



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Radiology/Nuclear Medicine

(RA)

Installation Guide and Release Notes

Version 5.0
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Preface

This guide contains complete instructions for installing the Radiology program version 5.0 and setting up the initial parameters for operation. Please refer to the technical manual, user's guide, and radiology supervisor's guide for further information about this program. The original VA manuals are also available, including the ADPAC (Application Coordinator) Manual.

1.0 Release Notes

1.1 Package Overview

The Resource and Patient Management System (RPMS) Radiology / Nuclear Medicine package is a comprehensive software package, designed to assist with the functions related to processing patients for imaging examinations. The Radiology / Nuclear Medicine package automates the entire range of diagnostic functions performed in imaging departments, including request entries by clinical staff, registration of patients for exams, processing of exams, recording of reports/results, verification of reports online, displaying/printing results for clinical staff, automatic tracking of requests/exams/reports, and generation of management statistics/reports, both recurring and ad hoc. The Radiology / Nuclear Medicine package automates many tedious tasks previously performed manually, providing faster, more efficient and accurate data entry and more timely results reporting.

The Radiology / Nuclear Medicine package is fully integrated with VA FileMan and provides certain patient demographic information supplied by the Patient Information Management System (PIMS) package. It also interacts with other RPMS packages to allow personnel to see patient medication histories, contrast media reactions (using the Adverse Reaction Tracking module), and laboratory test results that may influence the nature of an examination. Request entry has been incorporated in two ways: functionality within this package and an interface with the OERR/CPRS package, allowing online requesting of exams and viewing of reports. Information regarding each examination is stored by the system and may be compiled to produce a variety of reports necessary in carrying out daily business and for use by management in analyzing the workload. Information required to generate AMIS reports and resource allocation reports is also collected. The Radiology / Nuclear Medicine package supports the HL7 protocol. This allows the exchange of information concerning exam registration, cancellation, completion, and results (specifically reports and impressions) between the RPMS system and clients within or outside of RPMS.

1.2 Release Notes

The Radiology/Nuclear Medicine package is designed to assist with the functions related to processing patients for imaging examinations. The types of imaging exams supported are General Radiology, Nuclear Medicine, CT Scan, Magnetic Resonance Imaging, Angio/Neuro/Interventional, Ultrasound, Vascular Lab, Cardiology Studies, and Mammography.

One of the most significant enhancements to this version is a single combined report for a set of related procedures. This is a “printset” mechanism for entering a single report for all descendent cases registered from a parent order. (For more detailed information on parent procedures, see Procedure Enter/Edit in the radiology supervisor’s guide. Also, see the radiology supervisor’s guide for more information on Parent/Descendent Exams and Printsets.) The ability to report separately for each procedure ordered under a single parent procedure still exists.

Numerous other large and small enhancements have been added to this version, including:

- Online verification “STAT” category
- Ability to select and print multiple reports in “Select Report to Print by Patient”
- The Radiology/Nuclear Medicine package:
 - Allows for the initialization and maintenance of device specifications, timeout parameters, and other site manager functions
 - Provides the ability to establish site specific division, imaging location, and examination status parameters
 - Provides the ability to enter and edit examinations
 - Compiles information stored by the system into a variety of reports necessary to carry out daily business and for use by management in analyzing workload. These include daily, functional workload, personnel, and other special reports (e.g. AMIS).
 - Allows the grouping of results reports into distribution/routing queues which distribute reports to hospital locations
 - Allows for the online pre-verification by residents of transcribed reports
 - Allows for the online verification of transcribed reports
 - Provides for the registration and return of outside films
 - Provides the ability to view patient demographic and examination data
 - Provides the ability to establish site specific division, imaging location, and examination status parameters
 - Allows the creation of orderable items to be utilized through the OERR/CPRS package
 - Provides the ability to print jacket labels, worksheets, and flash cards
 - Integrates with VA FileMan and captures certain patient demographic information supplied by the Patient Information Management System (PIMS) package.
 - Interfaces with the OERR/CPRS package to support request entry and processing

- Interfaces with the Patient Care Component (PCC) package for the purpose of crediting outpatient imaging workload
- Interfaces with the Scheduling package for the purpose of capturing clinic stop codes and ambulatory procedures
- Interfaces with the Allergy/Adverse Reaction package for the purpose of capturing and displaying contrast media allergies and reactions.
- Allows the exchange of information concerning results (specifically reports and impressions) between the RPMS system and non-RPMS applications through the HL7 interface
- Provides mechanisms whereby personnel working in a given imaging department can enter, view, and report data separately from other imaging departments within the hospital
- Interfaces with the Health Summary package to print and display relevant medical histories
- Interfaces with the Imaging/Multi-Media package to store Image IDs on reports, displays 'i' in front of procedures for which Image IDs have been collected, provides HL7-formatted data upon exam registration, cancellation, completion, and report verification.

Note: The sample sessions in this manual may not be the same as sessions at your facility. This is due to variations in site parameters and changes due to software patches after release. For sessions that are likely to be significantly different from one site to another, sample sessions are not included in this manual.

2.0 Installation Notes

Prefix: RA

Current Version: 5.0

Note: Radiology v 4.5 is included for those sites still running Radiology v4.0

Read entire notes file prior to attempting any installation.

2.1 General Information

- Make a copy of this distribution for offline storage.
- Print all notes/readme files.
- It is recommended that the terminal output during the installation be captured using an auxport printer attached to the terminal at which you are performing the software installation. This will insure a printed audit trail if any problems should arise.

2.2 Contents of Distribution

Software Files:

File	Description
ra_0500pre.k	KIDS formatted Pre-Install File for v 4.5 and v 5.0
ra_0450.k	KIDS formatted Distribution File for Radiology v 4.5
ra_0450p.k	KIDS formatted Patch File for Radiology v 4.5
ra_0500cln.k	KIDS formatted Cleanup File for Radiology v 5.0
ra_0500.k	KIDS formatted Distribution File for Radiology v 5.0
ra_0500p.k	KIDS formatted Patch File for Radiology v 5.0
ra_0500post.k	KIDS formatted Post-Install for Radiology v 5.0

IHS Documentation:

File	Description
ra_050i.pdf	installation guide
ra_050t.pdf	technical manual
ra_050u.pdf	radiology user manual
ra_050o.pdf	radiology supervisor's guide

VA Documentation:

File	Description
ra5_0hl7.pdf	VA HL7 manual
ra5hl7is.pdf	VA HL7 Interface Specifications for Voice Recognition Dictation systems.
ra5_0um.pdf	VA User manual
ra5_0ig.pdf	VA Installation manual
RA5_OAG.pdf	VA ADPAC guide
ra5_0rn.pdf	VA release notes
ra5_0tm.pdf	VA technical manual
ra5_0ump20.pdf	VA user manual, patch 20
ra5_p2_ag.pdf	VA ADPAC guide, patch 2
ra_5_p3_ag.pdf	VA ADPAC guide, patch 3
ra_5_p3_tm.pdf	VA technical manual, patch 3
ra_5_p4_tm.pdf	VA technical manual, patch 4

2.3 Required Resources

- If running Radiology v 4.0, must have patch 10 installed
- Kernel v8.0 or later, must have patch 1008 installed
- FileMan v21 or later
- MailMan v7.1
- PIMS v5.3
- HL 7 v1.6, must have patch 1005 installed
- Lexicon v 2.0
- XB/ZIB v 3.0
- Adverse Reaction Tracking v4.0
- OE/RR v2.5

2.4 Before You Begin: Installation Issues

None

3.0 Installation Instructions

3.1 Summary of Pre-installation

The environment check routine (RAIENVCK) does the following:

1. Makes certain DUZ is set to an active user and DUZ(0)="@"
2. Checks environment for requirements in previous list.
3. Checks for existence of IHS patch RA*4.0*10
4. Checks File #79.2 for the existence of four entries:
5. Magnetic Resonance Imaging
6. Nuclear Medicine
7. Radiology
8. Ultrasound
9. Changes the name of the RADIOLOGY entry in the PACKAGE file (#9.4) to RADIOLOGY/NUCLEAR MEDICINE if the environment checks are satisfied.

Note: If steps 2 and 3 are not satisfied, the Distribution global, ^XTMP("XQOO", "RADIOLOGY/NUCLEAR MEDICINE 4.5", is deleted from the system and you will have to run the Load a Distribution option again.

The pre-installation routine (RAIPRE*) does the following:

1. Changes the name of the RADIOLOGY entry in the IMAGING TYPE file (#79.2) to GENERAL RADIOLOGY and changes its abbreviation from RA to RAD
2. Assigns an imaging type of GENERAL RADIOLOGY to all existing entries in the EXAMINATION STATUS file (#72)
3. Deletes the RA MOREMENUS option from the OPTION file (#19) and identifies users who were assigned that menu
4. Deletes the "C" cross-reference from File #72, and deletes the screen on the MODIFIERS field (#125) in the EXAMINATIONS multiple field (#50) of the RAD/NUC MED PATIENT file (#70)
5. Re-indexes the "AD" cross-reference on the REPORT DISTRIBUTION file (#74.4)

6. Deletes the MODIFIERS field (#12) and associated subfile from the RAD/NUC MED COMMON PROCEDURES file (#71.3)
7. Deletes the TYPE OF IMAGING field (#3) from the RAD/NUC MED PROCEDURE MODIFIERS file (#71.2)
8. Changes the names of package bulletins from "RADIOLOGY..." to "RAD/NUC MED..."
9. Deletes data from the CONTRAST MEDIUM ALLERGY field (#.05) in File #70 and deletes its data dictionary definition
10. Deletes the trigger cross-reference on the COMPLICATION field (#16) in the EXAMINATIONS multiple field (#50) in File #70
11. Deletes the "ATS" cross-reference on the NAME field (#.01) in File #70

3.2 Pre-Installation Instructions

Coordinate the installation with your radiology supervisor. There are many enhancements to this version, some requiring up front preparation by the radiology supervisor before this version is installed. For example, if the nuclear medicine data collection features are going to be used, the radiology supervisor will have to work with the pharmacy supervisor to make sure all radiopharmaceuticals used at the site have been added to the Drug file. (See the Implementation Check List in the Radiology/Nuclear Medicine radiology supervisor's guide.)

The package will be installed using Kernel Installation and Distribution system (KIDS).

The pre-install deletes the old templates.

1. If this is a virgin installation, you may skip this step. If the site is running Radiology v 4.0, make certain that patch RA*4.0*10 was installed.
2. If this is a virgin installation, you may skip this step. If you are currently at version 4.0, make certain the following entries are among those in the Imaging Type file (#79.2):
 - Magnetic Resonance Imaging
 - Nuclear Medicine
 - Radiology
 - Ultrasound

If they do not exist, contact the ITSC Service Center. The environment check routine requires the conditions in steps 2 in order to run the installation.

3. Schedule downtime with the package and voice recognition system users. This installation will put RA namespaced options and protocols out of service for the duration of the installation. Please refer to the Test Site Install Times chart in section 6.0 for a sample of installation and cleanup times. The cleanup runs in the background. The cleanup run time depends largely on how many entries are in File #74.4. The cleanup process must be completed before you proceed with installing patches. Use the KIDS Install File Print option to display the entry for Radiology/Nuclear Medicine Cleanup 5.0. You should see a section that states: "RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0 is running in background. Task: NNNN". Use Taskman option, List Tasks, and check to see if the designated task is still listed under Running Tasks.
4. Six bulletins are exported with this package. These bulletins are generated when an important action happens, such as the deletion of an exam. Consult with the radiology supervisor to determine how many Radiology/Nuclear Medicine package related mail groups should exist and what mail group(s) should be associated with each bulletin. If this is not a virgin installation, you may not need to make any changes. For more information on bulletins and mail groups, see Section 5.3 of this manual.
5. Use the Distribution Queue Purge [RA RPTDISTPURGE] option to purge distribution files of printed reports in the Report Distribution Queue file #74.4. This will help to minimize the CPU time needed to run the clean-up programs. The entries in this file are only pointers to the real report records. Sites not using distribution queues may have zero entries in this file. If there are zero entries in File #74.4, skip to step 7.
6. After the purge completes, determine the number of entries in the Report Distribution file #74.4. Using the VA FileMan Inquire option, type 74.4 at the Output From What File prompt. VA FileMan should display the number of entries in the file. Use an "^" to exit the option.

Note: If you have a large number of entries (e.g., more than 10,000), you may want to use the Rebuild Distribution Queues [RA RPTDISTREBUILD] option and enter a date within the last 45 days. The purpose of this is to reduce the volume of data that must be processed by the clean-up programs.

7. Use the global placement utilities to create and place the new ^RADPTN global. The following globals must be translated for multiple CPUs:
 - ^RA
 - ^RABTCH
 - ^RADPT

- ^RADPTN (new global)
- ^RAMIS
- ^RAO
- ^RARPT

4.0 Sample Installations

4.1 Installation Instructions

This guide can be used to install the package into either a test or production account. The following table indicates which steps are appropriate for the installation. You will probably wish to install the package in your test account first.

Step	Description	Test	Prod
1.	Make sure the Radiology/Nuclear Medicine (or Imaging Service) and voice recognition system users are off the system. Clinicians should stop ordering Rad/Nuc Med procedures the install. On MSM systems, the installation process will prompt you to move the package's routines to other CPUs. If you inhibit logons to the CPUs receiving the routines, you must shutdown TaskMan; otherwise, the routines will not be moved.		P
2.	Backup the system.		P
3.	Disable mapping for RA* routines, if applicable.		P
4.	Disable journalling, if applicable (RA* globals).		P
5.	Stop all tasked jobs in the RA* namespace. Taskman should be up and running during this install.		
6.	SKIP TO STEP 11 IF YOU ARE STARTING FROM V 4.5 Delete existing RA namespaced routines Use the routine deletion method you are most comfortable with.	T	P
	Example: D ^%RDELETE ROUTINE DELETE routine (s) ? > RA* routine (s) ? > <RET> nnn routines to DELETE, OK: NO// YES (On Open M, you get a Device: prompt)		
7.	Sign into the account where the package is installed. Make certain your DUZ variable is set to a valid user number and DUZ(0) equals "@". The environment check routine requires this. Invoke the KIDS menu (XPD Installation Menu option). This installation assumes TaskMan is running.	T	P
8.	Load and install ra_0500pre.k	T	P

- | | | | |
|-----|--|---|---|
| 9. | Load and install ra_0450.k | T | P |
| 10. | Load and install ra_0450p.k | T | P |
| 11. | Delete existing RA namespaced routines Use the routine deletion method you are most comfortable with. ***DO NOT SKIP EVEN IF YOU DELETED RA NAMESPACED ROUTINE WHEN YOU INSTALLED V 4.5*** | T | P |

Example:

```
D ^%RDELETE
```

```
ROUTINE DELETE
```

```
routine (s) ? > RA*
routine (s) ? > <RET>
```

nnn routines to DELETE, OK: NO// YES (On Open M, you get a Device: prompt)

12. Sign into the account where the package is installed. Make certain your DUZ variable is set to a valid user number and DUZ(0) equals "@". The environment check routine requires this. Invoke the KIDS menu (XPD Installation Menu option).

Load and install ra_0500pre.k. ***Skip this step if already done as part of v 4.5 install.***

- | | | | |
|-----|----------------------------------|---|---|
| 13. | Load and install Radiology v 5.0 | T | P |
|-----|----------------------------------|---|---|

There are two (2) builds that must be loaded. Only one build needs to be installed — it queues the cleanup.

First, use the Load a Distribution option to load: ra_0500cln.k

Then use the same option to load: ra_0500.k

Use the Install Package(s) option to install: RADIOLOGY/NUCLEAR MEDICINE 5.0

This installation assumes TaskMan is running.

Note: The installation example dialogue that follows may vary depending on the system you have (Alpha or Open-M) and the additional work that must be done in the pre- and post-installation process. See examples of installations in section 4.2.

- | | | |
|-----|--|---|
| 14. | Check the KIDS Install File Print in the Utilities menu to verify successful completion of this Radiology/Nuclear Medicine V. 5.0 install. | P |
|-----|--|---|

- | | | |
|-----|--|-----|
| 15. | If your site is running the Imaging package with interfaces, you need to update copies of Radiology/Nuclear Medicine V. 4.0 routines that may exist on the DICOM server and/or Imaging workstations. These routines must also be updated if they are affected by future patches. | P |
| 16. | The KIDS cleanup install, RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0, will run in the background. It should take less than an hour unless your site has very large numbers of records in Files #74.4, #70, and #74. Use the KIDS Install File Print option under the Utilities Menu to check on the progress and completion of the cleanup install. If there are errors, you should fix the data problems, and then restart the cleanup install through the KIDS Restart Install of Package(s) option. | T P |

NOTE: The cleanup process must be completed before you proceed with installing patches. Use the KIDS Install File Print option to display the entry for Radiology/Nuclear Medicine Cleanup 5.0. You should see a section that states: "RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0 running in background. Task: NNNN". Use Taskman option, List Tasks, and check to see if the designated task is still listed under Running Tasks.

17. Load and install ra_0500p.k
 18. Load and install ra_0500post.k

4.2 Sample Installations

4.2.1 Virgin Install

```
D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT320

Select OPTION NAME: EVE          Systems Manager Menu

      Core Applications ...
      Device Management ...
FM   VA FileMan ...
      Manage Mailman ...
      Menu Management ...
      Programmer Options ...
      Operations Management ...
      Spool Management ...
      System Security ...
      Taskman Management ...
      User Management ...
      Application Utilities ...
      Capacity Management ...
```

```

MailMan Menu ...
Select Systems Manager Menu Option: Programmer Options

KIDS  Kernel Installation & Distribution System ...
NTEG  Build an 'NTEG' routine for a package
PG    Programmer mode
      Calculate and Show Checksum Values
      Delete Unreferenced Options
      Error Processing ...
      Global Block Count
      List Global
      Map Pointer Relations
      Number base changer
      Routine Tools ...
      Test an option not in your menu
      Verifier Tools Menu ...
Select Programmer Options Option: KIDS  Kernel Installation & Distribution
System

      Edits and Distribution ...
      Utilities ...
      Installation ...

Select Kernel Installation & Distribution System Option: Installation

1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution
Select Installation Option: Load a Distribution
Enter a Host File: ra_0500cln.k

KIDS Distribution saved on Jun 24, 1997@10:59:58
Comment: Radiology/Nuclear Medicine 5.0 Cleanup from our export account

This Distribution contains Transport Globals for the following Package(s):
      RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0

Want to Continue with Load? YES// <RET>

Loading Distribution...

Want to RUN the Environment Check Routine? YES// <RET>
      RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0
Will first run the Environment Check Routine, RAIENV

      This build will be queued to run from the RADIOLOGY/NUCLEAR MEDICINE
      5.0 build.  RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0 cannot be run
      independently.

Use INSTALL NAME: RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0 to install this
Distribution.

Select Installation Option: ?

1      Load a Distribution

```

```

2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help
text.

Select Installation Option: Load a Distribution
Enter a Host File: ra_0500.k

KIDS Distribution saved on Jun 24, 1997@11:01:39
Comment: Radiology/Nuclear Medicine 5.0 from our export account

This Distribution contains Transport Globals for the following Package(s):
      RADIOLOGY/NUCLEAR MEDICINE 5.0

Want to Continue with Load? YES// <RET>
Loading Distribution...

Want to RUN the Environment Check Routine? YES// <RET>
      RADIOLOGY/NUCLEAR MEDICINE 5.0
Will first run the Environment Check Routine, RAIENVCK

Use INSTALL NAME: RADIOLOGY/NUCLEAR MEDICINE 5.0 to install this
Distribution.

1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation Option: 6  Install Package(s)
Select INSTALL NAME:      RADIOLOGY/NUCLEAR MEDICINE 5.0      Loaded from
Distribution 6/3/97@17:09:39
      => Rad/Nuc Med v5.0 for export to the field. ;Created on May 29,
1997@

This Distribution was loaded on Jun 03, 1997@17:09:39 with header of
Rad/Nuc Med v5.0 for export to the field. ;Created on May 29, 1997@10:40
It consisted of the following Install(s):
RADIOLOGY/NUCLEAR MEDICINE 5.0

      RADIOLOGY/NUCLEAR MEDICINE 5.0

Will first run the Environment Check Routine, RAIENVCK

```

Note: If you choose to disable options and protocols, you will see a series of questions about which options and protocols to mark as 'out of order' and how long you want to delay the install.

Enter the Device you want to print the Install messages.

```
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.
```

```
DEVICE: HOME// (Enter a device name)
```

Note: If TaskMan is running, you may wish to queue the installation in order to use the terminal for other tasks.

4.2.2 Update from Version 4.5

The following example is taken from an installation on an Open M system. Quotes enclosing messages may not appear on your system and messages may change depending on the data at your facility.

```
D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT320

Select OPTION NAME: EVE          Systems Manager Menu

      Core Applications ...
      Device Management ...
FM   VA FileMan ...
      Manage Mailman ...
      Menu Management ...
      Programmer Options ...
      Operations Management ...
      Spool Management ...
      System Security ...
      Taskman Management ...
      User Management ...
      Application Utilities ...
      Capacity Management ...
      MailMan Menu ...

Select Systems Manager Menu Option: Programmer Options

KIDS  Kernel Installation & Distribution System ...
NTEG  Build an 'NTEG' routine for a package
PG    Programmer mode
      Calculate and Show Checksum Values
      Delete Unreferenced Options
      Error Processing ...
      Global Block Count
      List Global
      Map Pointer Relations
      Number base changer
      Routine Tools ...
      Test an option not in your menu
      Verifier Tools Menu ...

Select Programmer Options Option: KIDS  Kernel Installation & Distribution
System

      Edits and Distribution ...
      Utilities ...
      Installation ...
```

```

Select Kernel Installation & Distribution System Option: Installation
Select Installation Option: Load a Distribution
Enter a Host File: ra_0500cln.k

"KIDS Distribution saved on Sep 30, 1997@11:39:17"
Comment: Rad/Nuc Med Cleanup version 5.0

This Distribution contains Transport Globals for the following Package(s):
    RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0

Want to Continue with Load? YES// <RET>
Loading Distribution...

Want to RUN the Environment Check Routine? YES// <RET>
    RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0
"Will first run the Environment Check Routine, RAIENV"

    This build will be queued to run from the RADIOLOGY/NUCLEAR MEDICINE
    5.0 build. RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0 cannot be run
    independently.

Use INSTALL NAME: RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0 to install this
Distribution.

Select Installation Option: Load a Distribution
Enter a Host File: ra_0500.k

"KIDS Distribution saved on Sep 30, 1997@11:45:18"
Comment: Rad/Nuc Med version 5.0

This Distribution contains Transport Globals for the following Package(s):
    RADIOLOGY/NUCLEAR MEDICINE 5.0

Want to Continue with Load? YES// <RET>
Loading Distribution...

Want to RUN the Environment Check Routine? YES// <RET>
    RADIOLOGY/NUCLEAR MEDICINE 5.0
"Will first run the Environment Check Routine, RAIENVCK"

Use INSTALL NAME: RADIOLOGY/NUCLEAR MEDICINE 5.0 to install this
Distribution.

1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
       Restart Install of Package(s)
       Unload a Distribution

```

Note: At this point, you may also want to run the Verify Checksums in Transport Global option. If any of the routine checksums fail, contact your Area office and do not proceed with the installation process.

```
Select Installation Option: Install Package(s)
```

```
Select INSTALL NAME:    RADIOLOGY/NUCLEAR MEDICINE 5.0 Loaded from Dis-
tribution 10/2/97@14:06:15
```

```
"This Distribution was loaded on Oct 02, 1997@14:06:15 with header of "
"Rad/Nuc Med version 5.0;Created on Sep 30, 1997@"
11:45:18
```

```
It consisted of the following Install(s):
```

```
RADIOLOGY/NUCLEAR MEDICINE 5.0
```

```
    RADIOLOGY/NUCLEAR MEDICINE 5.0
```

```
"Will first run the Environment Check Routine, RAIENVCK"
```

```
Install Questions for RADIOLOGY/NUCLEAR MEDICINE 5.0
```

```
Incoming Files:
```

```
    34          CONTRACT/SHARING AGREEMENTS
```

```
Note:  You already have the 'CONTRACT/SHARING AGREEMENTS' File.
```

```
    70          RAD/NUC MED PATIENT
```

```
Note:  You already have the 'RAD/NUC MED PATIENT' File.
```

```
    70.2        NUC MED EXAM DATA
```

```
    71          RAD/NUC MED PROCEDURES (including data)
```

```
Note:  You already have the 'RAD/NUC MED PROCEDURES' File.
Data will NOT be added.
```

```
    71.1        MAJOR RAD/NUC MED AMIS CODES (including data)
```

```
Note:  You already have the 'MAJOR RAD/NUC MED AMIS CODES' File.
Data will NOT be added.
```

```
    71.2        PROCEDURE MODIFIERS (including data)
```

```
Note:  You already have the 'PROCEDURE MODIFIERS' File.
Data will NOT be added.
```

```
    71.3        RAD/NUC MED COMMON PROCEDURE
```

```
Note:  You already have the 'RAD/NUC MED COMMON PROCEDURE' File.
```

```
    71.4        RAD/NUC MED PROCEDURE MESSAGE
```

```
Note:  You already have the 'RAD/NUC MED PROCEDURE MESSAGE' File.
```

```
    71.5        IMAGING STOP CODES
```

```
Note:  You already have the 'IMAGING STOP CODES' File.
```

```
    71.6        ROUTE OF ADMINISTRATION (including data)
```

```
    71.7        SITE OF ADMINISTRATION (including data)
```

```
    71.8        RADIOPHARMACEUTICAL SOURCE
```

```
    71.9        RADIOPHARMACEUTICAL LOT
```

```
    72          EXAMINATION STATUS (including data)
```

```
Note:  You already have the 'EXAMINATION STATUS' File.
Data will NOT be added.
```

```
    74          RAD/NUC MED REPORTS
```

```
Note:  You already have the 'RAD/NUC MED REPORTS' File.
```

```
    74.1        STANDARD REPORTS
```

```
Note: You already have the 'STANDARD REPORTS' File.

74.2 REPORT BATCHES
Note: You already have the 'REPORT BATCHES' File.

74.3 REPORT DISTRIBUTION QUEUE (including data)
Note: You already have the 'REPORT DISTRIBUTION QUEUE' File.
I will MERGE your data with mine.

74.4 REPORT DISTRIBUTION
Note: You already have the 'REPORT DISTRIBUTION' File.

75.1 RAD/NUC MED ORDERS
Note: You already have the 'RAD/NUC MED ORDERS' File.

75.2 RAD/NUC MED REASON (including data)
Note: You already have the 'RAD/NUC MED REASON' File.
Data will NOT be added.

78.1 COMPLICATION TYPES (including data)
Note: You already have the 'COMPLICATION TYPES' File.
Data will NOT be added.

78.2 LBL/HDR/FTR FORMATS_
*BUT YOU ALREADY HAVE 'FLASH CARD FORMATS' AS FILE #78.2!
Shall I write over your FLASH CARD FORMATS File? YES// <ret>

78.3 DIAGNOSTIC CODES (including data)
Note: You already have the 'DIAGNOSTIC CODES' File.
Data will NOT be added.

78.4 FILM SIZES
Note: You already have the 'FILM SIZES' File.

78.6 CAMERA/EQUIP/RM
Note: You already have the 'CAMERA/EQUIP/RM' File.

78.7 LABEL PRINT FIELDS (including data)
Note: You already have the 'LABEL PRINT FIELDS' File.
I will OVERWRITE your data with mine.

79 RAD/NUC MED DIVISION
Note: You already have the 'RAD/NUC MED DIVISION' File.

79.1 IMAGING LOCATIONS
Note: You already have the 'IMAGING LOCATIONS' File.

79.2 IMAGING TYPE (including data)
Note: You already have the 'IMAGING TYPE' File.
I will MERGE your data with mine.

101 PROTOCOL (including data)
Note: You already have the 'PROTOCOL' File.
Data will NOT be added.

200 NEW PERSON (Partial Definition)
Note: You already have the 'NEW PERSON' File.
"Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES//<ret>
"

Enter options you wish to mark as 'Out Of Order': RA*
```

```

Enter options you wish to mark as 'Out Of Order': -DI*
Enter options you wish to mark as 'Out Of Order': <ret>
Enter protocols you wish to mark as 'Out Of Order': RA*
Enter protocols you wish to mark as 'Out Of Order': <ret>
Delay Install (Minutes): (0-60): 0// <ret>
Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME// (Spoolfile)

PACKAGE: RADIOLOGY/NUCLEAR MEDICINE 5.0T10      Oct 08, 1997 9:34 am  PAGE
1
                                           COMPLETED      ELAPSED
-----
--
STATUS: Install Completed                    DATE LOADED: OCT 02,
1997@14:06:15
INSTALLED BY: TAYLOR,JANEY
NATIONAL PACKAGE: RADIOLOGY/NUCLEAR MEDICINE

INSTALL STARTED: OCT 02, 1997@14:17          14:17:31          0:00:31
ROUTINES:                                     14:17:04          0:00:04

PRE-INIT CHECK POINTS:
XPD PREINSTALL STARTED                       14:17:04
PREA1                                         14:17:04
PREA2                                         14:17:04
PREA4                                         14:17:04
PREA10                                        14:17:05          0:00:01
PREA11                                        14:17:05
PREB1                                         14:17:05
PREB2                                         14:17:05
PREB3                                         14:17:05
PREB4                                         14:17:05
PREB5                                         14:17:05
PREB7                                         14:17:05
XPD PREINSTALL COMPLETED                   14:17:05

FILES:
CONTRACT/SHARING AGREEMENTS                 14:17:05
RAD/NUC MED PATIENT                          14:17:06          0:00:01
NUC MED EXAM DATA                          14:17:06
RAD/NUC MED PROCEDURES                      14:17:06
MAJOR RAD/NUC MED AMIS CODES                14:17:06
PROCEDURE MODIFIERS                         14:17:06
RAD/NUC MED COMMON PROCEDURE                14:17:06
RAD/NUC MED PROCEDURE MESSAGE               14:17:06
IMAGING STOP CODES                          14:17:06
ROUTE OF ADMINISTRATION                     14:17:06
SITE OF ADMINISTRATION                       14:17:07          0:00:01

```

```

RADIOPHARMACEUTICAL SOURCE          14:17:07
RADIOPHARMACEUTICAL LOT              14:17:07
EXAMINATION STATUS                   14:17:07
RAD/NUC MED REPORTS                  14:17:07
STANDARD REPORTS                     14:17:07
REPORT BATCHES                       14:17:07
REPORT DISTRIBUTION QUEUE            14:17:07
REPORT DISTRIBUTION                   14:17:07
RAD/NUC MED ORDERS                    14:17:08          0:00:01
RAD/NUC MED REASON                    14:17:08
COMPLICATION TYPES                   14:17:08
LBL/HDR/FTR FORMATS                  14:17:08
DIAGNOSTIC CODES                     14:17:08
FILM SIZES                            14:17:08
CAMERA/EQUIP/RM                      14:17:08
LABEL PRINT FIELDS                   14:17:08
RAD/NUC MED DIVISION                 14:17:08
IMAGING LOCATIONS                    14:17:08
IMAGING TYPE                          14:17:08
NEW PERSON                            14:17:10          0:00:02

BULLETIN                             14:17:12          0:00:02
SECURITY KEY                          14:17:12
FUNCTION                               14:17:12
PRINT TEMPLATE                         14:17:13          0:00:01
SORT TEMPLATE                          14:17:13
INPUT TEMPLATE                         14:17:16          0:00:03
HL7 APPLICATION PARAMETER             14:17:16
PROTOCOL                              14:17:16
OPTION                                 14:17:27          0:00:11

POST-INIT CHECK POINTS:
XPD POSTINSTALL STARTED              14:17:27
POST1                                 14:17:27
POST2                                 14:17:27
POST3                                 14:17:28          0:00:01
POST31
POST311
POST4                                 14:17:28
POST7                                 14:17:28
POST8                                 14:17:28
POST9                                 14:17:28
POST10                                14:17:29          0:00:01
POSTCLN                               14:17:29
POST11                                14:17:29
POST13                                14:17:29
XPD POSTINSTALL COMPLETED           14:17:29

INSTALL QUESTION PROMPT
ANSWER

XPF78.2#1  Shall I write over your FLASH CARD FORMATS File          YES
XPZ1  Want to DISABLE Scheduled Options, Menu Options, and Protocols NO
MESSAGES:

  Install Started for RADIOLOGY/NUCLEAR MEDICINE 5.0T10 :
    Oct 02, 1997@14:17

  Installing Routines:
    Oct 02, 1997@14:17:04

```

```
Running Pre-Install Routine: ^RAIPRE

Deleting obsolete Stop Codes multiple from Rad/Nuc Med Procedures
data dictionary. Deleting Stop Code data from the Rad/Nuc Med
Procedures file. Please be patient, this may take a while.

Deleting obsolete Principal Clinic field from Imaging Locations data
dictionary. Deleting Principal Clinic data from the Imaging Locations
file.

Deleting obsolete Common Procedure Group field from Rad/Nuc Med
Common Procedure data dictionary. Deleting Common Procedure
Group data from the Rad/Nuc Med Common Procedure file.

Deleting obsolete Input Devices multiple from Imaging Locations
data dictionary. Deleting Imaging Devices data from the
Imaging Locations file.

Deleting obsolete Device Assignment Explanation word processing field
from Imaging Type data dictionary. Deleting Device Assignment
Explanation data from the Imaging type file.

Deleting obsolete Allow 'VA' Patient Entry field from Rad/
Nuc Med Division data dictionary. Deleting Allow 'VA'
Patient Entry data from the Rad/Nuc Med Division file.

Deleting obsolete Allow 'NON-VA' Patient Entry field from
Rad/Nuc Med Division data dictionary. Deleting Allow 'NON-
VA' Patient Entry data from the Rad/Nuc Med Division file.

Deleting obsolete Ask 'Requesting Physician' field from
Rad/Nuc Med Division data dictionary. Deleting Ask 'Requ-
esting Physician' data from the Rad/Nuc Med Division file.

Deleting obsolete LAST DFN CONVERTED (75.1) field from
RAD/NUC MED DIVISION data dictionary.
Deleting LAST DFN CONVERTED (75.1) data from the
RAD/NUC MED DIVISION file. Division: PRESCOTT, AZ

Deleting obsolete CONVERSION START TIME (75.1) field from
RAD/NUC MED DIVISION data dictionary.
Deleting CONVERSION START TIME (75.1) data from the
RAD/NUC MED DIVISION file. Division: PRESCOTT, AZ

Deleting obsolete CONVERSION STOP TIME (75.1) field from
RAD/NUC MED DIVISION data dictionary.
Deleting CONVERSION STOP TIME (75.1) data from the
RAD/NUC MED DIVISION file. Division: PRESCOTT, AZ

Deleting obsolete LAST DFN CONVERTED (70) field from
RAD/NUC MED DIVISION data dictionary.
Deleting LAST DFN CONVERTED (70) data from the
RAD/NUC MED DIVISION file. Division: PRESCOTT, AZ

Deleting obsolete CONVERSION START TIME (70) field from
RAD/NUC MED DIVISION data dictionary.
Deleting CONVERSION START TIME (70) data from the
RAD/NUC MED DIVISION file. Division: PRESCOTT, AZ

Deleting obsolete CONVERSION STOP TIME (70) field from
RAD/NUC MED DIVISION data dictionary.
```

```
Deleting CONVERSION STOP TIME (70) data from the
RAD/NUC MED DIVISION file.  Division: PRESCOTT, AZ

Changing name of Label Print Field (file: 78.7)
from: 'RADIOLOGY LOCATION' to 'IMAGING LOCATION'

Un-compiling the RA STATUS CHANGE input template on the
Rad/Nuc Med Patient file.

Compiled input template routines for: RA STATUS CHANGE (RACTK*)
exist on the system.  These namespaced routines should be purged.

Un-compiling the RA EXAM EDIT input template on the
Rad Nuc/Med Patient file.

Compiled input template routines for: RA EXAM EDIT (RACTEX*)
exist on the system.  These namespaced routines should be purged.

Installing Data Dictionaries:
      Oct 02, 1997@14:17:10

Installing Data:
      Oct 02, 1997@14:17:11

Installing PACKAGE COMPONENTS:

Installing BULLETIN

Installing SECURITY KEY

Installing FUNCTION

Installing PRINT TEMPLATE

Installing SORT TEMPLATE

Installing INPUT TEMPLATE

Installing HL7 APPLICATION PARAMETER

Installing PROTOCOL

Installing OPTION
      Oct 02, 1997@14:17:27

Running Post-Install Routine: ^RAIPST
Option 'RA SIGN-ON MSG' IS NOW UNDER option 'XU USER SIGN-ON'
Deleting obsolete *CREDIT CLINIC STOP data dictionary and
Descriptor nodes from Major Rad/Nuc Med AMIS Codes file

Converting free-text pointer data in the REQUIRED FLASH CARD PRINTER
field of the Rad/Nuc Med Procedures file to regular pointers to the
Device file.

If you receive a message(s) similar to the following two, contact the ADPAC
to determine whether printers are needed in the Imaging Location(s).

'1' could not be found in the "B" cross-reference
of the Device File (3.5)!  Deleting '1' from the
'REQUIRED FLASH CARD PRINTER' field of Rad/Nuc Med Procedure
PNEUMOENCEPHALOGRAM S&I
```

'1' could not be found in the "B" cross-reference of the Device File (3.5)! Deleting '1' from the 'REQUIRED FLASH CARD PRINTER' field of Rad/Nuc Med Procedure MANDIBLE 4 OR MORE VIEWS

Converting free-text pointer data for fields: FLASH CARD PRINTER NAME, JACKET LABEL PRINTER NAME, REPORT PRINTER NAME and REQUEST PRINTER NAME in the Imaging Locations file to regular pointers to the Device file.

Converting ALLOW 'RELEASED/UNVERIFIED' data from the Rad/Nuc Med Division file to the new ALLOW 'RELEASED/UNVERIFIED' field on the Imaging Locations file.

Deleting obsolete ALLOW 'RELEASED/UNVERIFIED' field from Rad/Nuc Med Division file.

Correcting values in the REPORT RIGHT MARGIN field of all entries in the IMAGING LOCATIONS file.

Add Exam Statuses with an Imaging Type of 'Mammography'. Exam Statuses created: Cancelled; Waiting For Exam; Called For Exam; Examined; Transcribed and Complete.

The processing routine for the 'ORU' HL7 Message Type has been changed from 'RAHLO' to 'RAHLBKVR'.

Updating Routine file...

The following Routines were created during this install:

RACTRG
RACTRG1
RACTRG10
RACTRG11
RACTRG12
RACTRG2
RACTRG3
RACTRG4
RACTRG5
RACTRG6
RACTRG7
RACTRG8
RACTRG9
RACTWR
RACTWR1
RACTWR2
RACTWR3
RACTWR4
RACTWR5
RACTTK
RACTTK1
RACTTK10
RACTTK11
RACTTK12
RACTTK13
RACTTK14
RACTTK15
RACTTK16
RACTTK17
RACTTK18
RACTTK19

```
RACTTK2
RACTTK20
RACTTK3
RACTTK4
RACTTK5
RACTTK6
RACTTK7
RACTTK8
RACTTK9
RACTVR
RACTVR1
RACTVR2
RACTVR3
RACTVR4
RACTEX
RACTEX1
RACTEX10
RACTEX11
RACTEX12
RACTEX13
RACTEX14
RACTEX15
RACTEX16
RACTEX17
RACTEX18
RACTEX2
RACTEX3
RACTEX4
RACTEX5
RACTEX6
RACTEX7
RACTEX8
RACTEX9
RACTOE
RACTOE1
RACTOE2
RACTOE3
RACTOE4
RACTOE5
RACTOE6
RACTOE7
RACTOE8
RACTQE
RACTQE1
RACTQE2
RACTQE3
RACTQE4
RACTQE5
RACTQE6

Updating KIDS files...

RADIOLOGY/NUCLEAR MEDICINE 5.0T10 Installed.
      Oct 02, 1997@14:17:31

Install Message sent #2494480
Install Completed
```

5.0 Installation Configuration

5.1 Summary of Post-Installation

The post-installation routines (RAIPST*) do the following:

1. Identifies users who are classified as both Resident and Staff and removes the Resident classification
2. Deletes File #72 entries of the imaging type GENERAL RADIOLOGY which were not on the system before the initialization process began
3. Populates the new TYPE OF IMAGING multiple field (#3) in File #71.2
4. Kills and re-indexes the "B" and "C" cross-references on the RAD/NUC MED PROCEDURES file (#71)
5. Kills and re-indexes the "BIMG" cross-reference on the IMAGING LOCATIONS file (#79.1)
6. Kills and re-indexes the "ASTAT" cross-reference on the RAD/NUC MED REPORTS file (#74)
7. Kills and re-indexes the "AIMG" cross reference on File #71
8. Kills and re-indexes the "AA" cross-reference on File #71.3
9. Sends a message with all the Radiology/Nuclear Medicine procedures to the Order Entry/Results Reporting (OE/RR) package, if OE/RR V. 3.0 is installed
10. Adds data to the new STOP CODES multiple field (#160) in the RAD/NUC MED PROCEDURES file (#71)
11. Deletes the CREDIT CLINIC STOP filed (#3) of File #71.1 and all its Stop Code entries.

5.2 Setup Instructions

Step	Description	Test	Prod
1.	Enable journaling, if applicable. The following globals are recommended for journaling: ^RA ^RABTCH ^RADPT ^RADPTN (new global) ^RAMIS		P

- ^RAO
^RARPT
2. Move the Radiology/Nuclear Medicine routines onto all your systems, if applicable. P

 3. Enable routine mapping, if applicable. The following routines are recommended for mapping: P
RABTCH* RACNLU RACT* RADEM* RADPA
RAEDCN* RAEDPT RAFLH* RAHL* RAJAC
RAORD* RAPROD*RAPROQ RAPSET* RAPTLU
RAREG* RART* RASERV RASTED RASTEXT*
RASTREQ* RAUTL*

 4. You must also: T P
Define at least one division for your site (File #79)
Assign the RA OVERALL menu to the radiology supervisor
Assign the three RA security keys (RA ALLOC, RA MGR, AND RA VERIFY) to the radiology supervisor
Specify devices to print flash cards, jacket labels, and reports (see the Implementation and Maintenance section of the technical manual for more information on how to do this)
Enter a mail group name for each one of the six bulletins exported see section 5.3.
Add the RA OVERALL menu to AKMOCORE menu
Update the 'CHART# OF PATIENT (IHS)' entries contained in the LBL/HDR/FTR FORMAT file. See section 5.4.
Please see the Radiology Supervisors Manual for more setup details

 5. If this is a virgin installation you may skip this step. Use the Imaging Type Mismatch Report option to obtain a printout of all cases where the Imaging Type of the visit does not match the Imaging Type of the current exam status. This option stands alone; it is not on any Radiology/Nuclear Medicine menu. Give this printout to the radiology supervisor. The radiology supervisor should edit these cases to 'Complete' as soon as possible to correct the exam status. The mismatch condition should only exist on cases not yet completed at the time V. 4.5 is installed. If not corrected, the mismatches will lead to inaccurate counts on workload reports that depend on the examination status parameters to determine which statuses are included in which reports. P

 6. If this is a virgin installation you may skip this step. If any users had the RA MOREMENUS option, you should delete that "broken" pointer from their primary or secondary menu. A list of these users, if any, appears in the post-installation dialogue. T P

 7. There is a new feature in this version to print a bar coded SSN on the request form. If your facility would like bar codes to appear on the request form you must enter the correct set-up data in the BAR CODE P

ON (#60) and BAR CODE OFF (#61) fields of the TERMINAL TYPE file (#3.2) entry for the request form printer that was entered in the REQUEST PRINTER NAME field (#16) of the IMAGING LOCATIONS file (#79.1). Repeat this step for each imaging location entry that wishes to print bar-coded SSNs. If the radiology supervisor plans on configuring label formats to use the barcoded label fields that are available, you will also have to enter the correct set-up data in the BAR CODE ON and BAR CODE OFF fields for the affected label and flash card printers. For some printers a special cartridge must be purchased to support bar code printing.

- | | | | |
|-----|--|---|---|
| 8. | Set the SUPPRESS FORM FEED AT CLOSE field (#11.2) in the DEVICE file (#3.5) to 'No' for the device used to print Radiology/Nuclear Medicine reports (File #79.1, field #10 - REPORT PRINTER NAME). Repeat this step for each imaging location entry. | T | P |
| 9. | If your Rad/Nuc Med service wants to print cancelled requests, you will need to enter the devices on which they should print. Use the Device Specifications for Imaging Locations [RA DEVICE] option under the IRM Menu [RA SITEMANAGER]. | T | P |
| 10. | Using the same option, Device Specifications for Imaging Locations, enter printers for each nuclear medicine imaging location where dosage tickets need to be printed. | | P |
| 11. | Review the messages in the KIDS Install File print with your radiology supervisor. Some adjustments may be needed if the label or report printer's data could not be resolved, or if any other messages indicate a problem. | | P |
| 12. | Further implementation can be done by the package radiology supervisor using the Implementation Check List in the radiology supervisor guide. | T | P |

The KIDS Distributions, ^XTMP("XQOO", "RADIOLOGY/NUCLEAR MEDICINE CLEANUP 5.0") and ^XTMP("XQOO","RADIOLOGY/NUCLEAR MEDICINE 5.0"), occupy approximately 2 megabytes of disk space and are deleted upon successful completion of the installation process.

Use the KIDS Build File Print option if you wish to obtain a complete listing of package components (e.g., routines and options) sent with this Distribution file.

Use the KIDS Install File Print option if you wish to print out the results of the installation process. You will need to retrieve the two install results separately.

A summary of installation times at the test sites can be found in section 6.0.

Please refer to the HL7 package documentation and the Radiology/Nuclear Medicine technical manual to set up and maintain Radiology/Nuclear Medicine interfaces with non-RPMS systems (e.g., voice recognition systems and PACS systems).

If your facility is using the Imaging Multi-Media software to subscribe to Rad/Nuc med HL7 messages, you may need to delete the RA SEND ORU and RA SEND ORM protocols from the ITEM multiple of the following protocols if the MAG namespaced protocols are already entered as items, and if the RA SEND protocols are not being used for another application:

- RA REG
- RA EXAMINED
- RA CANCEL
- RA RPT

If you run an XINDEX or %INDEX, you may run into several errors caused by references to routines not in the UCI if the imaging package and/or OE/RR V. 3.0 are not yet installed or released. These errors are benign and do not affect the operation of the Radiology/Nuclear Medicine package. Routines involved are:

- AGRIC
- MAGSET3
- ORMFN
- ORXP
- ORERR
- RB3
- RXP

5.3 Setting Up Mail Groups and Bulletins

This section discusses creating mail groups and associating those mail groups to the package's six bulletins. These bulletins are generated when important actions take place (e.g., the deletion of an exam) and are sent to members of a mail group who should be aware that the action took place. The names of the bulletins are:

- RAD/NUC MED REQUEST CANCELLED
- RAD/NUC MED EXAM DELETED
- RAD/NUC MED REPORT DELETION
- RAD/NUC MED REPORT UNVERIFIED
- RAD/NUC MED CREDIT FAILURE
- RAD/NUC MED REQUEST HELD

To find out what mail groups are associated with these bulletins and who belongs to those mail groups you can do a VA FileMan sort and print. The following is an example of a sort and print that can be run before or after the installation of this new version.

```
D Q^DI

VA FileMan 21.0

Select OPTION: 2  PRINT FILE ENTRIES

OUTPUT FROM WHAT FILE: BULLETIN// <RET>
SORT BY: NAME// <RET>
START WITH NAME: FIRST// RA<RET>
GO TO NAME: LAST// RADZ<RET>
    WITHIN NAME, SORT BY: <RET>
FIRST PRINT FIELD: .01<RET>  NAME
THEN PRINT FIELD: 4<RET>  MAIL GROUP      (multiple)
    THEN PRINT MAIL GROUP SUB-FIELD: .01<RET>  MAIL GROUP
    THEN PRINT MAIL GROUP SUB FIELD: MAIL GROUP:MEMBER<RET>
    THEN PRINT MAIL GROUP SUB FIELD: <RET>
THEN PRINT FIELD: <RET>

*****
Heading (S/C): BULLETIN LIST// <RET>
START AT PAGE: 1// <RET>
DEVICE: (printer name) <RET>          RIGHT MARGIN: 80// <RET>
```

Consult with the package radiology supervisor to determine how many mail groups to create, what mail group(s) you wish to associate with each bulletin, and who should be the coordinator for each mail group.

The following are suggestions for setting up six mail groups, one for each bulletin.

Table 5-1: RAD/NUC MED REQUEST CANCELLED bulletin

Mail Group (#3.8) field name	Suggested value
NAME	RA REQUEST CANCELLED
TYPE	Public
RESTRICTIONS	Unrestricted
DESCRIPTION	The members of this mail group will receive a bulletin when a Radiology/Nuclear Medicine request is cancelled.

Table 5-2: RAD/NUC MED EXAM DELETED bulletin

Mail Group (#3.8) field name	Suggested value
NAME	RA EXAM DELETED
TYPE	Public
RESTRICTIONS	Unrestricted
DESCRIPTION	The members of this mail group will receive a bulletin when a Radiology/Nuclear Medicine exam is deleted

Table 5-3: RAD/NUC MED REPORT DELETION bulletin

Mail Group (#3.8) field name	Suggested value
NAME	RA REPORT DELETION
TYPE	Public
RESTRICTIONS	Unrestricted
DESCRIPTION	The members of this mail group will receive a bulletin when a Radiology/Nuclear Medicine report is deleted.

Table 5-4: RAD/NUC MED REPORT UNVERIFIED bulletin

Mail Group (#3.8) field name	Suggested value
NAME	RA REPORT UNVERIFIED
TYPE	Public
RESTRICTIONS	Unrestricted
DESCRIPTION	The members of this mail group will receive a bulletin when a Radiology/Nuclear Medicine report is changed from Verified to any other status.

Table 5-5: RAD/NUC MED REQUEST HELD bulletin

Mail Group (#3.8) field name	Suggested value
NAME	RA REQUEST HELD
TYPE	Public
RESTRICTIONS	Unrestricted
DESCRIPTION	The members of this mail group will receive a bulletin when a Radiology/Nuclear Medicine request is placed on a status of Hold.

Table 5-6: RAD/NUC MED CREDIT FAILURE bulletin

Mail Group (#3.8) field name	Suggested value
NAME	RA CREDIT FAILURE
TYPE	Public
RESTRICTIONS	Unrestricted
DESCRIPTION	The members of this mail group will receive a bulletin when an exam has not been credited properly.

The following screenshot is an example of creating a mail group.

```

D Q^DI

VA FileMan 21.0

Select OPTION: 1 ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: MAIL GROUP// <RET>

EDIT WHICH FIELD: ALL// <RET>

Select MAIL GROUP NAME: RA CREDIT FAILURE
  Are you adding 'RA CREDIT FAILURE' as
  a new MAIL GROUP (the nnTH)? YES
  MAIL GROUP COORDINATOR: TAYLOR,FRANK          FT
Select MEMBER: SMITH,NANCY          NS
  Are you adding 'SMITH,NANCY' as a new MEMBER (the 1ST for this MAIL
GROUP)? YES
Select MEMBER: <RET>
DESCRIPTION:
  1>The members of this mail group will receive a bulletin when an
  2>exam has not been credited properly.
  3><RET>
EDIT Option: <RET>
TYPE: public
ORGANIZER: JONES,GARY
COORDINATOR: PACK,ADAM
SELECT AUTHORIZED SENDER: <RET>
ALLOW SELF ENROLLMENT?: NO
REFERENCE COUNT: <RET>
LAST REFERENCED: <RET>
RESTRICTIONS: 0<RET> UNRESTRICTED
Select MEMBER GROUP NAME: <RET>

```

```
Select REMOTE MEMBERS: <RET>
Select DISTRIBUTION LIST: <RET>

Select MAIL GROUP NAME: <RET>
```

The following screenshot is an example of associating a mail group with a bulletin.

```
D Q^DI

VA FileMan 21.0

Select OPTION: 1  ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: MAIL GROUP// <RET>

EDIT WHICH FIELD: ALL// <RET>

Select MAIL GROUP NAME: RA CREDIT FAILURE
  Are you adding 'RA CREDIT FAILURE' as
    a new MAIL GROUP (the nnTH)? YES
      MAIL GROUP COORDINATOR: TAYLOR,FRANK          FT
Select MEMBER: SMITH,NANCY          NS
  Are you adding 'SMITH,NANCY' as a new MEMBER (the 1ST for this MAIL
GROUP)? YES
Select MEMBER: <RET>
DESCRIPTION:
  1>The members of this mail group will receive a bulletin when an
  2>exam has not been credited properly.
  3><RET>
EDIT Option: <RET>
TYPE: public
ORGANIZER: JONES,GARY
COORDINATOR: PACK,ADAM
SELECT AUTHORIZED SENDER: <RET>
ALLOW SELF ENROLLMENT?: NO
REFERENCE COUNT: <RET>
LAST REFERENCED: <RET>
RESTRICTIONS: 0<RET> UNRESTRICTED
Select MEMBER GROUP NAME: <RET>
Select REMOTE MEMBERS: <RET>
Select DISTRIBUTION LIST: <RET>

Select MAIL GROUP NAME: <RET>

The following screenshot is an example of associating a mail group with a
bulletin.
D Q^DI

VA FileMan 21.0

Select OPTION: 1  ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: BULLETIN// <RET>
EDIT WHICH FIELD: ALL// 4<RET>  (multiple)
  EDIT WHICH MAIL GROUP SUB-FIELD: ALL// <RET>
THEN EDIT FIELD: <RET>

Select BULLETIN NAME: RAD/NUC MED CREDIT FAILURE
Select MAIL GROUP: RA CREDIT FAILURE
  Are you adding 'RA CREDIT FAILURE' as
```

```

a new MAIL GROUP (the 1st for this BULLETIN)? YES
Select MAIL GROUP: <RET>

Select BULLETIN NAME: <RET>

```

5.4 Update Chart Number of Patient (IHS) Entries

Use FileMan to find the LBL/HDR/FTR FORMAT entries that contains 'CHART# OF PATIENT (IHS)'.

```

Select OPTION: SEARCH FILE ENTRIES

OUTPUT FROM WHAT FILE: LBL/HDR/FTR FORMATS

-A- SEARCH FOR LBL/HDR/FTR FORMATS FIELD: PRINT FIELDS      (multiple)

-A- SEARCH FOR LBL/HDR/FTR FORMATS PRINT FIELDS SUB-FIELD: .01 FIELD
-A- CONDITION: = EQUALS
-A- EQUALS LABEL PRINT FIELDS: CHART# OF PATIENT (IHS)

-B- SEARCH FOR LBL/HDR/FTR FORMATS PRINT FIELDS SUB-FIELD: <RET>

-B- SEARCH FOR LBL/HDR/FTR FORMATS FIELD: <RET>

IF: A//      LBL/HDR/FTR FORMATS FIELD EQUALS 35 (CHART# OF PATIENT (IHS))

DO YOU WANT THIS SEARCH SPECIFICATION TO BE CONSIDERED TRUE FOR CONDITION -
A-
    1) WHEN AT LEAST ONE OF THE 'PRINT FIELDS' MULTIPLES SATISFIES IT
    2) WHEN ALL OF THE 'PRINT FIELDS' MULTIPLES SATISFY IT
CHOOSE 1-2: 1// <RET>

STORE RESULTS OF SEARCH IN TEMPLATE: <RET>

SORT BY: FORMAT NAME// <RET>
START WITH FORMAT NAME: FIRST//<RET>
FIRST PRINT FIELD: .01 FORMAT NAME
THEN PRINT FIELD: <RET>
Heading (S/C): LBL/HDR/FTR FORMATS SEARCH Replace <RET>
DEVICE: <RET> VIRTUAL      Right Margin: 80//<RET>
LBL/HDR/FTR FORMATS SEARCH                      JUL 14,2004  08:47      PAGE 1
FORMAT NAME
-----

EXAM
FLASH
REPORT HEADER

                                3 MATCHES FOUND.

For each LBL/HDR/FTR FORMAT entry that contains 'CHART# OF PATIENT (IHS)',
you must review the field, delete it and then re-enter it so that its
compiled logic is recomputed.
Select Supervisor Menu Option: Utility Files Maintenance Menu

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 HEADER
FORMAT NAME: REPORT HEADER// <RET>
Select FIELD: CHART# OF PATIENT (IHS)// <RET>
FIELD: CHART# OF PATIENT (IHS)// <RET>
ROW: 7//<RET>
COLUMN: 3//<RET>
TITLE (OPTIONAL): Chart#://<RET>
Select FIELD: CHART# OF PATIENT (IHS)
...OK? Yes// <RET> (Yes)
FIELD: CHART# OF PATIENT (IHS)// @
SURE YOU WANT TO DELETE THE ENTIRE FIELD? Y (Yes)
Select FIELD: CHART# OF PATIENT (IHS)
Are you adding 'CHART# OF PATIENT (IHS)' as
a new PRINT FIELDS (the 17TH for this LBL/HDR/FTR FORMATS)? No// Y
(Yes)
ROW: 7
COLUMN: 3
TITLE (OPTIONAL): Chart#:
Select FIELD:
```

6.0 Test Site Install Times

Table 6-1

Type of System	File	#of Entries	Radiology/Nuclear	Radiology/Nuclear
Open M (site 1)	70	20,700		
	74	189,200		
	74.4	4,000		
Total			00:01	00:30
Open M (site 2)	70	14,890		
	74	79,860		
	74.4	0		
Total			00:01	00:24

Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (505) 248-4371 or (888) 830-7280 (toll free)

Fax: (505) 248-4363

Web: <http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm>

Email: support@ihs.gov