



RESOURCE AND PATIENT MANAGEMENT SYSTEM
IHS PHARMACY APPLICATIONS

IHS Pharmacy Modifications

APSP

Supplemental User Guide

Version 7.0 Patch 1025
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Preface

In 2015, the Office of the National Coordinator (ONC) for Health Information Technologies published the 2015 Edition set of rules related to the adoption of standards, implementation, and certification criteria for Electronic Health Record (EHR) technology. Indian Health Service (IHS) must meet these ONC 2015 certification requirements, which include new regulations around electronic prescribing (eRx) functions. The enhancements are scheduled to be released over several patches. The EHR patch 28 along with the IHS Pharmacy Modifications (namespace APSP) patch 1025 will include changes related to dosing and quantities.

For more information about the ONC 2015 Edition certification requirements relating to electronic prescribing, see the Electronic Prescribing page at ONC's HealthIT website at <https://www.healthit.gov/test-method/electronic-prescribing>.

1.0 Introduction

The purpose of this document is to provide information on the changes to the IHS Resource and Patient Management System (RPMS) Pharmacy Modifications (APSP) package. The changes are related to dosing and quantities for Outpatient, Inpatient, and Non-VA (also known as Outside) medication ordering and processing, including creating Local Possible Dosages.

This manual will describe the new parameters, and the effect on medication ordering and prescription processing. Changes consist of standardization of decimal dosing with regard to leading and trailing zeros, and also to allowable dosing units for oral liquid medications.

This manual is intended for pharmacy personnel.

This patch is APSP*7.0*1025. This patch should be installed prior to EHR*1.1*28 as described in the release notes and install guide.

2.0 Order Processing

Order processing may occur in two broad ways:

- Finishing orders that were placed in EHR by providers or their proxies.
- Entering orders from scratch in the RPMS Pharmacy package (backdoor entry).

Providers will be prevented from saving orders with invalid doses or quantities in the EHR, and similar validations will be performed on the dosage and quantity fields when orders are entered through the pharmacy package.

Validations include doses and quantities that include decimal numbers, where numbers will be required to have a leading zero if there is a decimal and the number is less than one (e.g., “0.5” and not “.5”), and must not have a trailing zero (e.g., “2” and not “2.0”). Additionally, medications that are oral liquid medications will have validation on the dose field to ensure that the doses are in metric units (milliliters or mL) and not household measurements or cubic centimeters (e.g., “5 mL” and not “1 teaspoonful”). For intravenous (IV) medications, the additive strength or volume, infusion rate, and total duration fields will also be validated for leading and trailing zeros.

2.1 Outpatient Medications

There will be no validation on pending orders being finished, unless the dose or quantity are edited as the validation in the EHR will prevent new orders from being saved with invalid doses or quantities moving forward. For backdoor entry of orders, there will be validation on the dosage and quantity fields.

Note: When a user enters an invalid dose (no leading zero, include a trailing zero, or using a dose unit that is not mL if the medication is an oral liquid), the system will reject the dose and the user will have to re-enter the dose.

Figure 2-1 displays the portions of the backdoor entry process, after the user has selected the **New Order** option.

Note: Error messages are in bold font for visibility; however, they display in normal font within RPMS.

```
Select Action: Quit// NO   New Order

Eligibility:
RX PATIENT STATUS: OUTPATIENT//
DRUG: METOCLOPRAMIDE HCL 5MG/5ML (SF) SYRUP      AU300      00121-0576-16
      ...OK? Yes//   (Yes)

METOCLOPRAMIDE HCL 5MG/5ML (SF) SYRUP requires an FDA medication guide.
```

Please take appropriate action and print a patient medication guide if necessary.

Enter RETURN to continue or '^' to exit: //

Now doing drug interaction and allergy checks. Please wait...

VERB: TAKE

Available Dosage(s)

1. Please Enter a Free Text Dosage.

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: .5ML .5ML

You entered .5ML is this correct? Yes// YES

A fractional number .5ML must have a number to the left of the decimal.

VERB: TAKE

Available Dosage(s)

1. Please Enter a Free Text Dosage.

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 5.0ML 5.0ML

You entered 5.0ML is this correct? Yes// YES

A fractional number 5.0ML may not have a trailing zero

VERB: TAKE

Available Dosage(s)

1. Please Enter a Free Text Dosage.

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 TEASPOONFUL 1 TEASPOONFUL

You entered 1 TEASPOONFUL is this correct? Yes// YES

Dosage units for Oral Liquids must be standard metric units.

VERB: TAKE

Available Dosage(s)

1. Please Enter a Free Text Dosage.

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 5 ML 5 ML

You entered 5 ML is this correct? Yes// YES

VERB: TAKE

ROUTE: PO// ORAL PO BY MOUTH

Schedule: TID (THREE TIMES A DAY)

LIMITED DURATION (IN DAYS, HOURS OR MINUTES):

CONJUNCTION:

PATIENT INSTRUCTIONS: BEFORE A MEAL

BEFORE A MEAL

(TAKE 5 ML BY MOUTH THREE TIMES A DAY BEFORE A MEAL)

NDC : 00121-0576-16// 00121-0576-16

BENCHMARK PRICE : 0.062360// 0.062360

UNIT PRICE OF DRUG: 0.056600// 0.056600

DAYS SUPPLY: (1-365): 30//

QTY (ML) : .12

```

A fractional number .12 must have a number to the left of the decimal.
QTY ( ML ) : 120.0
A fractional number 120.0 may not have a trailing zero
QTY ( ML ) : 120
COPIES: 1// 1

```

Figure 2-1: Portion of Backdoor Entry Process

2.2 Unit Dose Medications

There will be no validation on pending orders being finished as the validation in EHR will prevent new orders from being saved with invalid doses, unless the dose is edited. For backdoor entry of orders, there will be validation on the dose field for leading and trailing zeros only.

Note: When a user enters an invalid dose (no leading zero, include a trailing zero), the system will reject the dose and the user will have to re-enter the dose.

This system is slightly different from the outpatient side, and the user may or may not be brought back to the dose field, depending on the site and drug file set up. If the user is not brought back to the dose field, typing a caret (^) will trigger the system to return to the dose field.

Figure 2-2 displays the relevant portions of the backdoor entry process, after the user has selected the **New Order** option.

Note: There is no validation for the oral liquid dosage form and metric dose units. Error messages are in bold font for visibility but display in normal font within RPMS.

```

Select Action: View Profile// NO   New Order Entry

Select DRUG: METRONID
Lookup: GENERIC NAME
  1  METRONIDAZOLE 0.75% GEL          DE101  -1217    00299-3835-28
2017 DEMO CLINIC
  2  METRONIDAZOLE 50MG/ML SUSPENSION AM900   21.2     65628-0202-05
CHOOSE 1-2: 2 METRONIDAZOLE 50MG/ML SUSPENSION AM900   21.2     65628-0202-05

Available Dosage(s)
  1.   5ML
  2.  10ML

Select from list of Available Dosages or Enter Free Text Dose: .5 ML
A fractional number .5 must have a number to the left of the decimal.

Available Dosage(s)
  1.   5ML
  2.  10ML

```

```

Select from list of Available Dosages or Enter Free Text Dose: 5.0 ML
A fractional number 5.0 may not have a trailing zero

Available Dosage(s)
  1.    5ML
  2.   10ML

Select from list of Available Dosages or Enter Free Text Dose: 1
TEASPOONFUL

You entered 1 TEASPOONFUL is this correct? Yes//   YES
UNITS PER DOSE: 1//
MED ROUTE: ORAL//

```

Figure 2-2: Portions of the backdoor process – New Order option

2.3 Intravenous Medications

There will be no validation on pending orders being finished unless the dose is edited as the validation in EHR will prevent new orders from being saved with invalid doses or infusion rates moving forward.

For backdoor entry of orders, there will be validation on the dose field for leading and trailing zeros only.

Note: When a user enters an invalid dose (no leading zero, include a trailing zero), the system will reject the dose and the user will have to re-enter the dose.

This system is slightly different from the outpatient side, and the user may or may not be brought back to the dose field, depending on the site and drug file set up. If the user is not brought back to the dose field, typing a caret (^) will trigger the system to return to the dose field.

Figure 2-3 displays the relevant portions of the backdoor entry process for an admixture, after the user has selected the **New Order** option.

Note: Error messages are in bold font, but display in normal font within RPMS.

```

Select Action: View Profile// NO   New Order Entry

Select DRUG:

Select IV TYPE: ADMIXTURE.
Select ADDITIVE:
Select SOLUTION: SODIUM
  1   SODIUM CHLORIDE 0.9%           50 ML

```

```

2   SODIUM CHLORIDE 0.9%           1000 ML
3   SODIUM CHLORIDE 0.9%           100 ML

CHOOSE 1-3: 2   SODIUM CHLORIDE 0.9%           1000 ML

INFUSION RATE: 10.0
A fractional number 10.0 may not have a trailing zero
INFUSION RATE: .9
A fractional number .9 must have a number to the left of the decimal.
INFUSION RATE: 125 ml/hr

```

Figure 2-3: Backdoor process for an Admixture

Figure 2-4 displays the relevant portions of the backdoor entry process for a piggyback, after the user has selected the **New Order** option.

Note: Error messages are in bold font, but display in normal font within RPMS.

```

Select IV TYPE: PIGGYBACK.
Select ADDITIVE: AMPICILLIN

(The units of strength for this additive are in GM)
Strength: .5
A fractional number .5 must have a number to the left of the decimal.
Strength: 1.0
A fractional number 1.0 may not have a trailing zero
Strength: 1   1 GM
Select ADDITIVE:
Select SOLUTION: SODIUM
1   SODIUM CHLORIDE 0.9%           50 ML
2   SODIUM CHLORIDE 0.9%           1000 ML
3   SODIUM CHLORIDE 0.9%           100 ML

CHOOSE 1-3: 1   SODIUM CHLORIDE 0.9%           50 ML

INFUSION RATE: .9
A fractional number .9 must have a number to the left of the decimal.
INFUSION RATE: 10.0
A fractional number 10.0 may not have a trailing zero
INFUSION RATE: 30   INFUSE OVER 30 MINUTES
MED ROUTE: IVPB   IV PIGGYBACK           IVPB

```

Figure 2-4: Backdoor process for piggyback

Other types of IVs will fit into one of these patterns for fields that are validated:

- The strength of an additive
- The volume of the solution for a syringe

The infusion rate will all be validated.

2.4 Non-VA (Outside) Medications

Non-VA medications may not be documented in the Pharmacy package. See the *Electronic Health Record EHR Patch 28 Addendum to User Manual (ehr_0110.28o)* for information on entering Non-VA medications in the EHR.

3.0 Pharmacy Data Management – Dose Creation

3.1 Possible Doses

Possible dosages are created based on factors such as:

- The National Drug File (NDF) matching
- The listed strength of the medication
- The listed units of the medication

For outpatient use, these doses will read correctly in terms of leading and trailing zeros in the orders and prescriptions, even if they do not appear to read correctly when creating and editing doses.

Note: Possible Doses are not available for use in outpatient orders and prescriptions for oral liquid medications, so the metric unit validation is not used on Possible Doses.

The system will not accept trailing zeros but does allow no leading zeros when entering the number of units. These are then translated to the metric unit based on the listed strength.

Figure 3-1 displays the Possible Dose creation:

```
Select Drug: AMOXICILLIN
  1  AMOXICILLIN 1000MG/CLAV K 62.5MG SA TAB   AM111      43598-0220-40
  2  AMOXICILLIN 125 MG/5 ML SUSP              04-30-79    00093-4150-80
  3  AMOXICILLIN 125MG/5ML SUSP               AM111      00143-9888-01
  4  AMOXICILLIN 125MG/5ML SUSP 150ML        AM111      -4200      00093-4150-80
  5  AMOXICILLIN 200MG/5ML SUSP               AM111      -2400      00093-4160-76
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 3  AMOXICILLIN 125MG/5ML SUSP    AM111      00143-9888-01

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

AMOXICILLIN 125MG/5ML SUSP                      Inactive Date:

Strength from National Drug File match => 125    MG/5ML
Strength currently in the Drug File    => 125

Edit Strength? N// O

Strength => 125    Unit =>

Select DISPENSE UNITS PER DOSE: ?
Answer with POSSIBLE DOSAGES DISPENSE UNITS PER DOSE:
1    125    I
```

```

2      250      I

      You may enter a new POSSIBLE DOSAGES, if you wish
      Type a Number between 0 and 99999999, 4 Decimal Digits

Select DISPENSE UNITS PER DOSE: .5
  Are you adding '.5' as a new POSSIBLE DOSAGES (the 3RD for this DRUG)?
No// Y
  (Yes)
  Dosage = 62.5MG/2.5ML
  POSSIBLE DOSAGES DOSE: 62.5//   (No Editing)

DISPENSE UNITS PER DOSE: .5//
PACKAGE: I

Strength => 125   Unit =>

Select DISPENSE UNITS PER DOSE: 1.0 ??

Select DISPENSE UNITS PER DOSE: 3.0 ??

Select DISPENSE UNITS PER DOSE: ?
  Answer with POSSIBLE DOSAGES DISPENSE UNITS PER DOSE
  Choose from:
  .5      62.5      I
  1       125      I
  2       250      I

      You may enter a new POSSIBLE DOSAGES, if you wish
      Type a Number between 0 and 99999999, 4 Decimal Digits

Select DISPENSE UNITS PER DOSE:

```

Figure 3-1: Possible Dose creation

3.2 Local Possible Doses

Local Possible Doses are built locally for the site. These are free text entries that are used exactly as entered in the orders and prescriptions, and require validation for both leading and trailing zeros, and for metric units for oral liquid medications.

Figure 3-2 displays the Local Possible Dose creation.

Note: Error messages are in bold font, but display in normal font within RPMS.

```

Select Drug: AMOXICILLIN
  1  AMOXICILLIN 1000MG/CLAV K 62.5MG SA TAB   AM111      43598-0220-40
  2  AMOXICILLIN 125 MG/5 ML SUSP              04-30-79   00093-4150-80
  3  AMOXICILLIN 125MG/5ML SUSP              AM111      00143-9888-01
  4  AMOXICILLIN 125MG/5ML SUSP 150ML      AM111      -4200     00093-4150-80
  5  AMOXICILLIN 200MG/5ML SUSP              AM111      -2400     00093-4160-76
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 3  AMOXICILLIN 125MG/5ML SUSP   AM111      00143-9888-01

```

```

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

AMOXICILLIN 125MG/5ML SUSP                               Inactive Date:

Strength from National Drug File match => 125           MG/5ML
Strength currently in the Drug File    => 125

Edit Strength? N// O

Strength => 125      Unit =>

Select DISPENSE UNITS PER DOSE:

Strength: 125                               Unit: MG/5ML

Select LOCAL POSSIBLE DOSAGE: ?
  Answer with LOCAL POSSIBLE DOSAGE
  Choose from:
  2.5 ML      IO
  2 ML        IO
  5 ML        IO

      You may enter a new LOCAL POSSIBLE DOSAGE, if you wish
      Answer must be 1-60 characters in length.

Select LOCAL POSSIBLE DOSAGE: .5
A fractional number .5 must have a number to the left of the decimal.
Dosage units for Oral Liquids must be standard metric units. ??

Select LOCAL POSSIBLE DOSAGE: .5 ML
A fractional number .5 must have a number to the left of the decimal. ??

Select LOCAL POSSIBLE DOSAGE: 5.0 ML
A fractional number 5.0 may not have a trailing zero ??

Select LOCAL POSSIBLE DOSAGE: 1 TEASPOONFUL
Dosage units for Oral Liquids must be standard metric units. ??

Select LOCAL POSSIBLE DOSAGE: 5 CC
Dosage units for Oral Liquids must be standard metric units. ??

Select LOCAL POSSIBLE DOSAGE: 1 TEASPOONFUL (5 ML)
Dosage units for Oral Liquids must be standard metric units. ??

Select LOCAL POSSIBLE DOSAGE:

```

Figure 3-2: Local Possible Dose creation

4.0 Configuration

4.1 New Parameters

4.1.1 APSP Liquid Metric Units

This parameter holds the terms that are allowed as dose units for an oral liquid medication. This parameter is set automatically on install. Sites must not alter this parameter unless directed to do so by the National team.

4.1.2 APSP Restricted Liquid Terms

This parameter holds the terms that are not allowed as dose units for an oral liquid medication. This parameter is set automatically on install. Sites must not alter this parameter unless directed to do so by the National team.

4.2 New Fields

There is one new field in the Dosage Form (#50.606) file. Field **#9999999.02 Liquid** will be marked **yes** to indicate that the dosage form is an oral liquid item. This field is set automatically on install. Sites must not change this designation unless directed to do so by the National team.

Appendix A Search for Doses with Decimals

The following search recipe allows a site to search for active drugs with local possible doses that include a decimal. This search will print out all Local Possible Doses, and not just those doses that are out of compliance.

Warning: Searches must be run on a client that can log the session or output the information as a text file. The telnet client that is embedded in the EHR will not allow for these functions. The most common telnet clients in use in IHS currently are SecureCRT and NetTerm, both of which can log sessions.

A.1 Long Version with Explanations

1. Navigate to the **FileMan** (FM) menu and select the **SEARCH** option.
2. Select the **DRUG** file.

```
Select VA FileMan Option: SEARCH File Entries

OUTPUT FROM WHAT FILE: DOSAGE FORM// DRUG
  1  DRUG                                     (5419 entries)
  2  DRUG ACCOUNTABILITY ORDER               (0 entries)
  3  DRUG ACCOUNTABILITY STATS               (2 entries)
  4  DRUG ACCOUNTABILITY TRANSACTION         (0 entries)
  5  DRUG ACCOUNTABILITY TRANSACTION TYPE   (23 entries)
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1  DRUG                         (5419 entries)
```

Figure A-1: Drug file

3. Ensure we are only looking at active drugs by searching for a **Null Inactive Date** field.

```
-A- SEARCH FOR DRUG FIELD: INACTIVE DATE
-A- CONDITION: NULL
```

Figure A-2: Search for Null Inactive Date field

4. Search the **Local Possible Dosage** subfield of the **Local Possible Dosage** field for a decimal point.

```
-B- SEARCH FOR DRUG FIELD: LOCAL POSSIBLE DOSAGE      (multiple)

  -B- SEARCH FOR DRUG LOCAL POSSIBLE DOSAGE SUB-FIELD: LOCAL POSSIBLE
  DOSAGE
  -B- CONDITION: CONTAINS
  -B- CONTAINS: .
```

Figure A-3: Search for Local Possible Dosage field/subfield

5. Bypass the remaining questions and enter the criteria for the search.

```

-C- SEARCH FOR DRUG LOCAL POSSIBLE DOSAGE SUB-FIELD:

-C- SEARCH FOR DRUG FIELD:

IF: AB      INACTIVE DATE NULL      and DRUG LOCAL POSSIBLE DOSAGE CONTAINS "."

DO YOU WANT THIS SEARCH SPECIFICATION TO BE CONSIDERED TRUE FOR CONDITION -
B-
    1) WHEN AT LEAST ONE OF THE 'LOCAL POSSIBLE DOSAGE' MULTIPLES
SATISFIES IT
    2) WHEN ALL OF THE 'LOCAL POSSIBLE DOSAGE' MULTIPLES SATISFY IT
CHOOSE 1-2: 1//

OR:

```

Figure A-4: Entering search criteria

6. Bypass storing the search as a template and set the output.

```

STORE RESULTS OF SEARCH IN TEMPLATE:

SORT BY: GENERIC NAME//
START WITH GENERIC NAME: FIRST//
FIRST PRINT FIELD: NUMBER;L5
THEN PRINT FIELD: GENERIC NAME;L50
THEN PRINT FIELD: LOCAL POSSIBLE DOSAGE      (multiple)
    THEN PRINT LOCAL POSSIBLE DOSAGE SUB-FIELD: LOCAL POSSIBLE DOSAGE;L60
    THEN PRINT LOCAL POSSIBLE DOSAGE SUB-FIELD: PACKAGE;L10
    THEN PRINT LOCAL POSSIBLE DOSAGE SUB-FIELD:
THEN PRINT FIELD:
Heading (S/C): DRUG SEARCH//
STORE PRINT LOGIC IN TEMPLATE:

```

Figure A-5: Set the output

7. Set your telnet client to 180 columns and turn on logging, then print the results.

```

DEVICE: 0;180;9999 TELNET

```

Figure A-6: Setting telnet client columns

8. Retrieve the log and open it with your preferred text editor (Word, Notepad, etc.) or spreadsheet (Excel, etc.) program. The output will display similar to Figure A-7 (though the width was edited for fit). Review the entries for leading and trailing zeros.

Note: All doses will be output, not just the ones with decimals.

The goal is to make sure that all dose entries with decimals have a leading zero if they are less than 1 (e.g., “0.5” rather than “.5”) and do not have trailing zeros (e.g. “1” not “1.0”). Some incorrect (and exaggerated) examples are notated in **bold font**.

Note: The entry with the letter “O” instead of the number “0” on the tetanus/diphtheria injection:

DRUG SEARCH		FEB 14, 2020 10:35		PAGE 1
NUMBER	GENERIC NAME	LOCAL	POSSIBLE DOSAGE	PACKAGE
86427	ACETAMINOPHEN/COD #3 TABLET	1		Both
		2		Both
		1-2		Both
		1 TABLET		Both
		.5		Both
		1.0		Both
87711	ADALIMUMAB 40MG/0.8ML PEN	1 MG		Both
		0.8ML		Both
83611	AMOXICILLIN 250MG/5ML SUSP	5ML		Both
		10ML		Outpatient
		2.5ML		Outpatient
		.75ML		Outpatient
		2.0ML		Outpatient
		1.0 ML		Outpatient
		.5 ML		Outpatient
		6.0ML DOSE		Outpatient
88531	CROMOLYN 100MG/5ML ORAL SOL	.2500 ML		Both
87932	SIROLIMUS 1MG/ML SOL	0.5MLS		Both
87802	TDAP (ADACEL) VACCINE	0.5ML		Both
1341	TETANUS/DIPHTHERIA TOXOID INJ	O.5ML		Both

7 MATCHES FOUND.

Figure A-7: Log output

A.2 Copy and Paste Version

1. Navigate to the **FM Search** option and select the **Drug** file.
2. Ensure your telnet client is set to 180 columns and logging is turned on.
3. Copy everything in the box below and paste it into RPMS at the “-A- SEARCH FOR DRUG FIELD:” prompt.
4. Review output and ensure that all Local Possible Doses with decimals have leading zeros if less than 1, and no trailing zeros exist (e.g., “0.5” not “.5”; “1” not “1.0”).

Note: Entries that have a letter “O” instead of the number “0” for a leading character may display.

```
INACTIVE DATE
NULL
LOCAL POSSIBLE DOSAGE
LOCAL POSSIBLE DOSAGE
CONTAINS
.

AB

NUMBER;L5
GENERIC NAME;L50
LOCAL POSSIBLE DOSAGE
LOCAL POSSIBLE DOSAGE;L60
PACKAGE;L10

0;180;9999
```

Figure A-8: Copy and paste version

Appendix B Search for Oral Liquids

New rules state that all oral liquids must be dosed in mL only. This means that local possible doses created at the site that include teaspoon, tablespoon, cubic centimeters (cc), or variations of these terms, are no longer allowed even if used in conjunction with “mL” (e.g., “5 ML” is acceptable but “5 ML (1 TEASPOONFUL)” is not).

Note: The requirement applies to outpatient medications only.

This search will print out all Local Possible Doses, and not just those doses that are out of compliance.

Warning: This search involves a very large number of conditions. It is recommended to use the Copy and Paste version in section B.2.

B.1 Long Version with Explanations

1. Navigate to the **FileMan** (FM) menu and select the **SEARCH** option.
2. Select the **DRUG** file:

```
Select VA FileMan Option: SEARCH File Entries

OUTPUT FROM WHAT FILE: DOSAGE FORM// DRUG
  1  DRUG (5419 entries)
  2  DRUG ACCOUNTABILITY ORDER (0 entries)
  3  DRUG ACCOUNTABILITY STATS (2 entries)
  4  DRUG ACCOUNTABILITY TRANSACTION (0 entries)
  5  DRUG ACCOUNTABILITY TRANSACTION TYPE (23 entries)
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 DRUG (5419 entries)
```

Figure B-1: Select Drug file

3. Ensure we are only looking at active drugs by searching for a **Null Inactive Date** field:

```
-A- SEARCH FOR DRUG FIELD: INACTIVE DATE
-A- CONDITION: NULL
```

Figure B-2: Null Inactive Date field

4. Locate the drugs that are linked to an oral liquid dosage form.

The dosage forms in RPMS that are currently considered to be “Oral Liquids” are:

- DROPS,ORAL
- ELIXIR

- EMULSION
- FLUID EXTRACT
- GEL,ORAL
- LIQUID
- LIQUID(SF)
- LIQUID,NUTRITIONAL SUPPLEMENT
- LIQUID,ORAL
- PWDR,RENST-ORAL
- SOLN
- SOLN,CONC
- SOLN,ORAL
- SUSP
- SUSP,ORAL
- SUSP,SA
- SYRUP
- SYRUP,ORAL
- TINCTURE,ORAL

For this search, we are linking from the drug file to the pharmacy orderable item file to get this information. Ensure the search criteria is entered exactly as shown to create the link.

Warning: Do not use any “contains” criteria as you will end up with dosage forms that are not oral liquids.

```
-B- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
  By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-B- CONDITION: EQUALS
-B- EQUALS: DROPS,ORAL

-C- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
  By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-C- CONDITION: EQUALS
-C- EQUALS: ELIXIR

-D- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
  By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-D- CONDITION: EQUALS
-D- EQUALS: EMULSION

-E- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
```

```

By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-E- CONDITION: EQUALS
-E- EQUALS: FLUID EXTRACT

-F- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-F- CONDITION: EQUALS
-F- EQUALS: GEL,ORAL

-G- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-G- CONDITION: EQUALS
-G- EQUALS: LIQUID

-H- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-H- CONDITION: EQUALS
-H- EQUALS: LIQUID(SF)

-I- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-I- CONDITION: EQUALS
-I- EQUALS: LIQUID,NUTRITIONAL SUPPLEMENT

-J- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-J- CONDITION: EQUALS
-J- EQUALS: LIQUID,ORAL

-K- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-K- CONDITION: EQUALS
-K- EQUALS: PWDR,RENST-ORAL

-L- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-L- CONDITION: EQUALS
-L- EQUALS: SOLN

-M- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-M- CONDITION: EQUALS
-M- EQUALS: SOLN,CONC

-N- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-N- CONDITION: EQUALS
-N- EQUALS: SOLN,ORAL

-O- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-O- CONDITION: EQUALS
-O- EQUALS: SUSP

-P- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-P- CONDITION: EQUALS

```

```

-P- EQUALS: SUSP,ORAL

-Q- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
  By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-Q- CONDITION: EQUALS
-Q- EQUALS: SUSP,SA

-R- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
  By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-R- CONDITION: EQUALS
-R- EQUALS: SYRUP

-S- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
  By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-S- CONDITION: EQUALS
-S- EQUALS: SYRUP,ORAL

-T- SEARCH FOR DRUG FIELD: 2.1:DOSAGE FORM
  By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes// (Yes)
-T- CONDITION: EQUALS
-T- EQUALS: TINCTURE,ORAL

```

Figure B-3: Search criteria for Drug field

5. Bypass the remaining questions and enter the combinations of criteria to search.

```

-U- SEARCH FOR DRUG FIELD:

IF: AB      INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "DROPS,ORAL"
OR: AC      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "ELIXIR"
OR: AD      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "EMULSION"
OR: AE      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "FLUID
EXTRACT"
OR: AF      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "GEL,ORAL"
OR: AG      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "LIQUID"
OR: AH      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "LIQUID(SF)"
OR: AI      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive)
"LIQUID,NUTRITIONAL SUPPLEMENT"
OR: AJ      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive)
"LIQUID,ORAL"
OR: AK      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "PWDR,RENST-
ORAL"
OR: AL      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SOLN"
OR: AM      Or INACTIVE DATE NULL
           and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SOLN,CONC"

```

```

OR: AN      Or INACTIVE DATE NULL
              and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SOLN,ORAL"
OR: AO      Or INACTIVE DATE NULL
              and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SUSP"
OR: AP      Or INACTIVE DATE NULL
              and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SUSP,ORAL"
OR: AQ      Or INACTIVE DATE NULL
              and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SUSP,SA"
OR: AR      Or INACTIVE DATE NULL
              and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SYRUP"
OR: AS      Or INACTIVE DATE NULL
              and 2.1:DOSAGE FORM EQUALS (case-insensitive) "SYRUP,ORAL"
OR: AT      Or INACTIVE DATE NULL
              and 2.1:DOSAGE FORM EQUALS (case-insensitive)
"TINCTURE,ORAL"
OR:

```

Figure B-4: Enter criteria for combinations to search

6. Bypass storing the search as a template and set the output.

```

STORE RESULTS OF SEARCH IN TEMPLATE:

SORT BY: GENERIC NAME//
START WITH GENERIC NAME: FIRST//
FIRST PRINT FIELD: .001;L5  NUMBER
THEN PRINT FIELD: .01;L50  GENERIC NAME
THEN PRINT FIELD: 2.1:DOSAGE FORM;L45
      By '2.1', do you mean DRUG 'PHARMACY ORDERABLE ITEM'? Yes//      (Yes)
THEN PRINT FIELD: LOCAL POSSIBLE DOSAGE      (multiple)
      THEN PRINT LOCAL POSSIBLE DOSAGE SUB-FIELD: .01;L60  LOCAL POSSIBLE
DOSAGE
      THEN PRINT LOCAL POSSIBLE DOSAGE SUB-FIELD: 1;L10  PACKAGE
      THEN PRINT LOCAL POSSIBLE DOSAGE SUB-FIELD:
THEN PRINT FIELD:
Heading (S/C): DRUG SEARCH//
STORE PRINT LOGIC IN TEMPLATE:

```

Figure B-5: Set the output

7. If needed, set your telnet client to 180 columns and turn on logging, then print the results.

```

DEVICE: 0;180;9999  TELNET

```

Figure B-6: Printed results

8. Retrieve the log and open it with your preferred text editor (Word, Notepad, etc.) or spreadsheet (Excel, etc.) program. The output will display like Figure B-7 (though the example is edited for width).
9. Review the entries for doses that contain any values other than mL/milliliters.

Note: All doses will be output, though not all doses will be a problem.

The goal is to make sure that all doses are expressed in only mL/milliliters. Some incorrect examples are notated in **bold font**:

DRUG SEARCH				FEB 14, 2020 17:33	PAGE 1
NUMBER	GENERIC NAME	2.1:DOSAGE FORM	LOCAL	POSSIBLE DOSAGE	PACKAGE
3958	ACETAMINOPHEN/CODEINE SOLN	SOLN,ORAL		1 TSP	Both
87068	AMOX TR-K CLV 400-57/5 SUSP	PWDR,RENST-ORAL		1/2 TEASPOONFUL	Both
85065	AZITHROMYCIN 100MG/5ML SUSP	SUSP		1 TABLESPOON	Both
88527	CASTOR OIL 60% ORAL EMULS	EMULSION		1 TSP (5ML)	Both
85732	CETIRIZINE 1MG/ML SYRUP	SYRUP,ORAL		5ML (1 TEASPOONFUL)	Both
87994	CYPROHEPTADINE HCL SYRUP	SYRUP		5 CC	Both
87619	DIPHEN/ANTACID/LIDOCAINE	SUSP,ORAL		10 ML	Both
88529	DM-GG-PHENYLEPH SOLN	LIQUID(SF)		6ML	Both

8 MATCHES FOUND.

Figure B-7: Examples of incorrect doses

B.2 Copy and Paste Version

1. Navigate to the **FM Search** option and select the **Drug** file.
2. Ensure your telnet client is set to 180 columns and logging is turned on.
3. Copy everything in the box below and paste it into RPMS at the “-A- SEARCH FOR DRUG FIELD:” prompt.
4. Review output and ensure that all Local Possible Doses for these dosage forms are only in mL/milliliters.

Note: Entries including both mL and teaspoons or other measurements are not allowed.

```

INACTIVE DATE
NULL
2.1:DOSAGE FORM

EQUALS
DROPS, ORAL
2.1:DOSAGE FORM

EQUALS
ELIXIR
2.1:DOSAGE FORM

EQUALS

```

EMULSION
2.1:DOSAGE FORM

EQUALS
FLUID EXTRACT
2.1:DOSAGE FORM

EQUALS
GEL, ORAL
2.1:DOSAGE FORM

EQUALS
LIQUID
2.1:DOSAGE FORM

EQUALS
LIQUID (SF)
2.1:DOSAGE FORM

EQUALS
LIQUID, NUTRITIONAL SUPPLEMENT
2.1:DOSAGE FORM

EQUALS
LIQUID, ORAL
2.1:DOSAGE FORM

EQUALS
PWDR, RENST-ORAL
2.1:DOSAGE FORM

EQUALS
SOLN
2.1:DOSAGE FORM

EQUALS
SOLN, CONC
2.1:DOSAGE FORM

EQUALS
SOLN, ORAL
2.1:DOSAGE FORM

EQUALS
SUSP
2.1:DOSAGE FORM

EQUALS
SUSP, ORAL
2.1:DOSAGE FORM

EQUALS
SUSP, SA
2.1:DOSAGE FORM

EQUALS
SYRUP

```
2.1:DOSAGE FORM
```

```
EQUALS
```

```
SYRUP, ORAL
```

```
2.1:DOSAGE FORM
```

```
EQUALS
```

```
TINCTURE, ORAL
```

```
AB
```

```
AC
```

```
AD
```

```
AE
```

```
AF
```

```
AG
```

```
AH
```

```
AI
```

```
AJ
```

```
AK
```

```
AL
```

```
AM
```

```
AN
```

```
AO
```

```
AP
```

```
AQ
```

```
AR
```

```
AS
```

```
AT
```

```
.001;L5
```

```
.01;L50
```

```
2.1:DOSAGE FORM;L45
```

```
LOCAL POSSIBLE DOSAGE
```

```
.01;L60
```

```
1;L10
```

```
0;180;99999
```

Figure B-8: Copy and paste version 2

Appendix C Rules of Behavior

The Resource and Patient Management (RPMS) system is a United States Department of Health and Human Services (HHS), Indian Health Service (IHS) information system that is **FOR OFFICIAL USE ONLY**. The RPMS system is subject to monitoring; therefore, no expectation of privacy shall be assumed. Individuals found performing unauthorized activities are subject to disciplinary action including criminal prosecution.

All users (Contractors and IHS Employees) of RPMS will be provided a copy of the Rules of Behavior (ROB) and must acknowledge that they have received and read them prior to being granted access to a RPMS system, in accordance with IHS policy.

- For a listing of general ROB for all users, see the most recent edition of *IHS General User Security Handbook* (SOP 06-11a).
- For a listing of system administrators/managers rules, see the most recent edition of the *IHS Technical and Managerial Handbook* (SOP 06-11b).

Both documents are available at this IHS Web site:

<https://home.ihs.gov/security/index.cfm>.

<p>Note: Users must be logged on to the IHS D1 Intranet to access these documents.</p>

The ROB listed in the following sections are specific to RPMS.

C.1 All RPMS Users

In addition to these rules, each application may include additional ROB that may be defined within the documentation of that application (e.g., Dental, Pharmacy).

C.1.1 Access

RPMS users shall

- Only use data for which you have been granted authorization.
- Only give information to personnel who have access authority and have a need to know.
- Always verify a caller's identification and job purpose with your supervisor or the entity provided as employer before providing any type of information system access, sensitive information, or nonpublic agency information.
- Be aware that personal use of information resources is authorized on a limited basis within the provisions *Indian Health Manual* Part 8, "Information Resources Management," Chapter 6, "Limited Personal Use of Information Technology Resources."

RPMS users shall not:

- Retrieve information for someone who does not have authority to access the information.
- Access, research, or change any user account, file, directory, table, or record not required to perform their *official* duties.
- Store sensitive files on a PC hard drive, or portable devices or media, if access to the PC or files cannot be physically or technically limited.
- Exceed their authorized access limits in RPMS by changing information or searching databases beyond the responsibilities of their jobs or by divulging information to anyone not authorized to know that information.

C.1.2 Information Accessibility

RPMS shall restrict access to information based on the type and identity of the user. However, regardless of the type of user, access shall be restricted to the minimum level necessary to perform the job.

RPMS users shall

- Access only those documents they created and those other documents to which they have a valid need-to-know and to which they have specifically granted access through an RPMS application based on their menus (job roles), keys, and FileMan access codes. Some users may be afforded additional privileges based on the functions they perform, such as system administrator or application administrator.
- Acquire a written preauthorization in accordance with IHS policies and procedures prior to interconnection to or transferring data from RPMS.

C.1.3 Accountability

RPMS users shall

- Behave in an ethical, technically proficient, informed, and trustworthy manner.
- Log out of the system whenever they leave the vicinity of their personal computers (PCs).
- Be alert to threats and vulnerabilities in the security of the system.
- Report all security incidents to their local Information System Security Officer (ISSO).
- Differentiate tasks and functions to ensure that no one person has sole access to or control over important resources.
- Protect all sensitive data entrusted to them as part of their government employment.

- Abide by all Department and Agency policies and procedures and guidelines related to ethics, conduct, behavior, and information technology (IT) information processes.

C.1.4 Confidentiality

RPMS users shall

- Be aware of the sensitivity of electronic and hard copy information and protect it accordingly.
- Store hard copy reports/storage media containing confidential information in a locked room or cabinet.
- Erase sensitive data on storage media prior to reusing or disposing of the media.
- Protect all RPMS terminals from public viewing at all times.
- Abide by all Health Insurance Portability and Accountability Act (HIPAA) regulations to ensure patient confidentiality.

RPMS users shall not

- Allow confidential information to remain on the PC screen when someone who is not authorized to that data is in the vicinity.
- Store sensitive files on a portable device or media without encrypting.

C.1.5 Integrity

RPMS users shall

- Protect their systems against viruses and similar malicious programs.
- Observe all software license agreements.
- Follow industry standard procedures for maintaining and managing RPMS hardware, operating system software, application software, and/or database software and database tables.
- Comply with all copyright regulations and license agreements associated with RPMS software.

RPMS users shall not

- Violate federal copyright laws.
- Install or use unauthorized software within the system libraries or folders.
- Use freeware, shareware, or public domain software on/with the system without their manager's written permission and without scanning it for viruses first.

C.1.6 System Logon

RPMS users shall

- Have a unique User Identification/Account name and password.
- Be granted access based on authenticating the account name and password entered.
- Be locked out of an account after five successive failed login attempts within a specified time period (e.g., one hour).

C.1.7 Passwords

RPMS users shall

- Change passwords a minimum of every 90 days.
- Create passwords with a minimum of eight characters.
- If the system allows, use a combination of alpha-numeric characters for passwords, with at least one uppercase letter, one lower case letter, and one number. It is recommended, if possible, that a special character also be used in the password.
- Change vendor-supplied passwords immediately.
- Protect passwords by committing them to memory or store them in a safe place (do not store passwords in login scripts or batch files).
- Change passwords immediately if password has been seen, guessed, or otherwise compromised, and report the compromise or suspected compromise to their ISSO.
- Keep user identifications (IDs) and passwords confidential.

RPMS users shall not

- Use common words found in any dictionary as a password.
- Use obvious readable passwords or passwords that incorporate personal data elements (e.g., user's name, date of birth, address, telephone number, or social security number; names of children or spouses; favorite band, sports team, or automobile; or other personal attributes).
- Share passwords/IDs with anyone or accept the use of another's password/ID, even if offered.
- Reuse passwords. A new password must contain no more than five characters per eight characters from the previous password.
- Post passwords.
- Keep a password list in an obvious place, such as under keyboards, in desk drawers, or in any other location where it might be disclosed.

- Give a password out over the phone.

C.1.8 Backups

RPMS users shall

- Plan for contingencies such as physical disasters, loss of processing, and disclosure of information by preparing alternate work strategies and system recovery mechanisms.
- Make backups of systems and files on a regular, defined basis.
- If possible, store backups away from the system in a secure environment.

C.1.9 Reporting

RPMS users shall

- Contact and inform their ISSO that they have identified an IT security incident and begin the reporting process by providing an IT Incident Reporting Form regarding this incident.
- Report security incidents as detailed in the *IHS Incident Handling Guide* (SOP 05-03).

RPMS users shall not

- Assume that someone else has already reported an incident. The risk of an incident going unreported far outweighs the possibility that an incident gets reported more than once.

C.1.10 Session Timeouts

RPMS system implements system-based timeouts that back users out of a prompt after no more than five minutes of inactivity.

RPMS users shall

- Utilize a screen saver with password protection set to suspend operations at no greater than 10 minutes of inactivity. This will prevent inappropriate access and viewing of any material displayed on the screen after some period of inactivity.

C.1.11 Hardware

RPMS users shall

- Avoid placing system equipment near obvious environmental hazards (e.g., water pipes).
- Keep an inventory of all system equipment.

- Keep records of maintenance/repairs performed on system equipment.

RPMS users shall not

- Eat or drink near system equipment.

C.1.12 Awareness

RPMS users shall

- Participate in organization-wide security training as required.
- Read and adhere to security information pertaining to system hardware and software.
- Take the annual information security awareness.
- Read all applicable RPMS manuals for the applications used in their jobs.

C.1.13 Remote Access

Each subscriber organization establishes its own policies for determining which employees may work at home or in other remote workplace locations. Any remote work arrangement should include policies that

- Are in writing.
- Provide authentication of the remote user through the use of ID and password or other acceptable technical means.
- Outline the work requirements and the security safeguards and procedures the employee is expected to follow.
- Ensure adequate storage of files, removal, and nonrecovery of temporary files created in processing sensitive data, virus protection, and intrusion detection, and provide physical security for government equipment and sensitive data.
- Establish mechanisms to back up data created and/or stored at alternate work locations.

Remote RPMS users shall

- Remotely access RPMS through a virtual private network (VPN) whenever possible. Use of direct dial in access must be justified and approved in writing and its use secured in accordance with industry best practices or government procedures.

Remote RPMS users shall not

- Disable any encryption established for network, internet, and Web browser communications.

C.2 RPMS Developers

RPMS developers shall

- Always be mindful of protecting the confidentiality, availability, and integrity of RPMS when writing or revising code.
- Always follow the IHS RPMS Programming Standards and Conventions (SAC) when developing for RPMS.
- Only access information or code within the namespaces for which they have been assigned as part of their duties.
- Remember that all RPMS code is the property of the U.S. Government, not the developer.
- Not access live production systems without obtaining appropriate written access, and shall only retain that access for the shortest period possible to accomplish the task that requires the access.
- Observe separation of duties policies and procedures to the fullest extent possible.
- Document or comment all changes to any RPMS software at the time the change or update is made. Documentation shall include the programmer's initials, date of change, and reason for the change.
- Use checksums or other integrity mechanism when releasing their certified applications to assure the integrity of the routines within their RPMS applications.
- Follow industry best standards for systems they are assigned to develop or maintain, and abide by all Department and Agency policies and procedures.
- Document and implement security processes whenever available.

RPMS developers shall not

- Write any code that adversely impacts RPMS, such as backdoor access, "Easter eggs," time bombs, or any other malicious code or make inappropriate comments within the code, manuals, or help frames.
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

C.3 Privileged Users

Personnel who have significant access to processes and data in RPMS, such as, system security administrators, systems administrators, and database administrators, have added responsibilities to ensure the secure operation of RPMS.

Privileged RPMS users shall

- Verify that any user requesting access to any RPMS system has completed the appropriate access request forms.
- Ensure that government personnel and contractor personnel understand and comply with license requirements. End users, supervisors, and functional managers are ultimately responsible for this compliance.
- Advise the system owner on matters concerning information technology security.
- Assist the system owner in developing security plans, risk assessments, and supporting documentation for the certification and accreditation process.
- Ensure that any changes to RPMS that affect contingency and disaster recovery plans are conveyed to the person responsible for maintaining continuity of operations plans.
- Ensure that adequate physical and administrative safeguards are operational within their areas of responsibility and that access to information and data is restricted to authorized personnel on a need-to-know basis.
- Verify that users have received appropriate security training before allowing access to RPMS.
- Implement applicable security access procedures and mechanisms, incorporate appropriate levels of system auditing, and review audit logs.
- Document and investigate known or suspected security incidents or violations and report them to the ISSO, Chief Information Security Officer (CISO), and systems owner.
- Protect the supervisor, superuser, or system administrator passwords.
- Avoid instances where the same individual has responsibility for several functions (i.e., transaction entry and transaction approval).
- Watch for unscheduled, unusual, and unauthorized programs.
- Help train system users on the appropriate use and security of the system.
- Establish protective controls to ensure the accountability, integrity, confidentiality, and availability of the system.
- Replace passwords when a compromise is suspected. Delete user accounts as quickly as possible from the time that the user is no longer authorized system. Passwords forgotten by their owner should be replaced, not reissued.
- Terminate user accounts when a user transfers or has been terminated. If the user has authority to grant authorizations to others, review these other authorizations. Retrieve any devices used to gain access to the system or equipment. Cancel logon IDs and passwords, and delete or reassign related active and backup files.

- Use a suspend program to prevent an unauthorized user from logging on with the current user's ID if the system is left on and unattended.
- Verify the identity of the user when resetting passwords. This can be done either in person or having the user answer a question that can be compared to one in the administrator's database.
- Shall follow industry best standards for systems they are assigned to, and abide by all Department and Agency policies and procedures.

Privileged RPMS users shall not

- Access any files, records, systems, etc., that are not explicitly needed to perform their duties
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

Glossary

APSP

The namespace of the IHS modifications to the Outpatient Pharmacy Suite.

Backdoor Entry

The process of entering a Backdoor Order in the RPMS Pharmacy options.

Backdoor Order

A pharmacy order that is not entered using RPMS EHR but is entered by the pharmacist using the RPMS Pharmacy options.

Caret

A circumflex, also known as “up caret,” “hat,” or “up-hat,” resembling an inverted V or chevron. On most standard English language keyboards, created using the key combination Shift-6: ^.

Dose Unit

The unit of measure used for a specific dose of medication. Examples include but are not limited to tablet, capsule, teaspoonful, gram, and milliliter.

eRx

Electronic prescribing or an electronic prescription.

Intravenous Medications

Medications that are administered into a vein. For RPMS, the Pharmacy package that manages these types of medications for patients.

Leading Zeros

For the purposes of EHR and RPMS validation, one or more zeros to the left of a decimal point in a positive number that is less than 1. Example: 0.5

Local Possible Dose

A dose created in a local instance of the RPMS Pharmacy Data Management package that is free text.

Non-VA Medications

Also known as Outside Medications, this is the mechanism for a user to document a patient’s herbal, over-the-counter, and home medications that are not prescribed or managed by the site’s providers.

Oral Liquid Medication

A medication that is intended to be taken orally and intended to be in a liquid form at the time of administration. Oral liquids may be dispensed in a non-liquid form and converted to a liquid by the patient or person administering the medication.

Outpatient Medications

Medications primarily meant to be dispensed or administered to patients who are not admitted to a hospital unit or ward. For RPMS, the Pharmacy package that manages these types of medications for patients.

Outside Medications

See Non-VA Medications.

Pending Order

A medication order that has been input into the system and signed by the provider, but which has not yet been processed by Pharmacy.

Possible Dose

A dose created in a local instance of the RPMS Pharmacy Data Management package that is a function of the numerical dose and the strength of the drug recorded in the system. Possible doses may be limited to inpatient use for some medications.

Rx or Rxs

A prescription or prescriptions.

Telnet Client

Software that allows a connection to a server using the telnet network protocol.

Trailing Zeros

For the purposes of this validation, one or more zeros in a decimal number after which no other numbers follow. Example: 5.0

Unit Dose Medications

Medications that are specifically packaged in premeasured doses for single use. For RPMS, the Pharmacy package that manages non-IV versions of these types of medications for patients.

Acronym List

Acronym	Meaning
cc	Cubic Centimeters
CISO	Chief Information Security Officer
EHR	Electronic Health Record
FM	FileMan
HHS	Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
ID	Identification
IHS	Indian Health Service
ISSO	Information System Security Officer
IT	Information Technology
IV	Intravenous
mL	Milliliter
ONC	Office of the National Coordinator
PC	Personal Computer
ROB	Rules of Behavior
RPMS	Resource and Patient Management System
SAC	Standards and Conventions
VA	Veteran's Administration
VPN	Virtual Private Network

Contact Information

If you have any questions or comments regarding this distribution, please contact the IHS IT Service Desk.

Phone: (888) 830-7280 (toll free)

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