



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Radiology Package**

(RA)

## **Configuration and User Guide**

Version 5.0 Patch 1008  
September 2020

Office of Information Technology  
Division of Information Technology

# Table of Contents

<b>1.0</b>	<b>System Set Up Overview .....</b>	<b>1</b>
<b>2.0</b>	<b>Software .....</b>	<b>3</b>
<b>3.0</b>	<b>Menus .....</b>	<b>9</b>
3.1	Device Specification for Imaging Locations .....	10
<b>4.0</b>	<b>Ordering Providers for Radiology .....</b>	<b>11</b>
<b>5.0</b>	<b>Security Keys .....</b>	<b>12</b>
<b>6.0</b>	<b>FileMan Access .....</b>	<b>13</b>
<b>7.0</b>	<b>Radiology Supervisor's Menu .....</b>	<b>14</b>
7.1	Radiology Package Users .....	16
7.1.1	Electronic Signature Code Edit .....	18
7.2	System Definition .....	19
7.2.1	Camera/Equipment/Room .....	21
7.2.2	Imaging Location(s) \ .....	22
7.2.3	Division .....	25
7.3	Maintenance Files Print Menu .....	29
7.3.1	Print Procedure List Using VA FileMan .....	30
7.4	Utility File Definitions .....	31
7.4.1	Complication Type Entry/Edit .....	31
7.4.2	Diagnostic Code Enter/Edit .....	32
7.4.3	Examination Status .....	33
7.4.4	Films Type Entry/Edit .....	42
7.4.5	Major AMIS Code Entry/Edit .....	42
7.4.6	Label/Header/Footer Formatter .....	43
7.4.7	Order Entry Procedure Display Menu .....	47
7.4.8	Procedure Edit Menu .....	49
7.4.9	Reason Edit .....	55
<b>8.0</b>	<b>Building Radiology Quick Orders and Menus .....</b>	<b>57</b>
8.1	Quick Orders .....	57
8.2	Creating an EHR Order Menu ↓ for Radiology .....	62
<b>9.0</b>	<b>Radiology Workflow .....</b>	<b>72</b>
<b>10.0</b>	<b>Radiology/Nuclear Med Order Entry Menu .....</b>	<b>75</b>
10.1	Requesting an Exam in RPMS .....	75
10.2	Requesting an Exam in EHR .....	76
10.3	Cancel a Request .....	81
10.4	Detailed Request Display .....	82
10.5	Print Selected Requests by Patient .....	83
10.6	Print Rad/Nuc Med Requests by Date .....	85

<b>11.0</b>	<b>Exam Entry/Edit Menu.....</b>	<b>88</b>
11.1	Register Patient for Exams .....	88
11.2	Edit Exam by Patient .....	91
11.3	Case No. Exam Edit .....	92
11.4	Cancel an Exam .....	93
11.5	Switch Locations.....	95
11.6	Exam Status Display.....	95
<b>12.0</b>	<b>Films Reporting Menu.....</b>	<b>97</b>
12.1	Report Entry/Edit .....	97
12.2	On-Line Verifying of Reports .....	98
12.3	Outside Report Entry/Edit.....	99
12.4	Verify Report Only .....	102
12.5	Select Report to Print by Patient.....	102
12.6	Display a Rad/Nuc Med Report .....	103
<b>13.0</b>	<b>Radiology and PCC .....</b>	<b>105</b>
<b>14.0</b>	<b>Outside Films Registry Menu .....</b>	<b>107</b>
14.1	Add Films to Registry.....	107
14.2	Outside Films Profile.....	107
14.3	Delinquent Outside Film Report for Outpatients .....	108
<b>15.0</b>	<b>Patient Profile Menu .....</b>	<b>109</b>
15.1	Profile of Rad/Nuc Med Exams.....	109
15.2	Display Patient Demographics.....	110
<b>16.0</b>	<b>Management Reports Menu.....</b>	<b>112</b>
16.1	Daily Management Reports .....	112
16.1.1	Abnormal Exam Report .....	112
16.1.2	Complication Report .....	113
16.1.3	Daily Log Report.....	114
16.1.4	Delinquent Status Report .....	114
16.1.5	Examination Statistics .....	116
16.1.6	Incomplete Exam Report .....	117
16.1.7	Unverified Reports.....	119
16.2	Functional Area Workload Reports.....	120
16.2.1	Clinic Report.....	120
16.2.2	Ward Report .....	121
16.3	Personnel Workload Reports.....	122
16.3.1	Physician Report .....	122
16.3.2	Technologist Report .....	124
16.4	Special Reports.....	125
16.4.1	Detailed Procedure Report .....	126
16.4.2	Procedure/CPT Statistics Report.....	127
16.4.3	Film Usage Report.....	129
16.4.4	Status Time Report.....	131

16.5	Timeliness Reports .....	132
<b>17.0</b>	<b>Supervisor Menu .....</b>	<b>135</b>
17.1	Delete a Report.....	135
17.2	Exam Deletion .....	135
17.3	Override a Single Exam's Status to Complete .....	135
17.4	Restore a Deleted Report.....	135
17.5	Unverify a Report for Amendment .....	136
<b>18.0</b>	<b>Passing Mammograms to Women's Health .....</b>	<b>137</b>
<b>19.0</b>	<b>Interfacing .....</b>	<b>140</b>
<b>20.0</b>	<b>September 2020 RA_5.0_1008 Release Addendum.....</b>	<b>144</b>
20.1	Introduction.....	144
20.2	Modifications.....	144
20.2.1	New Security Keys: RAZRIS .....	144
20.2.2	New Radiology Interpreting Site Option.....	145
20.2.3	Radiology Report Impression .....	147
20.2.4	Additional Information and Example for Interpreting Site and/or Impression with CCDA/TOC and PHR .....	149
20.2.5	Normal and Abnormal Recent Test Results and Imaging Display in the CCDA/TOC and PHR .....	153
<b>Appendix A</b>	<b>Rules of Behavior .....</b>	<b>154</b>
A.1	All RPMS Users .....	154
A.1.1	Access.....	154
A.1.2	Information Accessibility .....	155
A.1.3	Accountability .....	155
A.1.4	Confidentiality.....	156
A.1.5	Integrity.....	156
A.1.6	System Logon.....	157
A.1.7	Passwords.....	157
A.1.8	Backups.....	158
A.1.9	Reporting.....	158
A.1.10	Session Timeouts .....	158
A.1.11	Hardware .....	158
A.1.12	Awareness.....	159
A.1.13	Remote Access .....	159
A.2	RPMS Developers .....	160
A.3	Privileged Users.....	160
<b>Glossary</b> .....		<b>163</b>
<b>Acronym List</b> .....		<b>165</b>
<b>Contact Information</b> .....		<b>166</b>

## Revision History

Version	Date	Author	Section	Page Number	Summary of Change
1.0	January 2004				Version 5.0 Release
2.0	September 2020	Leslie White	20.0	144–153	RA v5.0 P1008 (CHIT Phase 2) Release Addendum

## Preface

The purpose of this guide is to:

- Provide guidance for base set up and configuration of the Indian Health Service (IHS) Resource and Patient Management System (RPMS) Radiology package.
- Provide direction on how to set up menus of Radiology procedures to be ordered in the IHS Electronic Health Record (EHR).
- Provide general instruction on how to use the Radiology package for recording exams and reporting procedures.
- Provide a general overview of interface configuration of modality worklists, PACS systems, and reporting interfaces.
- Provide an overview of the linkage between the Radiology and Women's Health package.

## 1.0 System Set Up Overview

Before the RPMS Radiology/Nuclear Medicine Package may be used, significant set up and configuration must be performed for both the package itself as well as for users of the system. An overview of those system set up requirements is provided in this section. The individual performing the set up configuration must have a working knowledge of Radiology as well as VA FileMan access. In addition, they should read this section before beginning as set up and configuration should be performed in the order specified in this section.

Listed below are the general areas of set up required for the RPMS Radiology package. The complexity of set up varies from site to site. But this outline should be considered to include the minimum areas to be addressed for Day One.

<b>Radiology Requirements</b>
Maintenance Files print
Users <ul style="list-style-type: none"> <li>• FileMan Access Code – RrM</li> <li>• Security Keys – RA OVERALL (maybe RA VERIFY, RA ALLOC, and RA MGR)</li> <li>• Rad/Nuc Med Classification – Clerk, Technologist, Staff</li> <li>• Electronic Signature – Signature Block Title</li> <li>• Edit User Characteristics – Screen Editor</li> </ul>
Providers – Provider Key and active RPMS access and verify code
System Definition <ul style="list-style-type: none"> <li>• Camera/Equip/Rm Entry/Edit – Equipment or Rooms used for Rad/Nuc Med</li> <li>• Location Parameter Set- up – General Radiology, CT, US, MRI, etc.</li> <li>• Division Parameter Set-up – Parameters used at your facility</li> </ul>
Menus – add RA SITEMENAGER to RA OVERALL <ul style="list-style-type: none"> <li>• Define Default Devices for Radiology Locations – Where requisitions should print</li> <li>• Confirm Rad/Nuc Med Version 5.0 through patch 1004 has been installed.</li> </ul>

<b>Radiology Requirements</b>
<p>Utility Files Maintenance</p> <ul style="list-style-type: none"><li>• Complication Type Entry/Edit – Table to include Contrast reaction or other complication</li><li>• Diagnostic Code Enter/Edit – Table to include coded interpretations including BIRAD codes</li><li>• Examination Status Entry/Edit – Required data items required to move exam from waiting to complete</li><li>• Film Type Entry/Edit – Film Sizes and types</li><li>• Label/Header/Footer Formatter – Tool to customize Radiology Report Header</li><li>• Procedure Enter/Edit – Option to enter or modify procedures performed by Rad/Nuc Med Dept.</li><li>• Procedure Message Enter/Edit – Option to enter special messages seen by ordering provider.</li><li>• Procedure Modifier Entry – Option to customize modifiers for procedures, e.g. Left, Right, Upright, etc.</li><li>• Common Procedure Enter/Edit – Order entry menu in RPMS</li><li>• Reason Edit – Table of reasons why exams are canceled or put on hold.</li></ul>
<p>EHR</p> <ul style="list-style-type: none"><li>• EHR Quick Orders</li><li>• EHR Menus</li></ul> <p>Imaging Reports Local on Reports Tab</p>



## 2.0 Software

At the time of this manual review, the release status of RPMS Radiology is Version 5.0, through patch 1008. Release RA 1008 contains changes required to meet the 2015 Certified Health Edition for the Indian Health Service RPMS EHR. Please reference Section 20.0 for a full explanation and list of additions to the RPMS RAD/NUC MED Total System.

To confirm the software version that you have installed at your facility, use the Kernel Installation & Distribution System Utility Menu to determine the history of version and patch installation. Note that you should have versions 4.0, 4.5, and 5.0 of Radiology/Nuclear Medicine Versions installed. If you do not, please contact your Area support staff to obtain a supplemental file that contains IHS modifications to the VA software. You will also notice that while you see RA patches 1002 and 1001, you will not see 1003, 1004, and 1007 in the listings of patch installations. That is because these were compilations of VA patches, which are listed in Figure 2-1.

**Note:** RA 1007 (VA patches) and BRA 1007 were released in October 2017 and RA 1008 is to be released September 2020.

```

Core Applications ...
    Device Management ...
FM   VA FileMan ...
    Manage Mailman ...
    Menu Management ...
    Programmer Options ...
    Operations Management ...
    Spool Management ...
    Information Security Officer Menu ...
    Taskman Management ...
    User Management ...
EHR  RPMS-EHR Configuration Master Menu ...
GIS  GIS Interface Menu ...
KIDS Kernel Installation & Distribution System ...
TRNG Cimarron Medical Informatics Training Menu ...
    Application Utilities ...
    Capacity Management ...

Select Systems Manager Menu Option: programmer Options

KIDS Kernel Installation & Distribution System ...
PG   Programmer mode
    Delete Unreferenced Options
    Error Processing ...
    Global Block Count
    List Global
    Routine Tools ...

Select Programmer Options Option: KIDS Kernel Installation & Distribution
System

```

```

Edits and Distribution ...
Utilities ...
Installation ...
Patch Monitor Main Menu ...

Select Kernel Installation & Distribution System Option: UTILITIES

Build File Print
Install File Print
Convert Loaded Package for Redistribution
Display Patches for a Package
Purge Build or Install Files
Rollup Patches into a Build
Update Routine File
Verify a Build
Verify Package Integrity

elect Utilities Option: DISPlay Patches for a Package
Select PACKAGE NAME: RAD/NUC ??

Select PACKAGE NAME: RAD
  1  RADIATION SAFETY          RS
  2  RADIOLOGY/NUCLEAR MEDICINE  RA
CHOOSE 1-2:

CHOOSE 1-2: 2  RADIOLOGY/NUCLEAR MEDICINE  RA
Select VERSION: 5.0// ?
Answer with VERSION
Do you want the entire 66-Entry VERSION List? Y (Yes)
Choose from:
  1      10-17-84
  1.01   11-06-84
  1.02   11-06-84
  1.03   11-14-84
  1.05   11-21-84
  1.07   12-03-84
  1.08   12-04-84
  1.09   12-04-84
  1.1    12-05-84
  1.11   12-18-84
  1.15   01-12-85
  1.2    01-21-85
  1.25   02-01-85
  1.3    02-05-85
  1.31   02-24-85
  1.32   03-01-85
  1.33   03-05-85
  1.34   03-07-85
  1.35   03-11-85
  1.4    03-26-85
  1.41   03-26-85
  1.5    04-08-85
  1.51   04-12-85
  2      05-17-85
  2.01   05-31-85
  2.02   06-12-85
  2.03   06-24-85
  2.04   07-03-85

```

```

2.05      07-08-85
2.06      07-11-85
2.08      09-30-85
2.09      11-08-85
2.1       05-28-86
2.9       09-14-88
2.91      10-21-88
2.92      11-10-88
2.93      01-26-89
2.94      02-21-89
2.95      02-27-89
2.96      03-06-89
3         05-25-89
3.01      08-14-89
3.71      02-22-91
3.72      03-07-91
3.73      03-14-91
3.74      03-19-91
3.75      04-03-91
3.76      05-01-91
3.77      05-20-91
3.78      05-31-91
3.79      06-16-91
3.81      07-17-91
3.82      07-31-91
3.83      08-14-91
3.84      08-28-91
3.85      10-11-91
3.86      11-13-91
3.87      11-20-91
3.88      12-17-91
3.89      02-03-92
4.5       12-12-95
3.70      06-28-90
3.80      07-02-91
4.0       11-20-97
5.0       04-01-04

```

```

Select VERSION: 5.0//
Select VERSION: 5.0//      04-01-04
Do you want to see the Descriptions? NO//
DEVICE: HOME//      VIRTUAL TERMINAL

```

```

PACKAGE: RADIOLOGY/NUCLEAR MEDICINE      Dec 23, 2013 7:37 am      PAGE
1

```

```

PATCH #          INSTALLED          INSTALLED BY
-----

```

```

--
VERSION: 5.0      JUL 08, 2004      DEMO,USER 1
1                JUL 08, 2004      DEMO,USER 1
2                JUL 08, 2004      DEMO,USER 1
6                JUL 08, 2004      DEMO,USER 1
4                JUL 08, 2004      DEMO,USER 1
7                JUL 08, 2004      DEMO,USER 1
3                JUL 08, 2004      DEMO,USER 1
11               JUL 08, 2004      DEMO,USER 1
5                JUL 08, 2004      DEMO,USER 1
14               JUL 08, 2004      DEMO,USER 1
13               JUL 08, 2004      DEMO,USER 1
8                JUL 08, 2004      DEMO,USER 1
12               JUL 08, 2004      DEMO,USER 1

```

9	JUL 08, 2004	DEMO, USER 1
16	JUL 08, 2004	DEMO, USER 1
10	JUL 08, 2004	DEMO, USER 1
15	JUL 08, 2004	DEMO, USER 1
19	JUL 08, 2004	DEMO, USER 1
20	JUL 08, 2004	DEMO, USER 1
17	JUL 08, 2004	DEMO, USER 1
24	JUL 08, 2004	DEMO, USER 1
22	JUL 08, 2004	DEMO, USER 1
21	JUL 08, 2004	DEMO, USER 1
18	JUL 08, 2004	DEMO, USER 1
23	JUL 08, 2004	DEMO, USER 1
26	JUL 08, 2004	DEMO, USER 1
28	JUL 08, 2004	DEMO, USER 1
32	JUL 08, 2004	DEMO, USER 1
29	JUL 08, 2004	DEMO, USER 1
27	JUL 08, 2004	DEMO, USER 1
25	JUL 08, 2004	DEMO, USER 1
31	JUL 08, 2004	DEMO, USER 1
35	JUL 08, 2004	DEMO, USER 1
40	JUL 08, 2004	DEMO, USER 1
36	JUL 08, 2004	DEMO, USER 1
34	JUL 08, 2004	DEMO, USER 1
37	JUL 08, 2004	DEMO, USER 1
42	JUL 08, 2004	DEMO, USER 1
43	JUL 08, 2004	DEMO, USER 1
1001	MAY 24, 2005	DEMO, USER 3
1002	DEC 13, 2011@16:28:18	DEMO, USER 2
38	AUG 12, 2013@18:51:35	DEMO, USER 3
44	AUG 12, 2013@18:51:35	DEMO, USER 3
46	AUG 12, 2013@18:51:35	DEMO, USER 3
50	AUG 12, 2013@18:51:35	DEMO, USER 3
48	AUG 12, 2013@18:51:35	DEMO, USER 3
33	AUG 12, 2013@18:51:35	DEMO, USER 3
55	AUG 12, 2013@18:51:35	DEMO, USER 3
51	AUG 12, 2013@18:51:35	DEMO, USER 3
54	AUG 12, 2013@18:51:35	DEMO, USER 3
45	AUG 12, 2013@18:51:36	DEMO, USER 3
60	AUG 12, 2013@18:51:36	DEMO, USER 3
59	AUG 12, 2013@18:51:36	DEMO, USER 3
41	AUG 12, 2013@18:51:36	DEMO, USER 3
63	AUG 12, 2013@18:51:36	DEMO, USER 3
62	AUG 12, 2013@18:51:36	DEMO, USER 3
66	AUG 12, 2013@18:51:36	DEMO, USER 3
57	AUG 12, 2013@18:51:36	DEMO, USER 3
69	AUG 12, 2013@18:51:36	DEMO, USER 3
68	AUG 12, 2013@18:51:36	DEMO, USER 3
67	AUG 12, 2013@18:51:38	DEMO, USER 3
64	AUG 12, 2013@18:51:38	DEMO, USER 3
72	AUG 12, 2013@18:51:38	DEMO, USER 3
49	AUG 12, 2013@18:51:38	DEMO, USER 3
76	AUG 12, 2013@18:51:38	DEMO, USER 3
71	AUG 12, 2013@18:51:38	DEMO, USER 3
74	AUG 12, 2013@18:51:38	DEMO, USER 3
79	AUG 12, 2013@18:51:39	DEMO, USER 3
82	AUG 12, 2013@18:51:39	DEMO, USER 3
77	AUG 12, 2013@18:51:39	DEMO, USER 3
75	AUG 12, 2013@18:51:39	DEMO, USER 3
81	AUG 12, 2013@18:51:39	DEMO, USER 3
83	AUG 12, 2013@18:51:39	DEMO, USER 3
80	AUG 12, 2013@18:51:39	DEMO, USER 3
85	AUG 12, 2013@18:51:39	DEMO, USER 3

87	AUG 12, 2013@18:51:39	DEMO, USER 3
86	AUG 12, 2013@18:51:39	DEMO, USER 3
84	AUG 12, 2013@18:51:40	DEMO, USER 3
92	AUG 12, 2013@18:51:40	DEMO, USER 3
56	AUG 12, 2013@18:51:40	DEMO, USER 3
65	AUG 12, 2013@18:51:40	DEMO, USER 3
91	AUG 12, 2013@18:51:40	DEMO, USER 3
98	AUG 12, 2013@18:51:40	DEMO, USER 3
70	AUG 12, 2013@18:51:40	DEMO, USER 3
96	AUG 12, 2013@18:51:40	DEMO, USER 3
95	AUG 12, 2013@18:51:40	DEMO, USER 3
93	AUG 12, 2013@18:51:41	DEMO, USER 3
97	AUG 12, 2013@18:51:41	DEMO, USER 3
94	AUG 12, 2013@18:51:53	DEMO, USER 3
99	AUG 12, 2013@18:51:53	DEMO, USER 3
100	AUG 12, 2013@18:51:53	DEMO, USER 3
90	AUG 12, 2013@18:51:55	DEMO, USER 3
104	AUG 12, 2013@18:54:25	DEMO, USER 3
47	AUG 12, 2013@18:54:26	DEMO, USER 3
1006	MAY 14, 2018@14:54:10	DEMO, USER 4
105	JUN 12, 2018@15:57:11	DEMO, USER 4
101	JUN 12, 2018@15:57:11	DEMO, USER 4
106	JUN 12, 2018@15:57:11	DEMO, USER 4
103	JUN 12, 2018@15:57:11	DEMO, USER 4
108	JUN 12, 2018@15:57:12	DEMO, USER 4
107	JUN 12, 2018@15:57:12	DEMO, USER 4
111	JUN 12, 2018@15:57:12	DEMO, USER 4
112	JUN 12, 2018@15:57:12	DEMO, USER 4
115	JUN 12, 2018@15:57:13	DEMO, USER 4
114	JUN 12, 2018@15:57:13	DEMO, USER 4
110	JUN 12, 2018@15:57:13	DEMO, USER 4
116	JUN 12, 2018@15:57:13	DEMO, USER 4
117	JUN 12, 2018@15:57:14	DEMO, USER 4
122	JUN 12, 2018@15:57:14	DEMO, USER 4
121	JUN 12, 2018@15:57:14	DEMO, USER 4
123	JUN 12, 2018@15:57:14	DEMO, USER 4
126	JUN 12, 2018@15:57:15	DEMO, USER 4
125	JUN 12, 2018@15:57:15	DEMO, USER 4
1008	SEP 02, 2020@09:51:19	DEMO, USER 5

Figure 2-1: Installation History for Radiology

Next, check to be sure that the IHS modifications released in BRA patches have been installed by following the same menu path. You should have BRA patches 1003 and 1007 as shown in Figure 2-2.

PACKAGE: IHS MODS TO VA RADIOLOGY	Sep 10, 2020 9:48 am	PAGE 1
PATCH #	INSTALLED	INSTALLED BY
VERSION: 5.0		
1003	MAY 14, 2018@14:23:13	DEMO, USER 4
1007	JUN 12, 2018@15:57:44	DEMO, USER 4

Figure 2-2: Displaying patch levels for IHS Radiology patches

You may note that BRA patch 1004 is not listed. You may choose the **Install File Print** option to confirm that patch has been installed as shown below.

```

Build File Print
  Install File Print
  Convert Loaded Package for Redistribution
  Display Patches for a Package
  Purge Build or Install Files
  Rollup Patches into a Build
  Update Routine File
  Verify a Build
  Verify Package Integrity

Select Utilities Option: INStall File Print
Select INSTALL NAME: BRA
   1  BRA*5.0*1003          Install Completed      Install Completed
8/12/13@18:
53:37
   => BRA 5.0 Patch 1003   ;Created on Oct 19, 2011@21:38:26
   2  BRA*5.0*1004          Install Completed      Install Completed
8/12/13@18:
55:17
   => IHS Mods to VA Radiology Patch 1004 ;Created on Jun 01,
2012@11:03:13
CHOOSE 1-2: 2  BRA*5.0*1004      Install Completed      Install Completed
8/12/13
@18:55:17
   => IHS Mods to VA Radiology Patch 1004 ;Created on Jun 01,
2012@11:03:13
DEVICE: HOME//      VIRTUAL TERMINAL

PACKAGE: BRA*5.0*1004      Dec 23, 2013 8:03 am          PAGE
1
                                                    COMPLETED          ELAPSED
-----
STATUS: Install Completed          DATE LOADED: AUG 12,
2013@18:55:02
INSTALLED BY: DEMO,USER 3
NATIONAL PACKAGE:

INSTALL STARTED: AUG 12, 2013@18:55:17      18:55:17

ROUTINES:          18:55:17

INPUT TEMPLATE          18:55:17

INSTALL QUESTION PROMPT
ANSWER

XPI1  Want KIDS to INHIBIT LOGONS during the install          NO
XPZ1  Want to DISABLE Scheduled Options, Menu Options, and Protocols NO
MESSAGES:

```

Figure 2-3: Install File Print for Radiology

### 3.0 Menus

The RA OVERALL or Main Radiology Menu is distributed as follows. Users with the RA OVERALL key will see the following menu options.

```

Welcome, you are signed on with the following parameters:

Version : 5.0
Division : DEMO INDIAN HOSPITAL
Location : RADIOLOGY
Img. Type: GENERAL RADIOLOGY
User : DEMO,USER 3

Printer Defaults
-----
Flash Card : None
No cards
Jacket Label: None
Report : None
-----
--

Exam Entry/Edit Menu ...
Films Reporting Menu ...
Management Reports Menu ...
Outside Films Registry Menu ...
Patient Profile Menu ...
Radiology/Nuclear Med Order Entry Menu ...
Supervisor Menu ...
Switch Locations
Update Patient Record
User Utility Menu ...

```

Figure 3-1: Radiology/Nuclear Medicine Main Menu

It is highly recommended that the **RA SITEMANAGER** menu option from the **IRM Menu**, which is locked with the RA MGR key be added to the menu. The addition of this menu option allows access to the **Device Specifications for Imaging Locations** menu option, which can be used to define where Radiology requisitions are automatically printed. Note that you cannot define the Device Specifications until the Radiology Imaging Locations are defined.

```

IRM      IRM Menu ...
Exam Entry/Edit Menu ...
Films Reporting Menu ...
Management Reports Menu ...
Outside Films Registry Menu ...
Patient Profile Menu ...
Radiology/Nuclear Med Order Entry Menu ...
Supervisor Menu ...
Switch Locations
Update Patient Record
User Utility Menu ...

```

Figure 3-2: Radiology Menu with IRM Menu attached

### 3.1 Device Specification for Imaging Locations

Within the menu option for assigning default printer devices, the Radiology Supervisor or Manager can set default Printer Assignments. These are the default flash card/exam label, jacket label, request, request cancellation, radiopharmaceutical dosage ticket, and report printers. Once these printer names have been assigned to an Imaging Location, the module will automatically route output to the appropriate printer without having to ask the user.

```

IRM    IRM Menu ...
Device Specifications for Imaging Locations
Select IRM Menu Option: DEvIce Specifications for Imaging Locations

Do you want to see a 'help' message on printer assignment? No//    (No)

Select Imaging Location: RADIOLOGY
...OK? Yes//    (Yes)
                                (GENERAL RADIOLOGY-8907)

Default Printers:
-----
FLASH CARD PRINTER NAME:
JACKET LABEL PRINTER NAME:
REQUEST PRINTER NAME: X-RAY//
REPORT PRINTER NAME:
CANCELLED REQUEST PRINTER:

```

Figure 3-3: Setting Device Specification for Request Printer

**Note:** If you have more than one imaging location within an imaging type, the **Ask Imaging Location Division** parameter must be set to YES to print cancelled requests on the request cancellation printer.

Most IHS facilities no longer print exam labels, flash cards, or reports. Therefore, no default printer should be specified for these types of output and when setting up division parameters, the fields for **Print Jacket Labels, Flash Cards, Exam Labels**, etc., should all be set to **NO**.



## 4.0 Ordering Providers for Radiology

In order for a provider to be entered as an ordering provider in Radiology, they must have three attributes:

1. They must have the provider key. (Be sure they were set up as a provider in RPMS using the Add/Edit Provider option.)
2. They must be authorized to write Med orders (also indicated in the Add/Edit Provider option).
3. They must have an active RPMS access and verify code.

A decision must be made at each site on how best to handle orders from outside providers. While outside providers may never access EHR nor the RPMS system, it is highly recommended that they be set up just like any other provider so that they may be identified as the individual requesting the exam. Note that an outside provider may not place an order in EHR so the only way that provider may be identified as being the requesting provider is to use the “back door” option in RPMS to Request an exam.

## 5.0 Security Keys

### RA OVERALL

This is the key to the main **Radiology** menu and should be given to all Radiology staff.

### RA VERIFY

This key allows users to verify reports. The key must be given to any staff who will be entering or verifying reports for outside radiologists. Any staff who will be verifying reports will also need to have a valid Electronic Signature Code.

### RA MGR

This key gives user access to supervisor-type functions. Those functions are the following:

- Editing completed exams
- Adding an exam to a visit that is older than yesterday
- During execution of the status tracking function the user will be shown all non-completed exams, not just those associated with the user's current division.
- Updating the exam status of an exam that is complete
- Deleting exams
- Deleting reports
- Unverifying reports

### RA ALLOC

The RA ALLOC key would normally be reserved for the Radiology Supervisor, Manager or those who work with multiple imaging locations and/or divisions. This key overrides location access security entered for each Radiology/Nuclear Medicine user through Personnel Classification. Owners of the RA ALLOC have expanded access to Imaging Locations, Imaging Types, and Divisions.

In the case of most workload reports, this means they will be able to select from a list of all Divisions and Imaging types to include on the report.

In the case of various edit and ordering functions, it means they will be able to select from all locations within the Imaging Type to which they are currently signed on through the "Select sign-on location:" prompt.

## 6.0 FileMan Access

As a general rule, ensure that each member of the Radiology staff has been assigned RrM as FileMan Access codes. They may have other codes as well because of other duties, but this code assignment will ensure that they can perform their Radiology functions without issue.

```

NAME: STUDENT,ONE                                     Page 1 of 5
-----
NAME... STUDENT,ONE                                INITIAL: STU01
TITLE: RADIOLOGY TECHNOLOGIST                     NICK NAME:
SSN: XXXXX0001                                     DOB:
DEGREE:                                            MAIL CODE:
DISUSER:                                           TERMINATION DATE:
Termination Reason:

PRIMARY MENU OPTION: CMI TRAINING
Select SECONDARY MENU OPTIONS:
Want to edit ACCESS CODE (Y/N):                   FILE MANAGER ACCESS CODE: RrM
Want to edit VERIFY CODE (Y/N):

Select DIVISION: DEMO INDIAN HOSPITAL
SERVICE/SECTION: MEDICAL
-----
Exit      Save      Next Page      Refresh

Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND:                                     Press <PF1>H for help      Insert

```

Figure 6-1: Assigning FileMan access for Radiology staff

## 7.0 Radiology Supervisor's Menu

After the external menus, security keys, and user management set up has been completed, the rest of the Radiology setup may be accomplished from the Radiology/Nuclear Medicine Supervisor's Menu. A diagram of that menu structure is shown in Figure 7-1 on the following page.

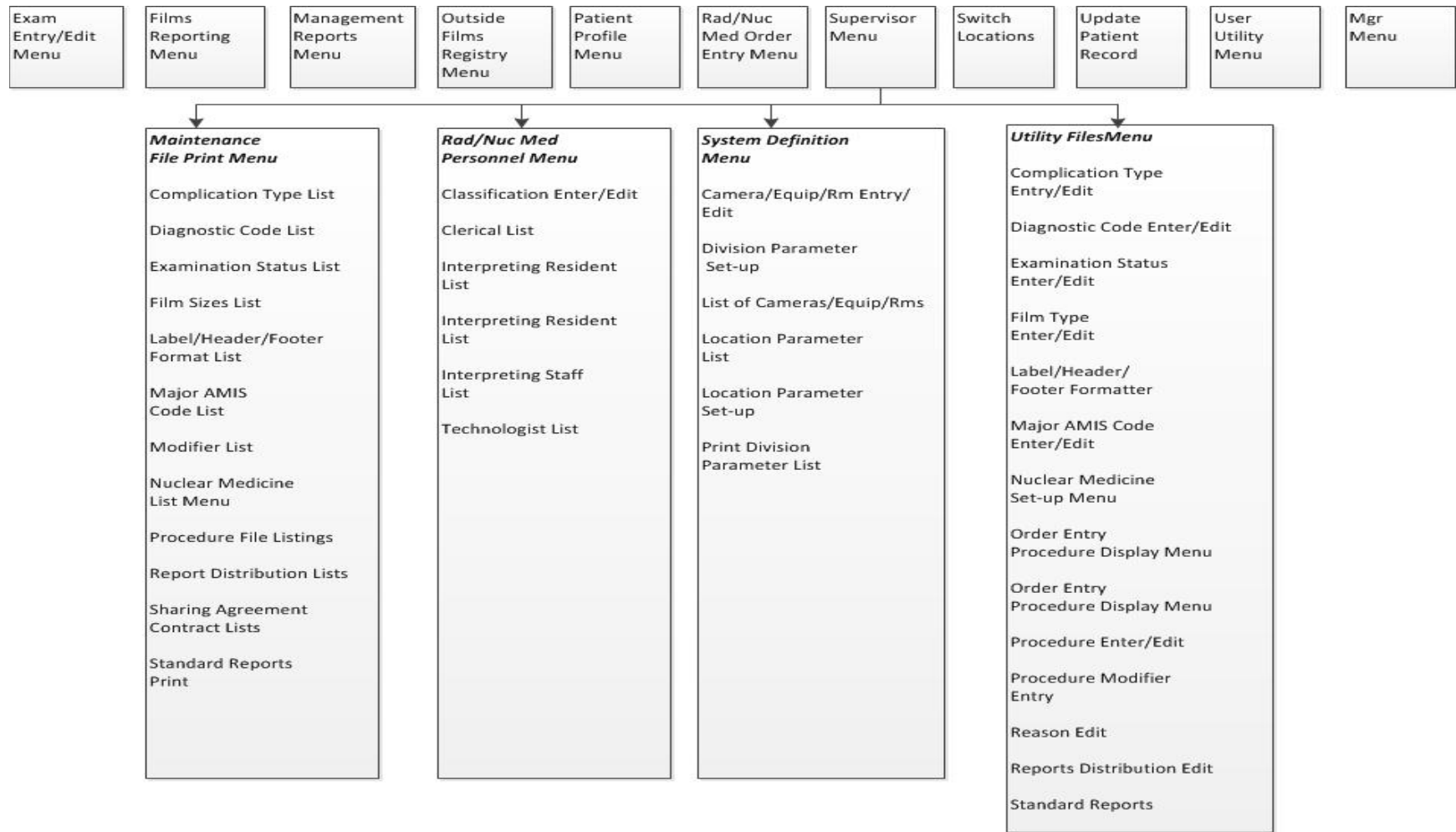


Figure 7-1: Supervisor Menu Overview diagram

## 7.1 Radiology Package Users

Upon entering a Radiology/Nuclear Medicine menu, the user is prompted to select a Sign-On Imaging Location. The set of locations the user is privileged to access is controlled by the radiology supervisor or IRM through the Classification Enter/Edit option. Most options are screened by a combination of imaging type, division, and location.

Besides being set up as Providers in RPMS using the **Add/Edit Provider** option, users of the Radiology package require additional setup which determines the functions and imaging types they will be allowed to use.

The **Rad/Nuc Med Classification Menu** may be accessed as follows:

```
RAD Rad/Nuc Med Total System Menu ...
    Supervisor Menu ...
    Rad/Nuc Med Personnel Menu ...
```

Figure 7-2: Radiology/Nuclear Medicine Personnel Menu

The **Classification Enter/Edit** menu option may be used to identify the functions and imaging locations allowed for each member of the Radiology staff, while the other four options in the **Rad/Nuc Med Classification Menu** may be used to list the staff who fall under the classification of Clerk, Resident, Staff, or Technologist.

```
Classification
Enter/Edit Clerical List
Interpreting Resident List
Interpreting Staff List
Technologist List
```

Figure 7-3: Radiology Personnel Classification

When assigning classifications to staff, the following general guidelines may be used:

- **Clerk** – Assigned to an individual who performs clerical entry in the Radiology/Nuclear Medicine Package. They cannot be listed as a technologist when editing an exam.
- **Technologist** – Assigned to all Radiology staff who perform exams.
- **Resident** – Not normally used in IHS – refers to a Radiology Resident.
- **Staff** – Reserved for interpreting Radiologists or those who will need to verify reports for interpreting Radiologist.

The setup for a typical Technologist is shown below.

**Note:** This would be a typical setup for a technologist at a site where reports are read by an outside Radiologist and may need to be edited or verified by a member of the Radiology staff.

If the Technologist in the example below had the RA ALLOC key, he/she would not have required identification of the RAD/NUC MED LOCATION ACCESS. And if he/she actually had responsibility for several imaging types, e.g., CT SCAN, MAMMOGRAPHY, and ULTRASOUND in addition to RADIOLOGY, and *did not* have the RA ALLOC key, then the additional Locations would have had to be added to this classification profile.

```
XRA > Supervisor Menu > Rad/Nuc Med Personnel Menu > Classification Enter/Edit
Select Rad/Nuc Med Personnel Menu Option: CLASSification Enter/Edit

Select Personnel: DEMO,USER 3 K

Select RAD/NUC MED CLASSIFICATION: t (T technologist)
Are you adding 'technologist' as
a new RAD/NUC MED CLASSIFICATION (the 1ST for this NEW PERSON)? No// Y
(Yes)
Select RAD/NUC MED CLASSIFICATION: c (C clerk)
Are you adding 'clerk' as a new RAD/NUC MED CLASSIFICATION (the 2ND for this N
EW PERSON)? No// Y (Yes)
Select RAD/NUC MED CLASSIFICATION: s (S staff)
Are you adding 'staff' as a new RAD/NUC MED CLASSIFICATION (the 3RD for this N
EW PERSON)? No// Y (Yes)
Select RAD/NUC MED CLASSIFICATION:
Select RAD/NUC MED LOCATION ACCESS: POTEAU IM// ?
Answer with RAD/NUC MED LOCATION ACCESS
Choose from:
MEDICAL IMAGING
POTEAU IM
MCALESTER IM
HUGO IM
IDABEL IM

RAD/NUC MED INACTIVE DATE:
STAFF REVIEW REQUIRED:
ALLOW VERIFYING OF OTHERS: Y YES
```

Figure 7-4: Classification of radiology staff

Note that in this example, there are five Imaging Locations defined. At small sites, which may or may not perform Radiology services on site, there will be a single imaging location.

### 7.1.1 Electronic Signature Code Edit

As indicated above in Classification Enter/Edit, staff may be designated who will be verifying reports for either outside or internal Radiologists as needed. Such staff will need an electronic signature code and will need to clearly identify their Signature Block Title. Failure to do so will result in reports displaying that the reports were verified by Staff Physician.

To set the electronic signature and the Signature Block Title, each user may access the **Electronic Signature code Edit** option from **TBOX** as shown in Figure 7-5.

```

At any Select Menu Option prompt > TBOX > Edit User Characteristics

IHS Radiology/Nuclear Med Order Entry Menu ...
  REG Exam Entry/Edit Menu ...
  Films Reporting Menu ...
  Management Reports Menu ...
  Outside Films Registry Menu ...
  Patient Profile Menu ...
  Supervisor Menu ...
  Switch Locations
  Update Patient Record
  User Utility Menu ...

Select Rad/Nuc Med Total System Menu Option: TBOX  User's Toolbox

      Electronic Signature code Edit

Select User's Toolbox Option: ELECTRONic Signature code Edit
This option is designed to permit you to enter or change your Initials,
Signature Block Information, Office Phone number, and Voice and
Digital Pagers numbers.
In addition, you are permitted to enter a new Electronic Signature Code
or to change an existing code.

INITIAL: DKU//
SIGNATURE BLOCK PRINTED NAME: DEMO K USER//
SIGNATURE BLOCK TITLE: CONTRACT RADIOLOGIST
OFFICE PHONE:
VOICE PAGER:
DIGITAL PAGER:

Your typing will not show.
ENTER NEW SIGNATURE CODE:
RE-ENTER SIGNATURE CODE FOR VERIFICATION:
DONE

```

Figure 7-5: Setting up Electronic Signature Code and Signature Block Title

**Note:** Signature code must be 6–20 characters in length with no control or lowercase characters.



## 7.2 System Definition

In order to run the radiology module, you must have at least one radiology division and one radiology location defined in the database.

Use the **Division Parameter Set-up** menu option to either initialize your division and location parameters or to update them if they are already defined.

### Radiology Division

The Radiology module is designed to handle multiple divisions within a medical center. While most IHS facilities only have one division, there are a number that are multi-divisional. As a result, it is possible to structure the system for more than one division. This may be an important feature to utilize to keep PCC visit and billing data organized in multi-divisional service units. Additional divisions may be initialized after the initial set up as if new services are added at additional facilities.

However, single division medical centers will not notice this in the everyday execution of the module. Only in the initial setup will there be any reference to 'division' for these single division sites.

Each division will have its own set of parameters defining such division-wide criteria as, should the exam 'requested date' be asked and are impressions required on reports.

### Radiology Location

Within a specific division, there may be a number of physical locations where a radiology procedure can be performed. For example, a division may have its main radiology department on the second floor, and it may also have a satellite location on the first floor at an outpatient clinic area. In addition, more than one type of radiology service may be offered within a facility, e.g., general radiology and mammography. Each of these imaging types may be set up as its own imaging location.

The module is designed to handle multiple locations within a division. Each location will have its own set of parameters defining such location-specific criteria as printer devices for flash cards and jacket labels.

### Prerequisites for Initialization

If you are setting up the system for the first time, then you will not be able to answer many of the location parameter prompts. These parameters are pointer fields to files that you will need to build as part of the initialization process (day-one files).

However, the important thing at this point is to enter at least one division and one location under that division.

The other steps required as a prerequisite to the initialization process are the following:

1. The Site Manager should add the **RA OVERALL** menu option to the **AKMOCORE** menu option for access to the module.
2. The Site Manager should give the radiology coordinator access to the **RA OVERALL** menu.
3. The Radiology Coordinator and the Site Manager should have all the RA keys.

After these actions are taken, the initialization of the module can be accomplished entirely within the Radiology module itself.

When the Radiology package is installed at a site, the Rad/Nuc Med Division will normally be defined. If it is not, VA FileMan may be used to edit the Rad/Nuc Med Division file to add and specify the Facility at which the Radiology/Nuclear Medicine Package will be used as well as the parameters in place at that division. If all security keys have been given and the individual configuring the Radiology Package is encountering the XQUIT screen when accessing the package, please submit a Help ticket to IHS IT Support at [itsupport@ihs.gov](mailto:itsupport@ihs.gov).

Within the **System Definition Menu**, there are three options for system set up as well as three options to list or print existing entries for the Division and Imaging Locations. There may be one to multiple Divisions and one or more Imaging Locations depending upon whether the facility operates on a stand-alone basis or in a multi-divisional environment where Radiology services are provided at more than one facility.

```
RAD   Rad/Nuc Med Total System Menu ...
Supervisor Menu ...
System Definition Menu ...
      Camera/Equip/Rm Entry/Edit
      Division Parameter Set-up
      List of Cameras/Equip/Rms
      Location Parameter List
      Location Parameter Set-up
      Print Division Parameter List
```

Figure 7-6: System Definition Menu

It is helpful to do system configuration in the order of the menu.

## 7.2.1 Camera/Equipment/Room

The entries in this file are used by the technologist to indicate with which camera/equipment/room the exam was performed. Even if no exams are performed on site, an Outside Location should be defined. Only cameras/equipment/rooms associated with the location where the exam was performed are valid choices when editing an exam. At facilities with numerous modalities, this may be a quality assurance tool to identify which equipment was used for an exam if a problem is later identified with that equipment.

If Radiology services are provided at a small health care facility where only one room and one X-ray machine is in use, you may choose to create only that one room when using the **Camera/Equip/Rm Entry/Edit** option.

If multiple locations and modalities are used, the **Camera/Equipment/Room** file may be populated with unique identifiers to make selection easier for the technologists that work with that modality at a particular site; e.g., S1-XRAY, T2-XRAY, S1-CT, T2-CT, MM-Mobile Mammography.

In the example in Figure 7-7, a new Modality of R1 with a synonym of GE ADVANX has been added to the existing list of rooms and equipment in use at multiple facilities.

```
Select Supervisor Menu Option: SYStem Definition Menu

    Camera/Equip/Rm Entry/Edit
    Division Parameter Set-up
    List of Cameras/Equip/Rms
    Location Parameter List
    Location Parameter Set-up
    Print Division Parameter List

Select System Definition Menu Option: CAmera/Equip/Rm Entry/Edit
Select Camera/Equip/Room: ?
Answer with CAMERA/EQUIP/RM, or DESCRIPTION
Do you want the entire 14-Entry CAMERA/EQUIP/RM List? Y (Yes)
Choose from:
BB          BROKEN BOW
CT ROOM    CTX
H          HUGO
I-MAMMO    MAMMOGRAPHY
I-ROOM 1   GENERAL RADIOLOGY
I-U/S      ULTRASOUND
MAMMO      MAMMOGRAPHY
MC          MCALESTER
OB/US      OB ULTRASOUND
PORTABLE    PORTABLE X-RAY MACHINE
POT        POTEAU
R2         GE MPV MICRO
U/S        ULTRASOUND

You may enter a new CAMERA/EQUIP/RM, if you wish
```

```

Enter a name for this camera/equip/rm, between 1 and 30 characters
in
length.

Select Camera/Equip/Room: R1          GE ADVANX
CAMERA/EQUIP/RM: R1//
DESCRIPTION: GE ADVANX//

```

Figure 7-7: Camera/Equipment/Rm Entry/Edit

## 7.2.2 Imaging Location(s)

The **Location Parameter Set-Up** function allows the user doing the configuration to define location parameters. Using this option actually creates an entry in file 44, the **Hospital Location** file. Do not use the Scheduling Package to set up Radiology Locations and do not use Radiology Locations to schedule appointments. If appointments are scheduled for Radiology services, use the Scheduling Package to create clinics that are clearly differentiated from the Radiology Locations by names such as X-Ray Appt, US Appt, CT Appt.

When Locations are set up within the Radiology package, they must be associated with an Imaging Type. Imaging Types available include:

```

ANGIO/NEURO/INTERVENTIONAL
CARDIOLOGY STUDIES (NUC MED)
CT SCAN
GENERAL RADIOLOGY
MAGNETIC RESONANCE IMAGING
MAMMOGRAPHY
NUCLEAR MEDICINE
ULTRASOUND
VASCULAR LAB

```

Figure 7-8: Imaging Types

Most small facilities will have only one Location with an Imaging Type of GENERAL RADIOLOGY. Larger facilities offering multiple services may choose to set up Locations for CT, US, MRI, and/or MAMMOGRAPHY.

**Note:** If a facility offers more than one modality and wishes to use VISTA Imaging functionality, they must set up locations associated with each type of imaging that are offered.

When setting up a Location, the user will normally specify the Camera/Equipment/Room associated with that location. In the case of a small facility offering limited X-Ray with one machine, they will create one location with an Imaging Type of General Radiology and a Camera/Equipment/Room of X-Ray or whatever they chose to call their Camera/Equipment/Room.

Larger facilities offering one or more Rad/Nuc Med services at more than one Facility will need to set up one Location for each modality offered at each facility. Additional Locations may be added as new equipment and services are offered. As those additional Locations are added, they must be added to the appropriate Division using the **Division Parameter Set-up** option.

In Figure 7-9, a new Imaging Location for Mammography is defined.

You will notice that several additional steps will be required before this new location is ready for use:

1. A default printer must be assigned under the Device Specifications for Imaging Locations to print order requisitions.
2. Unless staff have been assigned the RA ALLOC key, those individuals using the Mammography Location must have this Imaging Location added to their Rad/Nuc Med Classification access.
3. This new Imaging Location must be assigned to the appropriate Division under Division Set up.

**Note:** Because a Camera/Equipment/Rm was not set up for Mammograms prior to this step, the user is prompted to create the new Camera/Equipment/Rm as the Location is defined.

```
Rad/Nuc Med Total System Menu
Supervisor Menu
System Definition Menu
Location Parameter Set-up
Select Location: ?
  Answer with IMAGING LOCATIONS, or TYPE OF IMAGING:
  RADIOLOGY                                (GENERAL RADIOLOGY-8907)

  You may enter a new IMAGING LOCATIONS, if you wish
  Select the appropriate location.
  Entry must be an active "Clinic" type with a valid imaging Stop Code
  in the Hospital Location file.
  Answer with HOSPITAL LOCATION NAME
  Do you want the entire HOSPITAL LOCATION List? N (No)
Select Location: MAMMOGRAPHY
  Are you adding 'MAMMOGRAPHY' as a new HOSPITAL LOCATION? No// Y (Yes)
  HOSPITAL LOCATION TYPE: CL CLINIC
  HOSPITAL LOCATION TYPE EXTENSION: CLINIC//
  Are you adding 'MAMMOGRAPHY' as a new IMAGING LOCATIONS (the 2ND)? No// Y
  (Yes)
  IMAGING LOCATIONS TYPE OF IMAGING: MAMMOGRAPHY

** Caution: You are activating a new Imaging Type. **
This means you will have to assign procedures to
this imaging type. Workload reports will be printed
separately for this Imaging Type.
```

Are you sure? YES

\* Since you have added a new Imaging Location, remember to assign \*  
\* it to a Rad/Nuc Med division through Division Parameter Set-up. \*

Imaging Location: MAMMOGRAPHY

Flash Card Parameters:

-----  
HOW MANY FLASH CARDS PER VISIT: 0  
DEFAULT FLASH CARD FORMAT:

No default flash card printer has been assigned. Contact IRM.

Jacket Label Parameters:

-----  
HOW MANY JACKET LBLS PER VISIT: 0  
DEFAULT JACKET LABEL FORMAT:

No default jacket label printer has been assigned. Contact IRM.

Exam Label Parameters:

-----  
HOW MANY EXAM LABELS PER EXAM: 1// 0  
DEFAULT EXAM LABEL FORMAT:

Exam label printer is always the same as the flash card printer.

Order Entry Parameters:

-----  
No default request printer has been assigned. Contact IRM.

Report Parameters:

-----  
DEFAULT REPORT HEADER FORMAT: REPORT HEADER  
DEFAULT REPORT FOOTER FORMAT: REPORT FOOTER  
REPORT LEFT MARGIN: 10//  
REPORT RIGHT MARGIN: 70//  
PRINT DX CODES IN REPORT?: Y yes  
VOICE DICTATION AUTO-PRINT:

No default report printer has been assigned. Contact IRM.

Cameras/Equip/Rooms Used by this Location:

-----  
Select CAMERA/EQUIP/RM: MAM  
Are you adding 'MAM' as a new CAMERA/EQUIP/RM (the 9TH)? No// (No) ??  
Select CAMERA/EQUIP/RM: MAM  
Are you adding 'MAM' as a new CAMERA/EQUIP/RM (the 9TH)? No// Y (Yes)  
CAMERA/EQUIP/RM DESCRIPTION: MAMMOGRAM  
Are you adding 'MAM' as a new CAMERAS/EQUIP/RMS (the 1ST for this IMAGING LOCA  
TIONS)? No// Y (Yes)  
Select CAMERA/EQUIP/RM:

Default CPT Modifiers used by this Location:

-----+  
| Your entry cannot be compared with a CPT CODE, so be very sure |

```

| that this is the Default CPT Modifier that you want to stuff |
| into every registered exam from this imaging location.      |
+-----+
Select DEFAULT CPT MODIFIERS(LOC):

Recipients of the 'Stat' Alert for this Location:
-----
Select STAT REQUEST ALERT RECIPIENTS:

ALLOW 'RELEASED/NOT VERIFIED': no//  no
INACTIVE:
TYPE OF IMAGING: MAMMOGRAPHY//
CREDIT METHOD: 0//  Regular Credit

Imaging Location file #79.1 entry MAMMOGRAPHY has a missing
or invalid DSS ID.  The Radiology/Nuclear Medicine ADPAC should
use the Location Parameter Set-up [RA SYSLOC] option to enter
a valid imaging DSS Code for this imaging location.

Imaging Location file #79.1 entry MAMMOGRAPHY is not assigned
to a Rad/Nuc Med Division.  If Imaging exams are to be registered
in this imaging location, or if there are incomplete exams
already registered to this location, the Radiology/Nuclear
Med ADPAC should use the Division Parameter Set-up [RA SYSDIV]
option to assign this imaging location to the appropriate
Rad/Nuc Med Division.

```

Figure 7-9: Location Parameter Set up for Mammography

It is to be expected that the user will see the message in Figure 7-10 when the Location set up is complete. DSS ID is used to identify an Imaging Stop Code but is not used by IHS. Do not create entries in the Imaging Stop Code file and do not populate the DSS ID field in the Location file.

```

Imaging Location file #79.1 entry MAMMOGRAPHY has a missing
or invalid DSS ID.  The Radiology/Nuclear Medicine ADPAC should
use the Location Parameter Set-up [RA SYSLOC] option to enter
a valid imaging DSS Code for this imaging location.

```

Figure 7-10: Imaging Location Error

**Note:** Location Set up is not complete until each location is associated with a Division.

### 7.2.3 Division

The **Division Parameter Set-Up** function allows the user to define division parameters for the facility defined as the Rad/Nuc Med Division during the package installation. It also allows the user to create additional divisions if Radiology services are offered at more than one facility in a service unit.

The following diagram illustrates the multi-division, multi-location within a division concept.



Figure 7-11: Location within Division diagram

**Note:** A location can only be associated with one division.

Each division will have its own set of parameters defining division-wide criteria such as:

- Should the exam 'requested date' be asked,
- Should exam labels be printed, jacket labels,
- Should pregnancy status be defaulted to UNKNOWN
- Can pregnancy status be edited on a completed exam
- Should LOINC and SNOMED codes be used (under review for RA patch 1005 for MU2)
- Should exams be passed to PCC at the status of examined

It also permits linking Locations to that division. Until Locations have been assigned to a Division, the Radiology/Nuclear Medicine Package may not be used for those Imaging Locations.

Text to be displayed during ordering may be entered for Contrast Reaction and Clinical History Messages.

In Figure 7-12, the Division Parameters are defined for Demo Indian Hospital.

```

Select System Definition Menu Option: division Parameter Set-up
Select Division: ?
  Answer with RAD/NUC MED DIVISION:
  DEMO INDIAN HOSPITAL

  You may enter a new RAD/NUC MED DIVISION, if you wish
  Enter the name of the division.
  Answer with INSTITUTION NAME
  Do you want the entire INSTITUTION List? n (No)
Select Division: DEMO INDIAN HOSPITAL      OKLAHOMA      TAHLEQUAH      01
                      NM              8907

  ...OK? Yes// (Yes)
  
```



## Division-wide Order Entry Parameters:

-----  
 ASK 'IMAGING LOCATION': YES// ??

This division 'parameter' can be set to 'Yes' to indicate that the User should be asked when requesting an exam, which 'Imaging Location' the request should be forwarded to. It is recommended that this field be set to 'Yes' to facilitate sorting of requests by imaging location for various reports. Answering 'Yes' to this questions causes the 'SUBMIT REQUEST TO:' prompt to appear after a request is created.

Choose from:

Y        YES  
 n        NO

TRACK REQUEST STATUS CHANGES: YES//

CLINICAL HISTORY MESSAGE: \*\*\* CLINICAL HISTORY REQUIRED \*\*\*

**Note:** *This is the field that passes to the modality and PACS with some interfaces.*

Exam Entry/Edit Parameters:

-----  
 DETAILED PROCEDURE REQUIRED: yes//

ASK 'CAMERA/EQUIP/RM': yes//

AUTO USER CODE FILING: yes//

TRACK EXAM STATUS CHANGES: yes//

ASK EXAM STATUS TIME: yes//

TIME LIMIT FOR FUTURE EXAMS: ??

This is the maximum number of hours in the future that a user may Register a patient for an exam. If this prompt is bypassed, the user may not register a patient at a future date.

**Note:** *It may be advantageous to pre-register patients in some cases, like a special mammography unit that is at the clinic one day a month where appointments are scheduled closely together. However, if a patient fails to appear as scheduled, that request should be cancelled so that the ordering provider knows the patient failed to keep her appointment..*

Films Reporting Parameters:

-----  
 ALLOW STANDARD REPORTS: yes//

ALLOW BATCHING OF REPORTS: no//

ALLOW COPYING OF REPORTS: no//

IMPRESSION REQUIRED ON REPORTS: yes//

ALLOW VERIFYING BY RESIDENTS: no//

ALLOW RPTS ON CANCELLED CASES?: no//

WARNING ON RPTS NOT YET VERIF?: yes//

AUTO E-MAIL TO REQ. PHYS?:

ALLOW E-SIG ON COTS HL7 RPTS: no// ??

Entering 'Y' will turn on a feature that automatically adds the Electronic Signature Block printed name of the Verifying Physician that signed the report being transmitted to Rad/Nuc Med via an HL7 interface to a COTS voice reporting system. This parameter is only checked for COTS HL7 interfaces that use the Generate/Process Routine 'RAHLTCPB' in the subscriber protocol.

**Note:** *This is a very specific interface and may not be used by your interfaced reporting system.*

INTERPRETING STAFF REQ'D?: YES//

## Miscellaneous Division Parameters:

```
-----
PRINT FLASH CARD FOR EACH EXAM: no//
PRINT JACKET LBLs W/EACH VISIT: no//
SEND PCC AT EXAMINED: YES// ??
```

This prompt permits Radiology customers with the option to pass exam data to PCC when an exam reaches the EXAMINED status, or when a report is verified.

**Note: It is highly recommended that this parameter be set to YES whether or not reports are entered.**

```
PREGNANCY DEFAULT TO UNKNOWN: NO
PREGNANCY EDIT AT VERIFIED: Y YES
CONTRAST REACTION MESSAGE: CAUTION!! -- CONTRAST REACTION !!
    Replace
RPHARM DOSE WARNING MESSAGE:
    No existing text
    Edit? NO//
```

## HL7 Applications Associated with this Division:

```
-----
Select HL7 RECEIVING APPLICATION: ??
```

You may enter a new HL7 RECEIVING APPLICATIONS, if you wish Pointer to the HL7 APPLICATIONS file (#771).

If the Radiology HL7 Subscriber protocols (file #101) have been setup to use ROUTING LOGIC, then HL7 RECEIVING APPLICATIONS should be defined. This DIVISION will then send HL7 messages to the HL7 RECEIVING APPLICATIONS defined only.

If no HL7 RECEIVING APPLICATIONS are set when ROUTING LOGIC is being used, no HL7 messages will be created for this DIVISION.

If ROUTING LOGIC is not being used and no HL7 RECEIVING APPLICATIONS are set, then messages will be sent to all Radiology Subscriber protocols, as normal.

**If in doubt, do not put entries in this field. These are very specific interface types.**

Choose from:

RA-CLIENT-IMG	ACTIVE
RA-CLIENT-TCP	ACTIVE
RA-PSCRIBE-TCP	ACTIVE
RA-SCIMAGE-TCP	ACTIVE
RA-SERVER-IMG	ACTIVE
RA-TALKLINK-TCP	ACTIVE
RA-VOICE-SERVER	ACTIVE

## Imaging Locations Associated with this Division:

```
-----
Select IMAGING LOCATION: RADIOLOGY// MAMMOGRAPHY
    ...OK? Yes// (Yes)
```

(MAMMOGRAPHY-)

Are you adding 'MAMMOGRAPHY' as a new IMAGING LOCATIONS (the 2ND for this RAD/NUC MED DIVISION)? No// Y (Yes)

```
Select IMAGING LOCATION:
```

Division Parameters have been set!

```
Imaging Location file #79.1 entry RADIOLOGY has a missing
or invalid DSS ID. The Radiology/Nuclear Medicine ADPAC should
use the Location Parameter Set-up [RA SYSLOC] option to enter
a valid imaging DSS Code for this imaging location.
```

```
Imaging Location file #79.1 entry MAMMOGRAPHY has a missing
or invalid DSS ID. The Radiology/Nuclear Medicine ADPAC should
use the Location Parameter Set-up [RA SYSLOC] option to enter
a valid imaging DSS Code for this imaging location.
```

Figure 7-12: Division Parameter Setup

Note that it is to be expected that the user will see the message in Figure 7-13 when the Division parameter setup is complete. DSS ID is used to identify an Imaging Stop Code but is not used by IHS.

***Do not*** create entries in the Imaging Stop Code file and do not populate the **DSS ID** field in the **Location** file.

```
Imaging Location file #79.1 entry RADIOLOGY has a missing
or invalid DSS ID. The Radiology/Nuclear Medicine ADPAC should
use the Location Parameter Set-up [RA SYSLOC] option to enter
a valid imaging DSS Code for this imaging location.
```

Figure 7-13: Invalid DSS Code for imaging location message

## 7.3 Maintenance Files Print Menu

This menu allows the user to obtain a list of the entries that have been configured under the **Utility Files Maintenance Menu**. Access the **Maintenance Files Print Menu** as shown in Figure 7-14. Review the existing entries with the Radiology Supervisor/Manager to determine which entries need to be inactivated and any new entries that need to be created.

```
RAD   Rad/Nuc Med Total System Menu ...
Supervisor Menu ...
Maintenance Files Print Menu ...
```

Figure 7-14: Maintenance Files Print Menu

Utility files that may be printed include the following. It is recommended that only those files bolded be printed and updated via the Utility Files Maintenance.

```
Complication Type List
Diagnostic Code List
Examination Status List
Film Sizes List
Label/Header/Footer Format List
Major AMIS Code List
Modifier List
Nuclear Medicine List Menu ...
Procedure File Listings ...
```

```

HIST    Display Rad/NM Procedure Contrast Media History
Active Procedure List (Long)
Active Procedure List (Short)
Alpha Listing of Active Procedures
Barcoded Procedure List
Inactive Procedure List (Long)
Invalid CPT/Stop Code List
List of Inactive Procedures (Short)
List of Procedures with Contrast
Parent Procedure List
Procedure Message List
Series of Procedures List
Report Distribution Lists
Sharing Agreement/Contract List
Standard Reports Print

```

Figure 7-13: Utility Files

### 7.3.1 Print Procedure List Using VA FileMan

It is unfortunate, but all of the procedure listings are designed for 132-column format. It may be helpful to use VA FileMan to print the procedure list as follows:

```

Select VA FileMan Option: PRINT File Entries

OUTPUT FROM WHAT FILE: RAD/NUC MED PROCEDURES//
SORT BY: NAME//
START WITH NAME: FIRST//
FIRST PRINT FIELD: NAME;L25
THEN PRINT FIELD: TYPE OF PRO;L8;"TYPE"CEDURE
THEN PRINT FIELD: AMIS CODES      (multiple)
  THEN PRINT AMIS CODES SUB-FIELD: AMIS;L12
    1  AMIS CODE
    2  AMIS WEIGHT MULTIPLIER
CHOOSE 1-2: 1  AMIS CODE
  THEN PRINT AMIS CODES SUB-FIELD:
THEN PRINT FIELD: CPT;L6 CODE
THEN PRINT FIELD: INACTIVATION DATE;L5;"I/A"
THEN PRINT FIELD:
Heading (S/C): RAD/NUC MED PROCEDURES LIST  Replace
STORE PRINT LOGIC IN TEMPLATE:
DEVICE:  <== printer
RAD/NUC MED PROCEDURES LIST                SEP 19,2013  10:27    PAGE 1
NAME                                         CPT
NAME                                         CODE      I/A
-----
'BILIARY STENT PLACEMENT'  DETAILED  INTERVENTION  75982  DEC  7,1993
'CAROTID U/S               DETAILED  ULTRASOUND,E  93880  DEC  1,1993
'DRAGER VIEW MANDIBLE'    DETAILED  SKULL,INC.SI  70100  MAY 14,1998
'DUCTOGRAM MULTIPLE DUCTS DETAILED  OTHER        76088  MAY 14,1998
'DUCTOGRAM SINGLE DUCT'   DETAILED  OTHER        76086  MAY 14,1998
'FETAL BIOPHYSICAL PROFIL DETAILED  ULTRASOUND,E  76818  MAY 14,1998
'FETUS POST DEMISE'       DETAILED  OTHER        76499  MAY 14,1998
'UPPER EXTREMITY DUPLEX'  DETAILED  ULTRASOUND,E  93950  DEC  1,1993
ABD U/S                    DETAILED  76700      AUG 22,1993
ABDOMEN  MIN 2 VIEWS + CH  BROAD     76700      AUG  2,1992
ABDOMEN 1 VIEW             DETAILED  ABDOMEN-KUB   74000
ABDOMEN 2 VIEWS            DETAILED  ABDOMEN-KUB   74010  MAY 14,1998
ABDOMEN 3 OR MORE VIEWS   DETAILED  OBSTRUCTIVE   74020
ABDOMEN FLAT & UPRIGHT    DETAILED  ABDOMEN-KUB   74010

```

ABDOMEN FOR FETAL AGE 1 V	DETAILED	ABDOMEN-KUB	74720	MAY 14, 1998
ABDOMEN FOR FETAL AGE MUL	DETAILED	ABDOMEN-KUB	74725	MAY 14, 1998
ABDOMEN MIN 3 VIEWS+CHEST	SERIES	CHEST-SINGLE		
		OBSTRUCTIVE	74022	MAY 14, 1998
ABDOMEN, COMPLETE	DETAILED		76700	
ABDOMEN-KUB	BROAD	ABDOMEN-KUB	74000	
ACROMIOCLAVICULAR J BILAT	DETAILED	SKELETAL-BON	73050	
ACUTE ABDOMEN	SERIES	ABDOMEN-KUB		
		CHEST-SINGLE	74022	
ANGIO ADRENAL BILAT SELEC	DETAILED	ANGIOGRAM, CA	75734	NOV 29, 1993
ANGIO ADRENAL BILAT SELEC	DETAILED	ANGIOGRAM, CA	75733	NOV 29, 1993
ANGIO ADRENAL UNILAT SELE	DETAILED	ANGIOGRAM, CA	75732	NOV 29, 1993
ANGIO ADRENAL UNILAT SELE	DETAILED	ANGIOGRAM, CA	75731	NOV 29, 1993
ANGIO AORTOFEM CATH W/SER	DETAILED	ANGIOGRAM, CA	75631	NOV 29, 1993
ANGIO AORTOFEMORAL CATH W	DETAILED	ANGIOGRAM, CA	75630	NOV 13, 1986
ANGIO BRACHIAL RETROGRADE	DETAILED	ANGIOGRAM, CA	75659	NOV 29, 1993
ANGIO BRACHIAL RETROGRADE	DETAILED	ANGIOGRAM, CA	75658	NOV 29, 1993
ANGIO CAROTID CEREBRAL BI	DETAILED	ANGIOGRAM, CA	75673	NOV 29, 1993
ANGIO CAROTID CEREBRAL BI	DETAILED	ANGIOGRAM, CA	75672	MAY 14, 1998
ANGIO CAROTID CEREBRAL BI	DETAILED	ANGIOGRAM, CA	75671	NOV 29, 1993
ANGIO CAROTID CEREBRAL SE	DETAILED	ANGIOGRAM, CA	75661	NOV 29, 1993
ANGIO CAROTID CEREBRAL SE	DETAILED	ANGIOGRAM, CA	75660	NOV 29, 1993

Figure 7-15: Print Entries in Rad/Nuc Med Procedure file using VA FileMan

You may not wish to edit all of the Utility Files, but it is recommended that you review and update the following.

## 7.4 Utility File Definitions

The **Utility Files Maintenance Menu** provides the Radiology Supervisor or Manager with a number of menu options to customize the Radiology Package to meet their site's needs. These files are the so-called Day One files. When the system is first loaded, many of these files will have data. However, the coordinator must review this data to insure that the data meets the site's needs and to modify or add file entries accordingly.

All of the files are 'day-one' files. That is, these files need to be initialized before the module is placed into production mode. They may subsequently be updated as new procedures or services are offered or discontinued. You may wish to begin by printing the existing entries in the Utility Files using the **Maintenance Files Print** menu in Section 7.3.

### 7.4.1 Complication Type Entry/Edit

This option allows the manager to enter/edit complication types that may be associated with an exam. When editing an exam, a user can specify a complication using the **Case Number Edit** option or **Edit Exam by Patient** option. However, if a complication has not been defined in this table, it may not be entered at the time an exam is edited.

The most commonly used complication type is a contrast material reaction complication. In the case of this complication, the patient's record in the Allergy Tracking System will be automatically updated to indicate the patient has had a contrast material reaction. As a result, every time the patient is registered for a procedure that may involve contrast material, the receptionist will be warned and should then take the appropriate action.

When the system is initialized, two complications are loaded into the module: Contrast Material Reaction and No Complication. Other site-specific entries can be added using this option. In the example in Figure 7-16, a new Complication Type is entered for Morbid Obesity.

```
Select Utility Files Maintenance Menu Option: COMPLICATION Type Entry/Edit

Select COMPLICATION TYPES: ?
  Answer with COMPLICATION TYPES
  Choose from:
  CONTRAST REACTION
  NO COMPLICATION

      You may enter a new COMPLICATION TYPES, if you wish
  Enter a type of complication, between 3 and 30 characters in
length,
      that may be associated with an exam.

Select COMPLICATION TYPES: MORBID OBESITY
  Are you adding 'MORBID OBESITY' as
  a new COMPLICATION TYPES (the 3RD)? No// Y (Yes)
COMPLICATION: MORBID OBESITY//
CONTRAST MEDIUM REACTION?: NO NO
```

Figure 7-16: Adding a new compilation

## 7.4.2 Diagnostic Code Enter/Edit

This option allows the manager to enter and edit report diagnostic codes. Diagnostic codes may be entered at the time a report is entered to provide an overall impression of the exam.

Diagnostic Codes are important for three reasons:

1. The Abnormal Report may be run periodically for any abnormal diagnostic codes.
2. BiRad Codes entered as Diagnostic Codes trigger the link to Women's Health.
3. Diagnostic Codes flagged as Abnormal will trigger an Abnormal Notification in EHR for the ordering provider.

The following is the list of diagnostic codes that most likely were loaded as part of the initialization process:

Normal
--------

```

Minor Abnormality
Major Abnormality, No Attn. Needed
Abnormality, Attn. Needed
Major Abnormality, Physician Aware
Undictated Films Not Returned, 3 Days
Unsatisfactory/Incomplete Exam
POSSIBLE MALIGNANCY, FOLLOW-UP NEEDED
MAJOR ABNORMALITY, URGENT ATTN. NEEDED
MAM - NEGATIVE
MAM - BENIGN FINDING, NEGATIVE
MAM - PROBABLY BENIGN FINDING, SHORT INTERVAL F/U SUGGESTED
MAM - SUSPICIOUS ABNORMALITY, BIOPSY SHOULD BE CONSIDERED
MAM - HIGHLY SUGGESTIVE OF MALIG, ACTION SHOULD BE TAKEN
MAM - ASSESSMENT IS INCOMPLETE
MAM - NOT INDICATED

```

Figure 7-17: Diagnostic codes

As part of the initialization process, these entries can be deleted. However, once the system is in production, you should not delete any entries. The names of entries should also not be changed, once in production, as this could affect their meaning.

Existing entries may be edited to determine whether they will appear on the abnormal report and whether they will trigger an Abnormal notification for the ordering provider. In Figure 7-18, the Diagnostic Code, MAJOR ABNORMALITY, URGENT ATTN NEEDED is shown.

```

Select Utility Files Maintenance Menu Option: DIAGnostic Code Enter/Edit

Select DIAGNOSTIC CODES: MAJOR
    1 MAJOR ABNORMALITY, NO ATTN. NEEDED
    2 MAJOR ABNORMALITY, URGENT ATTN. NEEDED
CHOOSE 1-2: 2 MAJOR ABNORMALITY, URGENT ATTN. NEEDED
DESCRIPTION:
PRINT ON ABNORMAL REPORT: YES//
GENERATE ABNORMAL ALERT?: YES//
INACTIVE:

```

Figure 7-18: Editing Diagnostic Code

### 7.4.3 Examination Status

In order to ensure the functionality of the Radiology Package, this is probably the most important utility file to configure correctly. If a data element is required but not entered by staff during the processing of an exam, the exam will get hung up and fail to complete.

For each Imaging Type in use at a facility, the examination status change requirements must be set in order to move an exam from one status to the next in the normal process. This option may also be used to indicate if exams in each status should be included in various Radiology reports. In the example provided below, only four examination statuses are defined:

- Waiting for Exam
- Examined
- Transcribed
- Complete

This would be typical for a facility that has a Transcriptionist and on-site Radiologist who interprets images. At many facilities where reports are provided by an outside entity, only three statuses may be used: Waiting for Exam, Examined, and Complete.

If other Imaging Types are in use at a facility—Mammography, Ultrasound, CT, MRI—the examination statuses must be defined for each separate Imaging Type. The examination statuses must be duplicated by specifying the Imaging Type and then defining the requirements for each examination status for that Imaging Type.

When the examination status changes have been defined, an inconsistency report should be reviewed to be sure that if a data element is required but that data element is not asked for, or a data element is required in order to be complete but is not asked for at an earlier step in the examination status. In Figure 7-19, Examination Statuses are defined for General Radiology.

**Note:** If Examination Statuses have not been previously set, it may be helpful to begin with the Status of COMPLETE and work back down to WAITING FOR EXAM.

```
Select Utility Files Menu Option: Examination Status Enter/Edit

Select an Imaging Type: general RADIOLOGY

Select an Examination Status: ?
Answer with EXAMINATION STATUS
Do you want the entire EXAMINATION STATUS List? y (Yes)
Choose from:
  CALLED FOR EXAM           Imaging Type: GENERAL RADIOLOGY
                           Order:
  CANCELLED                 Imaging Type: GENERAL RADIOLOGY
                           Order: 0
  COMPLETE                 Imaging Type: GENERAL RADIOLOGY
                           Order: 9
  DICTATED                 Imaging Type: GENERAL RADIOLOGY
                           Order:
  EXAMINED                 Imaging Type: GENERAL RADIOLOGY
                           Order: 2
  PROBLEM DRAFT           Imaging Type: GENERAL RADIOLOGY
                           Order:
```



```

TRANSCRIBED           Imaging Type: GENERAL RADIOLOGY
                       Order: 3
WAITING FOR EXAM      Imaging Type: GENERAL RADIOLOGY
                       Order: 1

```

You may enter a new EXAMINATION STATUS, if you wish  
 Enter a name for an exam status, between 3 and 30 non-numeric  
 characters, to the current exam status being defined.

```

Select an Examination Status: waiting FOR EXAM  Imaging Type: GENERAL RADIOLOGY
                               Order: 1
...OK? Yes//    (Yes)

```

\* Reminder \* WAITING FOR EXAM does NOT need data entered for  
 the 'ASK' and 'REQUIRED' fields. Registration automatically  
 sets cases to this status since its ORDER number is 1.

```

Name of Current Exam Status: WAITING FOR EXAM//
Order in sequence of status progression: 1//
Should this Status appear in Status Tracking ?: YES
//
User Key needed to move an exam to this status:
Default next status for exam: EXAMINED//
Can an exam be cancelled while in this status ?: YES
//
Generate exam alert for requesting physician ?: NO
//
Generate Examined HL7 Message:

```

#### Status Change Requirements

-----

Please indicate which of the following is required  
 in order to place an exam into the 'WAITING FOR EXAM' status:

```

Technologist Required ?: NO//
Resident Or Staff Required ?: NO//
Detailed Procedure required ?: NO//
Film Entry Required ?: NO//
Diagnostic Code Required ?: NO//
Camera/Equip/Rm Required ?: NO//
Procedure Modifiers required ?: NO//
CPT Modifiers required ?: NO//

```

WARNING: You must use the reporting feature of the system as  
 a prerequisite for the following requirements:

```

Report Entered required ?: NO//
Impression required ?: NO//
Verified Report required ?: NO//

```

#### Status Tracking Functions

-----

Please indicate which of the following should be asked when  
 changing an exam's status to 'WAITING FOR EXAM' while using  
 the 'status tracking' feature:

```

Ask for Technologist ?: NO//
Ask For Interpreting Physician ?: NO//
Ask for Procedure ?: NO//
Ask For Film Data ?: NO//
Ask For Diagnostic Code ?: NO//
Ask For Camera/Equip/Rm ?: NO//

```

```

Ask for Procedure Modifiers ?: NO//
Ask for CPT Modifiers ?: NO//
Ask for User Code ?: NO//
Ask Medications & Dosages ?: NO//
Ask Medication Admin Dt/Time & Person ?: NO//

Management Report Criteria
-----
Please indicate which of the following workload reports should
include exams with the 'WAITING FOR EXAM' status:

Clinic Report should include exams of this status ?: NO
//
PTF Bedsection Report should include exams of this status ?: NO
//
Service Report (Workload) should include exams of this status ?: YES
//
Sharing/Contract Report (Workload) should include exams of this status ?: NO
//
Ward Report (Workload) should include exams of this status ?: NO
//
Film Usage Report (Workload) should include exams of this status ?: NO
//
Technologist Report (Workload) should include exams of this status ?: NO
//
AMIS Report (Workload) should include exams of this status ?: NO
//
Detailed Procedure Report (Workload) should include exams of this status ?: NO
//
Camera/Equip/Rm Report should include exams of this status ?: NO
//
Physician Report should include exams of this status ?: NO
//
Resident Report should include exams of this status ?: NO
//
Staff Report should include exams of this status ?: NO
//
Delinquent Status Report should include exams of this status ?: YES
//

Select an Examination Status: examINED Imaging Type: GENERAL RADIOLOGY
Order: 2
...OK? Yes// (Yes)

Name of Current Exam Status: EXAMINED//
Order in sequence of status progression: 2//
Should this Status appear in Status Tracking ?: YES
//
User Key needed to move an exam to this status:
Default next status for exam: TRANSCRIBED//
Can an exam be cancelled while in this status ?: NO
//
Generate exam alert for requesting physician ?: NO
//
Generate Examined HL7 Message: YES//

Status Change Requirements
-----
Please indicate which of the following is required
in order to place an exam into the 'EXAMINED' status:

Technologist Required ?: YES//

```

```

Resident Or Staff Required ?: NO//
Detailed Procedure required ?: YES//
Film Entry Required ?: YES//
Diagnostic Code Required ?: NO//
Camera/Equip/Rm Required ?: YES//
Procedure Modifiers required ?: NO//    NO
CPT Modifiers required ?: NO//    NO

```

```

WARNING: You must use the reporting feature of the system as
a prerequisite for the following requirements:
Report Entered required ?: NO//
Impression required ?: NO//
Verified Report required ?: NO//

```

#### Status Tracking Functions

```

-----
Please indicate which of the following should be asked when
changing an exam's status to 'EXAMINED' while using
the 'status tracking' feature:

```

```

Ask for Technologist ?: YES//
Ask For Interpreting Physician ?: NO//
Ask for Procedure ?: YES//
Ask For Film Data ?: YES//
Ask For Diagnostic Code ?: NO//
Ask For Camera/Equip/Rm ?: YES//
Ask for Procedure Modifiers ?: NO//    NO
Ask for CPT Modifiers ?: NO//    NO
Ask for User Code ?: NO//
Ask Medications & Dosages ?: NO//    NO
Ask Medication Admin Dt/Time & Person ?: NO//    NO

```

#### Management Report Criteria

```

-----
Please indicate which of the following workload reports should
include exams with the 'EXAMINED' status:

```

```

Clinic Report should include exams of this status ?: YES
//
PTF Bedsection Report should include exams of this status ?: NO
//
Service Report (Workload) should include exams of this status ?: YES
//
Sharing/Contract Report (Workload) should include exams of this status ?: NO
//
Ward Report (Workload) should include exams of this status ?: YES
//
Film Usage Report (Workload) should include exams of this status ?: YES
//
Technologist Report (Workload) should include exams of this status ?: YES
//
AMIS Report (Workload) should include exams of this status ?: YES
//
Detailed Procedure Report (Workload) should include exams of this status ?: YES
//
Camera/Equip/Rm Report should include exams of this status ?: YES
//
Physician Report should include exams of this status ?: YES
//
Resident Report should include exams of this status ?: NO
//
Staff Report should include exams of this status ?: YES

```

```
//
Delinquent Status Report should include exams of this status ?: YES
//

Select an Examination Status: tranSCRIBED Imaging Type: GENERAL RADIOLOGY
                               Order: 3
...OK? Yes// (Yes)

Name of Current Exam Status: TRANSCRIBED//
Order in sequence of status progression: 3//
Should this Status appear in Status Tracking ?: YES
//
User Key needed to move an exam to this status:
Default next status for exam: COMPLETE//
Can an exam be cancelled while in this status ?: NO
//
Generate exam alert for requesting physician ?: NO
//
Generate Examined HL7 Message:

    Status Change Requirements
    -----
    Please indicate which of the following is required
    in order to place an exam into the 'TRANSCRIBED' status:

Technologist Required ?: YES//
Resident Or Staff Required ?: YES//
Detailed Procedure required ?: YES//
Film Entry Required ?: YES//
Diagnostic Code Required ?: NO//
Camera/Equip/Rm Required ?: YES//
Procedure Modifiers required ?: NO//
CPT Modifiers required ?: NO//

    WARNING: You must use the reporting feature of the system as
             a prerequisite for the following requirements:
Report Entered required ?: YES//
Impression required ?: NO//
Verified Report required ?: YES//

    Status Tracking Functions
    -----
    Please indicate which of the following should be asked when
    changing an exam's status to 'TRANSCRIBED' while using
    the 'status tracking' feature:

Ask for Technologist ?: YES//
Ask For Interpreting Physician ?: YES//
Ask for Procedure ?: YES//
Ask For Film Data ?: YES//
Ask For Diagnostic Code ?: NO//
Ask For Camera/Equip/Rm ?: YES//
Ask for Procedure Modifiers ?: NO//
Ask for CPT Modifiers ?: NO//
Ask for User Code ?: NO//
Ask Medications & Dosages ?: NO//
Ask Medication Admin Dt/Time & Person ?: NO//

    Management Report Criteria
    -----
    Please indicate which of the following workload reports should
```

```

include exams with the 'TRANSCRIBED' status:

Clinic Report should include exams of this status ?: YES
//
PTF Bedsection Report should include exams of this status ?: NO
//
Service Report (Workload) should include exams of this status ?: NO
//
Sharing/Contract Report (Workload) should include exams of this status ?: NO
//
Ward Report (Workload) should include exams of this status ?: YES
//
Film Usage Report (Workload) should include exams of this status ?: YES
//
Technologist Report (Workload) should include exams of this status ?: YES
//
AMIS Report (Workload) should include exams of this status ?: YES
//
Detailed Procedure Report (Workload) should include exams of this status ?: YES
//
Camera/Equip/Rm Report should include exams of this status ?: YES
//
Physician Report should include exams of this status ?: YES
//
Resident Report should include exams of this status ?: NO
//
Staff Report should include exams of this status ?: YES
//
Delinquent Status Report should include exams of this status ?: YES
//

Select an Examination Status: COMPLETE

Name of Current Exam Status: COMPLETE//
Order in sequence of status progression: 9//
Should this Status appear in Status Tracking ?: NO
//
User Key needed to move an exam to this status:
Default next status for exam:
Can an exam be cancelled while in this status ?: NO
//
Generate exam alert for requesting physician ?: YES
//
Generate Examined HL7 Message:

    Status Change Requirements
    -----
    Please indicate which of the following is required
    in order to place an exam into the 'COMPLETE' status:

Technologist Required ?: YES//
Resident Or Staff Required ?: YES//
Detailed Procedure required ?: YES//
Film Entry Required ?: YES//
Diagnostic Code Required ?: NO//
Camera/Equip/Rm Required ?: YES//
Procedure Modifiers required ?: NO//    NO
CPT Modifiers required ?: NO//    NO

    WARNING: You must use the reporting feature of the system as
             a prerequisite for the following requirements:
Report Entered required ?: YES//

```

```

Impression required ?: YES//
Verified Report required ?: YES//

    Status Tracking Functions
    -----
    Please indicate which of the following should be asked when
    changing an exam's status to 'COMPLETE' while using
    the 'status tracking' feature:

Ask for Technologist ?: YES//
Ask For Interpreting Physician ?: YES//
Ask for Procedure ?: YES//
Ask For Film Data ?: YES//
Ask For Diagnostic Code ?: NO//
Ask For Camera/Equip/Rm ?: YES//
Ask for Procedure Modifiers ?: NO//    NO
Ask for CPT Modifiers ?: NO//    NO
Ask for User Code ?: NO//
Ask Medications & Dosages ?: NO//    NO
Ask Medication Admin Dt/Time & Person ?: NO//    NO

    Management Report Criteria
    -----
    Please indicate which of the following workload reports should
    include exams with the 'COMPLETE' status:

Clinic Report should include exams of this status ?: YES
    //
PTF Bedsection Report should include exams of this status ?: NO
    //
Service Report (Workload) should include exams of this status ?: YES
    //
Sharing/Contract Report (Workload) should include exams of this status ?: NO
    //
Ward Report (Workload) should include exams of this status ?: YES
    //
Film Usage Report (Workload) should include exams of this status ?: YES
    //
Technologist Report (Workload) should include exams of this status ?: YES
    //
AMIS Report (Workload) should include exams of this status ?: YES
    //
Detailed Procedure Report (Workload) should include exams of this status ?: YES
    //
Camera/Equip/Rm Report should include exams of this status ?: YES
    //
Physician Report should include exams of this status ?: YES
    //
Resident Report should include exams of this status ?: NO
    //
Staff Report should include exams of this status ?: YES
    //
Delinquent Status Report should include exams of this status ?: NO
    //

    Checking order numbers
    _____ and Default Next Status used for status progression _____
    within : GENERAL RADIOLOGY

    Required order numbers are in place.

```

```

_____ Checking Exam Status names _____
        within : GENERAL RADIOLOGY

Exam Status names check complete
Enter RETURN to continue or '^' to exit:

        Data Inconsistency Report For Exam Statuses

DEVICE: HOME//

                                                Page: 1
                                                Date: Nov 04, 2008

        Data Inconsistency Report For Exam Statuses
=====

_____ Checking verified report required and impression required _____
        within : GENERAL RADIOLOGY

'Verified Report required ?' was set to 'yes'; but
'Impression required ?' was not set to 'yes' at this and lower status(es) :

                Verified Rpt req'd           Impression Required
CANCELLED                N                       N
WAITING FOR EXAM        N                       N
EXAMINED                 N                       N
TRANSCRIBED             Y                       N
COMPLETE                 Y                       Y

                                                Page: 2
                                                Date: Nov 04, 2008

        Data Inconsistency Report For Exam Statuses
=====

If verified report is required at a particular status,
then the impression should also be required at the same or lower status.

        Checking order numbers
_____ and Default Next Status used for status progression _____
        within : GENERAL RADIOLOGY

Required order numbers are in place.

_____ Checking Exam Status names _____
        within : GENERAL RADIOLOGY

                                                Page: 3
                                                Date: Nov 04, 2008

        Data Inconsistency Report For Exam Statuses
=====

Exam Status names check complete

```

Figure 7-19: Setting up Examination Status requirements

### 7.4.4 Films Type Entry/Edit

This option allows the manager to edit existing film types and enter new film types. These film types will be the choices the technologist can select from during the **Case No. Exam Edit** or **Edit Exam by Patient** options to indicate which films were used during the procedure.

Most sites have moved to digital imaging or are moving in that direction. For those sites, it is recommended that a film type of Digital be added. Some sites have chosen to add two separate Digital film types based on the size of the cartridge.

For those sites that track “re-takes”, film types of Wasted may be created so that the Wasted Film Report may be run.

In Figure 7-20, Digital Film type is created as well as a corresponding Wasted-Digital Film. Note that R may be used instead of W to indicate a Retake.

```
Select Utility Files Maintenance Menu Option: film Type Entry/Edit
Select FILM SIZES: DIGITAL
  Are you adding 'DIGITAL' as a new FILM SIZES (the 20TH)? No// Y (Yes)
FILM: DIGITAL//
IS THIS A 'CINE' FILM SIZE?: N NO
FLUORO ONLY?: N NO
INACTIVATION DATE:
WASTED FILM?:

Select FILM SIZES: W-DIGITAL
  Are you adding 'W-DIGITAL' as a new FILM SIZES (the 21ST)? No// Y (Yes)
FILM: W-DIGITAL//
IS THIS A 'CINE' FILM SIZE?: N NO
FLUORO ONLY?: N NO
INACTIVATION DATE:
WASTED FILM?: Y YES
ANALOGOUS UNWASTED FILM SIZE: DIGITAL
```

Figure 7-20: Creating a Film Type and a Wasted Film Type

### 7.4.5 Major AMIS Code Entry/Edit

This menu option allows the coordinator to add new AMIS codes and edit existing AMIS codes.

When the system is first installed, all necessary entries and data associated with each entry will be part of the module.

AMIS Codes are workload codes used by the VA but they are not used within IHS so the user may encounter the following message when accessing this menu option. They must answer the question with a response of **YES** in order to proceed.

IHS continues to use AMIS codes as there are several reports based on AMIS codes.



```

Select Utility Files Maintenance Menu Option: major AMIS Code Entry/Edit
+-----+
| New entries and modifications to existing entries are      |
| prohibited without approval from Radiology Service VACO. |
+-----+

Do you have approval from Radiology Service VACO to
add/change any AMIS codes and weight? No// YES

```

Figure 7-21: Editing AMIS codes

The most common reason needed to access the AMIS Code file is to remove Retired from the names of some of the AMIS Codes or to add an AMIS Code of Mammography or DEXA if they do not already exist on your system.

#### 7.4.6 Label/Header/Footer Formatter

Although Labels are seldom printed by IHS sites using the Radiology package, this option should be exercised to customize the display of the header information on Radiology reports. If a report must be printed to send to an outside provider, it can only be printed from the Radiology Package. EHR imaging reports generated from the RPMS Radiology package have no identifying information on them and are not suitable for printing.

The manager may select from the following fields when laying out the report header and footer. And it is highly recommended that the format of the header be laid out on paper before altering the settings for the fields and their labels in this option.

Listed below are the field choices. Note that if you do not have the entries for Chart Number (IHS) please submit a ticket to IHS IT Support ([itsupport@ihs.gov](mailto:itsupport@ihs.gov)) in order to get a supplemental file. The fields that are bolded are most commonly used on the Report Header for IHS sites.

- AGE OF PATIENT
- ATTENDING PHYSICIAN AT ORDER
- ATTENDING PHYSICIAN CURRENT
- CASE NUMBER
- CASE NUMBER BARCODE
- CASE#
- CATEGORY (OUTP/INP)
- **CHART# OF PATIENT (IHS)**
- CURRENT DATE/TIME
- CURRENT PATIENT LOCATION
- **DATE OF BIRTH**

- **DATE OF BIRTH (AGE yrs)**
- DATE OF EXAM
- DATE ONLY
- DATE REPORT ENTERED
- **DATE REPORTED**
- **DIAGNOSTIC CODE**
- EXAM MODIFIERS
- **FREE TEXT**
- HOSPITAL DIVISION(INSTITUTION)
- IHS AGE OF PATIENT
- IHS AGE OF PATIENT AT EXAM
- IMAGING LOCATION
- LAST TIME THIS EXAM PERFORMED
- LAST VISIT FOR ANY EXAM
- **LONG CASE NUMBER**
- LONG CASE NUMBER BARCODE
- **NAME OF PATIENT**
- NAME OF PATIENT (FIRST LAST)
- **PAGE NUMBER**
- PATIENT ADDRESS LINE 1
- PATIENT ADDRESS LINE 2
- PATIENT ADDRESS LINE 3
- PRIMARY PHYSICIAN AT ORDER
- PRIMARY PHYSICIAN CURRENT
- **PROCEDURE**
- PROCEDURE BARCODE, 30 CHARS
- PROCEDURE BARCODE, 60 CHARS
- REPORT STATUS
- **REQUEST ENTERED BY**
- REQUEST ENTERED DATE/TIME

- REQUESTING AREA
- REQUESTING LOCATION
- **REQUESTING PHYSICIAN**
- RESIDENT
- RESIDENT SIGNATURE
- RESIDENT SIGNATURE NAME
- SERVICE
- **SEX OF PATIENT**
- SSN OF PATIENT
- SSN OF PATIENT BARCODE
- SSN OF PATIENT BARCODE-NO DASH
- **STAFF RADIOLOGIST**
- STAFF SIGNATURE
- STAFF SIGNATURE NAME
- **TECHNOLOGIST**
- UPDATED PATIENT LOCATION
- USUAL PATIENT CATEGORY
- VERIFIED DATE
- VERIFYING ELECTRONIC SIGNATURE
- **VERIFYING RADIOLOGIST**
- VERIFYING SIGNATURE
- VERIFYING SIGNATURE BLOCK
- VERIFYING SIGNATURE NAME
- **VERIFYING SIGNATURE TITLE**

The actual creation of the Report Header and Footer is much like creating an EHR Order Menu where rows and columns must be specified for the various fields. Duplicate entries for items like “FREE TEXT” can be entered more than once by using quotation marks for each entry after the initial one.

When the layout is complete, a sample header is printed to the screen so that the manager can determine if any adjustments are required.

In the sample report footer below, only two fields have been defined, **Date Report Entered** and **Page Number**.

FIELD	ROW	COL	TITLE	TEXT
-----				
--				
FORMAT NAME: REPORT FOOTER				
DATE REPORT ENTERED	1	3	Date Reported:	
PAGE NUMBER	1	70		

Figure 7-22: Format for Report Footer

```
Select Utility Files Maintenance Menu Option: label/Header/Footer Formatter
    >>> Exam Label/Report Header/Report Footer/Flash Card Formatter <<<

Select LBL/HDR/FTR FORMATS FORMAT NAME: report FOOTER
FORMAT NAME: REPORT FOOTER//
Select FIELD: DATE REPORT ENTERED//
  FIELD: DATE REPORT ENTERED//
  ROW: 1//
  COLUMN: 3//
  TITLE (OPTIONAL): Date Reported://
Select FIELD:
NUMBER OF ROWS IN FORMAT: 1//

    ...format 'REPORT FOOTER' has been compiled.

<<<<<<-----Column No.-----
>>>>>>

0-----1-----2-----3-----4-----5-----6-----7-----
-8
1      0      0      0      0      0      0      0
0

Date Reported:Jan 11,1985  09:33                               Page 1
```

Figure 7-23: Creating Report Footer

In the Report Header below, the following fields have been defined.

```
*** DEMO INDIAN MEDICAL CENTER ***
      5670 EAST TUCSON BOULEVARD
      TUCSON, ARIZONA 56789
      TELEPHONE: (520)765-8970

Name:   DEMO PATIENT                      DOB: 09-01-19XX (36 yrs)
Chart#: 00-00-00                          Sex: MALE
Requesting Loc: DENTAL                    Physician: DEMO, PROVIDER
Entered request: USER, DEMO

Case#: 081194-234                          Technician: DEMO, TECH
Procedure: 1A - SKULL                      Radiologist: DEMO, RADIOLOGIST
                                           Verifier: DEMO, USER A
-----
```

Figure 7-24: Sample Report Header

FIELD	ROW	COL	TITLE	TEXT
-----				
FORMAT NAME: REPORT HEADER				
FREE TEXT	4	20		*** DEMO INDIAN MEDICAL CEN
FREE TEXT	5	24		5670 EAST TUCSON BOULEVARD
FREE TEXT	6	26		TUCSON, ARIZONA 56789
FREE TEXT	7	25		TELEPHONE: (520)765-8970
NAME OF PATIENT	9	3	Name:	
DATE OF EXAM	9	3	Date of exam :	
DATE OF BIRTH (AGE yrs)	9	53	DOB:	
CHART# OF PATIENT (IHS)	10	3	Chart#:	
SEX OF PATIENT	10	53	Sex:	
REQUESTING LOCATION	11	3	Requesting Loc:	
REQUESTING PHYSICIAN	11	47	Physician:	
REQUEST ENTERED BY	12	3	Entered request	
TECHNOLOGIST	13	46	Technician:	
LONG CASE NUMBER	14	3	Case#:	
STAFF RADIOLOGIST	14	45	Radiologist:	
PROCEDURE	15	3	Procedure:	
VERIFYING RADIOLOGIST	15	48	Verifier:	
FREE TEXT	16	1		-----

Figure 7-25: Layout for Sample Report Header

For multi-divisional facilities with Radiology offered at more than one division, it may be advisable to create a report header for each facility and then link the correct report header to the Division in the Location Parameter Set up.

## 7.4.7 Order Entry Procedure Display Menu...

### 7.4.7.1 Common Procedure Enter/Edit

A Common Procedure List is nothing more than a numbered list of the top 40 procedures available for ordering for each Imaging Type in RPMS. When placing an order directly in RPMS, the procedure may be selected from the numbered list, entered by CPT code, or selected by name, e.g., WRIST. While it is not required that a Common Procedure List be created, it simplifies the ordering process at small sites with limited procedures or when orders are not always placed via EHR.

Before creating a Common Procedure List, it may be of value to use the **Display Common Procedure List** menu option to see what already is in place.

This menu option may be used to add and or remove procedures from the display used to enter requests. If you have inherited an old common procedure list, it may be helpful to just remove all Procedures from the list and then rebuild the list with the order of items desired. Note that you cannot mix imaging types on single Common Procedure List. Also, you may add procedures by CPT or HCPCS code rather than procedure name.

In the example shown in Figure 7-26, three mammogram procedures are added to the Common Procedure list for Mammography.

```
Select Order Entry Procedure Display Menu Option: common Procedure
Enter/Edit

Select one of the following imaging types:
  GENERAL RADIOLOGY
  MAMMOGRAPHY

Select IMAGING TYPE: maMMOGRAPHY

Select RAD/NUC MED COMMON PROCEDURE: ?
Answer with RAD/NUC MED COMMON PROCEDURE
Do you want the entire RAD/NUC MED COMMON PROCEDURE List? N (No)
Choose from:

    You may enter a new RAD/NUC MED COMMON PROCEDURE, if you wish
    Enter a procedure name.
    Only active procedures may be selected.

Are you adding 'MAMMOGRAM G0202' as
  a new RAD/NUC MED COMMON PROCEDURE? No// Y (Yes)
PROCEDURE: MAMMOGRAM G0202//
INACTIVATE FROM LIST:
SEQUENCE NUMBER: 1//

Select RAD/NUC MED COMMON PROCEDURE: G0204 ( )

Attempting FILEMAN lookup...   Diagnosticmammographydigital
  DIAGNOSTIC MAMMOGRAPHY, PRODUCING DIRECT DIGITAL IMAGE, BILATERAL,
ALL VIEWS MAMMOGRAM G0204 (MAM Detailed)
CPT:G0204
  Are you adding 'MAMMOGRAM G0204' as
  a new RAD/NUC MED COMMON PROCEDURE? No// Y (Yes)
PROCEDURE: MAMMOGRAM G0204//
INACTIVATE FROM LIST:
SEQUENCE NUMBER: 2//

Select RAD/NUC MED COMMON PROCEDURE: G0406 ( )

Attempting FILEMAN lookup...   Diagnosticmammographydigital
  DIAGNOSTIC MAMMOGRAPHY, PRODUCING DIRECT DIGITAL IMAGE, UNILATERAL,
ALL VIEWS MAMMOGRAM G0206 (MAM Detailed)
CPT:G0206
  Are you adding 'MAMMOGRAM G0206' as
  a new RAD/NUC MED COMMON PROCEDURE? No// Y (Yes)
PROCEDURE: MAMMOGRAM G0206//
```

```
INACTIVATE FROM LIST:
SEQUENCE NUMBER: 3//
```

Figure 7-26: Adding three new procedures to the Common Procedure List for Mammography

### 7.4.7.2 Create OE/RR Protocol from Common Procedure

This option is not used in IHS. Orderable items are created for Radiology Procedures in the EHR Clinical Coordinator's Order Menu Management Menu.

### 7.4.7.3 Display Common Procedure List

This option may be used to display one or more Common Procedure Lists. In Figure 7-27, the common procedure list for General Radiology is displayed.

COMMON RADIOLOGY/NUCLEAR MEDICINE PROCEDURES (GENERAL RADIOLOGY)	
-----	
1) CHEST 2 VIEWS PA&LAT	21) TIBIA & FIBULA 2 VIEWS
2) CHEST SINGLE VIEW	22) KNEE 3 VIEWS
3) RIBS UNILAT+CHEST 3 OR MORE VIEW	23) FEMUR 2 VIEWS
4) RIBS BILAT+CHEST 4 OR MORE VIEWS	24) SPINE CERVICAL MIN 2 VIEWS
5) ABDOMEN 1 VIEW	25) SPINE THORACIC AP&LAT&SWIM VIEWS
6) ABDOMEN FLAT & UPRIGHT	26) SPINE LUMBOSACRAL MIN 2 VIEWS
7) ACUTE ABDOMEN	27) SPINE SACRUM & COCCYX MIN 2 VIEW
8) SHOULDER 2 OR MORE VIEWS	28) SPINE SCOLIOSIS EXAM MIN 2 VIEWS
9) CLAVICLE	29) PELVIS 1 VIEW
10) ACROMIOCLAVICULAR J BILAT	30) HIP 2 OR MORE VIEWS
11) FINGER(S) 2 OR MORE VIEWS	31) SKULL LESS THAN 4 VIEWS
12) HAND 3 OR MORE VIEWS	32) NECK SOFT TISSUE
13) WRIST 3 OR MORE VIEWS	33) SINUSES MIN 2 VIEWS
14) FOREARM 2 VIEWS	34) SINUSES 3 OR MORE VIEWS
15) ELBOW 3 OR MORE VIEWS	35) FACIAL BONES, MINIMUM 3 VIEWS
16) HUMERUS 2 OR MORE VIEWS	36) NASAL BONES MIN 3 VIEWS
17) TOE(S) 2 OR MORE VIEWS	37) MANDIBLE 4 OR MORE VIEWS
18) FOOT 3 OR MORE VIEWS	38) ORBIT MIN 4 VIEWS
19) CALCANEUS 2 VIEWS	39) BONE AGE STUDY
20) ANKLE 3 OR MORE VIEWS	40) ECHOGRAM OTHER UNLISTED

Figure 7-27: Common Procedures List for General Radiology

## 7.4.8 Procedure Edit Menu

### 7.4.8.1 Procedure Modifier Entry

Modifiers are words that can be used to better describe a procedure; the most common modifiers are LEFT and RIGHT. But very specific modifiers may be entered for billing purposes, e.g., FA for Left Hand, thumb, F1 for Left Hand, second digit; F2 for Left Hand, third digit, etc. While a modifier may be in the Procedure Modifier list, it may not be used for additional imaging types until those Imaging Types have been added to the Modifier. In Figure 7-28, Bilateral was already defined as a modifier, but the Imaging Type of MAMMOGRAPHY was added so that modifier could be used with that modality. Multiple imaging types may be added for each modifier.

```

Supervisor's Menu
Utility Files Maintenance Menu
Procedure Edit Menu
Procedure Modifier Entry

Select Procedure Modifier: BILATERAL EXAM (RAD)
Select TYPE OF IMAGING: GENERAL RADIOLOGY// MAMMOGRAPHY
Select TYPE OF IMAGING: ?
Answer with TYPE OF IMAGING
Choose from:
1 GENERAL RADIOLOGY
2 MAMMOGRAPHY

Note that this modifier may now be used both for General Radiology and
Mammography

```

Figure 7-28: Adding an Imaging Type to a Procedure Modifier

### 7.4.8.2 Procedure Message Entry/Edit

When ordering a procedure, there may be certain patient preparation requirements that should be conveyed to the ordering provider. These requirements can be defined in Procedure Messages which can then be attached to the Procedures during the Procedure Enter/Edit process.

For example, a new Procedure Message is created in Figure 7-29 below.

It may subsequently be entered on the appropriate procedure when it is defined and will also display when the EHR quick order is created.

```

Select RAD/NUC MED PROCEDURE MESSAGE TEXT: ?

    You may enter a new RAD/NUC MED PROCEDURE MESSAGE, if you wish
    Message can be 3-240 characters in length. It cannot be preceded
with
    punctuation.

Select RAD/NUC MED PROCEDURE MESSAGE TEXT: SPECIAL PREPARATION IS REQUIRED
FOR THIS PROCEDURE. PLEASE CONTACT THE RADIOLOGY DEPT FOR DIRECTIONS.

```

Figure 7-29: Creating a Procedure Message

### 7.4.8.3 Procedure Enter/Edit

This function allows the package coordinator to enter new procedures into the system and to edit existing procedures. Procedures must be defined correctly in the Radiology/Nuclear Medicine Procedure file before they can be used to create quick orders for EHR menus.



Entries in this procedure file are the allowable choices the user will be able to choose from at the “Procedure” prompt either while ordering, registering a patient for an exam, or editing an exam.

If the procedure has an inactivation date of less than the current date, then the procedure is not a valid choice and will not appear on the list of valid/active procedures when displayed to the user.

If you will be interfacing with a PACS or modality/worklist server, be careful about using a forward slash (/) or ampersand (&) in procedure names as these are HL7 encoding characters and may cause incorrect parsing of an HL7 order or exam message.

There are four types of procedures.

1. Detailed: Procedure is associated with one or more AMIS codes and must have a CPT or HCPCS code assigned to it.
2. Series: Procedure is associated with more than one AMIS code and must have a CPT code assigned to it.
3. Broad: Procedure is mainly used by the receptionist when scheduling a patient for an exam. It is used when he/she is not exactly sure which detailed or series procedure will be performed. However, before the exam can be considered complete, the Procedure must be changed to detailed or series.

If the division parameter requiring a detailed or series procedure upon initial exam registration is set to Yes, then the receptionist will not be allowed to select a broad procedure.

**Note:** Since the 2014 Meaningful Use in 2014, it has been recommended and trained to use only Detailed, Series, or Parent procedures as defined in the RAD/NUC MED Procedure File.

4. Parent: Procedure is a “placeholder” used for ordering one or more related procedures that are always reported together. It does not have a CPT code and is broken down into its descendant procedures which must be registered and edited. Parent procedures must have one or more descendant procedures, but a single report may be filed against all descendant procedures defined under a parent. Parent procedures are a convenient mechanism to generate multiple CPT codes for exams that are always performed in tandem, i.e., Digital Screening Mammogram and CAD.

When editing or creating new procedures, always continue on to run the validity check on CPT and stop codes. CPT codes are updated by the American Medical Association and IHS on an annual basis, but those updates do not automatically transfer into the Radiology/Nuclear Medicine procedure file. If a CPT code is no longer active, the original procedure must have an inactivation date assigned and a new procedure must be created with the new CPT code.

In Figure 7-30, a detailed procedure is edited for an ABDOMEN KUB with a procedure message. Note that modality is a required field for some modality worklist servers. You may need to confirm the modality code that you need to use with your interface.

```

Select Procedure Edit Menu Option:  Procedure Enter/Edit

Select RAD/NUC MED PROCEDURES NAME: ABDOMEN
  1  ABDOMEN  MIN 2 VIEWS + CHEST (ACUTE)          (RAD Inactive)
  2  ABDOMEN  1 VIEW                               (RAD Detailed) CPT:74000
  3  ABDOMEN  2 VIEWS                              (RAD Inactive) CPT:74010
  4  ABDOMEN  3 OR MORE VIEWS                      (RAD Detailed) CPT:74020
  5  ABDOMEN  FLAT & UPRIGHT                       (RAD Detailed) CPT:74010ress
<RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5:
  6  ABDOMEN  FOR FETAL AGE 1 VIEW                 (RAD Inactive) CPT:74720
  7  ABDOMEN  FOR FETAL AGE MULT VIEWS            (RAD Inactive) CPT:74725
  8  ABDOMEN  MIN 3 VIEWS+CHEST                   (RAD Inactive) CPT:74022
  9  ABDOMEN, COMPLETE                            (RAD Detailed) CPT:76700
 10  ABDOMEN-KUB                                  (RAD Broad  ) CPT:74000
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-10: 9  ABDOMEN, COMPLETE                (RAD Detailed) CPT:76700
NAME: ABDOMEN, COMPLETE//
TYPE OF IMAGING: GENERAL RADIOLOGY//
TYPE OF PROCEDURE: DETAILED//
CONTRAST MEDIA USED: NO//  No
Select MODALITY: ??
  You may enter a new MODALITY, if you wish
Choose from:
AS      Angioscopy
BI      Biomagnetic Imaging
CD      Color Flow Doppler
CF      Cinefluorography (Retired)
CP      Culposcopy
CR      Computed Radiography
CS      Cystoscopy
CT      Computed Tomography
DD      Duplex Doppler
DF      Digital Fluoroscopy (Retired)
DG      Diaphanography
DM      Digital Microscopy
DS      Digital Subtraction Angiography (Retired)
DX      Digital Radiography
EC      Echocardiography
ES      Endoscopy
FA      Fluorescein Angiography
FS      Fundoscopy
IO      Intra-oral Radiology (Retired)
LP      Laparoscopy
LS      Laser Surface Scan

```

```

MA      Magnetic Resonance Angiography
MG      Mammography      (Retired)
MR      Magnetic Resonance
MS      Magnetic Resonance Spectroscopy
NM      Nuclear Medicine
OT      Other
PT      Positron Emission Tomography (PET)
RF      Radio Fluoroscopy
RG      Radiographic Imaging (conventional film/screen)
ST      Single-Photon Emission Computed Tomography (SPECT)
TG      Thermography
US      Ultrasound
VF      Videofluorography      (Retired)
VL      Visible Light
XA      X-Ray Angiography

Select MODALITY: DX      Digital Radiography
Are you adding 'DX' as a new MODALITY (the 1ST for this RAD/NUC MED PROCEDURES)?
No// Y (Yes)
Select MODALITY:
HEALTH SUMMARY WITH REQUEST:
Select SYNONYM:
PROMPT FOR MEDS:
Select DEFAULT MEDICATION:
Select AMIS CODE: ABDOMEN-KUB
  AMIS WEIGHT MULTIPLIER: 1
  BILATERAL?:
Select AMIS CODE:
CPT CODE// 76700 (no editing)
Select DEFAULT CPT MODIFIERS (PROC):
STAFF REVIEW REQUIRED: NO//
RAD/NM PHYS APPROVAL REQUIRED: NO//
REQUIRED FLASH CARD PRINTER:
REQUIRED FLASH CARD FORMAT:
Select FILM TYPE: DIGITAL
Are you adding 'DIGITAL' as a new FILMS NEEDED (the 1ST for this RAD/NUC MED
PROCEDURES)? No// Y (Yes)
  NORMAL AMOUNT NEEDED FOR EXAM: 1
Select FILM TYPE:
Select MESSAGE: SP
  1 SPECIAL PREPARATION IS REQUIRED FOR THIS PROCEDURE. PLEASE CONTACT THE
RADIOLOGY DEPT FOR DIRECTIONS.
  2 SPECIAL PREPARATION REQUIRED - PLEASE CONTACT RADIOLOGY DEPARTMENT
CHOOSE 1-2: 1 SPECIAL PREPARATION IS REQUIRED FOR THIS PROCEDURE. PLEASE CONTACT
THE RADIOLOGY DEPT FOR DIRECTIONS.
Are you adding 'SPECIAL PREPARATION IS REQUIRED FOR THIS PROCEDURE. PLEASE CONTACT
THE RADIOLOGY DEPT FOR DIRECTIONS.' as
a new MESSAGE (the 1ST for this RAD/NUC MED PROCEDURES)? No// Y (Yes)
Select MESSAGE:
EDUCATIONAL DESCRIPTION:
  No existing text
  Edit? NO//
INACTIVATION DATE:
Select RAD/NUC MED PROCEDURES NAME:

Want to run a validity check on CPT and stop codes? NO//YES

```

Figure 7-30: Editing a procedure

In order to create parent procedures, all descendant procedures must first be defined under **Procedure Enter/Edit** and they must all have the same imaging type. Once that has been confirmed, the parent procedure may be created. A common parent procedure that may be requested is a CT of a chest, abdomen, and pelvis, a CAP procedure. A parent procedure does not require a CPT code. Therefore, a parent procedure may be created using the two descendants, CT Chest (Thorax) without contrast, CPT 71250, and CT Abdomen and Pelvis without contrast, CPT 74176.

```
Select Procedure Edit Menu Option: proce
  1   Procedure Enter/Edit
  2   Procedure Message Entry/Edit
  3   Procedure Modifier Entry
CHOOSE 1-3: 1 Procedure Enter/Edit

Select RAD/NUC MED PROCEDURES NAME: CT CHEST, ABDOMEN, PELVIS WO CONTRAST(
ABDOMEN/ABDOMENFLANKBACK/ABDOMENVENOUS CONTRAST PELVIS/PELVISACRAL/PELVISHIP THORAX/
THORAXLUMBAR )

The following words were not used in this search:
  CT
  WO

Attempting FILEMAN lookup...
  Are you adding 'CT CHEST, ABDOMEN, PELVIS WO CONTRAST' as
  a new RAD/NUC MED PROCEDURES (the 748TH)? No// Y (Yes)
  RAD/NUC MED PROCEDURES TYPE OF PROCEDURE: PA PARENT
NAME: CT CHEST, ABDOMEN, PELVIS WO CONTRAST Replace
TYPE OF IMAGING: CT SCAN
TYPE OF PROCEDURE: PARENT//
SINGLE REPORT: Y YES
HEALTH SUMMARY WITH REQUEST:
Select SYNONYM: CAP
  Are you adding 'CAP' as a new SYNONYM (the 1ST for this RAD/NUC MED PROCEDURES
)? No// Y (Yes)
Select SYNONYM:
RAD/NM PHYS APPROVAL REQUIRED: NO// NO
Select MESSAGE:

Select DESCENDENTS: 71250 CT THORAX W/O DYE
  COMPUTED TOMOGRAPHY, THORAX; WITHOUT CONTRAST MATERIAL CT THORAX W/O CONT
(CT Detailed) CPT:71250
  Are you adding 'CT THORAX W/O CONT' as a new DESCENDENTS (the 1ST for this RAD/NUC
MED PROCEDURES)? No// Y (Yes)
Select DESCENDENTS: CT ABDOMEN( ABDOMEN/ABDOMENFLANKBACK/ABDOMENVENOUS )

The following word was not used in this search:
  CT
.....
.....
Attempting FILEMAN lookup... AND PELVIS WO CONTRAST (CT Detailed) CPT:74176
  Are you adding 'CT ABDOMEN AND PELVIS WO CONTRAST' as
  a new DESCENDENTS (the 2ND for this RAD/NUC MED PROCEDURES)? No// Y (Yes)
Select DESCENDENTS:
EDUCATIONAL DESCRIPTION:
  No existing text
  Edit? NO//
```

INACTIVATION DATE:

Figure 7-31: Creating a Parent Procedure

## 7.4.9 Reason Edit

This option allows managers to modify or add reasons that can be selected by users who are cancelling and or holding Imaging orders. When canceling an exam, the user will normally see the following in Figure 7-32.

```

RAD- Exam Entry/Edit Menu ... Cancel an Exam

Select Exam Entry/Edit Menu Option: CANCEL an Exam

Enter Case Number: 082713-2

Choice Case No.          Procedure          Name          Pt ID
-----
1      082713-2          ANKLE 3 OR MORE VIEWS          GUMP,BJ          876

Do you wish to cancel this exam now? NO// Y
...exam status backed down to 'CANCELLED'
STATUS CHANGE DATE/TIME: SEP 30,2013@09:17//
TECHNOLOGIST COMMENT:
REASON FOR CANCELLATION: ??
    This is the reason this exam was cancelled.

Choose from:
1      ANESTHESIA CONSULT NEEDED          Synonym: ANES
6      CONFLICT OF EXAMINATIONS          Synonym: CON
7      DUPLICATE REQUESTS                Synonym: DUP
8      INADEQUATE CLINICAL HISTORY        Synonym: INAD
13     PATIENT CONSENT DENIED             Synonym: PCD
14     PATIENT EXPIRED                   Synonym: EXP
17     REQUESTING PHYSICIAN CANCELLED     Synonym: REQ
19     WRONG EXAM REQUESTED              Synonym: WRN
20     EXAM CANCELLED                    Synonym: CAN
21     EXAM DELETED                      Synonym: DEL
22     CALLED-WARD DID NOT SEND           Synonym:
23     RESCHEDULED                       Synonym: RSCH
24     DID NOT KEEP APPT                  Synonym: DNKA
25     PATIENT NOT PROPERLY PREP'D        Synonym: NOPREP
26     PATIENT CANCELLED EXAM            Synonym: PTCAN
27     RADIOLOGIST CANCELLED EXAM        Synonym: RADCAN
28     EQUIPMENT FAILURE                  Synonym: EQ
29     WRONG PATIENT REQ'D               Synonym: WRGPT

    REASON FOR CANCELLATION: 24 DID NOT KEEP APPT          Synonym: DNKA
    ...cancellation complete.

Do you want to cancel the request associated with this exam? No// (No)

HOLD DESCRIPTION:
No existing text
Edit? NO//
    ...request status updated to hold.

```

Figure 7-32: Entering a reason for cancelling an exam

The list of reasons may be supplemented as shown in Figure 7-33. Be sure to list the reason before attempting to create a new entry.

```
Supervisor Menu
Utility Files Maintenance Menu
Reason Edit

Select RAD/NUC MED REASON: DUPLICATE REQUESTS           Synonym: DUP
REASON: DUPLICATE REQUESTS//
TYPE OF REASON: CANCEL REQUEST//
SYNONYM: DUP//
NATURE OF ORDER ACTIVITY: type a caret (^) to bypass entry
```

Figure 7-33: Adding a new reason to the Reason List

**Note:** Type a caret (^) to bypass the “Nature of Order Activity” prompt.

## 8.0 Building Radiology Quick Orders and Menus

The menus that providers see when ordering Radiology procedures in EHR are site-configured. Radiology procedures are made into Quick Orders and then those quick orders are “hung” on menus. It is highly recommended that whoever builds the Radiology Order Menus confer with Provider staff for the most logical and easy format for the providers to use. A sample menu is shown in Figure 8-1. Note that besides the actual orderable procedures, there are also text headers which help to organize the orderable items into logical groupings.

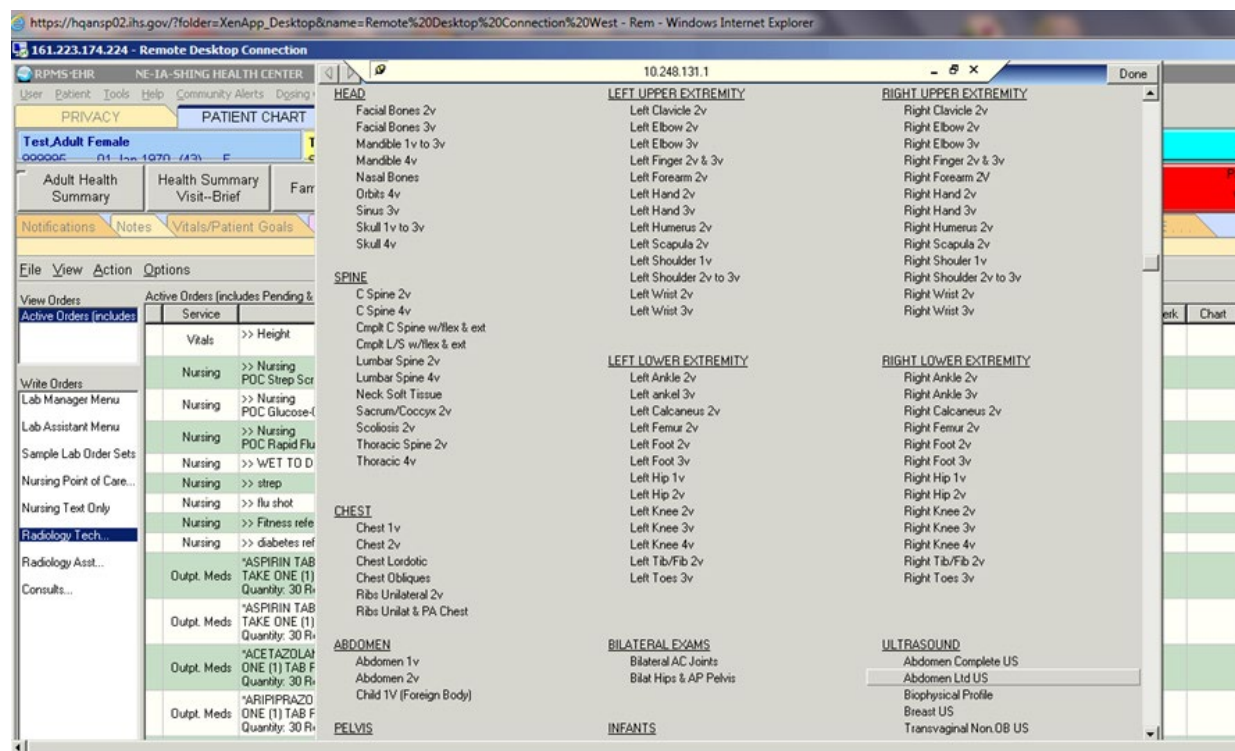


Figure 8-1: Sample EHR Order Menu for Radiology

No attempt should be made to build quick orders or EHR menus until the Radiology Package has been configured.

### 8.1 Quick Orders

The term quick order refers to the orderable items that have been created for use in the EHR. They fall into several categories – Nursing, Lab, Pharmacy, Immunizations, Imaging, etc. Radiology procedures cannot be assigned directly to an EHR order menu but must first be made into quick orders.

The menu path to build Radiology quick orders and menus may have different mnemonics on different RPMS systems, but both options may be found on the **CPRS Configuration (Clin Coord)** menu. If “jumping” is allowed on your RPMS system, you may use the convention of using a caret (^) followed by the menu mnemonic to go directly to the Quick Order option, e.g., ^**QO**.

A typical menu path is displayed in Figure 8-2.

```
Select IHS Kernel Option: EHR  EHR Main Menu

APT      Appointment Management
BED      Bed Control ...
CON      Consult Management ...
CPRS    CPRS Manager Menu ...
EHR      RPMS-EHR Configuration Master Menu ...
HS       Health Summary Maintenance ...
IMM      Immunization Menu ...
MTIU     TIU Menu for Medical Records ...
REG      Patient registration ...
REM      Reminder Managers Menu ...
TIU      TIU Menu for Clinicians ...

Select EHR Main Menu Option: CPRS  CPRS Manager Menu

CL       Clinician Menu ...
NM       Nurse Menu ...
WC       Ward Clerk Menu ...
PE     CPRS Configuration (Clin Coord) ...
IR       CPRS Configuration (IRM) ...

Select CPRS Manager Menu Option: PE  CPRS Configuration (Clin Coord)

AL       Allocate OE/RR Security Keys
KK       Check for Multiple Keys
DC       Edit DC Reasons
GP       GUI Parameters ...
GA       GUI Access - Tabs, RPL
MI       Miscellaneous Parameters
NO       Notification Mgmt Menu ...
OC       Order Checking Mgmt Menu ...
MM    Order Menu Management ...
LI       Patient List Mgmt Menu ...
FP       Print Formats
PR       Print/Report Parameters ...
RE       Release/Cancel Delayed Orders
US       Unsigned orders search
EX       Set Unsigned Orders View on Exit
NA       Search orders by Nature or Status
CM       Care Management Menu ...
DO       Event Delayed Orders Menu ...
LO       Lapsed Orders search
PM       Performance Monitor Report
```



```
Select CPRS Configuration (Clin Coord) Option: MM Order Menu Management
```

```

OI    Manage orderable items ...
PM    Enter/edit prompts
GO    Enter/edit generic orders
QO   Enter/edit quick orders
QU    Edit personal quick orders by user
ST    Enter/edit order sets
AC    Enter/edit actions
MN    Enter/edit order menus
AO    Assign Primary Order Menu
CP    Convert protocols
SR    Search/replace components
LM    List Primary Order Menus
DS    Disable/Enable order dialogs
CS    Review Quick Orders for Inactive ICD9 Codes
MR    Medication Quick Order Report
CV    Convert IV Inpatient QO to Infusion QO

```

Figure 8-2: Menu path to create ENR Quick Order

```
Select Order Menu Management Option: QO Enter/edit quick orders
```

Figure 8-3: QO Enter/edit quick orders menu option

In Figure 8-4, a quick order is created for a Left Hand 1 or 2 views, CPT 73120.

```

Select Order Menu Management Option: Enter/edit quick orders
Select QUICK ORDER NAME: RAZ HAND 1 OR 2 VIEWS LEFT
Are you adding 'RAZ HAND 1 OR 2 VIEWS LEFT' as
  a new ORDER DIALOG? No// Y (Yes)<< Note the convention of using RAZ for
Radiology quick orders.
TYPE OF QUICK ORDER: IMAGING << Use Imaging, Not Radiology.
NAME: RAZ HAND 1 OR 2 VIEWS LEFT Replace
DISPLAY TEXT: Hand 1 or 2 Views, Left << This is the text that displays on the EHR
Order screen.
VERIFY ORDER: YES

```

```

DESCRIPTION:
  No existing text
  Edit? NO//
ENTRY ACTION:

```

**Note that a Common Procedure List will be displayed ONLY if it has been built in the Radiology Package. A Common Procedure List is not required as Procedures may be entered by CPT code or by Name as well as by the procedure number on the common procedure list.**

Common General Radiology Procedures:

1 ABDOMEN 1 VIEW	21 HAND 3 OR MORE VIEWS
2 ABDOMEN 3 OR MORE VIEWS	22 HIP 2 OR MORE VIEWS
3 ANKLE 3 OR MORE VIEWS	23 KNEE 3 VIEWS
4 CALCANEUS 2 VIEWS	24 KNEES BILATERAL STANDING
5 CHEST 2 VIEWS PA&LAT	25 OB TRANSVAGINAL US
6 CLAVICLE	26 OB ULTRASOUND <14 WKS
7 ECHOGRAM ABDOMEN COMPLETE	27 PELVIS 1 VIEW
8 ECHOGRAM BREAST B-SCAN &/OR REAL TIM	28 RIBS UNILAT 2 VIEWS
9 ECHOGRAM PELVIC COMPLETE	29 SHOULDER 2 OR MORE VIEWS

10 ECHOGRAM RETROPERITONEAL COMPLETE	30 SPINE CERVICAL MIN 2 VIEWS
11 ECHOGRAM THYROID B-SCAN &/OR REAL TI	31 SPINE CERVICAL MIN 4 VIEWS
12 ECHOGRAPHY, TRANSVAGINAL	32 SPINE LUMBOSACRAL MIN 2 VIEWS
13 ELBOW 2 VIEWS	33 SPINE LUMBOSACRAL MIN 4 VIEWS
14 ELBOW 3 OR MORE VIEWS	34 SPINE SI JOINTS 1 OR 2 VIEWS
15 FACIAL BONES, LESS THAN 3 VIEWS	35 SPINE STANDING SCOLIOSIS
16 FACIAL BONES, MINIMUM 3 VIEWS	36 SPINE THORACIC 2 VIEWS
17 FEMUR 2 VIEWS	37 TIBIA & FIBULA 2 VIEWS
18 FINGER(S) 2 OR MORE VIEWS	38 TM JOINTS BILAT O&C MOUTH
19 FOOT 3 OR MORE VIEWS	39 TOE(S) 2 OR MORE VIEWS
20 HAND 1 OR 2 VIEWS	40 WRIST 3 OR MORE VIEWS

Radiology Procedure: 20    HAND 1 OR 2 VIEWS  
Procedure Modifier: LEFT << **Modifiers are not required for quick orders but often help to ensure that the provider does not forget to specify details of the exam. In addition, it is helpful in arranging quick orders on the menu.**  
Another Procedure Modifier:  
History and Reason for Exam:  
  No existing text  
  Edit? No//    (No)  
Category: OUTPATIENT << **This field is not required but the provider must then specify the appropriate Category when ordering if it is not defined in the quick order.**  
Is this patient scheduled for pre-op? NO//  
Date Desired: TODAY// << **Not required but if not defaulted, provider must enter.**  
Mode of Transport: AMBULATORY << **Not required but if not specified, provider must enter.**  
Is patient on isolation procedures? NO << **Not required but if not specified, provider must enter.**  
Urgency: ROUTINE// << **Not required but if not specified, provider must enter.**

-----

Radiology Procedure: HAND 1 OR 2 VIEWS  
Procedure Modifiers: LEFT  
                          Category: OUTPATIENT  
                          Date Desired: TODAY  
                          Mode of Transport: AMBULATORY  
Isolation Procedures: NO  
                          Urgency: ROUTINE  
                          Submit request to: RADIOLOGY

-----

(P)lace, (E)dit, or (C)ancel this quick order? PLACE//  
Auto-accept this order? NO//

Figure 8-4: Creating an EHR quick order

If more than one imaging type has been configured for a Radiology Department, the individual defining the quick order will have to specify the Imaging Type for that quick order as in the examples below for CT (Figure 8-5) and Ultrasound (Figure 8-6) procedures.

In the example for a CT Head/Brain without Contrast below, note that a Common Procedure List is not available for CT and that the Procedure has been entered by CPT Code. Also, note that several of the fields, **Category**, **Date Desired**, **Mode of Transport**, and **Isolation Procedures** have all been left without entries. The provider ordering this exam would then have to supply this information when placing an order. To save the provider time during order entry, it is highly recommended that as many fields as possible be pre-populated when creating quick orders.

```

Select QUICK ORDER NAME: RAZ CT HEAD/BRAIN W/CONTRAST
Are you adding 'RAZ CT HEAD/BRAIN W/CONTRAST' as
  a new ORDER DIALOG? No// Y (Yes)
TYPE OF QUICK ORDER: IM
  1 IMAGING
  2 IMM IMMUNIZATIONS
CHOOSE 1-2: 1 IMAGING
NAME: RAZ CT HEAD/BRAIN W/CONTRAST Replace
DISPLAY TEXT: CT Head/Brain w/Contrast
VERIFY ORDER:
DESCRIPTION:
  1>
ENTRY ACTION:

Select one of the following imaging types:
  CT SCAN
  MAGNETIC RESONANCE IMAGING
  GENERAL RADIOLOGY
  ULTRASOUND

Select IMAGING TYPE: ct SCAN
CT Scan Procedure: 70460 CT HEAD/BRAIN W/ CONTRAST      CT HEAD/BRAIN W/ CONTRAST
Procedure Modifier:
Reason for Study:
Clinical History:
  1>
Category:
Is this patient scheduled for pre-op? NO//
Date Desired:
Mode of Transport:
Is patient on isolation procedures?
Urgency: ROUTINE//

-----
                CT Scan Procedure: CT HEAD/BRAIN W/ CONTRAST
                        Urgency: ROUTINE
                Submit request to: CT SCAN
-----

(P)lace, (E)dit, or (C)ancel this quick order? PLACE//
Auto-accept this order? NO//

```

Figure 8-5: Creating a quick order for a CT procedure

The example in Figure 8-6 shows creation of a quick order for an Ultrasound procedure, again with many of the field left blank, requiring provider entry of those fields during the ordering process.

```

Select QUICK ORDER NAME: RAZ US RETROPERITONEAL RT W/IMAGE LMT
  Are you adding 'RAZ US RETROPERITONEAL RT W/IMAGE LMT' as
    a new ORDER DIALOG? No// Y (Yes)
TYPE OF QUICK ORDER: IMAGING
NAME: RAZ US RETROPERITONEAL RT W/IMAGE LMT Replace
DISPLAY TEXT: US Retroperitoneal RT w/Image Lmtd
VERIFY ORDER:
DESCRIPTION:
  1>
ENTRY ACTION:

Select one of the following imaging types:
  CT SCAN
  MAGNETIC RESONANCE IMAGING
  GENERAL RADIOLOGY
  ULTRASOUND

Select IMAGING TYPE: ULTRASOUND
Ultrasound Procedure: 76775 US RETROPERITONEAL LIMITED      US RETROPERITONEAL
LIMITED
Procedure Modifier:
Reason for Study:
Clinical History:
  1>
Category:
Is this patient scheduled for pre-op? NO//
Date Desired:
Mode of Transport:
Is patient on isolation procedures?
Urgency: ROUTINE//

-----
          Ultrasound Procedure: US RETROPERITONEAL LIMITED
                    Urgency: ROUTINE
          Submit request to: ULTRASOUND
-----

(P)lace, (E)dit, or (C)ancel this quick order? PLACE//
Auto-accept this order? NO//

```

Figure 8-6: Creating a quick order for an Ultrasound Procedure

## 8.2 Creating an EHR Order Menu ↓ for Radiology

The menu that is displayed in Figure 8-1 was created after the Radiology Quick Orders were created. Sites that have more than one Division or more than one Imaging Type may choose to create more than one menu to match their Divisions or Imaging Types.

The menu path to access the **MN Enter/edit order menus** option is also accessed from the **CPRS Configuration (Clin Coord)** menu for Order Menu Management. The convention used to create Radiology menus is to use the prefix RAZM on any Radiology or Imaging Type of menu. It is highly recommended that a prototype of the menu or menus be laid out before accessing this menu option. Remember that the menu that will be viewed consists of both text and headers that are used to organize the quick orders and well as menu items which are the quick orders.

```

OI      Manage orderable items ...
PM      Enter/edit prompts
GO      Enter/edit generic orders
QO      Enter/edit quick orders
QU      Edit personal quick orders by user
ST      Enter/edit order sets
AC      Enter/edit actions
MN    Enter/edit order menus
AO      Assign Primary Order Menu
CP      Convert protocols
SR      Search/replace components
LM      List Primary Order Menus
DS      Disable/Enable order dialogs
CS      Review Quick Orders for Inactive ICD9 Codes
MR      Medication Quick Order Report
CV      Convert IV Inpatient QO to Infusion QO

Select Order Menu Management Option: MN  Enter/edit order menu
Select ORDER MENU: RAZM RADIOLOGY MENU
Are you adding 'RAZM RADIOLOGY MENU' as a new ORDER DIALOG? No// Y
Do you wish to copy an existing menu? YES// NO
DISPLAY TEXT: RADIOLOGY MENU
DESCRIPTION:
  No existing text
  Edit? NO//
COLUMN WIDTH: ??

This is the width, in characters, for each column in a menu.  For example, to have 3
columns on an 80 character device, enter a width of 26.
COLUMN WIDTH: 26
MNEMONIC WIDTH: ??

This field allows the width of item mnemonics to be varied; the default value is 5.
The mnemonic width determines the indentation of menu items under the text header.
MNEMONIC WIDTH: 2
PATH SWITCH: ??
This switch allows the user, when traversing back UP the tree of menus and items, to
select a new path back down the tree.  In other words, the menu is redisplayed when
returning to that menu's level in the tree and processing back down the tree is
possible from that point.  If nothing is selected from the menu, the path continues
back up the tree.
Choose from:
  YES
  NO
ENTRY ACTION:
This is MUMPS code that will be executed when accessing the menu.

EXIT ACTION:

This is MUMPS code that will be executed upon completion of processing the dialog;
it is currently used only with dialog-type entries.

```

Figure 8-7: Creating a new Menu for Radiology

When the initial dialogue for creating a menu has been completed, a blank menu template is displayed on the screen as below. Options for creating and managing the menu are listed below the blank menu screen.

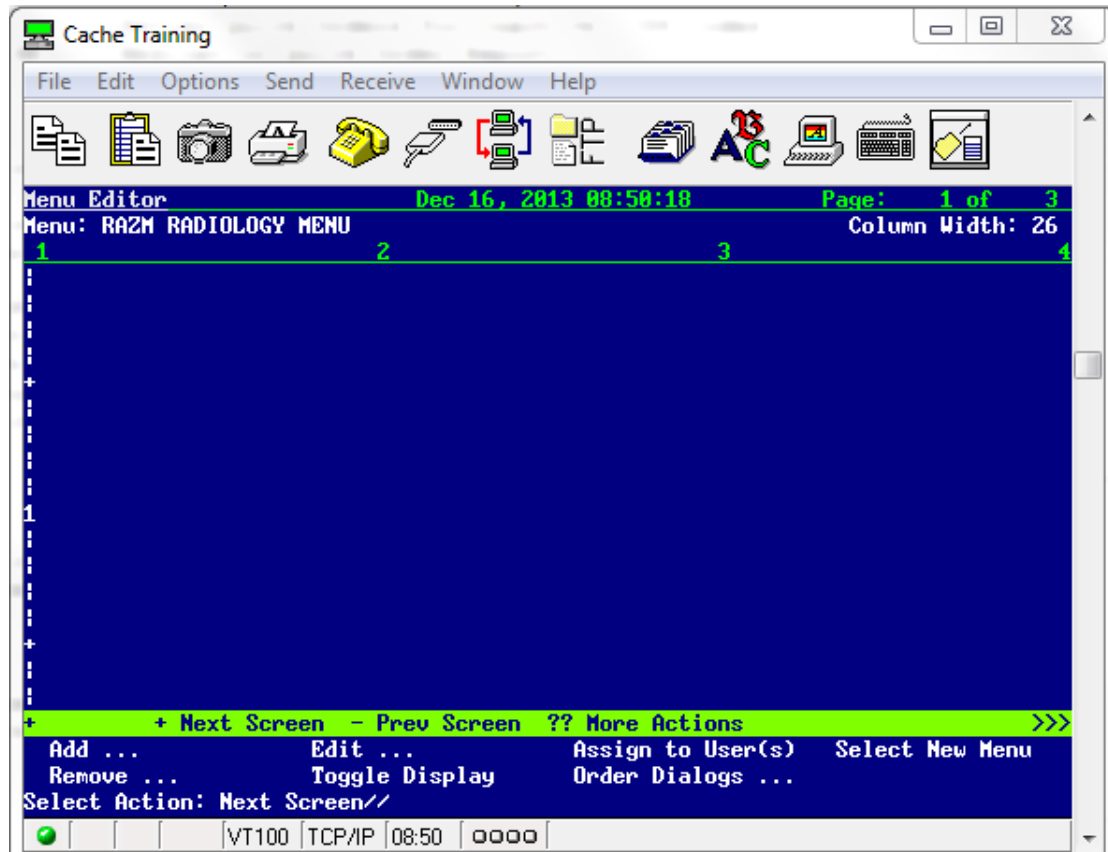


Figure 8-8: Blank menu template for Radiology

**Add** permits the user to add either a text header or a menu item (orderable item.) In either case, the user must specify the Row Number and Column where they wish the text or the orderable item to appear. Note that the left-hand margin of the Menu Editor shows |, +, and numbers (1,2,3, etc.). The first + represents Row 5, each | increments by one until the number 1 is reached which represents Row 10. Then each | after 1 increments as 1, so the lines represent Rows 11, 12, 13, and 14 until the next + is reached which represents Row 15. This pattern is repeated, and menu items or text headers may be added to create a menu as long as the user desires.

**Remove** allows the user to remove either menu items or text headers which they no longer wish to display on the order menu. The user must identify which item they wish removed and whether they wish to retain the current spacing in that column or allow shifting up of the menu items to prevent a gap in the menu.

**Edit** allows the user to edit either a text header or a menu item.

**Toggle Display** allows the user to actually see the quick orders on the menu instead of the Display text for the orderable items.

**Assign to User(s)** allows the user to identify which persons or categories of division, institution, etc., will be allowed to see and use this order menu. Typically, the menu would be assigned to a Division.

```

+          + Next Screen  - Prev Screen  ?? More Actions
>>>
  Add ...          Edit ...          Assign to User(s)  Select New
Menu
  Remove ...      Toggle Display    Order Dialogs ...
Select Action: Next Screen// ass  Assign to User(s)

Add New Orders may be set for the following:

      1  User          USR      [choose from NEW PERSON]
      4  Location     LOC      [choose from HOSPITAL LOCATION]
      5  Service      SRV      [choose from SERVICE/SECTION]
      6  Division     DIV      [DEMO INDIAN HOSPITAL]
      7  System       SYS      [DEMO.OKLAHOMA.IHS.GOV]
      9  Package      PKG      [ORDER ENTRY/RESULTS REPORTING]

Enter selection:

```

Figure 8-9: Assigning EHR Order Menu to User(s)

When building a menu, some users prefer working across the columns and others prefer completing all entries in a column before moving to the next column. If it is determined during the menu building process that the column width must be changed or the mnemonic width should be altered, those changes may be implemented by choosing the **Edit** option and then selecting **Menu**.

In the dialogue displayed in Figure 8-10, the first text header is added for **HEAD**. By indicating that it is a **HEADER**, the text will be underlined on the menu.

```

  Add ...          Edit ...          Assign to User(s)  Select New
Menu
  Remove ...      Toggle Display    Order Dialogs ...
Select Action: Next Screen// A
      1  Add ...
      2  Assign to User(s)
CHOOSE 1-2: 1
      Menu Items          Text or Header          Row

Add: T  Text or Header
DISPLAY TEXT: HEAD
ROW: 1
COLUMN: 1
HEADER: YES

DISPLAY TEXT

```

Figure 8-10: Creating a Text Header

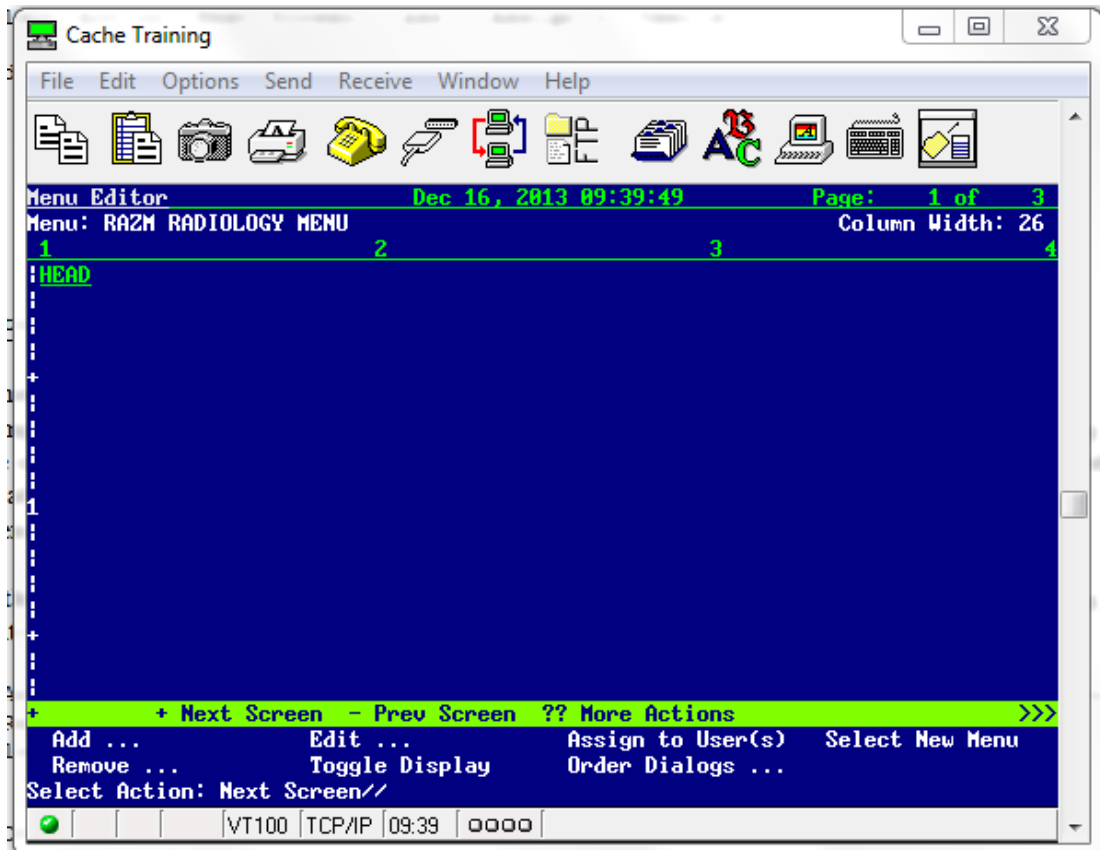


Figure 8-11: Displaying the Text Header on the Menu

That process can be repeated to add the Headers for LEFT UPPER EXTREMITY and RIGHT UPPER EXTREMITY.

```

Add ...          Edit ...          Assign to User(s)  Select New
Menu
Remove ...      Toggle Display    Order Dialogs ...
Select Action: Next Screen// A
  1  Add ...
  2  Assign to User(s)
CHOOSE 1-2: 1
  Menu Items          Text or Header          Row

Add: T  Text or Header
DISPLAY TEXT: LEFT UPPER EXTREMITY
ROW: 1
COLUMN: 1
HEADER: YES

DISPLAY TEXT

Add ...          Edit ...          Assign to User(s)  Select New
Menu
Remove ...      Toggle Display    Order Dialogs ...
Select Action: Next Screen// A
  1  Add ...
    
```



```

2 Assign to User(s)
CHOOSE 1-2: 1
Menu Items          Text or Header          Row
Add: T      Text or Header
DISPLAY TEXT: RIGHT UPPER EXTREMITY
ROW: 1
COLUMN: 1
HEADER: YES
DISPLAY TEXT
    
```

Figure 8-12: Adding Additional Text Headers

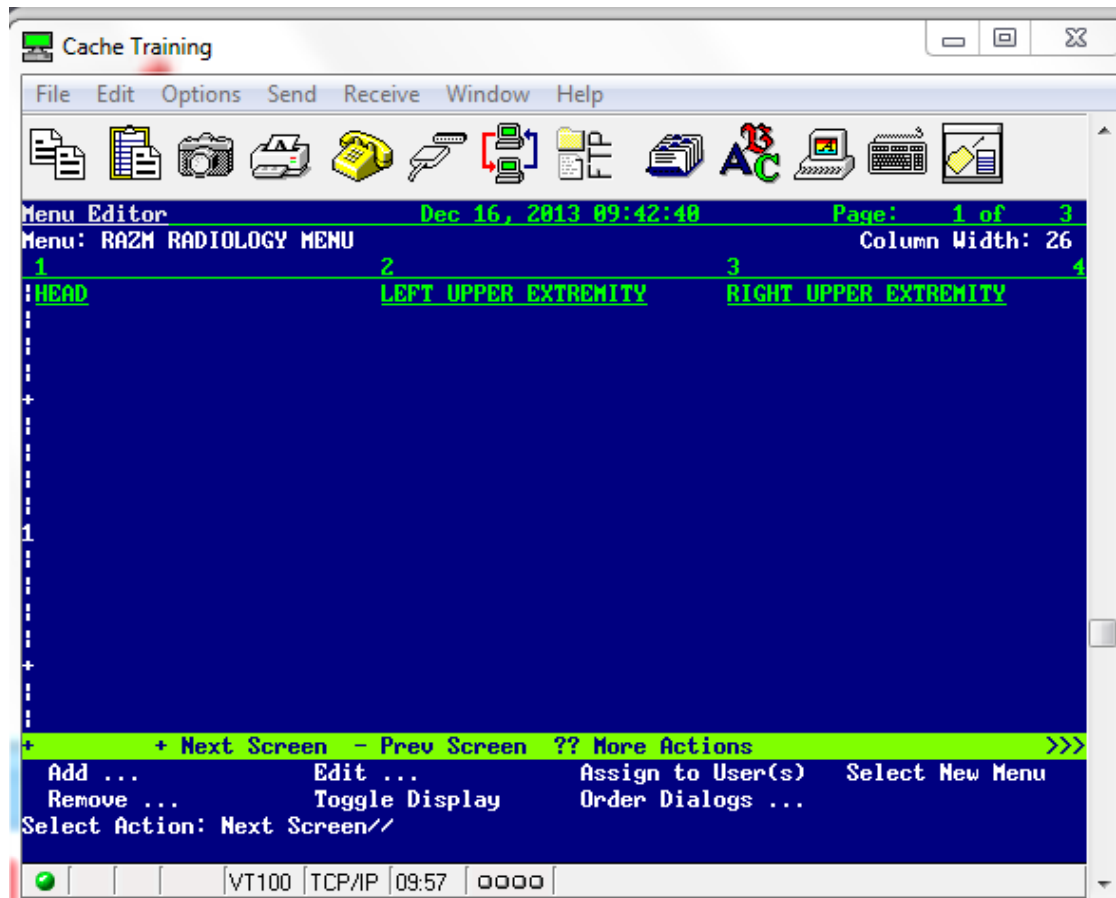


Figure 8-13: Displaying three columns with text headers

Next proceed to adding orderable items. Note that the headers occupy the first line so the first menu item can only be added to line 2. Unlike text and headers which will always return to the menu between entries, menu items may be added one after another as shown in Figure 8-14.

```

Add ...          Edit ...          Assign to User(s)  Select New Menu
Remove ...      Toggle Display    Order Dialogs ...
Select Action: Next Screen// A
1 Add ...
    
```

```

2 Assign to User(s)
CHOOSE 1-2:1
Menu Items          Text or Header          Row
Add: M Menu Items
ITEM: RAZ FAC
  1 RAZ FACIAL BONES 2 V
  2 RAZ FACIAL BONES 3 V
CHOOSE 1-2: 1 RAZ FACIAL BONES 2 V
ROW: 2
COLUMN: 1
DISPLAY TEXT:
MNEMONIC:

ITEM: RAZ FACIAL BONES 3 V
ROW: 3
COLUMN: 1
DISPLAY TEXT:
MNEMONIC:

ITEM: RAZ MANDIBLE
  1.RAZ MANDIBLE
  2.RAZ MANDIBLE >4V
CHOOSE 1-2: 1 RAZ MANDIBLE
ROW: 4
COLUMN: 1
DISPLAY TEXT:
MNEMONIC:

ITEM: RAZ MANDIBLE
  1 RAZ MANDIBLE
  2 RAZ MANDIBLE >4V
CHOOSE 1-2: 2 RAZ MANDIBLE >4V
ROW: 5
COLUMN: 1
DISPLAY TEXT:
MNEMONIC:

ITEM: RAZ NASAL BONES
ROW: 6
COLUMN: 1
DISPLAY TEXT:
MNEMONIC:

ITEM: RAZ ORBITS
ROW: 7
COLUMN: 1
DISPLAY TEXT:
MNEMONIC:

ITEM:

```

Figure 8-14: Adding Menu Items

The resulting menu currently looks like that shown in Figure 8-15.

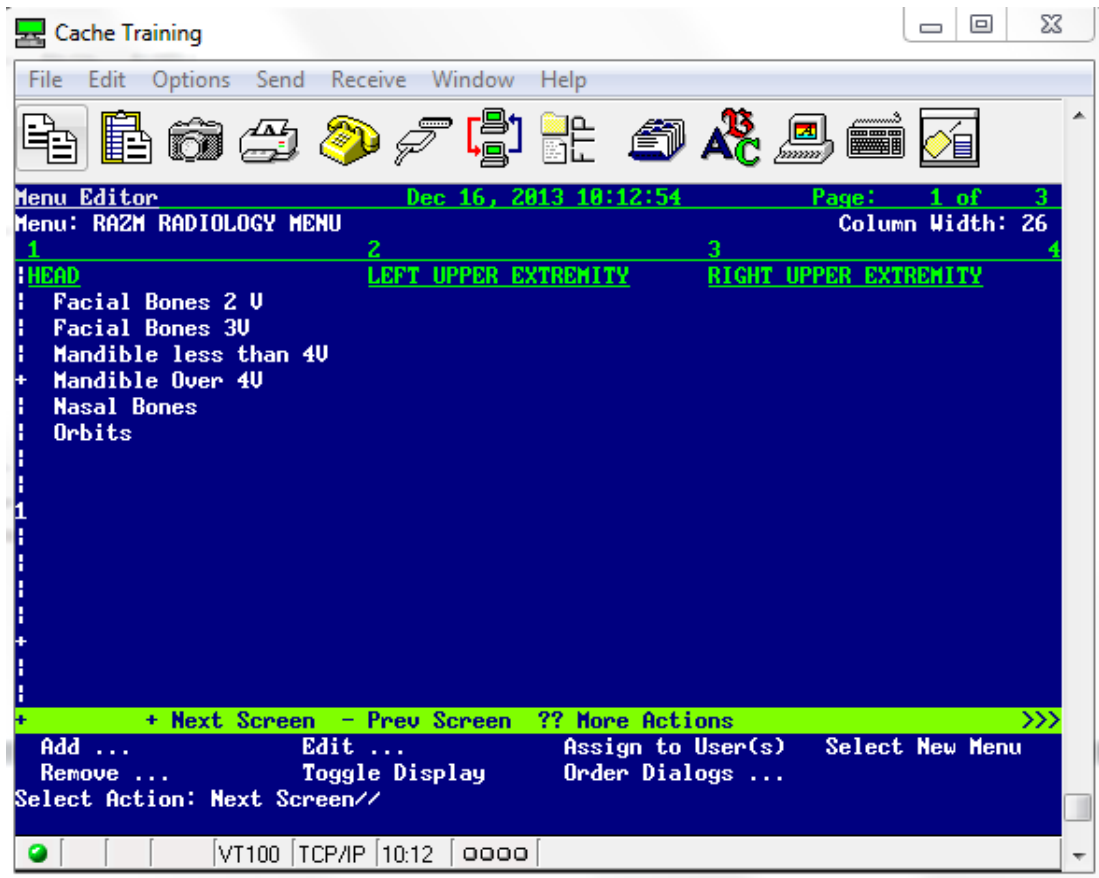
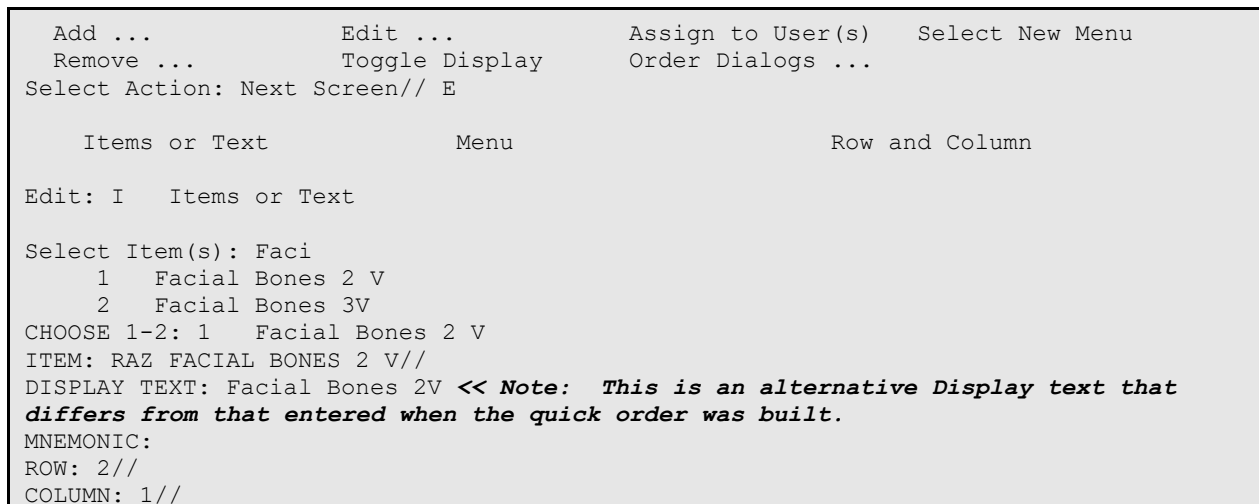


Figure 8-15: Partially built menu with text headers and some menu items

When you review the menu after adding a number of menu items, you may decide that you wish to alter the display of one or more menu items. For example, there is a discrepancy in the display of Facial Bones between 2 V and 3V. So in Figure 8-16, the user can alter the display of the Facial Bones 2 V to Facial Bones 2V to be consistent by choosing the **Edit** option.



Edit this quick order? YES// NO

Figure 8-16: Changing the Display Text for a Menu Item

When the Menu displays again, the new display text is in place.

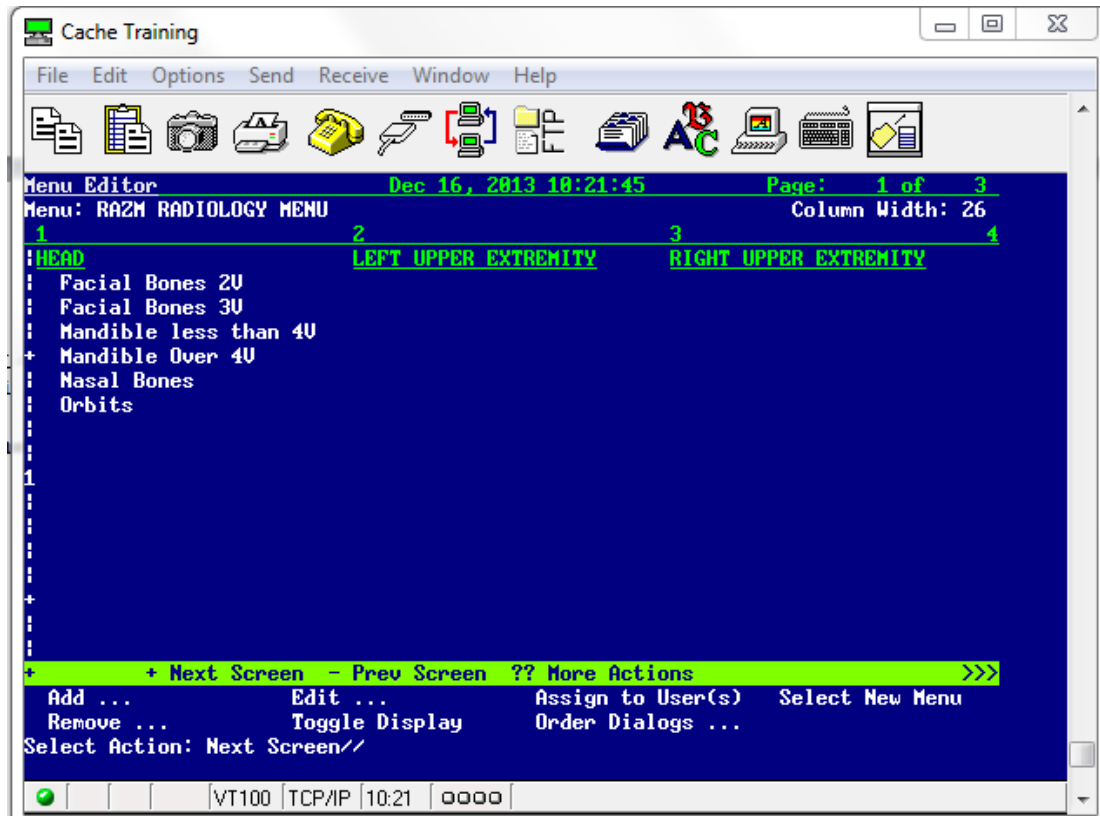


Figure 8-17: EHR Order menu with corrected item display

If you wish to actually see the quick orders associated with the menu items, you may choose the **Toggle Display** option. That is sometimes useful to see which quick order has been associated with a selectable menu item.

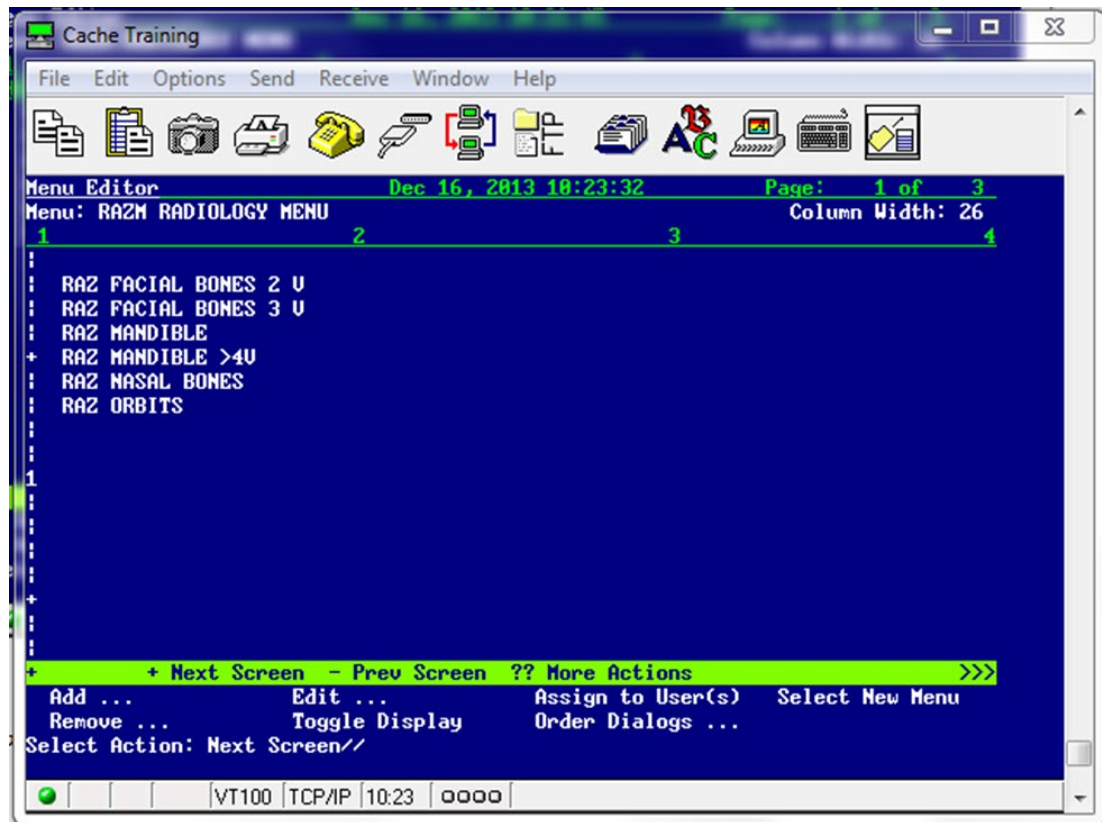


Figure 8-18: Menu with Toggle to show quick orders for menu items

When adding items to the menu, you may encounter messages indicating that another item is already in the position you have specified for the new item. You may choose to ignore that message and indeed insert an item that may have been skipped to maintain your desired order.

If you wish to insert an item into the menu, answer **YES** at the “Do you want to shift items in this column down?” prompt.

```
Add: M   Menu Items
ITEM: RAZ S
      1   RAZ SINUSES >3V
      2   RAZ SINUSES MIN 2V
CHOOSE 1-2: 2   RAZ SINUSES MIN 2V
ROW: 7
COLUMN: 1
There is another item in this position already!
Do you want to shift items in this column down? YES//
```

Figure 8-19: Inserting Menu Item and shifting existing items down

Normally EHR menus are maintained by the Clinical Application Coordinator (CAC) at a facility, but some Radiology Supervisors prefer to maintain their own menus. More extensive directions on menu management may be found in EHR documentation for CACs: <https://www.ihs.gov/EHR/index.cfm?module=cac>.

## 9.0 Radiology Workflow

Figure 9-1 displays the Radiology workflow expected for a site using EHR and that has an onsite Radiology transcriptionist and Radiologist. This may also be the workflow at a site that has on-site Radiology, but reports are provided by an outside Radiology provider without an interface. Reports may be manually entered (copied and pasted) by Radiology staff and verified by those staff.

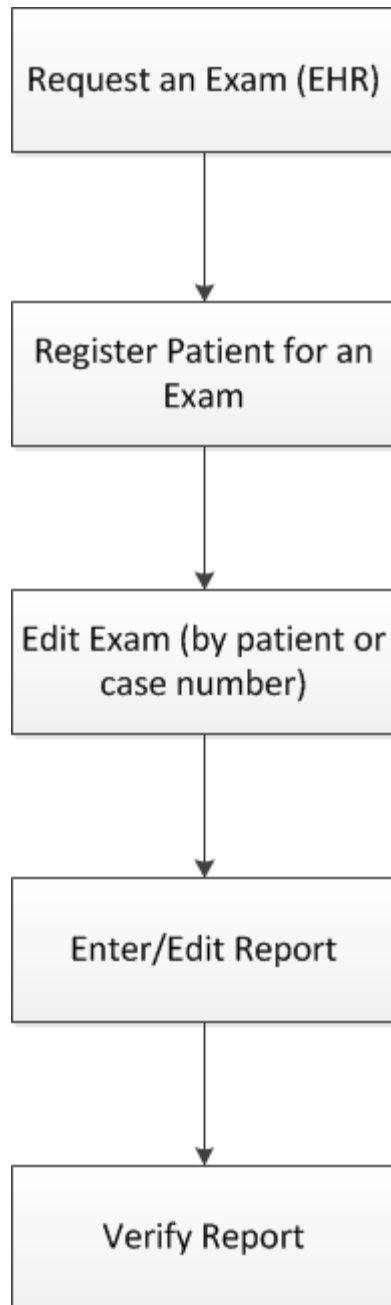


Figure 9-1: Radiology Workflow at a site with Transcriptionist and Radiologist

The second workflow (Figure 9-2) is slightly different for a site that has a Reports interface. Reports normally not only upload to the reports module in RPMS but are also automatically verified. In a scenario such as this, it is absolutely critical that all mandatory fields, such as pregnancy status, technologist, room/camera, and films be entered as set in the examination status file. If any mandatory fields are skipped during the Edit Exam process, the procedure will not go to a status of Complete.

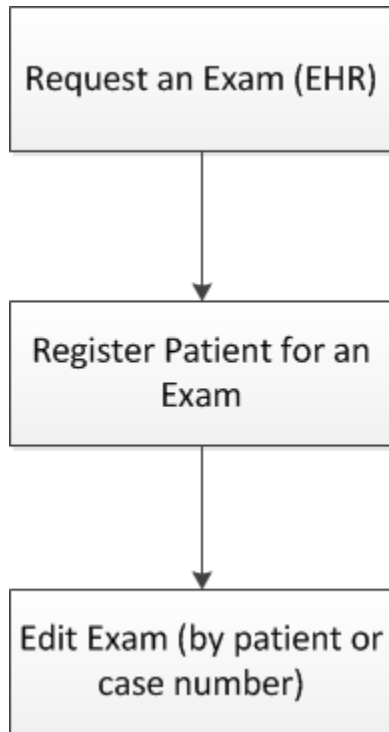


Figure 9-2: Workflow for site with a reports interface

The third scenario (Figure 9-3) may be for a site that offers limited or no Radiology services on site and gets hard-copy reports back from an outside Radiology service.

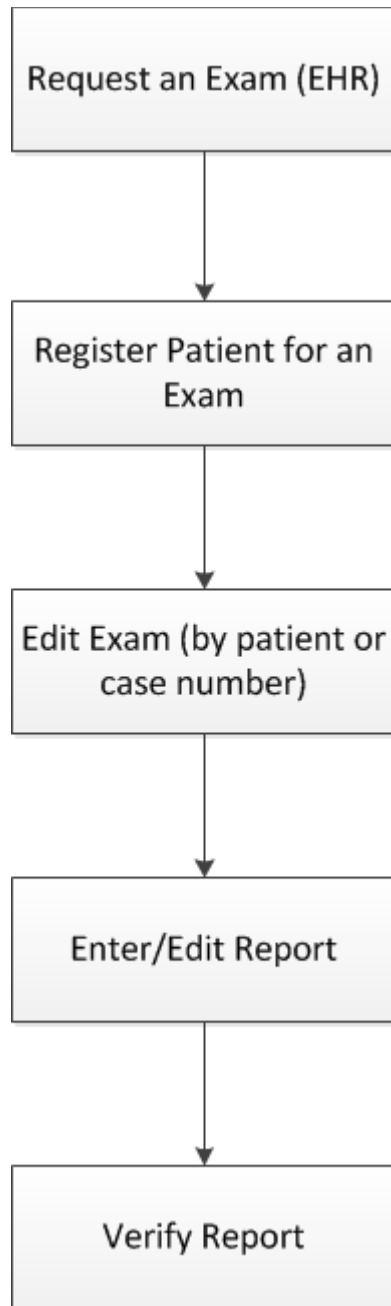


Figure 9-3: Workflow for site with limited or no radiology service on site

There may be slight alterations to these scenarios depending on whether VISTA Imaging is used. The goal in all cases is to demonstrate that an order has been placed in EHR from the requesting provider and that order has moved from a status of Pending to Complete. There is an advantage to providers at sites that have reporting capabilities or are using VISTA Imaging in that both reports and/or images may be viewed on the reports tab in EHR.



## 10.0 Radiology/Nuclear Med Order Entry Menu

### 10.1 Requesting an Exam in RPMS

As was noted in the previous section, the goal is to enable the providers to order all exams in EHR. That may not always be possible; examples being an order from an outside provider or an order that cannot be found when a patient presents for an exam.

Note that when an order is placed via the RPMS menu, the Nature or Order will default to SVC Correction.

Note also that if this patient had been a female of child-bearing age or an individual of unknown gender, the individual placing the order would have been prompted to enter the patient's pregnancy status of Y – Yes, N – No, or U – Unknown.

```

RAD    Rad/Nuc Med Total System Menu ...
Radiology/Nuclear Med Order Entry Menu ...
Request an Exam

Select Radiology/Nuclear Med Order Entry Menu Option: request an Exam

Select PATIENT NAME:
  DEMO,PATIENT SJ                F 08-10-19XX XXX-XX-0983    WW 999984

Patient Location:    MAMMOGRAPHY

Case #   Last 5 Procedures/New Orders Exam Date   Status of Exam   Imaging Loc.
-----
      HIP 2 OR MORE VIEWS          DEC  6,2013  COMPLETE        RADIOLOGY
      CHEST 2 VIEWS PA&LAT         DEC  6,2013  COMPLETE        RADIOLOGY
      ANKLE 3 OR MORE VIEWS        AUG 28,2003  COMPLETE        RADIOLOGY
      UROGRAM INTRAVENOUS          SEP  2,2001  COMPLETE        RADIOLOGY
8       UROGRAM INTRAVENOUS        SEP  2,2001  CANCELLED        RADIOLOGY
      CHEST SINGLE VIEW            Ord 12/18/13  RADIOLOGY

Press <RETURN> key to continue.
Copy a previous order's ICD codes? NO//

Select one of the following imaging types:
  GENERAL RADIOLOGY
  MAMMOGRAPHY

          COMMON RADIOLOGY/NUCLEAR MEDICINE PROCEDURES (MAMMOGRAPHY)
          -----
1) MAMMOGRAM G0202                3) MAMMOGRAM G0206
2) MAMMOGRAM G0204
Select Procedure (1-3) or enter '?' for help: 2

Processing procedure: MAMMOGRAM G0204

Select PROCEDURE MODIFIERS:
DATE DESIRED (Not guaranteed): T   (DEC 29, 2013)
REASON FOR STUDY: ANNUAL

```

```

***CLINICAL HISTORY REQUIRED***
Enter RETURN to continue or '^' to exit:
Ordering ICD-9 Diagnosis:
-----
      Patient: DEMO,PATIENT SJ           Pregnant at time of order entry:
      Procedure: MAMMOGRAM G0204
Proc. Modifiers:
      Category: OUTPATIENT                Mode of Transport: AMBULATORY
      Desired Date: Dec 29, 2013          Isolation Procedures: NO
      Request Urgency: ROUTINE            Scheduled for Pre-op: NO
      Request Location: MAMMOGRAPHY       Nature of order: SVC CORRECTION
      Reason for Study: ANNUAL

Clinical History:
ANNUAL EXAM
-----
Do you want to change any of the above? NO//

...request submitted to: MAMMOGRAPH

```

Figure 10-1: Requesting a Radiology Exam in RPMS

## 10.2 Requesting an Exam in EHR

Note that providers may not place orders for Radiology exams in EHR without the ORES security key.

The provider may have already seen a patient and started an EHR visit and as part of that visit followed the procedure below for placing a Radiology order.

Alternatively, the provider may choose to create a new visit or choose a pre-existing visit for placing the Radiology order.

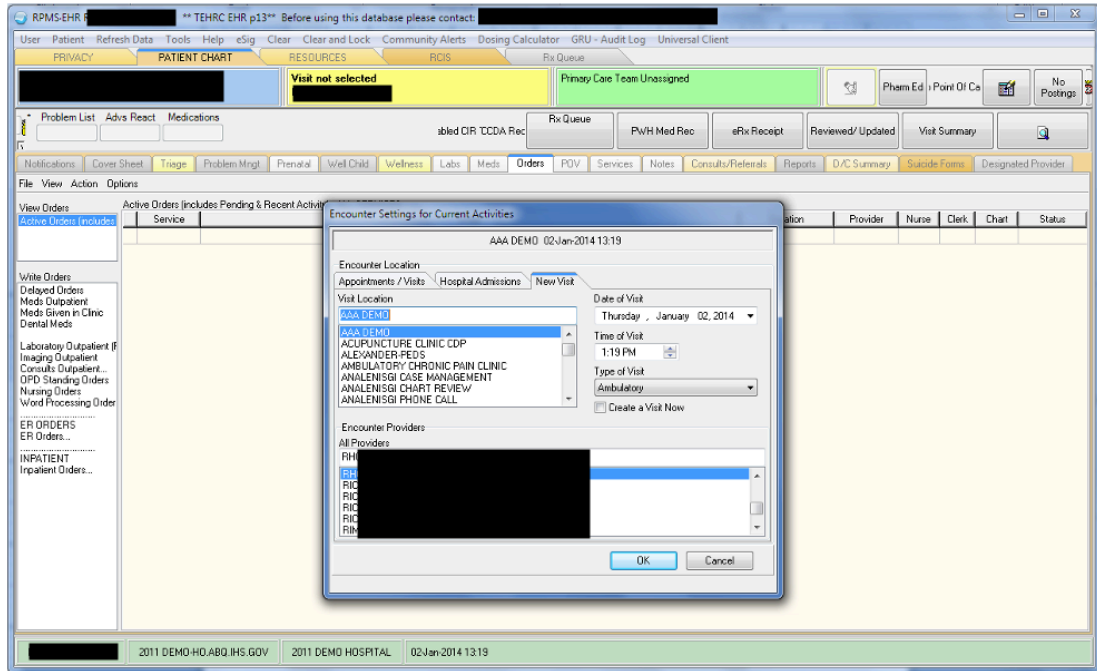


Figure 10-2: Creating a Visit

Once the visit has been created, the provider may select the **Order** tab and select the menu that has been defined for Radiology/Nuclear Medicine procedures. In Figure 10-3, the provider may select from several types of imaging.

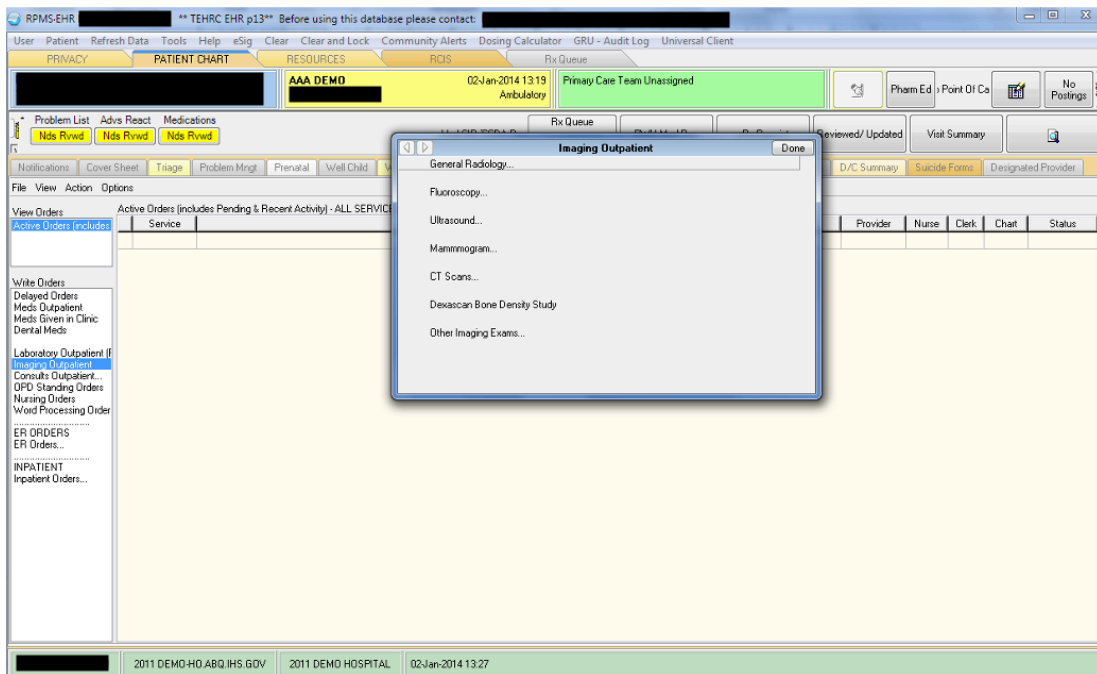


Figure 10-3: Selecting an Imaging type for order

After selecting the Imaging Type, the provider may choose a procedure listed as available under that menu.

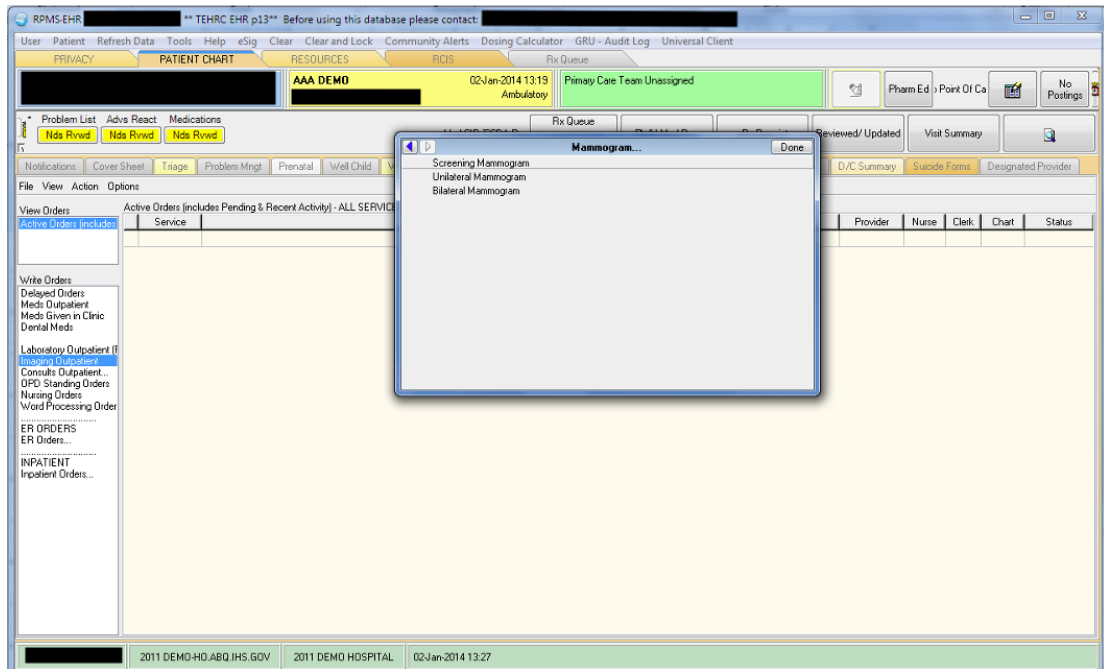


Figure 10-4: Selecting a procedure from the menu

After selecting the procedure, the provider must enter both the **Reason for the Exam** and the **Clinical History**. Copy and paste may be used if desired. One or more procedure modifiers may be used and if the patient is a female or of unknown gender of child bearing age, pregnancy status entered. The desired date of the exam must also be entered. If the quick orders have been configured completely, most of the fields will be pre-filled.

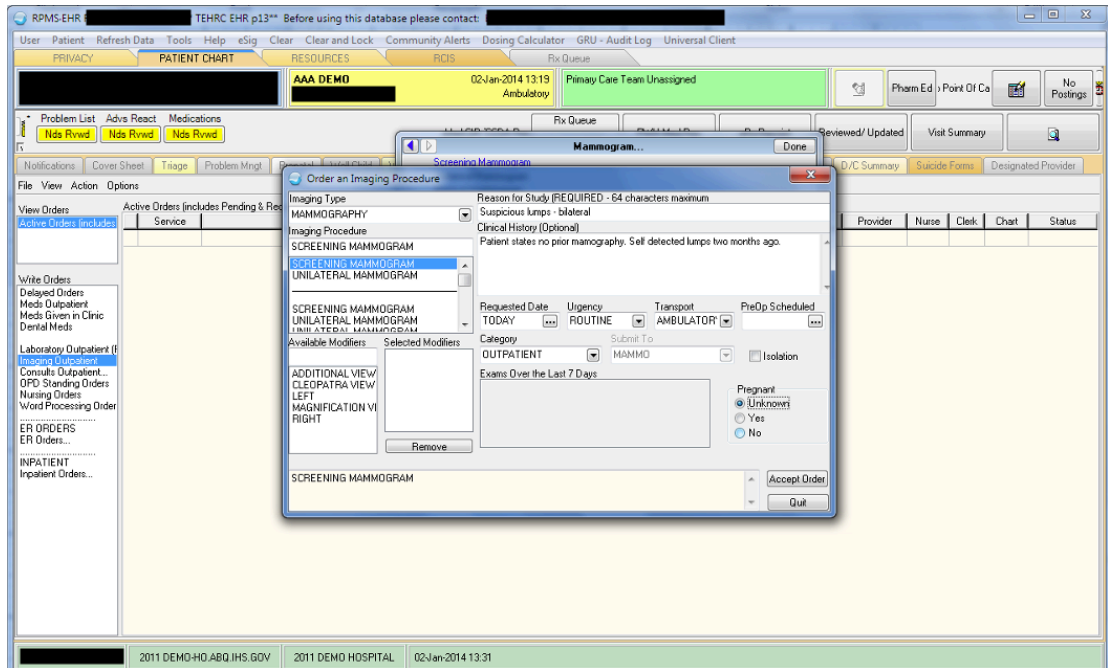


Figure 10-5: Completing order details

When the required fields have been completed, the provider may click **Accept Order** and then **Done** to close the menu.

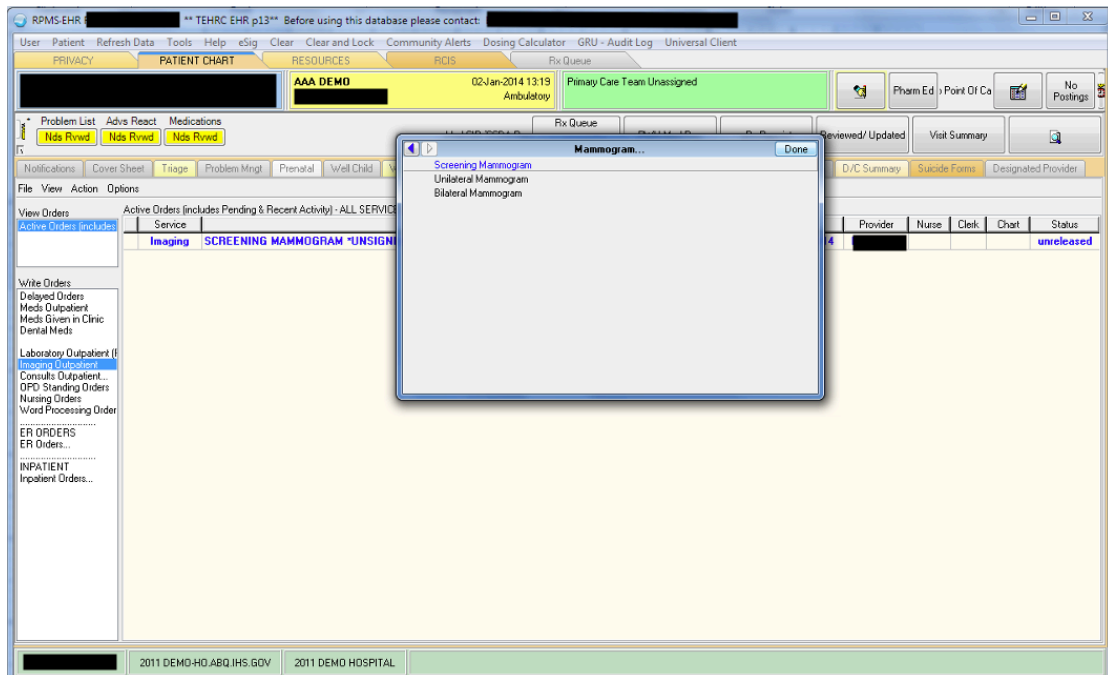


Figure 10-6: Closing the order menu box and unsigned order on order tab in EHR

The order is in a status of unreleased and cannot be accessed by staff in the Radiology department until the provider signs the order electronically.

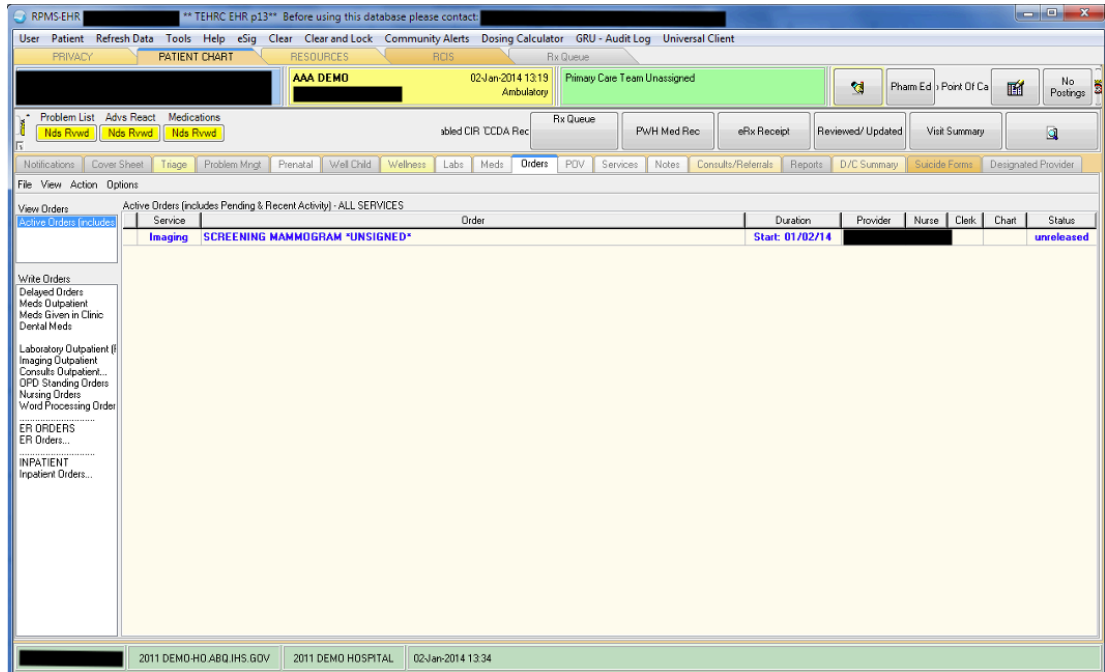


Figure 10-7: Unsigned order

There are several options for signing an electronic order, all of which begin with highlighting the order to be signed. The provider may right click on the highlighted order or may click on the toolbar icon of a hand holding a pencil ( ). If the provider right-clicks on the order, one of the options is **Sign Selected**.

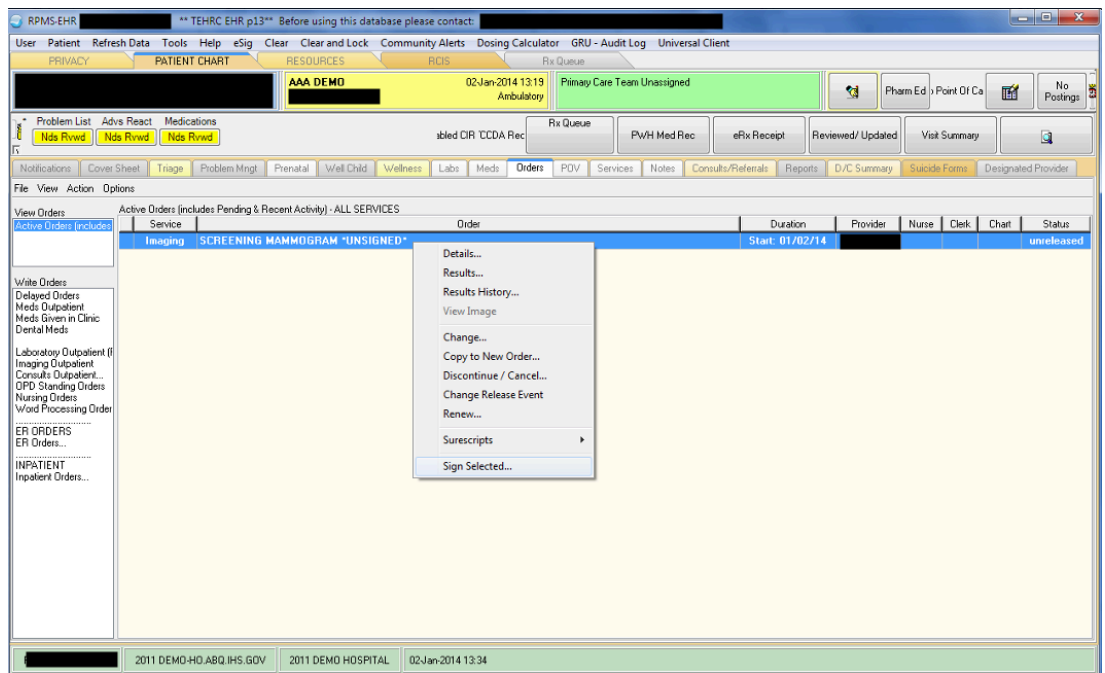


Figure 10-8: Highlighted order with option to sign

The last step for placing the order is for the provider to enter his/her electronic signature code and click **Sign**. When that is completed, the status of the order goes from unreleased to pending. The order is now available for Radiology staff to act.

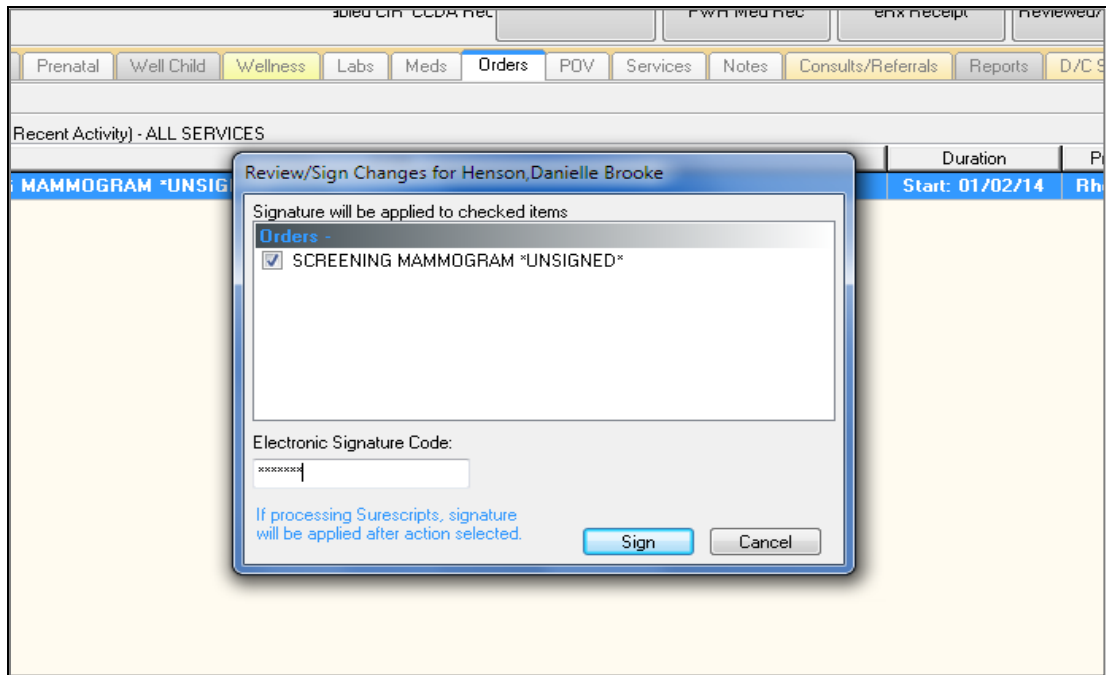


Figure 10-9: Electronically signing the order

### 10.3 Cancel a Request

A request would normally be cancelled by the ordering provider, but there may be reason why the request needs to be cancelled by staff in the Radiology department. A request may be cancelled as follows:

```

RAD      Rad/Nuc Med Total System Menu ...
Radiology/Nuclear Med Order Entry Menu ...
Cancel a Request

Select Radiology/Nuclear Med Order Entry Menu Option: CANCEL a Request

Select PATIENT NAME:
  DEMO,PATIENT SJ                      F 08-10-19XX XXX-XX-0983      WW 999984

      **** Requested Exams for DEMO,PATIENT SJ      ****      2 Requests
  St  Urgency  Procedure / (Img. Loc.)      Desired      Requester      Req'g Loc
  --  -
  1  p  ROUTINE  MAMMOGRAM G0204                12/29/2013  PROVIDER,DO  MAMMOGRAPHY
        (MAMMOGRAPHY)
  2  p  ROUTINE  CHEST SINGLE VIEW              12/18/2013  PROVIDER,DO  RADIOLOGY W
        (RADIOLOGY)

Select Request(s) 1-2 to Cancel or '^' to Exit:  Exit// 1

Select CANCEL REASON: ?
    
```

```

Answer with RAD/NUC MED REASON, or NUMBER, or SYNONYM
Do you want the entire RAD/NUC MED REASON List? Y (Yes)
Choose from:
1          ANESTHESIA CONSULT NEEDED           Synonym: ANES
6          CONFLICT OF EXAMINATIONS           Synonym: CON
7          DUPLICATE REQUESTS                 Synonym: DUP
8          INADEQUATE CLINICAL HISTORY         Synonym: INAD
13         PATIENT CONSENT DENIED              Synonym: PCD
14         PATIENT EXPIRED                     Synonym: EXP
17         REQUESTING PHYSICIAN CANCELLED      Synonym: REQ
19         WRONG EXAM REQUESTED                Synonym: WRN
20         EXAM CANCELLED                      Synonym: CAN
21         EXAM DELETED                        Synonym: DEL
22         CALLED-WARD DID NOT SEND            Synonym:
23         RESCHEDULED                         Synonym: RSCH
24         DID NOT KEEP APPT                   Synonym: DNKA
25         PATIENT NOT PROPERLY PREP'D        Synonym: NOPREP
26         PATIENT CANCELLED EXAM              Synonym: PTCAN
27         RADIOLOGIST CANCELLED EXAM         Synonym: RADCAN
28         EQUIPMENT FAILURE                   Synonym: EQ
29         WRONG PATIENT REQ'D                 Synonym: WRGPT

Select CANCEL REASON: PCD PATIENT CONSENT DENIED      Synonym: PCD
...will now 'CANCEL' selected request(s)...
...MAMMOGRAM G0204 cancelled...

Task 5539893: cancellation queued to print on device

```

Figure 10-10: Cancel a request for an exam

## 10.4 Detailed Request Display

A detailed request display may be selected if a copy of a Requisition is needed or in troubleshooting to determine what action was taken by what staff member.

```

RAD Rad/Nuc Med Total System Menu ...
Radiology/Nuclear Med Order Entry Menu ...
Detailed Request Display

Select Radiology/Nuclear Med Order Entry Menu Option: DETAILED Request Display

Select PATIENT NAME:
  DEMO,PATIENT SJ                F 08-10-19XX XXX-XX-0983    WW 999984

Select Rad/Nuc Med Location: All//

Another one (Select/De-Select):

Imaging Location(s) included:  MAMMOGRAPHY  RADIOLOGY  Unknown

      **** Requested Exams for HENSON,SANDRA JEAN ****    9 Requests
St  Urgency  Procedure / (Img. Loc.)  Desired  Requester  Req'g Loc
--  -
1  dc  ROUTINE  MAMMOGRAM G0204          12/29/2013  PROVIDOR,D  MAMMOGRAPHY
      (MAMMOGRAPHY)
2  p  ROUTINE  CHEST SINGLE VIEW       12/18/2013  PROVIDOR,D  RADIOLOGY W

```



```

(RADIOLOGY)
3 c ROUTINE CHEST 2 VIEWS PA&LAT 12/06/2013 PROVIDOR,D 63 RADIOLOG
(RADIOLOGY)
4 c ROUTINE HIP 2 OR MORE VIEWS 12/06/2013 PROVIDOR,D 63 RADIOLOG
(RADIOLOGY)
5 c ROUTINE ANKLE 3 OR MORE VIEWS 08/28/2003 PROVIDOR,MO 01 GENERAL
(RADIOLOGY)
6 c ROUTINE UROGRAM INTRAVENOUS 09/02/2001 PROVIDOR,DI 30 EMERGENC
(UNKNOWN)
7 dc ROUTINE UROGRAM INTRAVENOUS 09/02/2001 PROVIDOR,G 30 EMERGENC
(UNKNOWN)
8 c ROUTINE ABDOMEN 1 VIEW 09/01/2001 PROVIDOR,G 30 EMERGENC
(UNKNOWN)

**** Detailed Display ****

Name: DEMO,PATIENT SJ (999984) Date of Birth: AUG 10,19XX
-----
Requested : MAMMOGRAM G0204 (MAM Detailed G0204)

Current Status: DISCONTINUED (dc)
Requester: DEMO,USER 3
Tel/Page/Dig Page: Unknown
Patient Location: MAMMOGRAPHY
Entered: Dec 29, 2013 11:24 am by DEMO,USER 3
Pregnant at time of order entry: UNKNOWN
Desired Date: Dec 29, 2013
Cancelled: Dec 29, 2013 11:25 am by DEMO,USER 3
Transport: AMBULATORY
Reason for Study: ANNUAL

Clinical History: ANNUAL EXAM

Reason Cancelled: PATIENT CONSENT DENIED
Request Submitted to: MAMMOGRAPHY

Do you wish to display request status tracking log? NO//

```

Figure 10-11: Detailed Request Display

## 10.5 Print Selected Requests by Patient

This option may be used when it is desired to see the history of Radiology orders and exams for a patient.

In the column labeled **St** for Status, **p** means the exam is pending, **c** means the exam is complete, **h** means the request is on hold, and **dc** indicates that the exam has been cancelled.

```

RAD Rad/Nuc Med Total System Menu ...
Radiology/Nuclear Med Order Entry Menu ...
Print Selected Requests by Patient

Select Radiology/Nuclear Med Order Entry Menu Option: Print Selected Requests by
Patient

Select PATIENT NAME:
DEMO,PT <A> M 12-21-19XX CH T99996

```

St	Urgency	Procedure / (Img. Loc.)	Desired	Requester	9 Requests Req'g Loc
1	p	ROUTINE CLAVICLE (UNKNOWN)	08/16/2007	PROVIDER,TR	EMERGENCY R
2	p	ROUTINE CHEST 2 VIEWS PA&LAT (UNKNOWN)	12/27/2006	DOC,DEMO E	EMERGENCY R
3	p	ROUTINE CT LUMBAR SPINE W/O CONT (UNKNOWN)	2/27/2006	DOC,DEMO E	EMERGENCY R
4	p	ROUTINE US ECHO 2D W/ OR W/O M-MO (UNKNOWN)	/27/2006	DOC,DEMO E	EMERGENCY R
5	dc	ROUTINE CHEST SINGLE VIEW (UNKNOWN)	11/14/2006	PROVIDER,F	EMERGENCY R
6	p	ROUTINE CHEST 2 VIEWS PA&LAT (UNKNOWN)	11/08/2006	PROVIDER,E	OUTPATIENT
7	dc	ROUTINE CHEST 2 VIEWS PA&LAT (UNKNOWN)	06/08/2006	PROVIDER,D	OUTPATIENT
8	p	ROUTINE CHEST 2 VIEWS PA&LAT (UNKNOWN)	02/24/2006	DEMO,PRV	OUTPATIENT

Select Request(s) 1-8 to Print or '^' to Exit: Continue// 1

Do you wish to generate a Health Summary Report? No// NO

DEVICE: HOME// Virtual

>>Rad/Nuc Med Consultation for UNKNOWN<< AUG 16,2007 11:21 Page 1

---

Name : DEMO,PT Urgency : ROUTINE  
 Pt ID Num : T99996 Transport : AMBULATORY  
 Date of Birth: DEC 21,19XX Patient Loc: EMERGENCY ROOM  
 Age : XX Phone Ext :  
 Sex : MALE

---

Requested: CLAVICLE (RAD Detailed 73000)  
 Procedure Modifiers: LEFT  
 Request Status: PENDING (p)

Requester: PROVIDER,T A DO  
 Tel/Page/Dig Page: 580-326-7561 / /  
 Attend Phy Current: UNKNOWN  
 Prim Phy Current: UNKNOWN  
 Date/Time Ordered: Aug 16, 2007 11:20 am by DEMO,USER 3 K  
 Date Desired: Aug 16, 2007

>>Rad/Nuc Med Consultation for UNKNOWN<< AUG 16,2007 11:21 Page 2

---

Name : DEMO,PT Urgency : ROUTINE  
 Pt ID Num : T99996 Transport : AMBULATORY  
 Date of Birth: DEC 21,19XX Patient Loc: EMERGENCY ROOM  
 Age : XX Phone Ext :  
 Sex : MALE

---

Clinical History:  
 FELL OFF HORSE

```

Date Performed: _____ Case No.: _____
Technologist Initials: _____ Number/Size Films: _____
Interpreting Phys. Initials: _____

>>Rad/Nuc Med Consultation for UNKNOWN<<          AUG 16,2007  11:22 Page 3
=====
Name           : DEMO,PT           Urgency        : ROUTINE
Pt ID Num      : T99996            Transport      : AMBULATORY
Date of Birth  : DEC 21,19XX       Patient Loc    : EMERGENCY ROOM
Age           : XX                 Phone Ext     :
Sex           : MALE

Comments:
-----
-----
-----
-----

>>Rad/Nuc Med Consultation for UNKNOWN<<          AUG 16,2007  11:22 Page 4
=====
Name           : DEMO,PT           Urgency        : ROUTINE
Pt ID Num      : T99996            Transport      : AMBULATORY
Date of Birth  : DEC 21,19XX       Patient Loc    : EMERGENCY ROOM
Age           : XX                 Phone Ext     :
Sex           : MALE

=====
Case #   Last 5 Procedures/New Orders Exam Date   Status of Exam   Imaging Loc.
-----
          ABDOMEN MIN 3 VIEWS+CHEST             Ord 2/3/06
          CHEST 2 VIEWS PA&LAT                   Ord 2/24/06
          CHEST 2 VIEWS PA&LAT                   Ord 11/8/06
          CHEST 2 VIEWS PA&LAT                   Ord 12/27/06
          CT LUMBAR SPINE W/O CONT               Ord 12/27/06
          US ECHO 2D W/ OR W/O M-MODE           Ord 12/27/06
          CLAVICLE                               Ord 8/16/07

          No registered exams filed for this patient.
=====

```

Figure 10-12: Print Selected Request by Patient

## 10.6 Print Rad/Nuc Med Requests by Date

In a busy Radiology Department, a secretary may be requested to print the Radiology Requests for the day in order to determine the workload for the day.

```

RAD   Rad/Nuc Med Total System Menu ...
Radiology/Nuclear Med Order Entry Menu ...
Print Rad/Nuc Med Requests by Date

```

Select Radiology/Nuclear Med Order Entry Menu Option: Print Rad/Nuc Med Requests by Date

Request Status Selection

-----  
 Choose one of the following:  
     Discontinued  
     Complete  
     Hold  
     Pending  
     Request Active  
     Scheduled  
     All Current Orders

Select Status: Pending//

Date Criteria Selection

-----  
 Select one of the following:

    E          ENTRY DATE OF REQUEST  
     D          DESIRED DATE FOR EXAM

Date criteria to use for choosing requests to print: E// DESIRED DATE FOR EXAM

\*\*\*\* Date Range Selection \*\*\*\*

Beginning DATE : T (AUG 16, 2007)

Ending DATE : T (AUG 16, 2007)

Print HEALTH SUMMARY for each patient? NO

DEVICE: HOME// Virtual

>>Rad/Nuc Med Consultation for UNKNOWN<<                  AUG 16,2007 11:22 Page 1

=====

Name	: DEMO,PT	Urgency	: ROUTINE
Pt ID Num	: T99996	Transport	: AMBULATORY
Date of Birth:	DEC 21,19XX	Patient Loc:	EMERGENCY ROOM
Age	: XX	Phone Ext	:
Sex	: MALE		

=====

Requested:          CLAVICLE                                  (RAD Detailed 73000)  
 Procedure Modifiers: LEFT  
 Request Status:      PENDING (p)

Requester:          PROVIDER,T A DO  
 Tel/Page/Dig Page: 580-326-7561 / /  
 Attend Phy Current: UNKNOWN  
 Prim Phy Current:   UNKNOWN  
 Date/Time Ordered:  Aug 16, 2007 11:20 am by DEMO,USER 3 K  
 Date Desired:       Aug 16, 2007

>>Rad/Nuc Med Consultation for UNKNOWN<<                  AUG 16,2007 11:22 Page 2

=====

Name	: DEMO,PT	Urgency	: ROUTINE
------	-----------	---------	-----------

```

Pt ID Num      : T99996                Transport  : AMBULATORY
Date of Birth: DEC 21,19XX            Patient Loc: EMERGENCY ROOM
Age           : XX                     Phone Ext  :
Sex          : MALE
=====

Clinical History:
  FELL OFF HORSE
-----

Date Performed: _____            Case No.: _____
Technologist Initials: _____      Number/Size Films: _____
Interpreting Phys. Initials: _____
-----

>>Rad/Nuc Med Consultation for UNKNOWN<<                AUG 16,2007  11:22 Page 3
=====
Name           : DEMO,PT                Urgency      : ROUTINE
Pt ID Num      : T99996                Transport    : AMBULATORY
Date of Birth: DEC 21,19XX            Patient Loc: EMERGENCY ROOM
Age           : XX                     Phone Ext    :
Sex          : MALE
=====

Comments:
-----
-----
-----
-----
-----

>>Rad/Nuc Med Consultation for UNKNOWN<<                AUG 16,2007  11:22 Page 4
=====
Name           : DEMO,PT                Urgency      : ROUTINE
Pt ID Num      : T99996                Transport    : AMBULATORY
Date of Birth: DEC 21,19XX            Patient Loc: EMERGENCY ROOM
Age           : XX                     Phone Ext    :
Sex          : MALE
=====

Case #      Last 5 Procedures/New Orders Exam Date      Status of Exam      Imaging Loc.
-----
          ABDOMEN MIN 3 VIEWS+CHEST                    Ord 2/3/06
          CHEST 2 VIEWS PA&LAT                          Ord 2/24/06
          CHEST 2 VIEWS PA&LAT                          Ord 11/8/06
          CHEST 2 VIEWS PA&LAT                          Ord 12/27/06
          CT LUMBAR SPINE W/O CONT                      Ord 12/27/06
          US ECHO 2D W/ OR W/O M-MODE                  Ord 12/27/06
          CLAVICLE                                       Ord 8/16/07

No registered exams filed for this patient.
    
```

Figure 10-13: Print Rad/Nuc Med Requests by Date

## 11.0 Exam Entry/Edit Menu...

### 11.1 Register Patient for Exams

All exams to be processed through the Radiology department must begin with registering the patient for the exam. This is distinct from Patient Registration in that it creates an entry in the Radiology/Nuclear Medicine Patient file. It indicates that the patient is present, and the exam will be performed. Depending upon how the Location Parameters have been set, some sites may choose to register patients in advance of their exams to prevent a backlog of scheduled procedures.

At small sites that do not have radiology services on site, this option may be deferred until a report comes back from the performing site indicating that a patient presented for the exam.

Note that the Case Number is created at the time a patient is registered for an exam. While case numbers may appear on the screen as a numeric value (5, 35, 234, etc.), case numbers are unique numbers identified by the date of service and the case number. For example, a case displaying as 5 when a patient is registered is actually case 122913-5 if the date is 12/29/13.

Many interfaces for modality worklists are triggered by the Register Patient for an Exam step.

```
RAD   Rad/Nuc Med Total System Menu ...
Exam Entry/Edit Menu ...
Register Patient for Exams
```

**Note:** You can either start at this point by entirely skipping the Request an Exam option or proceed with processing an exam that has already been requested.

#### Exam Not Already Requested

```
Select Exam Entry/Edit Menu Option: REG   Register Patient for Exams

Select Patient: DEMO,PA
  1   DEMO,PATIENT B           <CA>   F 01-28-19XX 000005555   CH 999999
  2   DEMO,PATIENT PRIVATE    <CWAD> F 12-31-19XX 000003175P   CH 999996
CHOOSE 1-2: 1
DEMO,PATIENT B           <CA>   F 01-28-19XX 000005555   CH 999999
...OK? Yes//   (Yes)

*****      Patient Demographics      *****

Name           : DEMO,PATIENT B
Pt ID          : 999999
Date of Birth  : JAN 28,19XX (XX)
Veteran       : Yes                    Eligibility : Unknown
```

```

Sex          : FEMALE
Other Allergies:
      'V' denotes verified allergy   'N' denotes non-verified allergy

CODEINE (V)           CIPROFLOXACIN (V)
METHOTREXATE (V)     CHOCOLATE (V)
METFORMIN HYDROCHLORIDE (V)  AZITHROMYCIN (V)
TAPE, PAPER (V)      TAPE, COTTON (V)
OTHER ALLERGY/ADVERSE REACTION (V)  ASPIRIN (V)
TETANUS TOXOID (V)   PENICILLIN (V)
PAXIL (V)             ALPHAGAN 0.2% OPH SOLN (V)
FIBERGLASS (V)

Case #   Last 5 Procedures/New Orders   Exam Date   Status of Exam   Imaging Loc.
-----
1904     KNEE 3 VIEWS                       NOV 26,2006  CANCELLED        MEDICAL IMAG

Case #   Last 5 Procedures/New Orders   Exam Date   Status of Exam   Imaging Loc.
-----
2449     SPINE LUMBOSACRAL MIN 4 VIEW        NOV  8,2006  CANCELLED        MEDICAL IMAG
9804     U/S ECHO DOPPLER                   SEP 15,2006  WAITING FOR      MEDICAL IMAG
286      ECHOGRAM ABDOMEN LTD               FEB 13,2006  EXAMINED         IDABEL IM
          ANKLE 2 VIEWS                      SEP 12,2005  COMPLETE        MEDICAL IMAG
          CHEST 2 VIEWS PA&LAT                Ord 3/4/03
          CT ABDOMEN W/CONT                  Ord 12/12/03
          CHEST SINGLE VIEW                 Ord 3/23/05
          'FETAL BIOPHYSICAL PROFILE U     Ord 5/19/06
          ELBOW 3 OR MORE VIEWS           Ord 12/21/06

Imaging Exam Date/Time: NOW//   (AUG 16, 2007@11:25)

      **** Requested Exams for DEMO,PATIENT BOGUS ****   5 Requests
St  Urgency  Procedure / (Img. Loc.)  Desired  Requester  Req'g Loc
--  -
1  p  ROUTINE  ELBOW 3 OR MORE VIEWS  12/21/2006  PROVIDER,BR  GOODMAN
          (UNKNOWN)
2  p  ROUTINE  'FETAL BIOPHYSICAL PROFIL  05/19/2006  DOCTOR,A  EMERGENCY R
          (UNKNOWN)
3  p  ROUTINE  CHEST SINGLE VIEW      03/23/2005  DOCTOR,P Y  MED/SURG
          (UNKNOWN)
4  p  ROUTINE  CT ABDOMEN W/CONT      12/12/2003  PROVIDER,A  INPATIENT
          (UNKNOWN)
5  h  ROUTINE  HAND 3 OR MORE VIEWS   04/02/2003  PROVIDER,M  POTEAU
          (UNKNOWN)

(Use Pn to replace request 'n' with a Printset procedure.)
Select Request(s) 1-5 or '^' to Exit:  Exit//

Do you want to Request an Exam for DEMO,PATIENT BOGUS? No// If you answer yes at this point, you will be prompted to select requesting provider, requesting location, procedure, and other items that are normally provided if an exam is electronically ordered.

```

Figure 11-1: Registering a patient for an exam that has not already been requested

### Registering a Patient with an Electronically Requested Exam

```

Select Patient: DEMO,P
1  DEMO,PATIENT BOGUS      <CA>  F 01-28-19XX 000005555  CH 999999
2  DEMO,PATIENT PRIVATE    <CWAD> F 12-31-19XX 000003175P  CH 999996

```

```

CHOOSE 1-2: 2
  DEMO,PATIENT PRIVATE          <CWAD> F 12-31-19XX 000003175P   CH 999996
    ...OK? Yes//      (Yes)

          *****      Patient Demographics      *****

Name       : DEMO,PATIENT PRIVATE
Pt ID      : 999996
Date of Birth: DEC 31,19XX (XX)
Veteran    : No                      Eligibility : Unknown
Sex        : FEMALE
Other Allergies:
  'V' denotes verified allergy   'N' denotes non-verified allergy

AZITHROMYCIN(V)      METFORMIN HYDROCHLORIDE(V)
CHOCOLATE(V)         CHLOSTEROL(V)
SUGAR SNACKS(V)     IBUPROFEN(V)
ASPIRIN(V)          CIPROFLOXACIN(V)
METHOTREXATE(V)    SULFAMETHOXAZOLE/TRIMETHOPRIM(V)
MILK(V)             SHRIMP(V)
STRAWBERRIES(V)     AMOXICILLIN 125 MG/5 CC(V)

Case #   Last 5 Procedures/New Orders Exam Date   Status of Exam   Imaging Loc.
-----
          CLAVICLE                               Ord 12/10/04

Case #   Last 5 Procedures/New Orders Exam Date   Status of Exam   Imaging Loc.
-----

          No registered exams filed for this patient.

Imaging Exam Date/Time: NOW//      (AUG 16, 2007@11:25)

          **** Requested Exams for DEMO,PATIENT PRIVATE ****      1 Requests
St  Urgency Procedure / (Img. Loc.)   Desired   Requester   Req'g Loc
--  -
1  p  ROUTINE CLAVICLE                 12/10/2004 PROVIDER,ST  OPD-FAMILY
          (UNKNOWN)

(Use Pn to replace request 'n' with a Printset procedure.)
Select Request(s) 1-1 or '^' to Exit: Exit// 1

          Procedure: CLAVICLE

          ...will now register DEMO,PATIENT PRIVATE with the next case number... (AUG
16, 2007@11:25)

          Case Number: 8977
          -----
          PROCEDURE: CLAVICLE//                      (RAD Detailed) CPT:73000

          Select PROCEDURE MODIFIERS: BILATERAL EXAM
          Are you adding 'BILATERAL EXAM' as
          a new PROCEDURE MODIFIERS (the 1ST for this EXAMINATIONS)? No// Y (Yes)
          Select PROCEDURE MODIFIERS:
          CATEGORY OF EXAM: OUTPATIENT//  OUTPATIENT
          PRINCIPAL CLINIC: OPD-FAMILY PRACTICE//
          TECHNOLOGIST COMMENT:

```

Figure 11-2: Registering a patient with an electronically requested exam



## 11.2 Edit Exam by Patient

After an exam has been performed, the next step is to edit the exam, either by case number or by patient. This indicates that the exam has been performed and in the cases of interfaces should perform several functions.

Clear the exam from the modality worklist.

Send an examined message to the PACS or VISTA Imaging workstation.

In the case of a small site which performs no on site Radiology, this step may be deferred until a report is received back from the referral site.

When editing an exam, it is extremely important to enter all required fields and watch the screen for the message in Figure 11-3.

```
...will now designate exam status as 'EXAMINED'... for case no. 8977
STATUS CHANGE DATE/TIME: AUG 16,2007@11:27//
...exam status successfully updated.
```

Figure 11-3: Successful update of an exam that has been edited

If the Division Parameters have been set to pass Radiology procedures to PCC at examined, the exam should be viewable in PCC at this point.

```
RAD Rad/Nuc Med Total System Menu ...
Exam Entry/Edit Menu ...
Edit Exam by Patient

Select Exam Entry/Edit Menu Option: EDIT Exam by Patient

Select Patient: DEMO,PATIENT PRIVATE
                **** Edit Exams By Patient ****

Patient's Name: DEMO,PATIENT PRIVATE 999996 Run Date: AUG
16,2007

Case No. Procedure Exam Date Status of Exam Imaging
Loc -----
---
1 8977 CLAVICLE 08/16/07 WAITING FOR EXAM MEDICAL
IMA
Type a '^' to STOP, or
CHOOSE FROM 1-1: 1

Case No.:8977 Procedure:CLAVICLE Date:AUG 16,2007
11:25
                (RAD Detailed) CPT:73000

LAST MENSTRUAL PERIOD:
PRIMARY MEANS OF BIRTH CONTROL:
LAST NEGATIVE HCG TEST:
PROCEDURE: CLAVICLE//
Select PROCEDURE MODIFIERS: BILATERAL EXAM//
Select CPT MODIFIERS:
```

```

CATEGORY OF EXAM: OUTPATIENT//
PRINCIPAL CLINIC: OPD-FAMILY PRACTICE//
REQUESTING PHYSICIAN: PROVIDER,S A MD//
Select TECHNOLOGIST: DEMO,TECH L RTCT          HLC          859HLC
RADIO
LOGY TECHNOLOGIST
Select TECHNOLOGIST:
TECHNOLOGIST COMMENT:
COMPLICATION: NO COMPLICATION//
PRIMARY CAMERA/EQUIP/RM: r1          GE ADVANX
Select FILM SIZE: 8x10//
FILM SIZE: 8x10//
AMOUNT(#films or cine ft): 2//
NUMBER OF REPEATS: 0
Select FILM SIZE:
CLINICAL HISTORY FOR EXAM:
1>PAIN
EDIT Option:
...will now designate exam status as 'EXAMINED'... for case no. 8977
STATUS CHANGE DATE/TIME: AUG 16,2007@11:27//
...exam status successfully updated.

```

Figure 11-4: Edit Exam by Patient

### 11.3 Case No. Exam Edit

The **Case No. Exam Edit** option offers the same functionality as **Edit Exam by Patient**. Some staff prefers to work with case numbers as opposed to patient names. Regardless of which option is chosen, it is critical to enter all required fields and watch that the screen displays the message that the exam status was successfully updated. If the Division Parameters have been set to pass Radiology procedures to PCC at examined, the exam should be viewable in PCC at this point.

```

RAD Rad/Nuc Med Total System Menu ...
Exam Entry/Edit Menu ...
Case No. Exam Edit

Select Exam Entry/Edit Menu Option: case No. Exam Edit

Enter Case Number: 080704-729

Choice Case No.      Procedure                Name
Pt ID
-----
1      080704-729      CHEST 2 VIEWS PA&LAT      DEMO,PATIENT MI 999987
                        (RAD Detailed) CPT:71020
PROCEDURE: CHEST 2 VIEWS PA&LAT//
CONTRAST MEDIA USED: NO// NO
Select PROCEDURE MODIFIERS:
Select CPT MODIFIERS:
CATEGORY OF EXAM: OUTPATIENT//
PRINCIPAL CLINIC: 30 EMERGENCY MEDICINE//
REQUESTING PHYSICIAN: PROVIDER,R E//
Select TECHNOLOGIST: student,one STUDENT,ONE
Select TECHNOLOGIST:
TECHNOLOGIST COMMENT:
COMPLICATION: NO COMPLICATION//

```

```

PRIMARY CAMERA/EQUIP/RM: 1          RADIOLOGY - ROOM 1
Select FILM SIZE: DIGITAL
  AMOUNT(#films or cine ft): 2
Select FILM SIZE: W-DIGITAL
  AMOUNT(#films or cine ft): 1
Select FILM SIZE:
...will now designate exam status as 'EXAMINED'... for case no. 729
STATUS CHANGE DATE/TIME: DEC 29,2013@13:27//
...exam status successfully updated.

```

Figure 11-5: Case No. Exam Edit option

## 11.4 Cancel an Exam

The **Cancel an Exam** option differs from the **Cancel a Request** option in that the patient has already been registered for the exam and a case number has been generated. It is important to note that when canceling an exam, the user will be asked if they also wish to cancel the request for an exam. If the patient will subsequently be having the exam and it must be deferred for some reason, do not cancel the request.

Note that exams to be cancelled may be entered by case number, patient name, or patient chart number.

```

RAD   Rad/Nuc Med Total System Menu ...
Exam Entry/Edit Menu ...
Cancel an Exam

Select Exam Entry/Edit Menu Option: cancel an Exam

Enter Case Number: DEMO,PATIENT A          F 04-07-19XX XXX-XX-8134   DH
999985

                **** Case Lookup by Patient ****

Patient's Name: DEMO,PATIENT A 999985          Run Date: DEC 29,2013

  Case No.  Procedure                Exam Date  Status of Exam
  Imaging Loc
  -----
  1      746  ACUTE ABDOMEN                08/07/04  WAITING FOR EXAM
RADIOLOGY
  2      837  HIP 2 OR MORE VIEWS          02/20/04  COMPLETE
RADIOLOGY
  3      799  SPINE CERVICAL MIN 2 VIEWS  03/21/03  COMPLETE
RADIOLOGY
  4      433  CHEST 2 VIEWS PA&LAT        02/05/03  COMPLETE
RADIOLOGY
  5      470  SHOULDER 2 OR MORE VIEWS    11/10/01  COMPLETE
RADIOLOGY
  6      52   PELVIC U/S                    04/23/01  COMPLETE
RADIOLOGY
  7      430  ABDOMEN FLAT & UPRIGHT      04/21/01  COMPLETE
RADIOLOGY
  8      459  FINGER(S) 2 OR MORE VIEWS  12/09/00  COMPLETE
RADIOLOGY

```

```

9      504      ABDOMEN FLAT & UPRIGHT      10/07/00      COMPLETE
RADIOLOGY
10     749      ABDOMEN FLAT & UPRIGHT      05/04/00      CANCELLED
RADIOLOGY
11     696      PELVIC U/S                      04/14/00      COMPLETE
RADIOLOGY
12     613      PELVIC U/S                      03/16/00      COMPLETE
RADIOLOGY
13     497      PELVIC U/S                      03/15/00      COMPLETE
RADIOLOGY
14     474      ECHOGRAM ABDOMEN LTD           03/15/00      COMPLETE
RADIOLOGY
Type a '^' to STOP, or

Do you wish to cancel this exam now? NO// Y
...exam status backed down to 'CANCELLED'
STATUS CHANGE DATE/TIME: DEC 29,2013@13:09//
TECHNOLOGIST COMMENT: PT TRANSPORTED OUT
REASON FOR CANCELLATION: ?
This field points to the 'RAD/NUC MED REASON' file to indicate the
reason
the exam was cancelled.
Type of Reason must equal CANCEL REQUEST or GENERAL REQUEST.
Answer with RAD/NUC MED REASON, or NUMBER, or SYNONYM
Do you want the entire RAD/NUC MED REASON List? Y (Yes)
Choose from:
1          ANESTHESIA CONSULT NEEDED          Synonym: ANES
6          CONFLICT OF EXAMINATIONS          Synonym: CON
7          DUPLICATE REQUESTS                Synonym: DUP
8          INADEQUATE CLINICAL HISTORY        Synonym: INAD
13         PATIENT CONSENT DENIED             Synonym: PCD
14         PATIENT EXPIRED                   Synonym: EXP
17         REQUESTING PHYSICIAN CANCELLED     Synonym: REQ
19         WRONG EXAM REQUESTED              Synonym: WRN
20         EXAM CANCELLED                    Synonym: CAN
21         EXAM DELETED                      Synonym: DEL
22         CALLED-WARD DID NOT SEND           Synonym:
23         RESCHEDULED                       Synonym: RSCH
24         DID NOT KEEP APPT                 Synonym: DNKA
25         PATIENT NOT PROPERLY PREP'D       Synonym: NOPREP
26         PATIENT CANCELLED EXAM            Synonym: PTCAN
27         RADIOLOGIST CANCELLED EXAM        Synonym: RADCAN
28         EQUIPMENT FAILURE                 Synonym: EQ
29         WRONG PATIENT REQ'D               Synonym: WRGPT

REASON FOR CANCELLATION: 27 RADIOLOGIST CANCELLED EXAM Synonym:
RADCAN
...cancellation complete.

Do you want to cancel the request associated with this exam? No// Y (Yes)

* Updating Women's Health Database *

...request status updated to discontinued.

```

Figure 11-6: Cancel an exam

## 11.5 Switch Locations

When working at a site that offers multiple imaging types, it may be useful to switch Imaging Locations to check on exams or perform tasks for a different Imaging Location. That can easily be accomplished by using the option Switch Locations.

```

RAD    Rad/Nuc Med Total System Menu ...
Exam Entry/Edit Menu ...
Switch Locations

Select Exam Entry/Edit Menu Option: switch Locations
Please select a sign-on Imaging Location: MAMMOGRAPHY// RADIOLOGY
(G
GENERAL RADIOLOGY-8907)
Default Flash Card Printer: HOME//    VIRTUAL TERMINAL

Default Jacket Label Printer: HOME//    VIRTUAL TERMINAL

Default Report Printer: HOME//    VIRTUAL TERMINAL

-----
----
Welcome, you are signed on with the following parameters:

Version : 5.0
Division : DEMO INDIAN HOSPITAL
Location : RADIOLOGY
Img. Type: GENERAL RADIOLOGY
User    : DEMO,USER 3

Printer Defaults
-----
Flash Card : None
           No cards
Jacket Label: None
Report      : None

```

Figure 11-7: Switch Locations

## 11.6 Exam Status Display

It is useful during the course of a day to check on the progress and status of exams. This option allows a supervisor or other staff to quickly review to see if exams have all been accounted for during the course of the day.

```

RAD    Rad/Nuc Med Total System Menu ...
Exam Entry/Edit Menu ...
Exam Status Display

Select Exam Entry/Edit Menu Option: exam Status Display

Current Division: DEMO INDIAN HOSPITAL
Current Imaging Type: GENERAL RADIOLOGY

Exam Status Tracking Module
Date    : 12/29/13 11:58 AM
Locations: RADIOLOGY

Division: DEMO INDIAN HOSPITAL
Status  : WAITING FOR EXAM

```

Case # Equip/Rm	Date	Patient	Procedure	
826	07/30/04	122218-DEMO,PATIENT A	NECK SOFT TISSUE	2
828	07/30/04	103144-DEMO,PATIENT B	FOOT 3 OR MORE VIEWS	4
478	08/05/04	181649-DEMO,PATIENT C	CT LUMBAR SPINE W/O CONT	
606	08/06/04	119429-DEMO,PATIENT D	CT HEAD W/O CONT	
729	08/07/04	143987-DEMO,PATIENT E	CHEST 2 VIEWS PA&LAT	
733	08/07/04	103740-DEMO,PATIENT F	CHEST 2 VIEWS PA&LAT	
746	08/07/04	118985-DEMO,PATIENT G	ACUTE ABDOMEN	
Exam Status Tracking Module			Division: DEMO INDIAN HOSPITAL	
Date : 12/29/13 11:58 AM			Status : EXAMINED	
Locations: RADIOLOGY				
Case # Equip/Rm	Date	Patient	Procedure	
745	08/07/04	106761-DEMO, .PATIENT H	HAND 3 OR MORE VIEWS	2
7	08/23/13	876-DEMO,BA	MAMMOGRAM BILATERAL	2
1	12/06/13	213321-DEMO,PATIENT I	CLAVICLE	1
Exam Status Tracking Module			Division: DEMO INDIAN HOSPITAL	
Date : 12/29/13 11:58 AM			Status : TRANSCRIBED	
Locations: RADIOLOGY				
Case # Equip/Rm	Date	Patient	Procedure	
893	07/31/04	107070-DEMO,PATIENT M	CHEST 2 VIEWS PA&LAT	2
895	07/31/04	184421-DEMO,PATIENT N	CHEST 2 VIEWS PA&LAT	2
382	08/04/04	127957-DEMO,PATIENT O	CT ABDOMEN W/CONT	ct
384	08/04/04	124291-DEMO,PATIENT P	CT ABDOMEN W/CONT	ct
Enter Status, (N)ext status, (C)ontinue, '^' to Stop: CONTINUE// ^				

Figure 11-8: Exam Status Display

## 12.0 Films Reporting Menu

### 12.1 Report Entry/Edit

If reports are to be entered into the Radiology/Nuclear Medicine Package in any non-interfaced mode, they must be entered either via the Report Entry/Edit option or via the Outside Report Entry/Edit option. It may be helpful to switch the RPMS screen editor from Line Editor to Screen Editor for those who will be entering reports. Also, unless the transcriptionist is very skilled at using the RPMS editors, he/she may find it easier to create the report in notepad, word pad, WORD, or some other kind of editor before copying and pasting the report into the RPMS Radiology report fields.

When entering reports, it is critical that the user monitor the text displayed at the end of report entry to ensure that the mandatory fields have been entered and the exam status is successfully updated to either Transcribed or Complete depending upon examination status parameters.

```

RAD    Rad/Nuc Med Total System Menu ...
FILMS Reporting Menu
Report Entry/Edit

Select Rad/Nuc Med Division: All// CHOCTAW NATION HOSPITAL      OKLAHOMA TRIBE/
638    TALIHINA          01    OK          556001

Another one (Select/De-Select):

Enter Case Number: DEMO

  1    DEMO,PATIENT BOGUS          <CA>  F 01-28-1965 444335555    CH 999999
  2    DEMO,PATIENT PRIVATE        <CWAD> F 12-31-1975 662123175P    CH 999996
CHOOSE 1-2: 2
  DEMO,PATIENT PRIVATE          <CWAD> F 12-31-19XX 000003175P    CH 999996
          **** Case Lookup by Patient ****

Patient's Name: DEMO,PATIENT PRIVATE 999996          Run Date: AUG 17,2007

  Case No.  Procedure          Exam Date  Status of Report  Imaging Loc
  -----  -
  1      8977  CLAVICLE          08/16/07  None              MEDICAL IMA
Type a '^' to STOP, or
CHOOSE FROM 1-1: 1

-----
Name       : DEMO,PATIENT PRIVATE          Pt ID      : 999996
Case No.   : 8977  Exm. St: EXAMINED        Procedure   : CLAVICLE
Exam Date:  AUG 16,2007  11:25          Technologist: DEMO,TECH L RTCT
Req Phys   : PROVIDER,STEPHEN A MD

-----
...report not entered for this exam...
...will now initialize report entry...
PRIMARY INTERPRETING STAFF: DEMO  TECHNICIAN K

-----
Select 'Standard' Report to Copy: RGT
Are you sure you want the 'RGT' standard report? No// Y

Do you want to add another standard to this report? No//

```

```

-----
REPORTED DATE: T (AUG 17, 2007)
-----
CLINICAL HISTORY:
PAIN

ADDITIONAL CLINICAL HISTORY:
 1>PREVIOUS ABNORMAL FILMS FROM 2 MONTHS AGO
 2>
EDIT Option:
-----
REPORT TEXT:
 1>RIGHT GREAT TOE:
EDIT Option:
-----
IMPRESSION TEXT:
 1>THIS IS REQUIRED FOR A REPORT TO PASS TO PCC.
 2>
EDIT Option:
-----

      Select one of the following:

          V          VERIFIED
          PD         PROBLEM DRAFT
          D          DRAFT

REPORT STATUS: D// RAFT
PRIMARY DIAGNOSTIC CODE:
...will now designate exam status as 'TRANSCRIBED'... for case no. 8977
STATUS CHANGE DATE/TIME: AUG 17,2007@14:23//
...exam status successfully updated.

Do you wish to print this report? No//

```

Figure 12-1: Report Entry/Edit

## 12.2 On-Line Verifying of Reports

This option allows the interpreting physician to verify reports online. To use this option, an Electronic Signature Code is required, and the user must also be assigned the RA VERIFY security key. An interpreting staff physician may verify reports associated with his/her name. If the division parameter ALLOW VERIFYING OF OTHERS is set to **YES**, the physician may also verify reports associated with other interpreting physicians.

Once verified, the legal signature may be printed in the footer of the report, provided the package coordinator has added this field to the footer.

```

RAD    Rad/Nuc Med Total System Menu ...
FILMS Reporting Menu
Report Entry/Edit

Select Films Reporting Menu Option: ON-Line Verifying of Reports

Enter your Current Signature Code:    SIGNATURE VERIFIED

```



```

Select Interpreting Physician: DEMO,USER 3 K//          DKR          COMPUTE
R SPECIALIST
There is only one report (DRAFT) to choose from.
Do you wish to review this one report? YES//

    Select one of the following:

        P          PAGE AT A TIME
        E          ENTIRE REPORT

DEMO,PATIENT PRIVATE (999996)          Case No.          : 081607-8977 @11:25
CLAVICLE                               Transcriptionist: DEMO,USER 3 K
Req. Phys : PROVIDER,STEPHEN A MD      Pre-verified      : NO
Staff Phys: DEMO,USER 3 (P)
=====
CLAVICLE                               (RAD Detailed) CPT:73000
  Proc Modifiers : BILATERAL EXAM

Clinical History:
PAIN

Additional Clinical History:
PREVIOUS ABNORMAL FILMS FROM 2 MONTHS AGO

Report:                               Status: DRAFT
RIGHT GREAT TOE:

Impression:
THIS IS REQUIRED FOR A REPORT TO PASS TO PCC.
=====

Type '?' for action list, 'Enter' to continue//

    Select one of the following:

        V          VERIFIED
        PD         PROBLEM DRAFT
        D          DRAFT

REPORT STATUS: D// VERIFIED
PRIMARY DIAGNOSTIC CODE:
  Status update queued!

```

Figure 12-2: On-line Verifying of Report

## 12.3 Outside Report Entry/Edit

This option allows the user to log an outside interpreted report, without having to verify it. The report entered from this option is automatically given the electronically filed report status.

```

RAD   Rad/Nuc Med Total System Menu ...
FILMS Reporting Menu
Outside Report Entry/Edit

```

Select Films Reporting Menu Option: outside Report Entry/Edit

```

+-----+
|
| This option is for entering canned text for
| outside work: interpreted report done outside,
| and images made outside this facility.
|
| For a printset, the canned text must apply to all
| cases within the printset.
|
+-----+

```

Select Imaging Type: All//

Another one (Select/De-Select):

Enter Case Number: 729

```

-----
Name       : DEMO,PATIENT B           Pt ID      : 999997
Case No.   : 729   Exm. St: EXAMINED   Procedure  : CHEST 2 VIEWS PA&LAT
Exam Date  : AUG  7,2004  17:58       Technologist: STUDENT,ONE
Req Phys   : PROVIDER,A E
-----

```

```

...report not entered for this exam...
...will now initialize report entry...
-----

```

Select 'Standard' Report to Copy:

REPORTED DATE: T (DEC 29, 2013)

CLINICAL HISTORY:

Pt with high blood sugar

```

+++++
Required: REPORT TEXT and/or IMPRESSION TEXT
+++++

```

REPORT TEXT:

==[ WRAP ]==[ INSERT ]=====< REPORT TEXT >===== [ <PF1>H=Help ]=====

*This is where the report text can be copied and pasted or transcribed from a hard copy report.*

<=====T=====T=====T=====T=====T=====T=====T=====T=====T=====T>=====

IMPRESSION TEXT:

==[ WRAP ]==[ INSERT ]=====< IMPRESSION TEXT >===== [ <PF1>H=Help ]=====

The Impression field is a separate field within the report and must be entered separately. It is usually a simple statement of exam overall impression. However, the impression is usually required to pass an exam to PCC.

<=====T=====T=====T=====T=====T=====T=====T=====T=====T=====T>=====

PRIMARY DIAGNOSTIC CODE:

```

Report status is stored as "Electronically Filed".
...will now designate exam status as 'COMPLETE'... for case no. 729

```

```

STATUS CHANGE DATE/TIME: DEC 29,2013@14:18//
  ..exam status successfully updated.
  ...will now designate request status as 'COMPLETE'...
  ...request status successfully updated.

Do you wish to print this report? No//YES

```

Figure 12-3: Outside Report Entry/Edit

This is how the report using the Outside Report Entry/Edit appears.

```

Select Films Reporting Menu Option: select Report to Print by Patient

Select Patient: 999997
  DEMO,PATIENT B                F 01-03-19XX XXX-XX-8011    DH 999997
                        **** Patient's Exams ****

Patient's Name: DEMO,PATIENT B 999997          Run Date: DEC 29,2013

  Case No.  Procedure                Exam Date  Status of Report  Imaging Loc
  -----  -
  1      742    CT HEAD W/O CONT                08/07/04                RADIOLOGY
  2      729    CHEST 2 VIEWS PA&LAT           08/07/04    ELECTRONICALLY F RADIOLOGY
Type a '^' to STOP, or
CHOOSE FROM 1-2: 2

Select a device: HOME//    VIRTUAL TERMINAL    Right Margin: 80//
                *** DEMO INDIAN MEDICAL CENTER ***
                5670 EAST TUCSON BOULEVARD
                TUCSON, ARIZONA 56789
                TELEPHONE: (520)765-8970

Name:    DEMO,PATIENT B                DOB: 01-03-19XX    (XX)
Chart#:  999997                        Sex: FEMALE
Requesting Loc: 30 EMERGENCY MEDICIN    Physician: PROVIDER,A E
Entered request: USER,DEMO K           Technician: STUDENT,ONE
Case#:  080704-729                    Radiologist:
Procedure: CHEST 2 VIEWS PA&LAT        Verifier:

-----

(Case 729 COMPLETE) CHEST 2 VIEWS PA&LAT          (RAD Detailed) CPT:71020
Clinical History:
Pt with high blood sugar

Report:
This is where the report text can be copied and pasted or transcribed from
A hard copy report.

Impression:
The Impression field is a separate field within the report and must be
entered separately. It is usually a simple statement of exam overall
impression. However, the impression is usually required to pass an exam to
PCC.

VERIFIED BY:

*****

```

```
*ELECTRONICALLY FILED*
*****
```

Figure 12-4: Report entered via Outside Report Entry/Edit

## 12.4 Verify Report Only

This function allows the user to verify a report without having to access the **Report Enter/Edit** option. This function is often used when a report has been edited, but the report status has not been updated to reflect the verified status. It does not differ substantially from the option for **On-line Verifying of Reports** option.

```
RAD Rad/Nuc Med Total System Menu ...
FILMS Reporting Menu
Verify report Only
```

Figure 12-5: Verify report Only option

## 12.5 Select Report to Print by Patient

This option may be used to print a hard copy report suitable for faxing be medical records to an outside provider or medical facility.

```
RAD Rad/Nuc Med Total System Menu ...
FILMS Reporting Menu
Select Report to Print by Patient

Select Films Reporting Menu Option: select Report to Print by Patient

Select Patient: DEMO,PATIENT A F 04-07-19XX XXX-XX-8134 DH 118
**** Patient's Exams ****

Patient's Name: DEMO,PATIENT A 999985 Run Date: DEC 29,2013

Case No. Procedure Exam Date Status of Report Imaging Loc
-----
1 746 ACUTE ABDOMEN 08/07/04 (Exam Dc'd) RADIOLOGY
2 837 HIP 2 OR MORE VIEWS 02/20/04 VERIFIED RADIOLOGY
3 799 SPINE CERVICAL MIN 2 VIEWS 03/21/03 VERIFIED RADIOLOGY
4 433 CHEST 2 VIEWS PA&LAT 02/05/03 VERIFIED RADIOLOGY
5 470 SHOULDER 2 OR MORE VIEWS 11/10/01 VERIFIED RADIOLOGY
6 52 PELVIC U/S 04/23/01 VERIFIED RADIOLOGY
7 430 ABDOMEN FLAT & UPRIGHT 04/21/01 VERIFIED RADIOLOGY
8 459 FINGER(S) 2 OR MORE VIEWS 12/09/00 VERIFIED RADIOLOGY
9 504 ABDOMEN FLAT & UPRIGHT 10/07/00 VERIFIED RADIOLOGY
10 749 ABDOMEN FLAT & UPRIGHT 05/04/00 (Exam Dc'd) RADIOLOGY
11 696 PELVIC U/S 04/14/00 VERIFIED RADIOLOGY
12 613 PELVIC U/S 03/16/00 VERIFIED RADIOLOGY
13 497 PELVIC U/S 03/15/00 VERIFIED RADIOLOGY
14 474 ECHOGRAM ABDOMEN LTD 03/15/00 VERIFIED RADIOLOGY

Type a '^' to STOP, or

Select a device: HOME// VIRTUAL TERMINAL Right Margin: 80//
```

```

*** DEMO INDIAN MEDICAL CENTER ***
      5670 EAST TUCSON BOULEVARD
      TUCSON, ARIZONA 56789
      TELEPHONE: (520)765-8970

Name: DEMO,PATIENT A          DOB: 04-07-19XX   (XX)
Chart#: 999985                Sex: FEMALE
Requesting Loc: 30 EMERGENCY MEDICIN  Physician: DIGOXIN,CARDIAC A
Entered request: DEMO,USER

Case#: 022004-837            Technician: DEMO,TECH S
Procedure: HIP 2 OR MORE VIEWS  Radiologist: DEMO,RADIOLOGIST
                                 Verifier: TECH,JJ
-----

Pregnancy Screen: Patient is unable to answer or is unsure

(Case 837 COMPLETE)  HIP 2 OR MORE VIEWS          (RAD Detailed) CPT:73510
Proc Modifiers : RIGHT
Clinical History:

feels out of place painful

Report:
The exam demonstrates the osseous and joint structures to be intact and
without evidence of fractures, dislocations or significant degenerative
changes identified.

Impression:
Unremarkable radiographic evaluation of the right hip.

Primary Interpreting Staff:
DEMO STAFF, Radiologist

VERIFIED BY:
JJ TECH, Radiologist

/JFP

Date Reported:FEB 23,2004  13:26                      Page 1

```

Figure 12-6: Select Report to Print by Patient

## 12.6 Display a Rad/Nuc Med Report

This option allows the user to display a VERIFIED radiology or nuclear medicine report at the terminal. It is the equivalent of viewing a report on the report tab in EHR.

```

RAD   Rad/Nuc Med Total System Menu ...
FILMS Reporting Menu
Display a Rad/Nuc Med Report

Select Films Reporting Menu Option: DISPLay a Rad/Nuc Med Report

Select Patient: DEMO,PATIENT PRIVATE

```

```

          **** Patient's Exams ****
Patient's Name: DEMO,PATIENT PRIVATE  999996          Run Date: AUG 17,2007

  Case No.  Procedure                Exam Date  Status of Report  Imaging Loc
  -----
1    8977    CLAVICLE                    08/16/07  VERIFIED          MEDICAL IMA
Type a '^' to STOP, or

DEMO,PATIENT PRIVATE (999996)          Case No.       : 081607-8977 @11:25
CLAVICLE                               Transcriptionist: DEMO,USER 3 K
Req. Phys : PROVIDER,STEPHEN A MD      Pre-verified   : NO
Staff Phys: DEMO,USER 3 (P)

=====
      CLAVICLE                               (RAD Detailed) CPT:73000
      Proc Modifiers : BILATERAL EXAM
      Clinical History:
      PAIN

      Additional Clinical History:
      PREVIOUS ABNORMAL FILMS FROM 2 MONTHS AGO

      Report:                               Status: VERIFIED
      RIGHT GREAT TOE:

      Impression:
      THIS IS REQUIRED FOR A REPORT TO PASS TO PCC.

Enter 'Top' or 'Continue':  Continue//

```

Figure 12-7: Display a Rad/Nuc Med Report

## 13.0 Radiology and PCC

If Radiology/Nuclear Medicine has been entered as a Package in the PCC Master Control file and is set to pass data to PCC, examination data should appear in the visit file. Note that Radiology CPT codes may not be searched for in VGEN or QMan because they are embedded in the V Radiology entry and are not in the V CPT Code file.

```

SITE: DEMO INDIAN HOSPITAL                TYPE OF LINK: TIME REQUIRED
  DEFAULT HEALTH SUMMARY TYPE: ADULT REGULAR
  TYPE OF VISIT: IHS                       Beginning FISCAL YEAR Month: OCTOBER
  PASS PAPS TO WH FROM V LAB?: YES        DIRECTORY FOR EPI DM: C:/EXPORT/
  EHR/CHART AUDIT START DATE: SEP 01, 2008
PACKAGE: LAB SERVICE                       PASS DATA TO PCC ?: YES
  PACKAGE FLAG: 1
PACKAGE: RADIOLOGY/NUCLEAR MEDICINE      PASS DATA TO PCC ?: YES

```

Figure 13-1: PCC Master Control File with entry for Radiology/Nuclear Medicine

In PCC, Radiology/Nuclear Medicine procedures are stored in the V RADIOLOGY file. When doing a PCC Visit Display, procedures passed from the Radiology/Nuclear Medicine Package will display under the RADIOLOGY section as shown in Figure 13-2.

```

PCC VISIT DISPLAY                          Dec 29, 2013 14:37:52                Page: 1 of 2
+
USER LAST UPDATE:      DEMO,USER 3
OLD/UNUSED UNIQUE VIS: 5059010002569406
DATE/TIME LAST MODIFI: AUG 22, 2013@14:13:15
NDW UNIQUE VISIT ID (: 102320002569406
VISIT ID:              3JQ2-WWX

===== RADIOLOGYs =====
RADIOLOGY PROCEDURE:  CHEST 2 VIEWS PA&LAT
CPT CODE:             71020
IMPRESSION:          TEST IMPRESSION
EVENT DATE&TIME:     AUG 22, 2013@14:10
ORDERING PROVIDER:   DEMO,USER 3
CLINIC:              RADIOLOGY
DATE/TIME ENTERED:   AUG 22, 2013@14:11:47
ENTERED BY:         DEMO,USER 3
DATE/TIME LAST MODIFI: AUG 22, 2013@14:11:47
LAST MODIFIED BY:    DEMO,USER 3
V FILE IEN:         196208

```

Figure 13-2: PCC Visit Display with a V Radiology Entry

In addition, Radiology Nuclear Medicine procedures will display on the Health Summary along with the Impression if entered.

```

----- MOST RECENT RADIOLOGY STUDIES (max 5 years) -----
CHEST 2 VIEWS PA&LAT                (08/22/13)

```

```
IMPRESSION: TEST IMPRESSION  
  
MAMMOGRAM BILATERAL (08/23/13)  
IMPRESSION: NO IMPRESSION.  
  
DIGITAL SCREENING MAMMOGRAM (08/23/13)  
IMPRESSION: NO IMPRESSION.
```

Figure 13-3: Health Summary Display of Radiology procedures



## 14.0 Outside Films Registry Menu

With the advent of digital imaging, the need to send or request hard copy films from other facilities is reduced. However, a tracking system is in place for those sites that still use “wet films.”

### 14.1 Add Films to Registry

The process for tracking films either leaving a facility or that have been requested and received at your facility begin with making an entry in the Outside Films Registry.

```

Rad/Nuc Med Total System Menu Option
Outside Films Registry Menu
Add Films to Registry

Select Outside Films Registry Menu Option: ADD Films to Registry

Select Patient:      DEMO,PATIENT PRIVATE
                    <CWAD> F 12-31-19XX 000003175P      CH 999996
Select OUTSIDE FILMS REGISTER DATE: T-2   AUG 15, 2007
Are you adding 'AUG 15, 2007' as
  a new OUTSIDE FILMS REGISTER DATE (the 1ST for this RAD/NUC MED PATIENT)? No
// Y (Yes)
  OUTSIDE FILMS REGISTER DATE REMARKS: ??
  This field contains a brief comment (2-240 characters) about the outside
  films.  It is used mainly to identify what type the outside film is.
  (ie. Chest Films)

  OUTSIDE FILMS REGISTER DATE REMARKS: Requested films of left tibia taken at DEMO
INDIAN HOSPITAL 6 months ago.
  NEEDED BACK DATE: t+15 (SEP 01, 2007)
  SOURCE OF FILMS: DEMO INDIAN HOSPITAL
  REMARKS: Requested films of left tibia taken at DEMO INDIAN HOSPITAL 6 months ago.

```

Figure 14-1: Add Films to Outside Registry

### 14.2 Outside Films Profile

Reports for films documented in the Outside Films Registry may be tracked for either a patient as shown in Figure 14-2 or by date as shown in Section 14.3, Figure 14-3.

```

Rad/Nuc Med Total System Menu Option
Outside Films Registry Menu
Outside Films Profile

Select Outside Films Registry Menu Option: OUTSIDE Films Profile

Select Patient:      DEMO,PATIENT PRIVATE
                    <CWAD> F 12-31-19XX 000003175P      CH 999996

DEVICE: HOME//      Virtual
Patient: DEMO,PATIENT PRIVATE  999996                Run Date: AUG 17,2007

***** Outside Films Profile *****
-----

```

```

Registered: 08/15/07          Returned : still on file          'OK' Needed: No
Source      : DEMO INDIAN HOSPITAL
Remarks    : Requested films of left tibia 6 months ago.
-----

```

Figure 14-2: Outside Films Profile

### 14.3 Delinquent Outside Film Report for Outpatients

This report may be run on a periodic basis to determine which films from your facility have still not been returned or which films you have not returned to the originating facility.

```

Rad/Nuc Med Total System Menu Option
Outside Films Registry Menu
Delinquent Outside Film Report for Outpatients

Select Outside Films Registry Menu Option: delinquent Outside Film Report for Ou
tpatients
All Films with 'Needed Back' Dates Less Than: T (DEC 29, 2013)
DEVICE:  VIRTUAL TERMINAL      Right Margin: 80//
IMAGING SERVICE DELINQUENT OUTSIDE FILM REPORT FOR OUTPATIENTS
                                DEC 29,2013  17:03    PAGE 1
PATIENT                               PT ID              NEEDED BACK
-----
*** NO RECORDS TO PRINT ***

```

Figure 14-3: Delinquent Outside Film Report

## 15.0 Patient Profile Menu

The **Patient Profile Menu** is a tool that a Radiology Supervisor can use for troubleshooting. Not only can the record of exams and the status of those exams be tracked for an individual patient, but the list of options exercised by which staff member can also be displayed. Also, the times that the different options were exercised can be displayed if needed.

### 15.1 Profile of Rad/Nuc Med Exams

```

Rad/Nuc Med Total System Menu ...
Patient Profile Menu
Profile of Rad/Nuc Med Exams

Select Patient Profile Menu Option: profile of Rad/Nuc Med Exams

Select Patient:      DEMO,PATIENT PRIVATE
                    **** Registered Exams Quick Profile ****

Patient's Name: DEMO,PATIENT PRIVATE  999996          Run Date: AUG 17,2007

  Case No.  Procedure                Exam Date  Status of Exam  Imaging Loc
  -----  -
1      8977  CLAVICLE                    08/16/07  EXAMINED       MEDICAL IMA
Type a '^' to STOP, or
=====
Name       : DEMO,PATIENT PRIVATE  999996
Division   : CHOCTAW NATION HOSPI  Category   : OUTPATIENT
Location   : MEDICAL IMAGING       Ward        :
Exam Date  : AUG 16,2007  11:25   Service    :
Case No.   : 8977                   Bedsection  :
                                           Clinic     : OPD-FAMILY PRACTICE
-----
Registered : CLAVICLE                (RAD Detailed) CPT:73000
Requesting Phy: PROVIDER,STEPHEN A M Exam Status : EXAMINED
Int'g Resident:                      Report Status: NO REPORT
Pre-Verified : NO                    Cam/Equip/Rm : R1
Int'g Staff  :                      Diagnosis    :
Technologist : DEMO,TECH L RTCT      Complication : NO COMPLICATION
                                           Films       : 8x10 - 2
-----
-----Modifiers-----
Proc Modifiers: BILATERAL EXAM

CPT Modifiers : None
=====

                    *** Imaging Personnel ***
-----
Primary Int'g Resident:
Primary Int'g Staff   :
Pre-Verifier:
Verifier              :

Secondary Interpreting Resident      Secondary Interpreting Staff
-----
None                                 None

```

Technologist(s)		Transcriptionist	
-----		-----	
DEMO,TECH L RTCT		No Report	
Do you wish to display activity log? No// y			
*** Exam Activity Log ***			
Date/Time	Action	Computer User	
Technologist comment	-----	-----	
AUG 16,2007 11:26	EXAM ENTRY	DEMO,USER 3 K	
AUG 16,2007 11:27	EDIT BY PATIENT	DEMO,USER 3 K	
*** Exam Status Tracking Log ***			
Status	Date/Time	Elapsed Time (DD:HH:MM)	Cumulative Time (DD:HH:MM)
-----	-----	-----	-----
WAITING FOR EXAM	AUG 16,2007 11:26	00:00:01	00:00:01
EXAMINED	AUG 16,2007 11:27		
=====			

Figure 15-1: Profile of Rad/Nuc Med Exams

## 15.2 Display Patient Demographics

The **Display Patient Demographics** option can be used to display the patient's basic demographic information as well as allergies and their Radiology exam history.

Rad/Nuc Med Total System Menu ...	
Patient Profile Menu	
Display Patient Demographics	
Select Patient Profile Menu Option: display Patient Demographics	
Select PATIENT NAME:	
*****	Patient Demographics *****
Name	: DEMO,PATIENT PRIVATE Address: 899 STREET ST
Pt ID	: 999996
Date of Birth:	DEC 31,19XX
Age	: XX TOWN, OK 74571
Veteran	: No
Eligibility	: Unknown
Exam Category:	OUTPATIENT
Sex	: FEMALE
Phone Number	: 555-555-7000
Narrative	: PATIENT DEAF
Contrast Medium Reaction: Yes	
Other Allergies:	
'V' denotes verified allergy 'N' denotes non-verified allergy	
AZITHROMYCIN (V)	METFORMIN HYDROCHLORIDE (V)
CHOCOLATE (V)	CHLOSTEROL (V)
Other Allergies:	
'V' denotes verified allergy 'N' denotes non-verified allergy	

SUGAR SNACKS (V)		IBUPROFEN (V)		
ASPIRIN (V)		CIPROFLOXACIN (V)		
METHOTREXATE (V)		SULFAMETHOXAZOLE/TRIMETHOPRIM (V)		
MILK (V)		SHRIMP (V)		
STRAWBERRIES (V)		AMOXYCILLIN 125 MG/5 CC (V)		
RADIOLOGICAL/CONTRAST MEDIA (N)				
Case #	Last 5 Procedures/New Orders	Exam Date	Status of Exam	Imaging Loc.
-----	-----	-----	-----	-----
8977	CLAVICLE	AUG 16,2007	EXAMINED	MEDICAL IMAG

Figure 15-2: Display Patient Demographics

## 16.0 Management Reports Menu...

The **Management Report Menu** is broken into five general categories. Examples of all of the reports will not be shown in this section as some of the reports are for VA usage only and others are designed for 132-column format. Note that all reports may be run by Division and/or Imaging Location.

```
Daily Management Reports ...
Functional Area Workload Reports ...
Personnel Workload Reports ...
Special Reports ...
Timeliness Reports ...
```

Figure 16-1: Management Reports Main Menu

### 16.1 Daily Management Reports

#### 16.1.1 Abnormal Exam Report

The **Abnormal Exam report** can be generated only if Diagnostic Codes are entered into Reports. If Diagnostic Codes have not been identified to print on the Abnormal Report and/or no Diagnostic Codes have been entered when reports were entered, there will be nothing to report on the Abnormal Exam Report.

```
Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Daily Management Reports ...
Abnormal Exam Report

Select Daily Management Reports Option: ABNORMAL Exam Report

      ABNORMAL EXAM REPORT

Select Rad/Nuc Med Division: All//
Another one (Select/De-Select):

****Select Diagnostic Codes: All//****
Another one (Select/De-Select):

Print only those exams not yet printed? Yes// NO

**** Date Range Selection ****

  Beginning DATE : 1/1/2007  (JAN 01, 2007)

  Ending   DATE : T  (AUG 17, 2007)

DEVICE: HOME//  Virtual
```

```

          <<<< ABNORMAL DIAGNOSTIC REPORT >>>>  Print Date: 8/17/07
          (P=Primary Dx, S=Secondary Dx / '*' represents reprint)

Patient Name          Ward/Clinic          Requesting Physician
          Procedure          Exam Date
=====
          Division: CHOCTAW NATION HOSPITAL
          Imaging Type: GENERAL RADIOLOGY

          *****
          * No Abnormal Exams *
          *****
    
```

Figure 16-2: Abnormal Exam Report

### 16.1.2 Complication Report

The **Complication Report** is generated based on complications entered by staff when exams are edited. If no complications are entered at the time an exam is edited, there will be no complications to report.

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Daily Management Reports ...
Complication Report

Select Daily Management Reports Option:  Complication Report

Select Imaging Type: All//

Another one (Select/De-Select):

**** Date Range Selection ****

  Beginning DATE : 1/1/12  (JAN 01, 2012)

  Ending    DATE : 12/31/12  (DEC 31, 2012)

DEVICE: HOME//  VIRTUAL TERMINAL  Right Margin: 80//

  >>> Complications Report <<<
  Division: DEMO INDIAN HOSPITAL          Page: 1
  Imaging Type: GENERAL RADIOLOGY         Date: Dec 31, 2013
  Period: JAN 1,2012 to DEC 31,2012.
-----
Name/Pt-Id          Date/Time          Procedure/Complication
  Personnel
-----
Complications: 0  Exams: 0  % Complications: 0
Contrast Media Complications: 0  C.M. Exams: 0  % C.M. Comp.: 0

  >>> Complications Report <<<
  Division: DEMO INDIAN HOSPITAL          Page: 2
  Imaging Type: MAMMOGRAPHY              Date: Dec 31, 2013
  Period: JAN 1,2012 to DEC 31,2012.
-----
Name/Pt-Id          Date/Time          Procedure/Complication
    
```

```

Personnel
Complications: 0 Exams: 0 % Complications: 0
Contrast Media Complications: 0 C.M. Exams: 0 % C.M. Comp.: 0

Division: DEMO INDIAN HOSPITAL
Complications: 0 Exams: 0 % Complications: 0
Contrast Media Complications: 0 C.M. Exams: 0 % C.M. Comp.: 0
    
```

Figure 16-3: Complication Report

### 16.1.3 Daily Log Report

The **Daily Log Report** is an important tool to review periodically throughout the day to ensure that work is completed and no exams remain in a status of **Waiting for Exam** or **Examined** if reports have been entered.

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Daily Management Reports ...
Daily Log Report

Select Daily Management Reports Option: DAILY Log Report

Select Rad/Nuc Med Division: All// CHOCTAW NATION HOSPITAL          OKLAHOMA TRIBE/
638      TALIHINA          01      OK          556001

Another one (Select/De-Select):

Select Log Date: T-1// (AUG 16, 2007)

DEVICE: HOME// Virtual

Daily Log Report For: Aug 16, 2007          Page: 1
Division      : CHOCTAW NATION HOSPITAL          Date: Aug 17, 2007
Imaging Location : MEDICAL IMAGING (GENERAL RADIOLOGY)
Name           Pt ID      Ward/Clinic          Procedure
Exam Status    Case #     Time                Reported
-----
DEMO,PATIENT PRIVATE  999996    OPD-FAMILY PRACTICE  CLAVICLE
COMPLETE      8977     11:25 AM            Yes
Imaging Location Total 'MEDICAL IMAGING': 1
Imaging Type Total 'GENERAL RADIOLOGY': 1
Division Total 'CHOCTAW NATION HOSPITAL': 1
    
```

Figure 16-4: Daily Log Report

### 16.1.4 Delinquent Status Report

The **Delinquent Status Report** looks for exams that fall into the defined examination statuses designated for the report. Note that in Figure 16-5, a status of Complete incorrectly displays on the Delinquent Status Report.

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Daily Management Reports ...
    
```



Delinquent Status Report

Select Daily Management Reports Option: DELInquent Status Report

Select Rad/Nuc Med Division: All// HUGO

Delinquent Status Report

The entries printed for this report will be based only on exams that are in one of the following statuses:

GENERAL RADIOLOGY

- 
- WAITING FOR EXAM
- TRANSCRIBED
- Dictated
- COMPLETE

\*\*\*\* Date Range Selection \*\*\*\*

Beginning DATE : 8/1/2006 (AUG 01, 2006)

Ending DATE : 8/31/2006 (AUG 31, 2006)

Select one of the following:

- I INPATIENT
- O OUTPATIENT
- B BOTH

Report to include: BOTH

Now that you have selected BOTH do you want to sort by Patient or Date ?

Select one of the following:

- P PATIENT
- D DATE

Enter response: DATE

DEVICE: HOME// Virtual

Delinquent Status Report

Division: HUGO HL CT

Page: 1

Imaging Type: GENERAL RADIOLOGY

Date: Aug 17, 2007

Patient Name Procedure	Case # Exam Status	Pt ID Rpt Text	Date Interp.	Ward/Clinic Phys.	Tech	Rpt Stat
XXXXXXXX,XXXXX XXXXX HAND 3 OR MORE VIEWS	8875 WAITING FOR	?? No	08/24/06 Unknown	OUTPATIENT	Unknown	No Rpt
XXXXXX,XXX XXX TIBIA & FIBULA 2 VIE	8884 WAITING FOR	84304 No	08/24/06 Unknown	HUGO RAD	Unknown	No Rpt
XXXX,XXXXXXXX XXXXX KNEE 2 VIEWS	7648 WAITING FOR	98819 No	08/28/06 Unknown	HUGO RAD	Unknown	No Rpt
XXXX,XXXXXXXX XXXXX	7808	98819	08/28/06	OUTPATIENT		No Rpt

KNEE 2 VIEWS	WAITING FOR	No	Unknown	Unknown	
-----					
XXXXXX,XXX XXX	7858	84304	08/28/06	HUGO RAD	No Rpt
TIBIA & FIBULA 2 VIE	WAITING FOR	No	Unknown	Unknown	
-----					
XXXXX,XXXXXX XXXX	8713	53915	08/29/06	OUTPATIENT	No Rpt
FINGER(S) 2 OR MORE	WAITING FOR	No	Unknown	Unknown	
-----					
XXXXXX,XXXXX XXXXXX	8845	50870	08/29/06	HUGO RAD	No Rpt
CHEST 2 VIEWS PA&LAT	WAITING FOR	No	Unknown	Unknown	
-----					
XXXXXXXX,XXXXX XXX XX	8766	20428	08/29/06	HUGO RAD	No Rpt
CHEST 2 VIEWS PA&LAT	WAITING FOR	No	Unknown	Unknown	
-----					
Imaging Type Total 'GENERAL RADIOLOGY': 10					
Division Total 'HUGO HL CT': 10					

Figure 16-5: Delinquent Status Report

### 16.1.5 Examination Statistics

Most Radiology departments are required to report numbers of exams performed on a weekly, monthly, or annual basis. This report does not show which exams were done but provides a sub-total by date as well as total for the time frame specified. You may notice a discrepancy between the exam count and visit count. That may in most cases be attributed to patients who had more than one exam per visit or who had bilateral exams.

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Daily Management Reports ...
Examination Statistics

Select Daily Management Reports Option: Examination Statistics

    Select one of the following:

        L      Location
        I      Imaging Type
        D      Division
        T      Totals Only

Enter Report Detail Needed: Location// Division

Select Rad/Nuc Med Division: All//

Another one (Select/De-Select):

**** Date Range Selection ****

    Beginning DATE : 8/1/2006  (AUG 01, 2006)

    Ending    DATE : 8/31/2006  (AUG 31, 2006)

DEVICE: HOME// Virtual
  
```

>>>> EXAMINATION STATISTICS <<<<<									
Page: 1									
Division: CHOCTAW NATION HOSPITAL					Location:				
Run Date: Aug 17, 2007					Imaging Type:				
For Period: Aug 01, 2006 to Aug 31, 2006.									
DATE	VISITS	EXAMS	COMPLETE EXAMS	CON	EMP	INP	OUT	RES	SHA
Aug 01, 2006	102	127	105	0	0	8	119	0	0
Aug 02, 2006	71	85	71	0	0	9	76	0	0
Aug 03, 2006	79	85	70	0	0	6	79	0	0
Aug 04, 2006	57	89	64	0	0	3	86	0	0
Aug 05, 2006	24	30	25	0	0	2	28	0	0
Aug 06, 2006	16	22	19	0	0	1	21	0	0
Aug 07, 2006	70	108	79	0	0	6	101	1	0
Aug 08, 2006	76	92	75	0	0	2	90	0	0
Aug 09, 2006	83	93	78	0	0	4	89	0	0
Aug 10, 2006	72	82	62	0	0	2	80	0	0
Aug 11, 2006	56	72	48	0	0	5	67	0	0
Aug 12, 2006	14	15	14	0	0	0	15	0	0
Aug 13, 2006	29	40	38	0	0	2	38	0	0
Aug 14, 2006	83	111	89	0	0	3	107	1	0
Aug 15, 2006	75	87	78	0	0	1	86	0	0
Aug 16, 2006	69	81	68	0	0	1	80	0	0
Aug 17, 2006	82	115	98	0	0	2	113	0	0
Aug 18, 2006	73	103	66	0	0	2	101	0	0
Aug 19, 2006	28	37	34	0	0	0	37	0	0
Aug 20, 2006	27	31	29	0	0	1	30	0	0
Aug 21, 2006	90	103	80	0	0	4	99	0	0
Aug 22, 2006	50	61	34	0	0	5	56	0	0
Aug 23, 2006	58	67	46	0	0	4	63	0	0
Aug 24, 2006	76	86	65	0	0	1	85	0	0
Aug 25, 2006	41	57	39	0	0	2	55	0	0
Aug 26, 2006	16	23	20	0	0	1	22	0	0
Aug 27, 2006	34	46	37	0	0	7	39	0	0
Aug 28, 2006	92	113	87	0	0	5	108	0	0
Aug 29, 2006	88	112	88	0	0	3	109	0	0
Aug 30, 2006	79	99	67	0	0	5	94	0	0
Aug 31, 2006	81	92	72	0	0	7	85	0	0
TOTAL	1891	2364	1845	0	0	104	2258	2	0

Figure 16-6: Examination Statistics

### 16.1.6 Incomplete Exam Report

This option allows the supervisor to generate a list of all exams that have not been completed. This report is similar to the Delinquent Status report, but unlike that report, this one lists any exam that is not in the complete status.

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Daily Management Reports ...
<b>Incomplete Exam Report</b>
Select Daily Management Reports Option: INComplete Exam Report

```

Select Rad/Nuc Med Division: All// CHOCTAW NATION HOSPITAL      OKLAHOMA TRIBE/638
TALIHINA          01    OK          556001

                                Incomplete Exam Report

**** Date Range Selection ****

Beginning DATE : 8/1/2006  (AUG 01, 2006)

Ending    DATE : 8/31/2006  (AUG 31, 2006)

Select one of the following:

    I          INPATIENT
    O          OUTPATIENT
    B          BOTH

Report to include: BOTH

Now that you have selected BOTH do you want to sort by
Patient or Date ?

Select one of the following:

    P          PATIENT
    D          DATE

Enter response: DATE

DEVICE: HOME//    Virtual

                                Incomplete Exam Report
Division: CHOCTAW NATION HOSPITAL      Page: 1
Imaging Type: GENERAL RADIOLOGY      Date: Aug 17, 2007
=====
Patient Name      Case #   Pt ID      Date      Ward/Clinic  Rpt Stat
Procedure        Exam Status Rpt Text   Interp. Phys.  Tech
=====
XXXXXXXX,XXXXXX  7586    75725     08/03/06  MED/SURG     No Rpt
CT ABDOMEN W&W/O CON  EXAMINED  No        Unknown     DEMO,TECH L
-----
XXXXXXXX,XXXXXX  7588    75725     08/03/06  MED/SURG     No Rpt
CT PELVIS W&W/O CONT  EXAMINED  No        Unknown     DEMO,TECH L
-----
XXXXXXXX,XXXXXX XXXXX 6866    69753     08/07/06  MED/SURG     No Rpt
CT ABDOMEN W&W/O CON  EXAMINED  No        Unknown     DEMO,TECH L
-----
XXXXXXXX,XXXXXX XXXXX 6871    69753     08/07/06  MED/SURG     No Rpt
CT PELVIS W&W/O CONT  EXAMINED  No        Unknown     DEMO,TECH L
-----
XXXXXXXX,XXXXXX XXXXX 8121    69753     08/11/06  MED/SURG     No Rpt
CHEST 2 VIEWS PA&LAT  EXAMINED  No        Unknown     DEMO,TECH H
=====
    
```

Figure 16-7: Incomplete Exam Report

### 16.1.7 Unverified Reports

This option allows the user to generate a report that contains the total number of unverified reports for the division and imaging types chosen by the user. The user may select only those divisions and imaging types to which he/she has access.

For each division and imaging type combination, the output is divided into two sections. The first section shows the total number of unverified reports for each interpreting staff physician. The second section shows the total number of unverified reports for each interpreting resident physician.

If there are no unverified reports for the division and imaging type combination, then the message **No Unverified Reports** displays instead of the two sections mentioned above.

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Daily Management Reports ...
Unverified Reports

Select Daily Management Reports Option: UNVERified Reports

Select Rad/Nuc Med Division: All//

Another one (Select/De-Select):

    Select one of the following:

        b      Brief
        d      Detailed
        e      Exam Date, Itemized List
        s      Staff, Itemized List

Note that the Brief and Detailed Report will print on standard 80-column paper. The
Exam Date and Staff, Itemized List are formatted for 132-column output devices.

Enter response: b//  Brief

(The date range refers to DATE REPORT ENTERED)

**** Date Range Selection ****

    Beginning DATE : 1/1  (JAN 01, 2013)

    Ending   DATE : t  (DEC 31, 2013)

Default cut-off limits (in hours) for aging of reports are :

                                24   48   96

Do you want to enter different cut-off limits? N// O

DEVICE: HOME//  VIRTUAL TERMINAL   Right Margin: 80//

                                >>>> Unverified Reports (brief) <<<<<
                                                                 Page: 1

```

```

Division: DEMO INDIAN HOSPITAL          Report Date Range: Jan 01, 2013
Imaging Type: GENERAL RADIOLOGY        Dec 31, 2013@23:59
Run Date: DEC 31,2013  14:21          Total Unverified Reports: 0

*****
*   No Unverified Reports   *
*****

```

Figure 16-8: Unverified Reports

## 16.2 Functional Area Workload Reports...

**Functional Area Workload Reports** allow a Radiology Manager to assess the source of their workload by clinic or location.

### 16.2.1 Clinic Report

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Functional Area Workload Reports ...
Clinic Report

Select Management Reports Menu Option: FUNCTIONal Area Workload Reports

      Clinic Report

Clinic Workload Report:
-----

Do you wish only the summary report? No// YES

Select Rad/Nuc Med Division: All//

Another one (Select/De-Select):

Do you wish to include all Clinics? Yes//  YES

**** Date Range Selection ****

Beginning DATE : 8/1/2006  (AUG 01, 2006)

Ending    DATE : 8/31/2006  (AUG 31, 2006)

The entries printed for this report will be based only
on exams that are in one of the following statuses:

GENERAL RADIOLOGY
-----
      EXAMINED
      TRANSCRIBED
      DICTATED
      COMPLETE

DEVICE: HOME//  Virtual

```

```

>>> Clinic Workload Report <<<
Page: 1

Division: CHOCTAW NATION HOSPITAL
Imaging Type: GENERAL RADIOLOGY
For period: Aug 01, 2006 to: AUG 31,2006
RUN Date: Aug 31, 2006

```

Clinic	-----Examinations-----					Total	% of Exams	WWU	% of WWU
	Inpt	Opt	Res	Other					
(Imaging Type Summary)									
BB-DEMO DOC, PAC	0	1	0	0	1	0.0	2	0.0	
CT	0	1	0	0	1	0.0	8	0.1	
EMERGENCY ROOM	0	1017	0	0	1017	47.7	3879	43.6	
FP-SISK	0	3	0	0	3	0.1	24	0.3	
IDABEL - DR. PROVIDER IM	0	1	0	0	1	0.0	2	0.0	
IDABEL - DR.PROVIDER II	0	3	0	0	3	0.1	7	0.1	

Figure 16-9: Clinic Report

## 16.2.2 Ward Report

**Ward Reports** allow a Radiology Supervisor to track their Workload by Ward.

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Functional Area Workload Reports ...
Ward Report

Ward Workload Report:
-----

Do you wish only the summary report? No// YES

Select Rad/Nuc Med Division: All//

Another one (Select/De-Select):

Do you wish to include all Wards? Yes// YES

**** Date Range Selection ****

Beginning DATE : 8/1/2006 (AUG 01, 2006)

Ending DATE : 8/31/2006 (AUG 31, 2006)

The entries printed for this report will be based only
on exams that are in one of the following statuses:

GENERAL RADIOLOGY
-----
TRANSCRIBED
DICTATED
COMPLETE

```

```

DEVICE: HOME//  Virtual

    >>> Ward Workload Report <<<                                     Page: 1

    Division: CHOCTAW NATION HOSPITAL
    Imaging Type: GENERAL RADIOLOGY                               For period: Aug 01, 2006 to
    Run Date: AUG 17,2007  14:48                                Aug 31, 2006

-----Examinations-----
Ward                               Inpt  Opt   Res Other  Total  % of  % of
-----
      (Imaging Type Summary)
MED/SURG                           68    0    0    0    68   85.0  325  92.6
OB/GYN                             12    0    0    0    12   15.0   26   7.4
-----
Imaging Type Total:                 80    0    0    0    80                351

```

Figure 16-10: Ward Report

## 16.3 Personnel Workload Reports...

**Personnel Workload Reports** allow the management staff to monitor the number of procedures ordered by their provider staff or the number of procedures performed by their technologists.

### 16.3.1 Physician Report

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Personnel Workload Reports ...
Physician Report

Select Personnel Workload Reports Option: PHYSician Report

Requesting M.D. Workload Report:
-----

Do you wish only the summary report? NO// YES

Select Rad/Nuc Med Division: All//

Another one (Select/De-Select):

Do you wish to include all Requesting M.D.s? Yes//  YES

**** Date Range Selection ****

    Beginning DATE : 8/1/2006  (AUG 01, 2006)

    Ending    DATE : 8/31/2006  (AUG 31, 2006)

    The entries printed for this report will be based only
    on exams that are in one of the following statuses:

    GENERAL RADIOLOGY

```



-----  
 EXAMINED  
 TRANSCRIBED  
 DICTATED  
 COMPLETE

DEVICE: HOME// Virtual

>>> Requesting M.D. Workload Report <<<

Page: 1

Division: CHOCTAW NATION HOSPITAL  
 Imaging Type: GENERAL RADIOLOGY  
 Run Date: AUG 17,2007 14:50

For period: AUG 1,2006 to  
 AUG 31,2006

Requesting M.D.	Examinations			Percent Exams
	In	Out	Total	
-----				
(Imaging Type Summary)				
PROVIDER, DEAN N PA-C	0	18	18	0.8
PROVIDER, HAMPTON W, DO	0	14	14	0.6
PROVIDER, CARLOS MD	0	3	3	0.1
PROVIDER, DEE D DO	1	82	83	3.7
PROVIDER, WAYNE E MD	0	1	1	0.0
PROVIDER, MARY ANN PA-C	0	42	42	1.9
PROVIDER, THOMAS C MD	0	8	8	0.4
PROVIDER, DONALD E DO	0	140	140	6.3
PROVIDER, RYAN D MD	1	0	1	0.0
PROVIDER, ROGER P MD	0	20	20	0.9
PROVIDER, PAUL Y MD	53	5	58	2.6
PROVIDER, MARIE C MD	6	4	10	0.4
PROVIDER, THOMAS C MD	0	2	2	0.1
DAVID, ANDREW E MD	0	10	10	0.4
PROVIDER, MICHAEL J DO	0	21	21	0.9
PROVIDER, FRED DO	0	40	40	1.8
PROVIDER, MARTHA A ARNP-C	0	2	2	0.1
PROVIDER, MARY S MD	0	4	4	0.2
PROVIDER, FLOYD K MD	0	22	22	1.0
PROVIDER, MELINDA S MD	1	5	6	0.3
HABETS, MICHELLE L PA-C	0	1	1	0.0
PROVIDER, THOMAS B PA-C	0	2	2	0.1
PROVIDER, DIXIE ARNP	0	2	2	0.1
PROVIDER, PHYLLIS D MD	1	11	12	0.5
PROVIDER, GWENDOLYN PA	0	12	12	0.5
PROVIDER, JASON L D	0	7	7	0.3
HOLLAND, ROGER P MD	0	1	1	0.0
PROVIDER, BARBARA J MD	1	3	4	0.2
PROVIDER, SEAN P PA-C	0	82	82	3.7
PROVIDER, RHONDA R PA-C	0	70	70	3.1
PROVIDER, KRISTI G ARNP	0	185	185	8.3
PROVIDER, ROBERT H MD	4	19	23	1.0
PROVIDER, ANTOINE MD	0	3	3	0.1
PROVIDER, TRACY A DO	0	24	24	1.1
PROVIDER, WILLYS L DPM	2	42	44	2.0
PROVIDER, AMELIA C MD	0	114	114	5.1
PROVIDER, HERVE PA-C	0	131	131	5.9
PROVIDER, MIKE P DPM	3	38	41	1.8
PROVIDER, DAVID S DO	0	2	2	0.1
PROVIDER, ATEF F MD	1	102	103	4.6
PROVIDER, CHRISTOPHER M MD	0	33	33	1.5
PROVIDER, EDDIE EMERSON PA-	0	1	1	0.0
PROVIDER, CH MD	3	21	24	1.1

PROVIDER, JOHNNY R DO	0	23	23	1.0
PROVIDER, RAMON O, MD	0	1	1	0.0
PEBENITO, CHARISSA P, MD	3	16	19	0.9
PROVIDER, G P DO	0	1	1	0.0
PROVIDER, MARYELLEN CNM	0	7	7	0.3
PROVIDER, JASON K DO	0	186	186	8.4
PROVIDER, SHIELA D ARNP	0	22	22	1.0
PROVIDER, STEPHEN A MD	3	54	57	2.6
PROVIDER, JOANN C PNP	0	32	32	1.4
PROVIDER, MELINDA F ARNP	0	14	14	0.6
PROVIDER, DONNA J CNM	0	11	11	0.5
PROVIDER, KELLIE	0	1	1	0.0
PROVIDER, JAMES P DO	5	38	43	1.9
PROVIDER, STEVE O MD	0	10	10	0.4
PROVIDER, TAMMY MICHELLE PA-C	0	22	22	1.0
PROVIDER, BENJAMIN C OD	0	2	2	0.1
PROVIDER, BAO MD	0	8	8	0.4
PROVIDER, SUZANNE PA-C	0	21	21	0.9
PROVIDER, GARY E MD	0	207	207	9.3
PROVIDER, TAMRA J PA	0	12	12	0.5
PROVIDER, JONI A CNM	0	10	10	0.4
PROVIDER, JOSE M MD	0	22	22	1.0
PROVIDER, D MD N	5	61	66	3.0
-----				
Imaging Type Total	93	2130	2223	

Figure 16-11: Physician Report

### 16.3.2 Technologist Report

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Personnel Workload Reports ...
Technologist Report

Select Personnel Workload Reports Option: TECHNologist Report

Technologist Workload Report:
-----

Do you wish only the summary report? NO// YES

Select Rad/Nuc Med Division: All//

Another one (Select/De-Select):

Do you wish to include all Technologists? Yes// YES

**** Date Range Selection ****

Beginning DATE : 8/1/2006 (AUG 01, 2006)

Ending DATE : 8/31/2006 (AUG 31, 2006)

The entries printed for this report will be based only
on exams that are in one of the following statuses:

GENERAL RADIOLOGY

```

```

-----
EXAMINED
TRANSCRIBED
DICTATED
COMPLETE

DEVICE: HOME// Virtual

>>> Technologist Workload Report <<< Page: 1

Division: CHOCTAW NATION HOSPITAL
Imaging Type: GENERAL RADIOLOGY For period: AUG 1,2006 to
Run Date: AUG 17,2007 14:51 AUG 31,2006

Technologist Examinations Percent Percent
              In Out Total Exams WWU WWU
-----
(Imaging Type Summary)
DEMO,TECH RTMCT 4 94 98 4.4 371 4.0
DEMO,TECH M 20 297 317 14.2 1179 12.6
DEMO,TECH S RT 11 410 421 18.9 1027 11.0
DEMO,TECH L RTCT 16 292 308 13.8 2318 24.7
DEMO,TECH GL 11 226 237 10.6 565 6.0
DEMO,TECH TM 4 84 88 3.9 348 3.7
DEMO,TECH JW RT 11 170 181 8.1 573 6.1
DEMO,TECH RRW RT 0 2 2 0.1 4 0.0
DEMO,TECH SM RT 2 44 46 2.1 129 1.4
DEMO,TECH BG RT 2 155 157 7.0 599 6.4
DEMO,TECH SA RT 0 11 11 0.5 29 0.3
DEMO,TECH M RT 13 191 204 9.1 1448 15.5
DEMO,TECH K RT 0 161 161 7.2 780 8.3
-----
Imaging Type Total 94 2137 2231 9370

NOTE: Since a procedure can be performed by more than one technologist,
the total number of exams and weighted work units by division and
imaging type is likely to be higher than the other workload reports.

```

Figure 16-12: Technologist Report

## 16.4 Special Reports...

The special reports menu offers the most options for determining the number and types of procedures performed by Division or by Imaging Location. In addition, the Status Time Report provides turnaround time statistics for individual exams.

```

AMIS Code Dump by Patient
AMIS Report
Camera/Equip/Rm Report
Cost Distribution Report
Detailed Procedure Report
Film Usage Report
Procedure Scaled wRVU/CPT Report
Procedure wRVU/CPT Report
Procedure/CPT Statistics Report
Status Time Report

```

Wasted Film Report

Figure 16-13: Special Reports Menu

## 16.4.1 Detailed Procedure Report

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Special Reports ...
Detailed Procedure Report

Select Special Reports Option: DETAILED Procedure Report

Select Rad/Nuc Med Division: All// CHOCTAW NATION HOSPITAL      OKLAHOMA TRIB
E/638      TALIHINA      01      OK      556001

Another one (Select/De-Select):

**** Date Range Selection ****

Beginning DATE : 8/1/2006 (AUG 01, 2006)

Ending DATE : 8/31/2006 (AUG 31, 2006)

The entries printed for this report will be based only
on exams that are in one of the following statuses:

GENERAL RADIOLOGY
-----
EXAMINED
TRANSCRIBED
DICTATED
COMPLETE

DEVICE: HOME// Virtual

>>>> Detailed Procedure Workload Report <<<<< Page: 1

Division: CHOCTAW NATION HOSPITAL
Imaging Type: GENERAL RADIOLOGY For period: AUG 1,2006 to
Run Date: AUG 17,2007 14:53 AUG 31,2006

Procedure
-----
Examinations      Percent      Percent
In      Out      Total      Exams      WWU      WWU
-----
Amis: 1 SKULL, INC.SINUS, MASTOID, JAW, ETC
C-ARM HAND 0 2 2 18.2 6 18.2
FACIAL BONES, LESS THAN 3 VIEW 0 1 1 9.1 3 9.1
NASAL BONES MIN 3 VIEWS 0 2 2 18.2 6 18.2
SINUSES 3 OR MORE VIEWS 0 3 3 27.3 9 27.3
SINUSES MIN 2 VIEWS 0 2 2 18.2 6 18.2
SKULL 4 OR MORE VIEWS 0 1 1 9.1 3 9.1

AMIS CATEGORY TOTALS 0 11 11 33

Amis: 2 CHEST-SINGLE VIEW
ABDOMEN MIN 3 VIEWS+CHEST 0 65 65 32.0 65 32.0

```

ACUTE ABDOMEN	0	12	12	5.9	12	5.9
CHEST APICAL LORDOTIC	0	1	1	0.5	1	0.5
CHEST SINGLE VIEW	15	95	110	54.2	110	54.2
LATERAL DECUB CHEST VIEW	0	1	1	0.5	1	0.5
LORDOTIC VIEW CHEST	0	1	1	0.5	1	0.5
RIBS UNILAT+CHEST 3 OR MORE VI	0	13	13	6.4	13	6.4
AMIS CATEGORY TOTALS	15	188	203		203	
Amis: 3 CHEST MULTIPLE VIEW						
CHEST 2 VIEWS PA&LAT	12	203	215	100.0	430	100.0
AMIS CATEGORY TOTALS	12	203	215		430	
<b>Note: Numerous pages of report not shown in order to display summary.</b>						
>>>> Detailed Procedure Workload Report <<<<<					Page: 23	
Division: CHOCTAW NATION HOSPITAL						
Imaging Type: GENERAL RADIOLOGY				For period: AUG 1,2006 to		
Run Date: AUG 17,2007 14:53				AUG 31,2006		
Amis Category	Examinations			Percent	Percent	
	In	Out	Total	Exams	WWU	WWU
-----						
(Division Summary)						
1-SKULL, INC.SINUS, MASTOID, JAW, ET	0	11	11	0.5	33	0.4
2-CHEST-SINGLE VIEW	15	188	203	8.8	203	2.2
3-CHEST MULTIPLE VIEW	12	203	215	9.3	430	4.6
5-ABDOMEN-KUB	4	35	39	1.7	78	0.8
6-OBSTRUCTIVE SERIES	7	68	75	3.2	225	2.4
7-SKELETAL-SPINE & SACROILIAC	0	104	104	4.5	312	3.3
8-SKELETAL-BONE & JOINTS	10	731	741	32.0	1482	15.9
9-GASTROINTESTINAL	0	33	33	1.4	198	2.1
10-GENITOURINARY	0	10	10	0.4	60	0.6
12-CHOLANGIOGRAM	4	3	7	0.3	70	0.7
19-VENOGRAM	0	2	2	0.1	30	0.3
21-COMPUTED TOMOGRAGHY	28	446	474	20.5	3792	40.6
23-ULTRASOUND, ECHOENCEPHALOGRAM	13	194	207	8.9	1449	15.5
24-OTHER	0	196	196	8.5	980	10.5
25-EXAMS IN OPER.SUITE AT SURGERY	4	10	14	0.6	89	1.0
26-PORTABLE (BEDSIDE) EXAMINATION	2	85	87	3.8	123	1.3
-SERIES OF AMIS CODES	0	94	94		383	4.1

Figure 16-14: Detailed Procedure Report

### 16.4.2 Procedure/CPT Statistics Report

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Special Reports
Procedure/CPT Statistics Report

Select Special Reports Option: PROCEDURE/CPT Statistics Report

Do you want to count CPT Modifiers separately? NO//

Select Rad/Nuc Med Division: All// CHO CTAW NATION HOSPITAL OKLAHOMA TRIB
    
```

```

E/638      TALIHINA      01      OK      556001

Another one (Select/De-Select):

Do you wish to include cancelled cases? Yes// NO
Do you wish to include all Procedures? Yes//   YES

**** Date Range Selection ****

Beginning DATE : 8/1/2006  (AUG 01, 2006)
Ending   DATE : 8/31/2006  (AUG 31, 2006)

Select one of the following:

      I      INPATIENT
      O      OUTPATIENT
      B      BOTH

Report to include: BOTH//

DEVICE: HOME//   Virtual

      >>>> PROCEDURE/CPT STATISTICS REPORT (INPATIENT) <<<<<   Page: 1

Division: CHOCTAW NATION HOSPITAL
Imaging Type: GENERAL RADIOLOGY      For period: 08/01/06 to
Run Date: AUG 17,2007  14:54          08/31/06
# of Procedures selected: All         Cancelled Exams: excluded

CPT      PROCEDURE      # DONE  (%)      $UNIT      $TOTAL  (%)
=====
70450    CT HEAD W/O CONT      4      4      0.00      0.00    0
71010    CHEST SINGLE VIEW     15     16      0.00      0.00    0
71020    CHEST 2 VIEWS PA&LAT  12     13      0.00      0.00    0
71260    CT THORAX W/CONT      3      3      0.00      0.00    0
72192    CT PELVIS W/O CONT    2      2      0.00      0.00    0
72193    CT PELVIS W/CONT      1      1      0.00      0.00    0
72194    CT PELVIS W&W/O CONT  6      6      0.00      0.00    0
73030    SHOULDER 2 OR MORE VIEWS  4      4      0.00      0.00    0
73130    HAND 3 OR MORE VIEWS  1      1      0.00      0.00    0
73500    HIP 1 VIEW            1      1      0.00      0.00    0
73610    ANKLE 3 OR MORE VIEWS 1      1      0.00      0.00    0
73630    FOOT 3 OR MORE VIEWS  2      2      0.00      0.00    0
73650    CALCANEUS 2 VIEWS     1      1      0.00      0.00    0
73700    CT LOWER EXTREMITY W/O CONT  1      1      0.00      0.00    0
73701    CT LOWER EXTREMITY W/CONT  1      1      0.00      0.00    0
74000    ABDOMEN 1 VIEW        1      1      0.00      0.00    0
74000    ABDOMEN-KUB           3      3      0.00      0.00    0
74020    FLAT AND UPRIGHT ABDOMEN  7      8      0.00      0.00    0
74150    CT ABDOMEN W/O CONT   3      3      0.00      0.00    0
74160    CT ABDOMEN W/CONT     1      1      0.00      0.00    0
74170    CT ABDOMEN W&W/O CONT  6      6      0.00      0.00    0
76000    C-ARM CHOLANGIOGRAM   4      4      0.00      0.00    0
76700    ECHOGRAM ABDOMEN COMPLETE  6      6      0.00      0.00    0
76705    ECHOGRAM ABDOMEN LTD  3      3      0.00      0.00    0
76770    ECHOGRAM RETROPERITONEAL COMPLETE  4      4      0.00      0.00    0
      Total for this imaging type -->  93      0.00

```

>>>> PROCEDURE/CPT STATISTICS REPORT (OUTPATIENT) <<<<< Page: 4

Division: CHOCTAW NATION HOSPITAL  
Imaging Type: GENERAL RADIOLOGY For period: 08/01/06 to  
Run Date: AUG 17,2007 14:54 08/31/06  
# of Procedures selected: All Cancelled Exams: excluded

CPT	PROCEDURE	# DONE	(%)	\$UNIT	\$TOTAL	(%)
70140	FACIAL BONES, LESS THAN 3 VIEWS	1	0	0.00	0.00	0
70160	NASAL BONES MIN 3 VIEWS	2	0	0.00	0.00	0
70210	SINUSES MIN 2 VIEWS	2	0	0.00	0.00	0
70220	SINUSES 3 OR MORE VIEWS	3	0	0.00	0.00	0
70260	SKULL 4 OR MORE VIEWS	1	0	0.00	0.00	0
70450	CT HEAD W/O CONT	94	4	0.00	0.00	0
70460	CT HEAD W/IV CONT	1	0	0.00	0.00	0
70470	CT HEAD W&WO CONT	19	1	0.00	0.00	0
70480	CT ORBIT SELLA P FOS OR TEMP BONE W/O	3	0	0.00	0.00	0
70486	CT MAXILLOFACIAL W/O CONT	16	1	0.00	0.00	0
70490	CT NECK SOFT TISSUE W/O CONT	1	0	0.00	0.00	0
70491	CT NECK SOFT TISSUE W/CONT	3	0	0.00	0.00	0
71010	CHEST SINGLE VIEW	95	4	0.00	0.00	0
71010	LORDOTIC VIEW CHEST	1	0	0.00	0.00	0
71020	CHEST 2 VIEWS PA&LAT	203	9	0.00	0.00	0
71021	CHEST APICAL LORDOTIC	1	0	0.00	0.00	0
71035	LATERAL DECUB CHEST VIEW	1	0	0.00	0.00	0
71100	RIBS UNILAT 2 VIEWS	1	0	0.00	0.00	0
71101	RIBS UNILAT+CHEST 3 OR MORE VIEWS	13	1	0.00	0.00	0
71110	RIBS BILAT 3 OR MORE VIEWS	2	0	0.00	0.00	0
71250	CT THORAX W/O CONT	5	0	0.00	0.00	0
71260	CT THORAX W/CONT	24	1	0.00	0.00	0
71270	CT THORAX W&W/O CONT	1	0	0.00	0.00	0
72020	SPINE SINGLE VIEW	1	0	0.00	0.00	0
72020	LUMBAR SPINE SINGLE VIEW	1	0	0.00	0.00	0
72040	SPINE CERVICAL MIN 2 VIEWS	22	1	0.00	0.00	0
72050	SPINE CERVICAL MIN 4 VIEWS	9	0	0.00	0.00	0
72070	SPINE THORACIC 2 VIEWS	27	1	0.00	0.00	0
72100	SPINE LUMBOSACRAL MIN 2 VIEWS	22	1	0.00	0.00	0
72110	SPINE LUMBOSACRAL MIN 4 VIEWS	19	1	0.00	0.00	0
72125	CT CERVICAL SPINE W/O CONT	29	1	0.00	0.00	0

Figure 16-15: Procedure /CPT Statistics Report

### 16.4.3 Film Usage Report

The film usage report is of less value at the current time because of the availability of detailed reports from most modalities.

```
Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Special Reports ...
Film Usage Report

Select Special Reports Option: FILM Usage Report

Film Usage Report
-----

Do you wish only the summary report? NO// YES
```

```

Select Rad/Nuc Med Division: All// CHOC TAW NATION HOSPITAL OKLAHOMA TRIB
E/638 TALIHINA 01 OK 556001

Another one (Select/De-Select):

Do you wish to include all Films? Yes// YES

**** Date Range Selection ****

Beginning DATE : 8/1/2006 (AUG 01, 2006)

Ending DATE : 8/31/2006 (AUG 31, 2006)

The entries printed for this report will be based only
on exams that are in one of the following statuses:

GENERAL RADIOLOGY
-----
EXAMINED
TRANSCRIBED
DICTATED
COMPLETE

DEVICE: HOME// Virtual

>>>> Film Usage Report <<<<< Page: 1

Division: CHOCTAW NATION HOSPITAL
Imaging Type: GENERAL RADIOLOGY For period: AUG 1,2006 to
Run Date: AUG 17,2007 14:54 AUG 31,2006

Film Size Number of Number of Films per Percentage
of of per Films
Films* Exams Exam Used
-----
(Imaging Type Summary)
10x12 1189 562 2.1 22.2
10x12 mam 98 22 4.5 1.8
11x14 (30x35cm) 353 138 2.6 6.6
14x14 66 31 2.1 1.2
14x17 (35x43cm) 613 246 2.5 11.5
14x17 Chest Kodak InSight 720 383 1.9 13.5
14x17 ct 1490 425 3.5 27.9
8x10 413 212 1.9 7.7
8x10 Mam 407 112 3.6 7.6
NO FILMS STANDBY TIME 1 1 1.0 0.0

Imaging Type Total 5350 2132 2.5
-----

* Cine data not included in imaging type totals.
Percentages calculated on film data only.

# of Films selected: ALL

```

Figure 16-16: Film Usage Report



### 16.4.4 Status Time Report

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Special Reports ...
Status Time Report

Select Special Reports Option: SStatus Time Report

Select Rad/Nuc Med Division: All// CHOC TAW NATION HOSPITAL OKLAHOMA TRIB
E/638 TALIHINA 01 OK 556001

Another one (Select/De-Select):

Select all requesting locations? Y/N: Y

Select IMAGING TYPE: GENE RAL RADIOLOGY

Select all procedures? Y/N: Y

**** Date Range Selection ****

Beginning DATE : 8/1/2006 (AUG 01, 2006)

Ending DATE : 8/31/2006 (AUG 31, 2006)

Do you wish to print detailed reports? No//

DEVICE: HOME// Virtual

** Status Tracking Statistics Report ** Page: 1
Division Summary Procedure Detail

Run Date: 08/17/07 For Period: 08/01/06 - 08/31/06
Division: CHOCTAW NATION HOSPITAL Imaging Type: GENERAL RADIOLOGY
Requesting Location:ALL Procedure:ALL

** Status Tracking Statistics Report ** Page: 2
Division Summary Procedure Detail

Run Date: 08/17/07 For Period: 08/01/06 - 08/31/06
Division: CHOCTAW NATION HOSPITAL Imaging Type: GENERAL RADIOLOGY
Requesting Location:ALL Procedure:ALL

From: WAITING FOR EXAM
To : EXAMINED


```

Procedure (CPT)	Minimum Time (DD:HH:MM)	Maximum Time (DD:HH:MM)	Average Time (DD:HH:MM)	Number of Procedures
SINUSES MIN 2 VIEWS (70210)	00:00:00	00:00:47	00:00:23	2
SINUSES 3 OR MORE VIEWS (70220)	00:00:10	00:00:27	00:00:18	2
SKULL 4 OR MORE VIEWS (70260)	00:01:25	00:01:25	00:01:25	1
CT HEAD W/O CONT (70450)	00:00:06	33:15:10	00:22:04	94
CT HEAD W&WO CONT (70470)	00:00:44	02:23:55	00:13:39	19
CT ORBIT SELLA P FOS OR T (70480)	00:00:49	00:21:57	00:08:17	3
CT MAXILLOFACIAL W/O CONT (70486)	00:00:20	37:05:59	03:03:59	13

Overall:	00:00:00	16:04:14	00:11:49	1844
** Status Tracking Statistics Report **				Page: 21
Division Summary Procedure Detail				
Run Date: 08/17/07	For Period: 08/01/06 - 08/31/06			
Division: CHOCTAW NATION HOSPITAL	Imaging Type: GENERAL RADIOLOGY			
Requesting Location: ALL	Procedure: ALL			
From: EXAMINED				
To : COMPLETE				
	Minimum Time (DD:HH:MM)	Maximum Time (DD:HH:MM)	Average Time (DD:HH:MM)	Number of Procedures
Procedure (CPT)	-----	-----	-----	-----
CT HEAD W/O CONT(70450)	74:18:23	74:18:23	74:18:23	1
CT MAXILLOFACIAL W/O CONT(70486)	38:18:55	38:18:55	38:18:55	1
CHEST 2 VIEWS PA&LAT(71020)	66:00:11	74:12:05	71:13:07	7
RIBS UNILAT+CHEST 3 OR MO(71101)	73:18:01	73:18:01	73:18:01	1
SPINE THORACIC 2 VIEWS(72070)	73:02:17	73:02:17	73:02:17	1
SPINE LUMBOSACRAL MIN 2 V(72100)	73:02:17	73:02:17	73:02:17	1
Overall:	38:18:51	75:23:38	66:20:40	86
** Status Tracking Statistics Report **				Page: 25
Division Summary Overall				
Run Date: 08/17/07	For Period: 08/01/06 - 08/31/06			
Division: CHOCTAW NATION HOSPITAL	Imaging Type: GENERAL RADIOLOGY			
Requesting Location: ALL	Procedure: ALL			
	Minimum Time (DD:HH:MM)	Maximum Time (DD:HH:MM)	Average Time (DD:HH:MM)	Number of Procedures
	-----	-----	-----	-----
From: WAITING FOR EXAM				
To : COMPLETE	64:19:42	64:19:42	64:19:42	1
From: WAITING FOR EXAM				
To : EXAMINED	00:00:00	16:04:14	00:11:49	1844
From: EXAMINED				
To : COMPLETE	38:18:51	75:23:38	66:20:	

Figure 16-17: Status Time Report

## 16.5 Timeliness Reports

The **Timeliness Reports** are quality assurance reports on the timeliness of processing Radiology procedures and reports. They are divided into three main categories.

Outpatient Procedure Wait Time ...
Verification Timeliness ...
Radiology Timeliness Performance Reports ...

Figure 16-18: Radiology Timeliness Performance Reports

Only one report will be demonstrated in Figure 16-19, the Verification Timeliness Summary Report.

```

Rad/Nuc Med Total System Menu ...
Management Reports Menu ...
Timeliness Reports ...
Verification Timeliness ...

Summary/Detail Report

Radiology Verification Timeliness Report

Enter Report Type

    Select one of the following:

        S          Summary
        D          Detail
        B          Both

Select Report Type: S// Summary

    The begin date for Summary and Both must be at least 10 days before today.
Enter starting date: 1/1/2003 (JAN 01, 2003)

    The ending date for Summary and Both must be at least 10 days before today.
Enter ending date: (1/1/2003 - 4/2/2003): 1/31/2003 (JAN 31, 2003)

Select Primary Interpreting Staff Physician (Optional):

Select Imaging Type: All//

Another one (Select/De-Select):

Send summary report to local mail group "G.RAD PERFORMANCE INDICATOR"? Yes// NO

    No OUTLOOK mail group(s) have been entered yet.

DEVICE: HOME//

                                Summary Verification Timeliness Report                                Page: 1

Facility: DEMO INDIAN HOSPITAL                Station: 8907                VISN:
Division: DEMO INDIAN HOSPITAL
Exam Date Range: 1/1/03 - 1/31/03
Imaging Type(s): GENERAL RADIOLOGY, MAMMOGRAPHY
Run Date/Time: 12/31/13 2:49 pm

Total number of reports expected for procedures performed during specified
date range: 1897

Hrs    >0    >24    >48    >72    >96    >120    >144    >168    >192    >216    >240    PENDING
From   -24    -48    -72    -96    -120   -144   -168   -192   -216   -240    Hrs
Ex Dt  Hrs    Hrs    Hrs    Hrs    Hrs    Hrs    Hrs    Hrs    Hrs    Hrs

#Tr     9     316    520    455    259    192     99     25      5      5      8      4
%Tr     0.5   16.7   27.4   24.0   13.7   10.1    5.2    1.3    0.3    0.3    0.4    0.2

```

#Vr	1	126	385	403	474	304	82	91	13	3	11	4
%Vr	0.1	6.6	20.3	21.2	25.0	16.0	4.3	4.8	0.7	0.2	0.6	0.2

## Summary Performance Indicator Report

Page: 2

- \* Columns represent # of hours elapsed from exam date/time through date/time report entered or date/time report was verified.  
e.g. ">0-24 Hrs" column represents those exams that had a report transcribed and/or verified within 0-24 hours from the exam date/time.
- \* Columns following the initial elapsed time column ">0-24 Hrs" begin at .0001 after the starting hour (e.g. ">24-48 Hrs" = starts at 24.001 through the 48th hour.)
- \* PENDING means there's no data for DATE REPORT ENTERED or VERIFIED DATE. So, if the expected report is missing one of these fields, or is missing data for fields .01 through 17 from file #74, RAD/NUC MED REPORTS, or is a Stub Report that was entered by the Imaging package when images were captured before a report was entered, then the expected report would be counted in the PENDING column.
- \* A printset, i.e., a set of multiple exams that share the same report, will be expected to have 1 report.
- \* Cancelled and "No Credit" cases are excluded from this report.

Figure 16-19: Verification Timeliness Report

## 17.0 Supervisor Menu

There are some options in the Supervisor's Menu which should be used sparingly and only in special cases.

### 17.1 Delete a Report

This option allows the Supervisor to delete a report that has been entered in error.

### 17.2 Exam Deletion

Deletion of an exam is prohibited if the exam has an associated report or image. The report and the image must be deleted first using the VISTA work station before the exam can be deleted.

Once the examination is DELETED, the user will be prompted to answer with a YES or NO to cancel the request associated with this exam. If YES, the request will also be cancelled and the request status updated to CANCELLED. If NO, the request status will be updated to HOLD and may be selected for registration at a future date.

### 17.3 Override a Single Exam's Status to Complete

This menu option allows the Radiology Supervisor or designated staff to override the status of any exam to complete. The only exceptions to this function are exams which are already complete or those which have been cancelled.

The option probably should not be used by any Radiology service, but it is a useful tool for a small site that performs no Radiology on site. When a completed report comes back from a Radiology referral, the patient may be registered for that exam and the exam subsequently either edited or immediately overridden to complete.

### 17.4 Restore a Deleted Report

If a report has been deleted in error, this option can be used to restore the deleted report to its case, only if another report was not linked to the case in the interim (time between the report deletion and restoration.) The restored report is re-assigned the report status it had prior to the Deleted report status. However, the status of the exam is not automatically updated.

## 17.5 Unverify a Report for Amendment

This option allows the supervisor to unverify a report. It is typically used if a second read is provided by another Radiologist or if the original Radiologist wishes to alter or append to an existing report. This option should not be given to other users. As the report is unverified, a copy of it is saved for medical/legal purposes, and the report can be amended using any option that allows report entry or edit function. After the amended report is re-verified, displays and printouts of the report will always have a notation at the top to call attention to the fact that it has been amended.

## 18.0 Passing Mammograms to Women's Health

While it is recognized that the Women's Health package is being phased out, some facilities that perform mammograms on site still use the Women's Health package for mammogram tracking.

In order to use the existing functionality to pass mammograms to Women's Health, several steps must be taken.

1. Diagnostic Codes must be entered for all mammogram reports. The recommendation is to use American College of Radiologist (ACR) BI-RAD codes. These should have been loaded with Radiology/Nuclear Medicine V 5.0 patch 1003. You can confirm their presence by using the following Radiology/Nuclear Medicine Package menu path.

```
Supervisor Menu
Utility Files Maintenance Menu
Diagnostic Codes Enter/Edit
```

Figure 18-1: Menu path to create/edit diagnostic codes in Radiology/Nuclear Medicine

- 1 – NEGATIVE
- 2 – BENIGN FINDINGS
- 3 – PROBABLY BENIGN – SHORT INTERVAL FOLLOW-UP
- 4 – SUSPICIOUS ABNORMALITY, SUGGEST BIOPSY
- 5 – HIGHLY SUGGESTIVE OF MALIGNANCY
- 0 – ASSESSMENT INCOMPLETE

2. Diagnostic Codes must be linked to a Women's Health diagnosis. The menu path to complete that linkage is in the **Women's Health** menu.

```
Women's Health
Manager's Functions
File Maintenance Menu
Edit Diagnostic Code Translation File
```

Figure 18-2: Menu path to linking Radiology diagnostic codes to Women's Health diagnosis

For each of the Women's Health Result/Diagnosis for a Mammogram Result, enter the corresponding Radiology Diagnostic Code. In Figure 18-3 below, a linkage has been created for **Prbly Benign, Short Int F/U**.

```
* * * WOMEN'S HEALTH: EDIT BW DIAGNOSTIC CODE TRANSLATION FILE * * *
Select RESULT/DIAGNOSIS: Prbly Benign, Short Int F/U      4
```

```

Are you adding 'Prbly Benign, Short Int F/U' as
a new BW DIAGNOSTIC CODE TRANSLATION (the 2ND)? No// Y (Yes)
WOMEN'S HEALTH DIAGNOSIS: Prbly Benign, Short Int F/U
//
RADIOLOGY DIAGNOSTIC CODE: MAM -
1 MAM - ASSESSMENT IS INCOMPLETE
2 MAM - BENIGN FINDING, NEGATIVE
3 MAM - HIGHLY SUGGESTIVE OF MALIG, ACTION SHOULD BE TAKEN
4 MAM - NEGATIVE
5 MAM - NOT INDICATED
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: <ENTER>
6 MAM - PROBABLY BENIGN FINDING, SHORT INTERVAL F/U SUGGESTED
7 MAM - SUSPICIOUS ABNORMALITY, BIOPSY SHOULD BE CONSIDERED
CHOOSE 1-7: 6

```

Figure 18-3: Linking Radiology diagnostic codes to Women's Health diagnoses

3. Set up the Women's Health site parameters to update with Mammograms from Radiology. Note that this screen is on Page 2 of the site parameters.

```

Women's Health
Manager's Functions
Edit Site Parameters

```

```

* * * EDIT SITE PARAMETERS FOR CIMARRON HOSPITAL * * *
-----
CDC.....:
          CDC Export: NO                FIPS County Code:
          Current MDE Version: 4.1      FIPS Program Code:
Bethesda 1991 Start Date: JAN 1,1991   CDC Tribal Pgm Abbreviation:
Bethesda 2001 Start Date: OCT 1,2002   Date CDC Funding Began:
Default Specimen Type: CONVENTIONAL SMEAR

HFS.....: Host File Path: /usr/spool/uucppublic

RADIOLOGY: Import Mammograms from Radiology: YES
Status Given to Imported Mammograms: OPEN

PCC.....: Run PCC Link in Diagnostic Mode: YES      (PAGE 2 OF 5)
-----

```

Figure 18-4: Editing Women's Health site parameters to import mammograms from Radiology

4. Adjust the Women's Health Site Parameters to *not* pass mammograms from Women's Health to PCC for On-Site Procedures. This is important to avoid creating duplicate entries for mammograms in PCC. Note that the options for mammograms are on pages 4 and 5 of the site parameters.

```

Women's Health
Manager's Functions
Edit Site Parameters

```



```

*** EDIT SITE PARAMETERS FOR DEMO INDIAN HOSPITAL ***
-----
Procedure Type           Active           Pass to PCC           DAYS
DELINQ
-----
--
Mammogram Dx Unilat      YES             OFF-SITE ONLY         30
Mammogram Screening      YES             OFF-SITE ONLY         30
Mastectomy               YES             BOTH ON- & OFF-SITE   30
Needle Biopsy            YES             BOTH ON- & OFF-SITE   30
Open Biopsy              YES             BOTH ON- & OFF-SITE   30
PAP Smear                YES             BOTH ON- & OFF-SITE   30
Pregnancy Test           YES             BOTH ON- & OFF-SITE   30
STD Evaluation            YES             BOTH ON- & OFF-SITE   30
Stereotactic Biopsy     YES             BOTH ON- & OFF-SITE   30
(PAGE 5 OF 5)

```

Figure 18-5: Switching Site parameters for Women's Health to pass Mammograms for Off-Site Only

- Test with a Demo Patient who is on the Women's Health Register by entering a screening mammogram with a Diagnostic Code in Radiology. When editing the exam for the patient, you should see a message, "Now updating Women's Health database." When the report is verified, you should be able to see a screening mammogram with a diagnosis under that patient's profile in Women's Health. If the patient is not on the Women's Health Register, the default Case Manager in Women's Health should receive a RPMS MailMan bulletin notifying that an entry could not be made for a mammogram in Woman's Health because the patient was not on the Register.

## 19.0 Interfacing

Radiology/Nuclear Medicine Interfaces can take many forms and numerous vendors are available. The four basic kinds of interfaces available include:

1. PACS interface – images are electronically passed to and stored on a server.
2. Modality Worklist interface – orders from RPMS electronically populate a Worklist on one or more desired modalities.
3. Report interface – reports electronically post back to the Radiology/Nuclear Medicine Report and are electronically verified.
4. Scanned interface – reports are scanned using the VISTA Scanning software and can be linked to the Radiology case number for provider review in EHR.

Any one of these interfaces can be used in conjunction with one or more of the others. All except the Scanning interface use HL7 language for coding in order to meet the Digital Imaging and Communications in Medicine (DICOM) standards.

An example of an HL7 order message is shown in Figure 19-1. This would be an example of an order message that would be sent from RPMS to a Modality Worklist or to a PACS server or to a VISTA workstation.

```
MSH|^~\&|RPMS_RAD|TESTHOSPITAL|GE_PACS|TEST|20070821000555-
0600|ORM^O01|IHS-2615209|P|2.3||AL|ER||
PID|1|48150|556001054321|556013015896~556016001622|DEMO^PATIENT^L^^^|MAXWEL
L^SMART^^^|19780418|F||PO BOX 555^^QUINTON^OK ^74555||918-555-
3858||||440555906
PV1|1|O|EMERGENCY ROOM^MEDICAL IMAGING^TEST HOSPITAL|||||
ORC|SC|11022|082007-11022||CM||20070820235200-0600||1509^
SMART^MAXWELL^E^DO^^||EMERGENCY ROOM^MEDICAL IMAGING
OBR|1|11022|082007-11022|175^ABDOMEN MIN 3 VIEWS+CHEST^C4||
||1509^SMART^MAXWELL^E^DO^^||GENERAL RADIOLOGY||^^^ 20070820235200-
0600^^ROUTINE||ABDOMEN PAIN RM-2 ||
```

Figure 19-1: HL7 Order Message

An order message consists of segments (MSH, PID, PV1, ORC, OBR) and fields. The data elements included between each series of | | in a segment.

Segments are defined as follows:

- MSH – The Message Header which identifies where this message originated and what its destination will be.
- PID – The Patient ID segment which contains the name, chart number, date of birth, sex, ordering provider, and other details of patient demographics.
- PV1 – The Visit segment which identifies whether this is an inpatient or outpatient visit and the visit location.

- ORC/OBR – the Order segments contain the details of the exam requested, the requesting provider, the date and time requested, and the reason for the exam.

An HL7 result message returns much the same information except the fields in the MSH are reversed in that the external reports interface or PACS system is returning information to RPMS. The report information is contained in OBX segments which are mapped to the desired fields in the Radiology/Nuclear Medicine Reports file.

```

MSH|^~\&|HL7INTERFACE|HL7 SYSTEM|RPMS_RAD|ZZZZ|
20070821065517|ORU^R01|DIARIS_070821065517062||1.0|| |NE|NE
PID|1||556001054321||DEMO^PATIENT^A^^^|19800810|M||||CR
OBR|1|17823|081807-17823|82^SPINE CERVICAL MIN 2 VIEWS^C4| | | |556001||
|1198^SMART^MAXWELL^E^MD^^| |20070821|GENERAL RADIOLOGY |FI|
|^20070818190500-0600^^ROUTINE|| |MVC NECK PAIN BACK PAIN EXAM 7 |876^
^20070819|876^ ^2007| 0819|UNKNOWN^ ^20070820| | | |CR|
OBX|1|FT| &GDT^ ||Referring Physician: SMART (Interface Hospital -
Nowhere, USA |||||
OBX|2|FT| &GDT^ ||X-Ray No: 51032_CNH [UID: TA20070818192925 ]|||
OBX|3|FT| &GDT^ ||Date of Exam: 8/18/2007 (Received on: 8/18/2007 7:29:25
PM)|||
OBX|4|FT| &GDT^ ||Reason for Exam: MVA LOW BACK PAIN/WORK/ER; |||
    
```

Figure 19-2: HL7 Report Message

Examples of potential workflows are shown in the following diagrams.

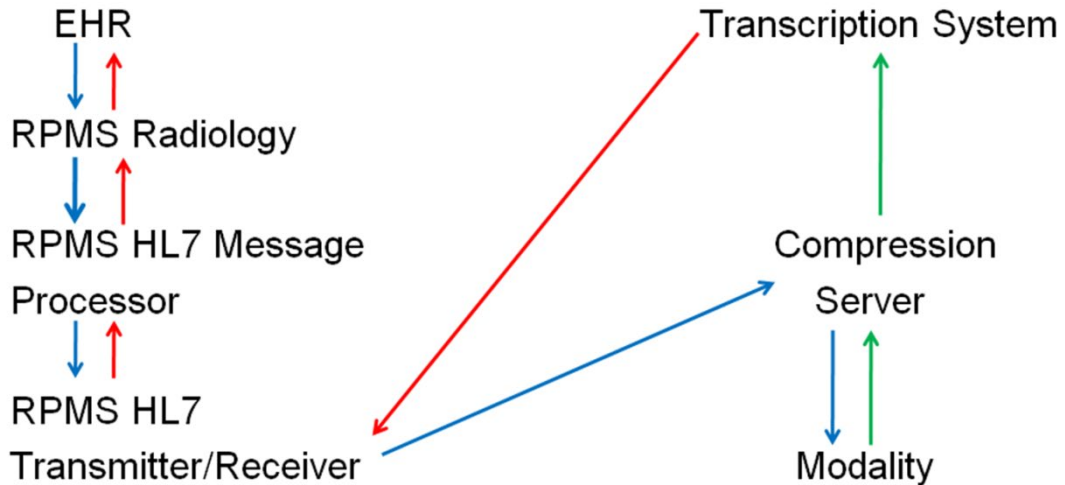


Figure 19-3: Example of a report using the generic interface in RPMS as the interface

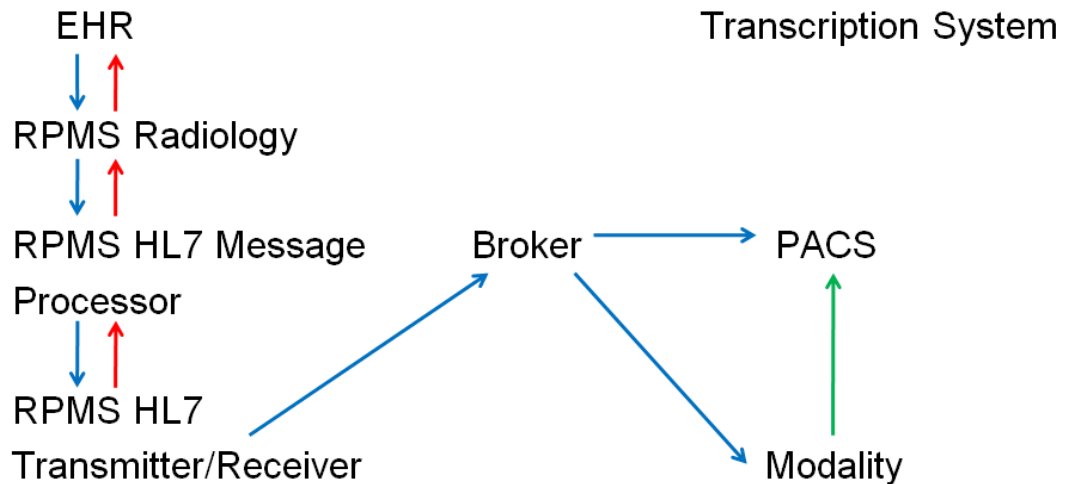


Figure 19-4: Example of a PACS interface with a modality worklist without a Reports interface

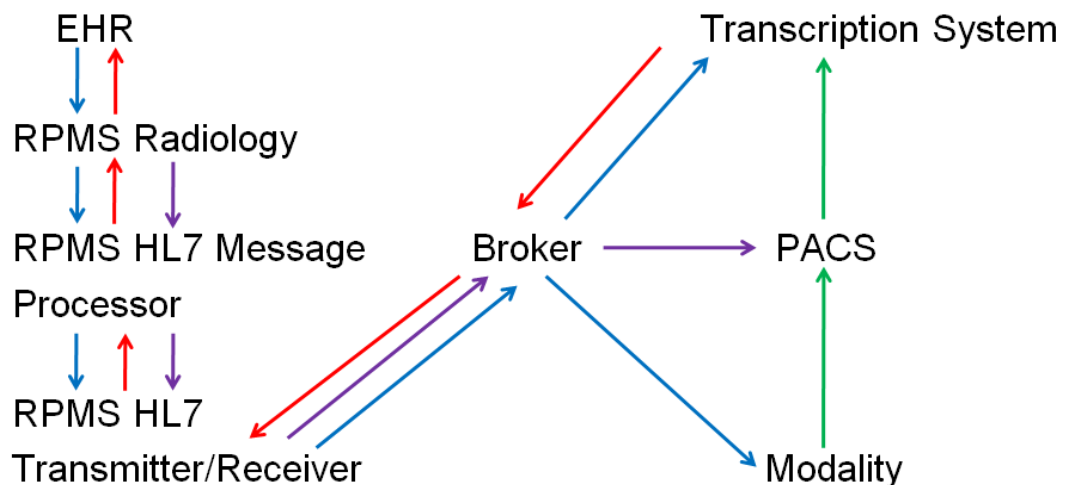


Figure 19-5: Example of a PACS, modality worklist, and Reports interface

Because of the large number of vendors and complexity of interfaces, it is highly recommended that any sites desiring any kind of interface begin the discussion with their area office IT staff. Complex interfaces can be extremely resource intensive and may not be practical for small sites offering limited or no Radiology services on site.

It is most likely that small sites may be able to meet Meaningful Use Stage 2 requirements by using the Radiology/Nuclear Medicine Package in a limited mode with VISTA scanning capability to link outside scanned reports to the Radiology exam originally requested in EHR.

More extensive documentation can be found on VISTA imaging at the following link: <https://www.ihs.gov/ehr/ftpfiles/?fld=VistA+Imaging&parent=>.

The screenshot shows the Indian Health Service (IHS) website interface. At the top, there is a header with the IHS logo and name, a search bar, and navigation links for 'A to Z Index', 'Employee Resources', and 'Feedback'. A red banner below the header contains a COVID-19 update. The main navigation menu includes 'About IHS', 'Locations', 'for Patients', 'for Providers', 'Community Health', 'Careers@IHS', and 'Newsroom'. The current page is titled 'Electronic Health Record (EHR) / FTP Files'. On the left, a sidebar lists various EHR-related topics, with 'FTP Files' selected. The main content area is titled 'FTP Files' and shows a directory path '\ VistA Imaging'. Below this is a 'Reset Search' button and a table listing files and folders. The table has columns for 'Type', 'Name', 'Size', and 'Last Modified'. The files listed are: 'Clinical Capture and Display', 'Documentation', 'Getting Started', 'Presentations', 'Radiology (DICOM)', 'System Maintenance and Daily Tasks', and 'Training modules', all dated May 13, 2019.

Type	Name	Size	Last Modified
	<input type="text" value="Search"/>		
Folder	<a href="#">Clinical Capture and Display</a>		May 13, 2019 10:36:44 AM
Folder	<a href="#">Documentation</a>		May 13, 2019 10:36:44 AM
Folder	<a href="#">Getting Started</a>		May 13, 2019 10:38:13 AM
Folder	<a href="#">Presentations</a>		May 13, 2019 10:37:26 AM
Folder	<a href="#">Radiology (DICOM)</a>		May 13, 2019 10:38:19 AM
Folder	<a href="#">System Maintenance and Daily Tasks</a>		May 13, 2019 10:37:49 AM
Folder	<a href="#">Training modules</a>		May 13, 2019 10:36:44 AM

Figure 19-6: IHS FTP website – VistA Imaging

## 20.0 September 2020 RA\_5.0\_1008 Release Addendum

### 20.1 Introduction

This addendum lists the new additions to the RPMS Radiology module as developed for the 2020 RPMS Radiology release, RA\*5.0\*1008. The following modifications were required for the 2015 Certified Health EHR edition specifically for the Indian Health Service RPMS/EHR Consolidated Clinical Document Architecture (CCDA), Transition of Care (TOC), and the Personal Health Record (PHR) certification criterion.

For RPMS RAD/NUC MED sites that manually enter and verify reports or have an existing HL7 interface for report transmission and verification, the verifying Radiologist or Staff associated with an interpreting site is the mechanism for sending the interpreting site for display in the CCDA, TOC, and PHR. The entered interpretation or RAD/NUC MED REPORT Impression is also exported with a verified report.

**Note:** RPMS RAD/NUC MED sites that do not enter or interface RAD/NUC MED REPORT entries with a verifying Radiologist or Staff and/or Impression entry will not see the following detailed information in the patient CCDA, TOC, or PHR.

If radiology reports are not entered, verified, and/or a site scans in reports via Vista Imaging Capture using a different RPMS RAD/NUC MED exam complete option, the interpreting site and impression information will not be captured for display in the CCDA, TOC, and PHR.

Additional information and screen shots are provided.

### 20.2 Modifications

#### 20.2.1 New Security Keys: RAZRIS

A new security key should be assigned to the Imaging Supervisor and RPMS Radiology Information System (RIS) consultant. The key assignment enables view and add/edit for existing or new Radiology Interpreting Site Add/Edit file entries. This new option is located in the **Rad/Nuc Med Personnel Menu**.

```
Rad/Nuc Med Total System Menu
Supervisor Menu ...
Rad/Nuc Med Personnel Menu ...
Radiology Interpreting Site Add/Edit
```

Figure 20-1: RPMS menu path to linking Radiology to the Radiology Interpreting Site Add/Edit

```
Classification Enter/Edit
Clerical List
  Interpreting Resident List
  Interpreting Staff List
  Radiology Interpreting Site Add/Edit
  Technologist List
```

Figure 20-2: RPMS Radiology Interpreting Site Add/Edit option with the RAZRIS security key

## 20.2.2 New Radiology Interpreting Site Option

```
Classification Enter/Edit
Clerical List
  Interpreting Resident List
  Interpreting Staff List
  Radiology Interpreting Site Add/Edit
  Technologist List
```

Figure 20-3: Radiology Interpreting Site Add/Edit requires the RAZRIS security key

This menu option allows the addition of new and existing imaging interpreting sites and includes a field association for new and existing Staff. Radiology or imaging interpreting sites may be local to the Indian Health Service (e.g., 2021 DEMO HOSPITAL) or an external vendor (e.g., RadREAD) or both. Each Radiology Interpreting Site will require an entry into this menu option.

These entries are not associated with the VA FileMan **Institution** File.

```
Select Rad/Nuc Med Personnel Menu Option: RADiology Interpreting Site Add/Edit
Radiology Interpreting Site: 2021 DEMO HOSPITAL
  Are you adding '2021 DEMO HOSPITAL' as
    a new RAD/NUC MED INTERPRETING SITE (the 10TH)? No// Y (Yes)
STREET ADDRESS: 2021 ABC STREET
CITY: ALBUQUERQUE
STATE: NM NEW MEXICO NM
ZIP: 87106
PHONE NUMBER: 5051111234
Select PERSONNEL NAME: DEMO,PERSON DEMO,PERSON IT LRW
  Are you adding 'DEMO,PERSON' as
    a new PERSONNEL NAME (the 1ST for this RAD/NUC MED INTERPRETING SITE)? No// Y
  (Yes)
```

Figure 20-4: Example addition of an RPMS RAD/NUC MED Radiology Interpreting Site

Figure 20-4 includes the association or pointer to an existing Radiologist or Staff and the example is for an external vendor.

**Reminder:** The Radiology Interpreting Site can have file additions for both local (IHS) and external radiologists or tele radiology vendors. At this time, it is assumed that Staff do not read for both an IHS site (local) and external vendor (outside of IHS).

There should be a one-to-one match with a radiologist Staff classification and a Radiology Interpreting Site. If a Staff is not associated with a Radiology Interpreting Site, the imaging **Interpreting Site** will *not* display in the CCDA, TOC, or patient PHR.

Staff who lack the RAZRIS security key but can access the **Rad/Nuc Med Personnel** menu, will be able to add staff radiologists to a field Radiology Interpreting Site. This has been added to the **Classification Enter/Edit** option (Figure 20-5).

If a staff deletion for an interpreting site is required from **Classification Enter/Edit**, use the new **Radiology Interpreting Site** menu option and associated field for **PERSONNEL NAME**.

```
Select Rad/Nuc Med Personnel Menu Option: CLASSification Enter/Edit

Select Personnel:      DEMO,STAFF IT      LRW
Select RAD/NUC MED CLASSIFICATION: staff//
Select RAD/NUC MED LOCATION ACCESS: RADIOLOGY DEPARTMENT
//
RAD/NUC MED INACTIVE DATE:
STAFF REVIEW REQUIRED:
ALLOW VERIFYING OF OTHERS: YES//
Radiology Interpreting Site: 2021 DEMO HOSPITAL//  << pulled in from the Radiology
Interpreting Site entry.  Or - RPMS RAD/NUC MED personnel missing the RAZRIS
Security Key can add existing or new Radiologist Staff.
```

Figure 20-5: Example review and addition of an RPMS RAD/NUC MED Staff and Classification Enter/Edit. Local Radiology Interpreting Site.

**Note:** As a reminder for the RPMS RAD/NUC MED Classification of Imaging Personnel and the assignment of classifications (Section 7.1), the following general guidelines may be used.

In particular, for the Staff designation:

**Clerk** – Assigned to an individual who performs clerical entry in the Radiology/Nuclear Medicine Package. They cannot be listed as a technologist when editing an exam.

**Technologist** – Assigned to all Radiology staff who perform exams.

**Resident** – Not normally used in IHS – refers to a Radiology Resident.



**Staff** – Reserved for interpreting Radiologists or those who will need to verify reports for interpreting Radiologist. Local staff = the Indian Health Service, and external staff = an external, third party teleradiology vendor.

**Reminder** – If RPMS radiology personnel are not holders of the RAZRIS key, they can still add the Radiology Interpreting Site for Staff through the Classification Enter/Edit option in this menu. Associate existing or added Staff to an existing Radiology Interpreting Site entry.

Figure 20-6 shows an example of an RPMS RAD/NUC MED Staff and Classification Enter/Edit and entry of an offsite Radiologist vendor.

```
Select Rad/Nuc Med Personnel Menu Option:  Classification Enter/Edit

Select Personnel:      DEMO,PERSONNEL P      spr
Select RAD/NUC MED CLASSIFICATION:  staff//
Select RAD/NUC MED LOCATION ACCESS:  RADIOLOGY DEPARTMENT
//
RAD/NUC MED INACTIVE DATE:
STAFF REVIEW REQUIRED:  no//
ALLOW VERIFYING OF OTHERS:
Radiology Interpreting Site: RadREAD  << RPMS RAD/NUC MED personnel missing the
RAZRIS Security Key can add existing or new Radiologist Staff.
```

Figure 20-6: Classification Enter/Edit example

## 20.2.3 Radiology Report Impression

### 20.2.3.1 Information Sharing For Impression Capture

Figure 20-7 shows an example of the RPMS RAD/NUC MED Patient Profile with Exam Status and Report Status Display.

```
===== Name :
DEMO,LOUIS 138425
  Division : 2021 DEMO HOSPITAL      Category : OUTPATIENT
  Location  : RADIOLOGY DEPARTMENT   Ward      :
  Exam Date : AUG 5,2020 12:17      Service   :
  Case No.  : 71                    Bedsection:
                                           Clinic    : DEMO CLINIC
-----
Registered : ANKLE 3 OR MORE VIEWS      (RAD Detailed) CPT:73610
Requesting Phy: DEMO,DOCTOR IT BS M Exam Status : COMPLETE
Int'g Resident: Report Status: VERIFIED
Pre-Verified : NO                      Cam/Equip/Rm : EXAM ROOM 1
Int'g Staff :STAFF,DEMO                Diagnosis  :
```

Figure 20-7: Example Patient Profile, Exam Status, and Report Status display

Local RPMS RAD/NUC MED system business rules may indicate that the Impression is required for (report) verification and (exam) completion. If this is the case, an Impression must be entered. Local rules also define whether V RADIOLOGY information is sent to the PCC at the examined status (no Impression) or complete status (Impression).

Figure 20-8 is an example of a manual report entry on an RPMS testing system.

```

Enter Case Number:      082020-90
-----
Name       : DEMO,LOUIS          Pt ID      : 138425
Case No.   : 90      Exm. St: EXAMINED  Procedure  : X-RAY ABDOMEN 1 VIEW(7401
Tech.Comment: TEST
Exam Date:  AUG 20,2020  13:50      Technologist: DEMO,PERSON
Req Phys   : DEMO,DOCTOR  IT BS MT
-----
PRIMARY INTERPRETING STAFF: DEMO, STAFF//

INTERPRETING IMAGING LOCATION: RADIOLOGY DEPARTMENT
//
-----
Select 'Standard' Report to Copy:  ABDOMEN,NORMAL

Report already exists.  This will over-write it.
Are you sure you want the 'ABDOMEN,NORMAL' standard report? No// Y

Do you want to add another standard to this report? No// NO
-----
REPORTED DATE: AUG 31,2020// N  (AUG 31, 2020)
-----
CLINICAL HISTORY:
DEMO
ADDITIONAL CLINICAL HISTORY:
  No existing text
  Edit? NO//
-----
REPORT TEXT:
The visualized bony structures are normal.  The bowel gas pattern is
unremarkable.  No unusual opacities are projected over the renal or
gallbladder areas.  There is no evidence of organomegaly or soft tissue
mass effect.

  Edit? NO//
-----
IMPRESSION TEXT:
NORMAL STUDY.

  Edit? NO//
-----
Select one of the following:

      V      VERIFIED
      PD     PROBLEM DRAFT
      D      DRAFT

REPORT STATUS: D// VERIFIED

```

Figure 20-8: Example of the RPMS RAD/NUC MED Report Entry/Edit for Impression

## 20.2.4 Additional Information and Example for Interpreting Site and/or Impression with CCDA/TOC and PHR

### 20.2.4.1 LOINC and CPT Information

Imaging Procedures required for electronic Clinical Quality Measure reporting and 2015 CEHRT certification testing will have a LOINC terminology code associated with them. Subsequently, IHS end users will observe a LOINC term in the CCDA and TOC. If a LOINC term is mapped to the imaging procedure, the LOINC short name is pulled into the CCDA, TOC, and the PHR. Versus the RAD/NUC MED PROCEDURE File name.

**Example:** Chest XR 2V [36643-5]

Not all RPMS RAD/NUC MED procedures will have LOINC codes mapped to them. In particular, new procedure files added to the RPMS RAD/NUC MED Total System due to recent, annual CPT code updates.

LOINC entries for RPMS RAD/NUC MED are not entered via the RAD/NUC MED PROCEDURE file and are not a required entry by IHS imaging sites. LOINC terms are pre-mapped by BQRM application releases and will be populated into the V RADIOLOGY file.

If RAD/NUC MED procedures do not have LOINC terms mapped, the terminology code utilized for the CCDA and TOC is the CPT code. The displayed procedure name will be pulled from the CPT file Short Description field versus the local RAD/NUC MED PROCEDURE file name.

**Example:** X-RAY EXAM OF FOOT [73630]

Note that the LOINC or CPT terminology codes do not display in the Personal Health Record imaging procedure example (Figure 20-14).

### 20.2.4.2 CCDA, TOC, and PHR Examples

**Note:** Each patient example is from a sanitized RPMS testing system.

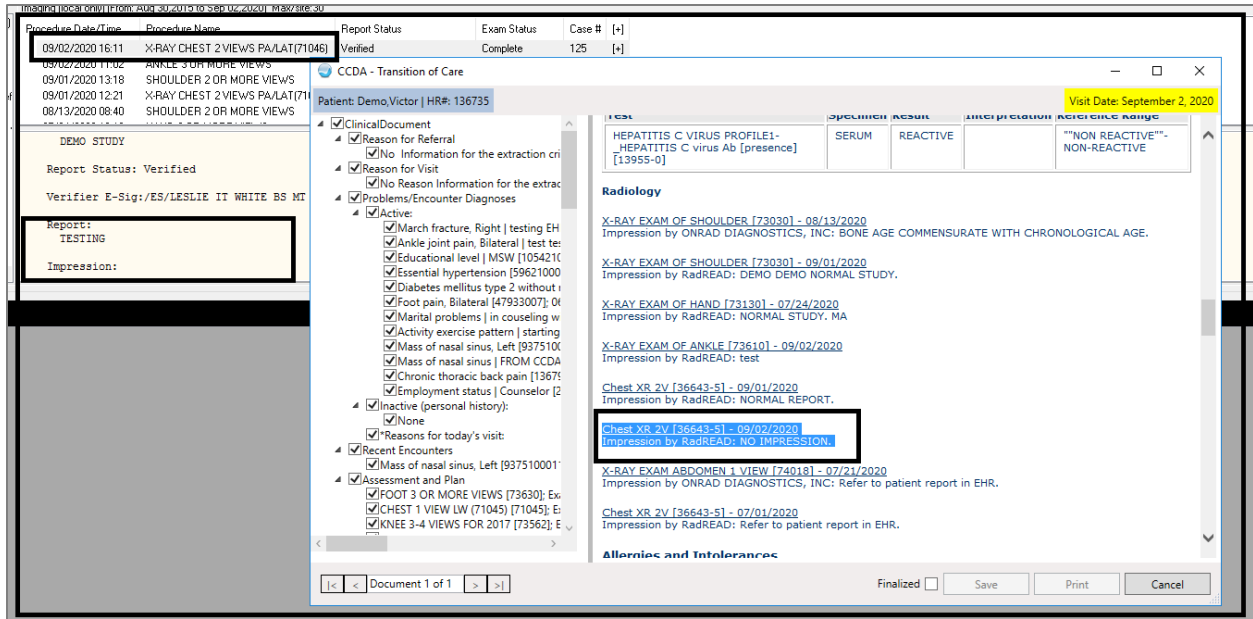


Figure 20-9: Example of the RPMS RAD/NUC MED Report Entry/Edit missing an Impression

**NO IMPRESSION** will display in the CCDa, TOC, and PHR. Local interpreting site rules and examination status updates should be reviewed to confirm if an Impression is required for local Imaging Reports and Exam status updates.

Figure 20-10 shows an Example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression entered in the RPMS RAD/NUC MED REPORT and included in the V RADIOLOGY file. The Radiology Interpreting Site (RadREAD) is also present.

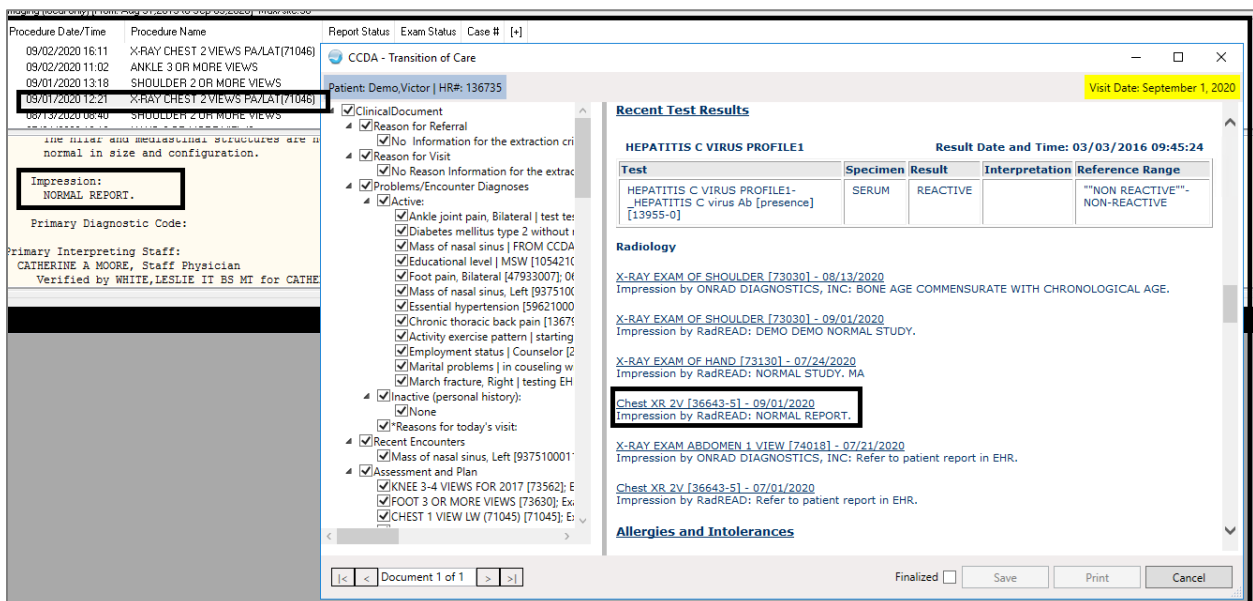


Figure 20-10: Example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression

Figure 20-11 shows an example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression entered in the RPMS RAD/NUC MED REPORT and captured in the V RADIOLOGY file. If an Impression entry exceeds the 240-character limit allowed for the Impression field in V RADIOLOGY file the **\*MORE\*** (SEE EXAM) will display as shown in in Figure 20-11.

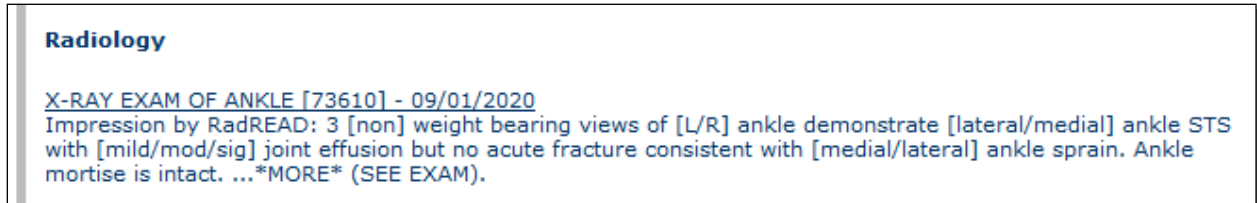


Figure 20-11: Example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression

Printing a full report is recommended from the patient record as needed.

See Figure 20-12 for an example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression entered in the RPMS RAD/NUC MED REPORT and included in the V RADIOLOGY file. Note that the interpreting radiologist or staff is not associated or pointing to a Radiology Interpreting Site and the Site is absent.

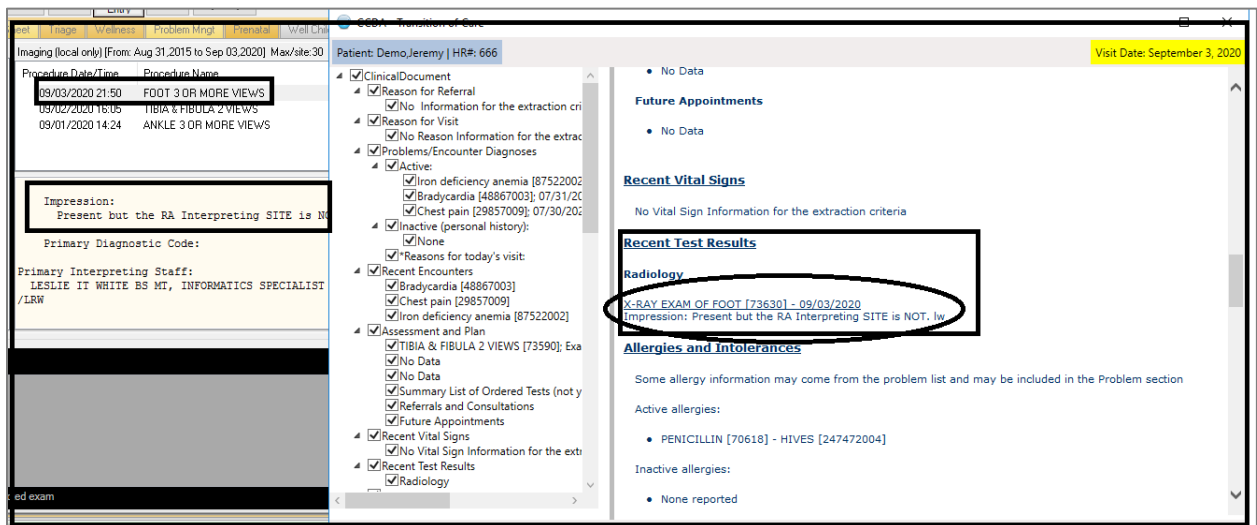


Figure 20-12: Example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression

See Figure 20-13 for an example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression entered in the RPMS RAD/NUC MED REPORT and included in the V RADIOLOGY file. The Interpreting Site was also mapped.

However, there may have been in issue with corrupt data or missing pointers in the RAD/NUC MED files. See the **Recent Test Results** in the TOC.

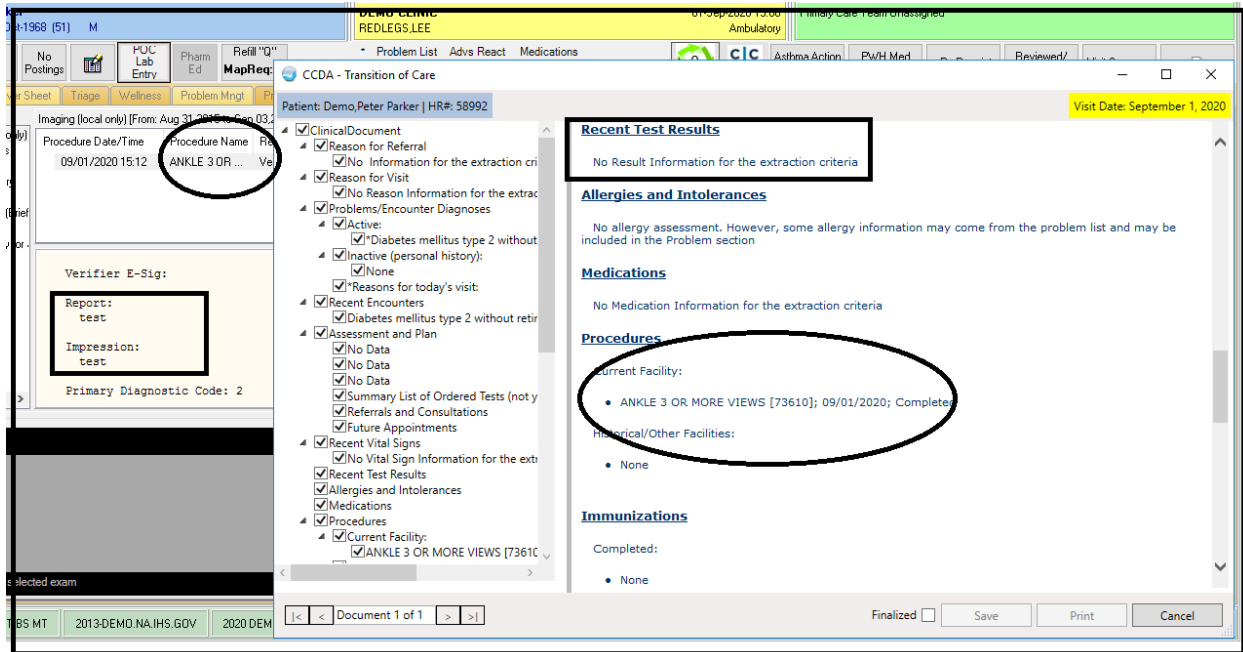


Figure 20-13: Example of the RPMS RAD/NUC MED Report Entry/Edit with an Impression entered in the RPMS RAD/NUC MED REPORT and included in the V RADIOLOGY file

Contact the IHS IT Support at [itsupport@ihs.gov](mailto:itsupport@ihs.gov) for RPMS Imaging Support if there are questions or errors.

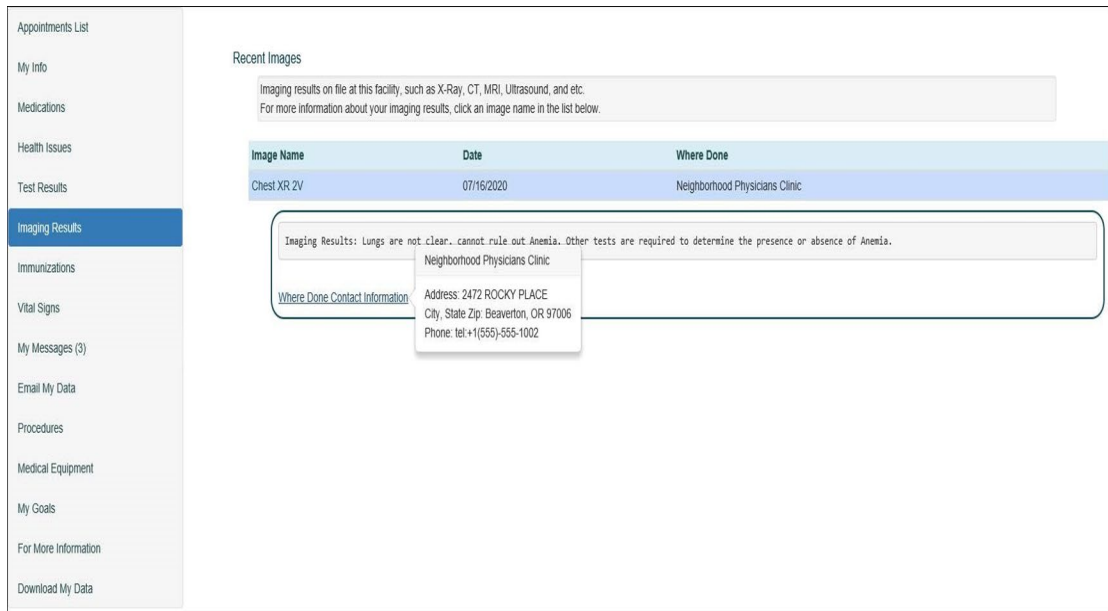


Figure 20-14: RPMS/EHR Personal Health Record example with Radiology Interpreting Site Address (Address + Phone number) and Impression.

## 20.2.5 Normal and Abnormal Recent Test Results and Imaging Display in the CCDA/TOC and PHR

The Diagnostic Codes do not display but are used to extract imaging test results for Normal Imaging result reports and Abnormal Imaging test result reports. This is not a 2015 CEHRT certification criterion requirement but was made in consultation with IHS CCDA SMEs.

**Note:** Imaging reports must be verified. Local imaging policy for the RPMS RAD/NUC MED diagnostic code reports/alerts should be reviewed with the imaging department and medical staff if not currently configured or mapped.

Verified reports lacking an Abnormal Diagnostic Code will display for three months from the Exam Date.

Verified reports with an Abnormal Diagnostic Code for the following will be captured in the CCDA/TOC and PHR for 13 months from the Exam Date.

- BI-RAD 3
- BI-RAD 4
- BI-RAD 5
- MAJOR ABNORMALITY

The use and incorporation of the RPMS RAD/NUC MED Diagnostic Codes is a local decision and inclusion in the RPMS RAD/NUC MED REPORT and provider Alerts are defined and configured locally.

Contact the IHS IT Support at [itsupport@ihs.gov](mailto:itsupport@ihs.gov) for RA\_5.0\_1008 use and configuration questions.

## Appendix A 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 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><b>Note:</b> 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.

### A.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).

#### A.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.

### A.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.

### A.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.

#### A.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.

#### A.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.

### A.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).

### A.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.

### A.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.

### A.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.

### A.1.10 Session Timeouts

RPMS system implements system-based timeouts that back users out of a prompt after no more than 5 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.

### A.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.

### A.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.

### A.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.

## A.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.

## A.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

**AMIS Code**

AMIS (Automated Management Information System) is a general system of computer programs used to process management reports for the Veteran's Administration.

**Broker**

A piece of commercial hardware that is used for formatting and routing HL7 orders, exams, images, and reports between RPMS and modalities, PACS systems, and Radiology reporting services.

**CCDA**

The CCDA application is an RPMS-based application that generates industry-standard Continuity of Care Documents (CCD) in Health Level 7 (HL7) CCDA format, following the July 2012 Draft Standard for Trial Use (DSTU) standard, further restricted by Meaningful Use 2 (MU2) requirements.

**Diagnostic Code**

One of a standard set of codes used for designating the normality or abnormality of an exam.

**DICOM**

Digital Imaging and Communications in Medicine

**HL7**

Health Level 7 – a standard for the exchange of electronic information between disparate entities.

**IHS**

Indian Health Service

**Modality**

Radiology Equipment (CT/US/XRAY)

**Modality Worklist**

A list of procedures that may be performed on a particular piece of Radiology equipment. If a site has an interface with a Modality Worklist server, the worklist will be populated automatically when an order is registered in the Radiology Package.

**PACS**

Picture Archiving and Communication System

**Personal Health Record (PHR)**

Indian Health system patients can use PHR to view and manage personal, family, and community health information. Patients can track medicines, lab results, allergies, and more from the privacy of a personal computer.

**Quick Order**

One or more menu items to link a Radiology procedure to an orderable item in EHR.

**RIS**

Radiology Information System

**RPMS**

Resource and Patient Management System – The Clinical and Administrative Information System used by Indian Health Service.

**TOC**

Transition of Care Document generated in the RPMS/EHR for patient referral visits outside of an issuing IHS site and providing a summary of care.

**VistaA Imaging**

The VistaA Imaging system integrates clinical images, scanned documents, and other non-textual data into the patient's electronic medical record.

**WWU**

Weighted work units (WWUs). The AMIS Weight Multiplier field of the Rad/Nuc Med Procedures file contains a number (0–99) to indicate to the various workload report routines how many times to multiply the weighted work units associated with the AMIS code. The Weight for each AMIS code is stored in the Weight field of the Major Rad/Nuc Med AMIS Code file.

## Acronym List

Term	Meaning
ACR	American College of Radiologist
AMIS	Automated Management Information System
CAC	Clinical Application Coordinator
CCD	Continuity of Care Documents
CCDA	Consolidated Clinical Document Architecture
CHIT	Certified Health Information Technology
CISO	Chief Information Security Officer
CPT	Current Procedural Terminology
DICOM	Digital Imaging and Communications in Medicine
DTSU	Draft Standard for Trial Use
HIPAA	Health Insurance Portability and Accountability Act
HL7	Health Level Seven
ID	Identification
IHS	Indian Health Service
ISSO	Information System Security Officer ( )
IT	Information Technology
PACS	Picture Archiving and Communication System
PHR	Personal Health Record
ROB	Rules of Behavior
RPMS	Resource and Patient Management
SAC	Standards and Conventions
TOC	Transition of Care
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)

**Web:** <https://www.ihs.gov/itsupport/>

**Email:** [itsupport@ihs.gov](mailto:itsupport@ihs.gov)