the Drug file NDC as a look-up field to attach or update the Alternate Cost data from a file. Preparation of the update file requires that the first column is populated with the NDCs of the Drug records that are intended to be updated. The expectation is that pharmacy will generate a list of Drug file NDCs and manually match those up with the 340B list.

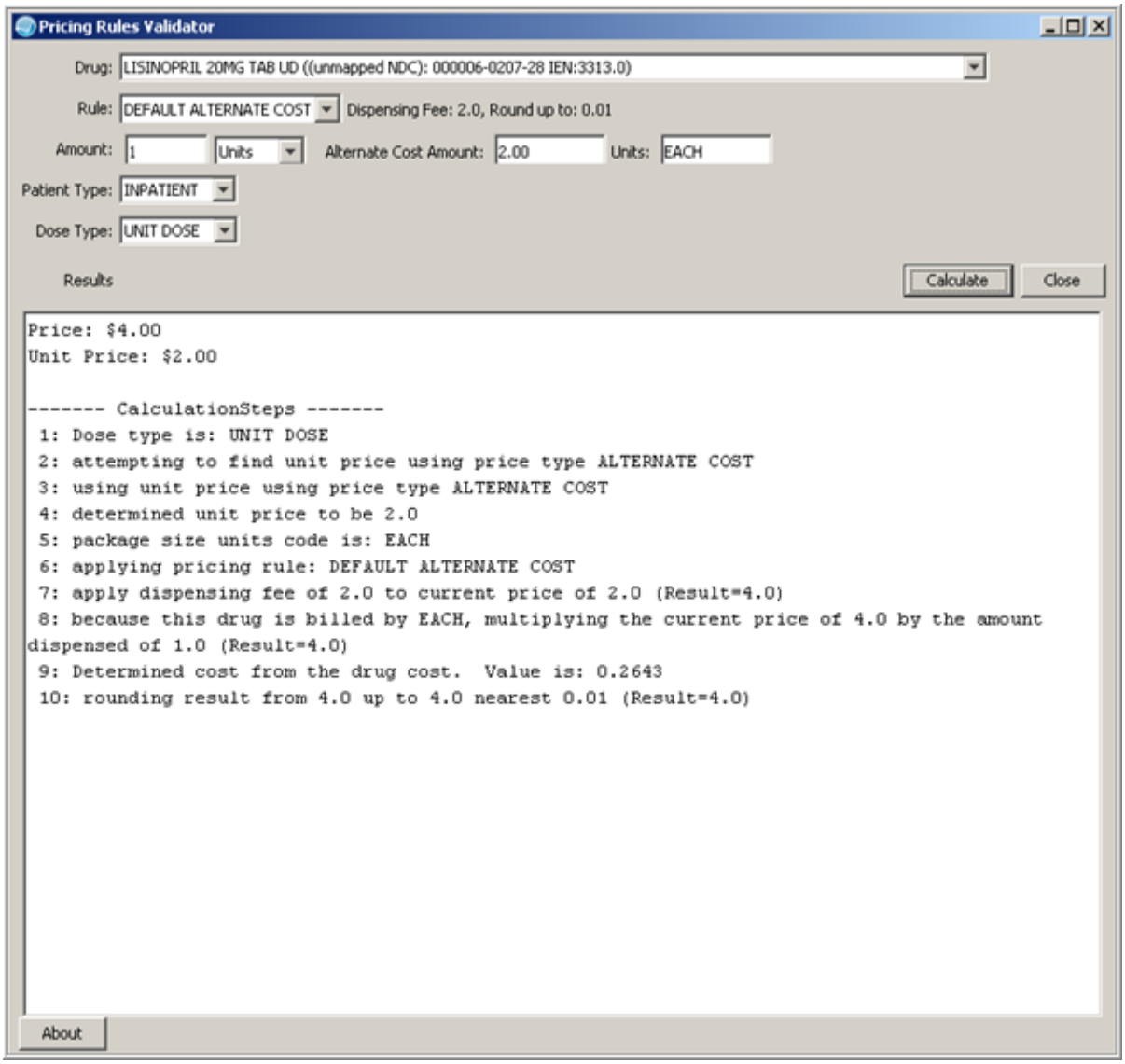
First, the update sets the Inactive Date of all active Alternate Cost entries to the current date. Then, the update creates new Alternate Cost entries for each drug that has an NDC matching the lookup NDC in the Update File. Cost and Unit are set from the corresponding row, and Active Date is set to the current date.

The following is an example of update process data relationships and data flow:

```
 Prior to update:
                 Drug File NDC: 000006-0106-58
             Alternate Cost NDC: <blank>
                 Alternate Cost: <blank>
            Alternate Cost Unit: <blank>
Alternate Cost Effective Date: <blank>
 Alternate Cost Inactive Date: <blank>

Update file for 01/15/2010:

(lookup NDC|NDC|description|cost|unit)

00006010658|00006010658|LISINOPRIL 10MG TAB |0.2247|TAB


After Update on 01/15/2010:

                 Drug File NDC: 000006-0106-58
             Alternate Cost NDC: 00006010658
                 Alternate Cost: 0.2247
            Alternate Cost Unit: TAB
Alternate Cost Effective Date: 01/15/2010
 Alternate Cost Inactive Date: <blank>

Update file for 02/15/2010:

(lookup NDC|NDC|description|cost|unit)

00006010658|00310013110|LISINOPRIL 10MG TAB |0.1645|TAB

After Update on 02/15/2010:

                 Drug File NDC: 00310-0131-10
             Alternate Cost NDC: 00310013110
                 Alternate Cost: 0.1645
            Alternate Cost Unit: TAB
Alternate Cost Effective Date: 02/15/2010
 Alternate Cost Inactive Date: <blank>
             Alternate Cost NDC: 00006010658
                 Alternate Cost: 0.2247
            Alternate Cost Unit: TAB
Alternate Cost Effective Date: 01/15/2010
 Alternate Cost Inactive Date: 02/15/2010
```

Pricing Validator: Support for Alternate Cost

The Pricing Validator includes logic to calculate an Alternate Cost charge when using the Default Alternate Cost pricing rule that includes as its price base, the Alternate Cost.



340B Usage File

The Pricing Engine configuration includes an option to extract usage data to a file to pass to the wholesaler/prime vendor for reconciliation. The file contains NDC, drug name, and quantity billed for each NDC. The file is run routinely for the predetermined period and is limited to charges created by 340B price rules as defined by the site in the Pharmacy Pricing Engine.

Usage File Process

In general, the process is as follows:

- Each day (or whatever period is chosen in the setup) the system creates the file.
- The pharmacy submits the file to the wholesaler by whatever means agreed to.
- The location and period of the file is configurable.
- The file consists of the following pipe-delimited fields:
  - NDC – 11 digit format
  - Dispense drug name
  - Quantity billed – subtotaled per each NDC
- The files created are named by date/time of creation (20100413-034920.txt).

The following is a sample 340B Usage file:

```
00409724101|EPINEPHRINE 1MG/1ML AMPUL|6
00409321805|METHYLPREDNISOLONE SO 125MG VIAL|14
00641037625|DIPHENHYDRAMIN 50MG/1ML 1ML VIAL|34
00517090225|KETOROLAC T 60MG/2ML VIAL|7
00378075101|CYCLOBENZAPRINE HCL 10MG TAB|4
58177000111|POTASSIUM CHLORIDE 10MEQ CAPSULE|6
00406035762|HYDROCODONE W/APAP 5/ 1TABLE TAB|41
00143985725|CEFTRIAXONE SODIUM 1GRAM VIAL|15
00378113401|KETOROLAC TROMETHAMINE 10MG TAB|56
00409909425|FENTANYL 50MCG/1ML 5ml VIAL|4
00049052083|PENICILLIN G POTASSIUM 5MU VIAL|1
00409230502|MIDAZOLAM 2MG/2ML VIAL|6
60505074401|ONDANSETRON HCL 4MG/2ML VIAL|17
51079098220|LISINOPRIL 10MG TABLET|1
00904404073|ASPIRIN 81MG TAB|24
00409117630|DEMEROL 25MG/1ML DISP SY|5
```