



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Dental/EDR Interface

(BADE)

Implementation Guide

Version 1.0 Patch 7
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Office of Information Technology
Division of Information Resource Management

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Preface

This manual provides information and instructions for BADE Version 1.0 Patch 7 release for the EDR (Electronic Dental Record) interface. This patch includes the functionality to view dental notes in RPMS and EHR that were created in Dentrix.

1.0 Introduction

The EDR interface transmits dental data bi-directionally between RPMS and Dentrix using HL7 formatted messages. The interface transmits patient and provider data from RPMS to Dentrix to synchronize these records between the two systems. Dental data (dental procedures with necessary visit information) is transmitted to RPMS to create patient dental records (visits) in RPMS.

Bade v1.0 patch 7 provides the necessary functions to receive and process dental notes created in Dentrix to be viewable in RPMS and EHR. In order for the dental note to be processed in RPMS, the authors and signers of the note (in Dentrix) will need to be created as users in RPMS. This guide includes examples of what you should expect to see in EHR, instructions for adding users to RPMS (authors and signers of the note), and the RPMS Mailman group for viewing alerts. This guide does not include the software installation details for the patch such as the KIDS build and Ensemble XML files, which are included in the installation instructions for Bade v1.0 patch 7.

Although you may install this patch at any time, the new message type will not transmit or be processed in RPMS unless coordinated with Dentrix support and their software has been updated to transmit the new message type (MDM-T04) to RPMS. To implement this enhancement, Dentrix Enterprise v8.0.96.553 or later must be installed on the Dentrix system and a Dentrix technician enables this feature in Dentrix. Instructions for adding authors and signers of the note in RPMS are included in this document as well as examples.

2.0 Dental Notes

A “Progress Note” in the RPMS EHR is the same item as a “Clinical Note” in Dentrix. Sometimes, the BADE Installation Guide refers to a “progress note” in Dentrix. However, by Dentrix terminology and data field entry, a “Progress Note” in Dentrix is not the same item as a “progress note” in RPMS EHR.

Prior to this patch, dental notes created in Dentrix did not cross over to RPMS and had to be viewed in Dentrix. After this patch is installed and Dentrix enables the function to transmit the dental note to RPMS, the note will be viewable in RPMS and EHR. The authors and signers of the note must have already been created in RPMS and Dentrix in order for the note to be processed correctly. Instructions for adding authors and signers are included in this guide with examples.

Only completed, finalized (signed) notes created in Dentrix are transmitted.

Note: The Clinical Note addendum function in Dentrix is turned off when this RPMS patch and Dentrix modifications are turned on. To replace the addendum function, a new Clinical Note will need to be created (and signed) in Dentrix when an additional comment or correction to a previous Clinical Note is desired.

3.0 Providers

Before the patch is installed, or at least before you contact Dentrix support, you will need to add the users (dental hygienists, Dental Health Aide Therapists [DHAT's], and auxiliary staff) in RPMS for those who author (create a new Clinical Note) and/or sign Clinical Notes in Dentrix. The users who author or sign the note in Dentrix are not always present in RPMS. If they are not present in RPMS, an alert will be created, which you will receive if you are a member of the "RPMS Dental" MailMan group. Instructions for adding members to the MailMan group is covered in Section 5.0. It is important that someone who routinely logs into RPMS be a member of this group so they can view any alerts that arise from issues related to the dental note processing (and other EDR issues) on a near real-time basis.

There are at least three different 'provider' types when referring to "Providers" in the installation instructions. Each different provider type has a process for adding them in RPMS and Dentrix. If not done correctly, 'error' messages (alerts) will be generated and the dental note will not be processed in RPMS. RPMS users who are added to the "RPMS Dental" MailMan group will be able to view these alerts.

The following are the three different provider types in Dentrix:

- Dentists
- Dental Hygienists
- DHAT's, Dental Assistants, and other auxiliary personnel

3.1 Dentists

Dentists are added and updated in RPMS and the Dentist's information is transmitted to Dentrix automatically. For Dentists already setup in RPMS and logging into Dentrix, nothing needs to be done. For new Dentists, follow the usual process for adding new providers in RPMS (using the AVA Add/Edit Provider option, then add their NPI number, then go back and re-enter their title in the AVA option). The title in RPMS must be "Dentist".

3.2 Dental Hygienists

Dental Hygienists are added in Dentrix by contacting Dentrix support and requesting a "hygienist" be added. In addition, they must also be added in RPMS using the same name and title. The site's IT/medical/dental staff who have the appropriate access in RPMS can add the user in RPMS, ensuring the name and title match exactly in order to process the dental note without errors. In addition, the dental hygienist's production must be mapped to the dental clinic 'chief dentist'. This is also done by the Dentrix Help Desk registration process. Once created in Dentrix, the Site IT or clinic staff cannot modify the dental hygienist's registration information. The title in RPMS must be "Dental Hygienist".

3.3 DHAT's, Dental Assistants and Auxiliary Personnel

These providers have two registrations: one in RPMS (completed by the Site's IT staff, CAC, or dental staff who have the appropriate access) and the second in Dentrrix (requested through the Dentrrix Help Desk). The name must match in Dentrrix and RPMS exactly in order for their clinical note to cross over to RPMS and be processed without errors. In addition, their production must be mapped to the dental clinic 'chief dentist'. This is also done by the Dentrrix Help Desk registration process. Once created in Dentrrix, the local Service Unit IT or clinic staff cannot modify their registration information. The title in RPMS must be "Dental Assistant" for these types of providers.

4.0 Authors and Signers of the Dental Note

HL7 messages are used in the communication between RPMS and Dentrix systems. Each HL7 message type has multiple ‘segments’ containing specific information that must be present in order for the Dentrix Clinical Note to populate appropriately in the RPMS EHR. This includes the author and signer of the note. See below for setup instructions for these two types of users.

4.1 Author

The “author” of a Clinical Note is determined by the log-in that is used to initiate a Clinical Note in Dentrix. This is often the dental assistant (or dental hygienist or DHAT) that first enters the patient’s health assessment information for the dental appointment encounter. The author can also be a dentist, if the dentist is the first person to create a Clinical Note. Once the Clinical Note is created, additional personnel can make edits to the Clinic Note, but their edits/contributions will not be reported by their log-in access or name in the HL7 message itself unless they are also the “signer” of the Clinical Note; see below for examples.

Note: Additional personnel that access the patient’s record are tracked by the Dentrix audit utility; however, their specific edits to an existing Clinical Note are not added to the HL7 message unless they are the author or signer of the note.

4.2 Signer

The “signer” role is self-explanatory: The signer is determined by the log-in of whomever signs the Clinical Note. Anyone that is granted the appropriate access rights in Dentrix can sign a Clinical Note. Therefore, the signer can be anyone, not just a dentist or dental hygienist. Below are examples of the Author / Signer combinations as they appear in the RPMS EHR.

The following are examples of “author” and “signer” of Dentrix Clinical Notes as they appear in the RPMS EHR.

Example

AUTHOR: Dental Assistant (name= Test Assistant)

SIGNER: Dental Assistant

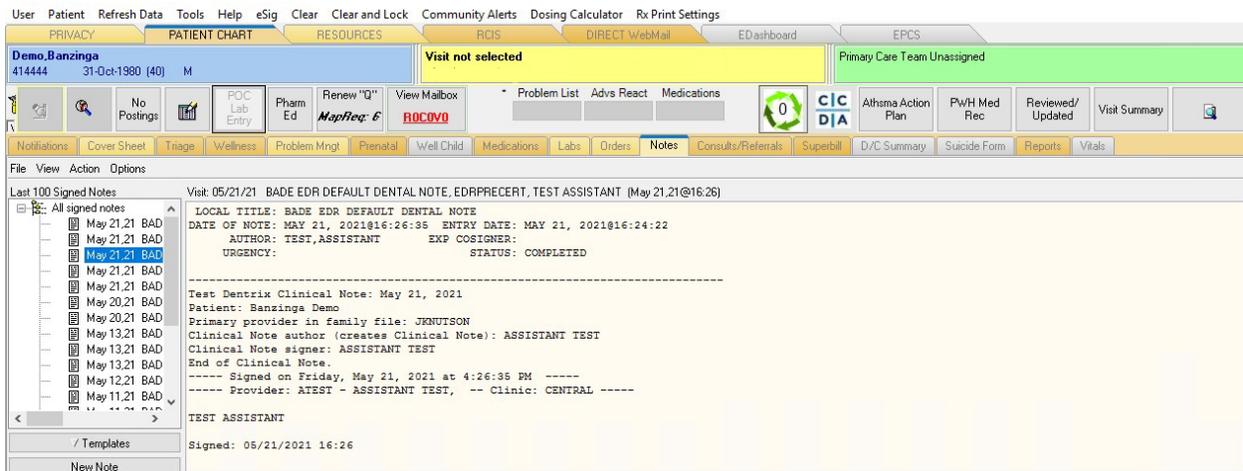


Figure 4-1: Dental Assistant Author and Signer

Example

AUTHOR: Dental Assistant (name=Test Assistant)

SIGNER: Dentist

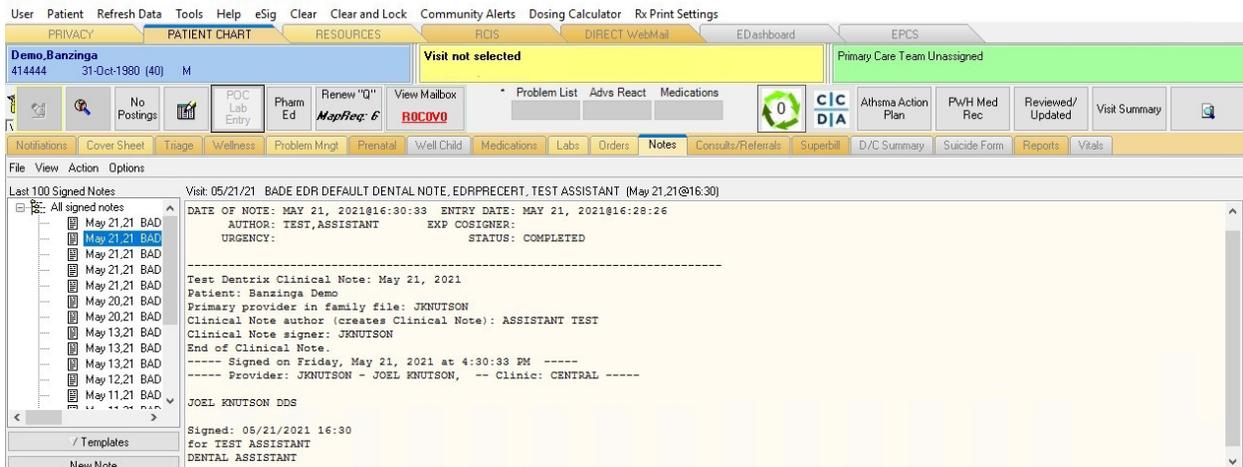


Figure 4-2: Dental Assistant Author and Dentist Signer

Example

AUTHOR: Dentist

SIGNER: Dental Assistant (name=Test Assistant)

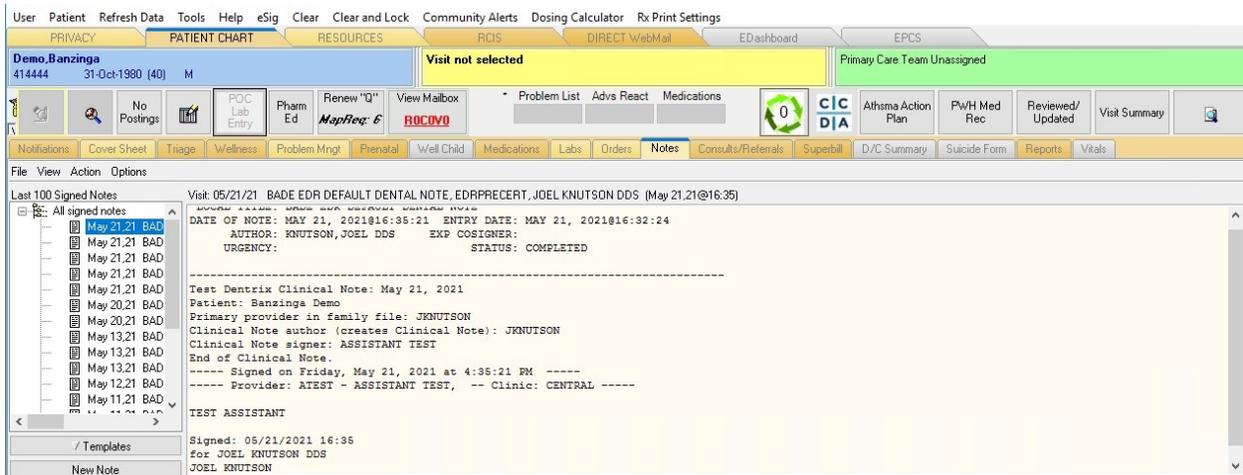


Figure 4-3: Dentist Author and Dental Assistant Signer

Example

AUTHOR: Dental Hygienist (name=Hygienist Test)

SIGNER: Dental Hygienist

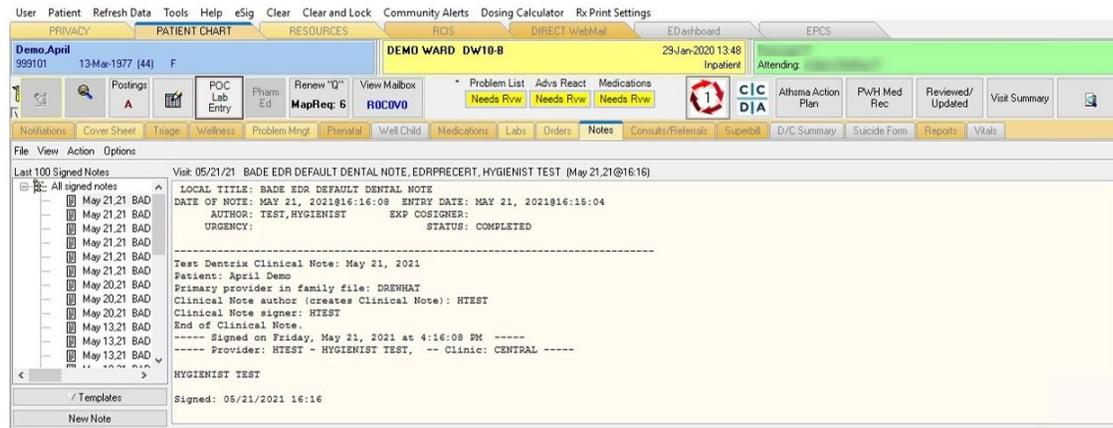


Figure 4-4: Dental Hygienist Author and Signer

Example

AUTHOR: Dental Hygienist (name=Hygienist Test)

SIGNER: Dentist



Figure 4-5: Dentist Hygienist Author and Dentist Signer

Example

AUTHOR: Dentist

SIGNER: Dental Hygienist (name=Hygienist Test)

Note: Dental Hygienist is ‘mapped’ to chief dentist (JKNUTSON in this case).

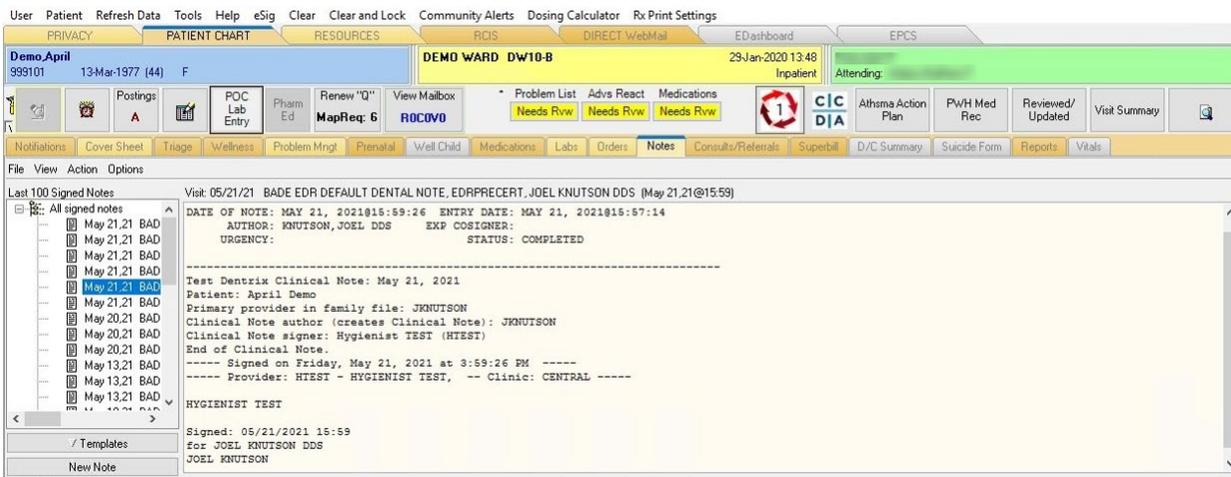


Figure 4-6: Dentist Author and Dental Hygienist Signer

Example

AUTHOR: Dentist

SIGNER: Dentist



Figure 4-7: Dentist Author and Signer

Example

Author: Dentist (with different PROV 1 in family file)

Signer: Dentist

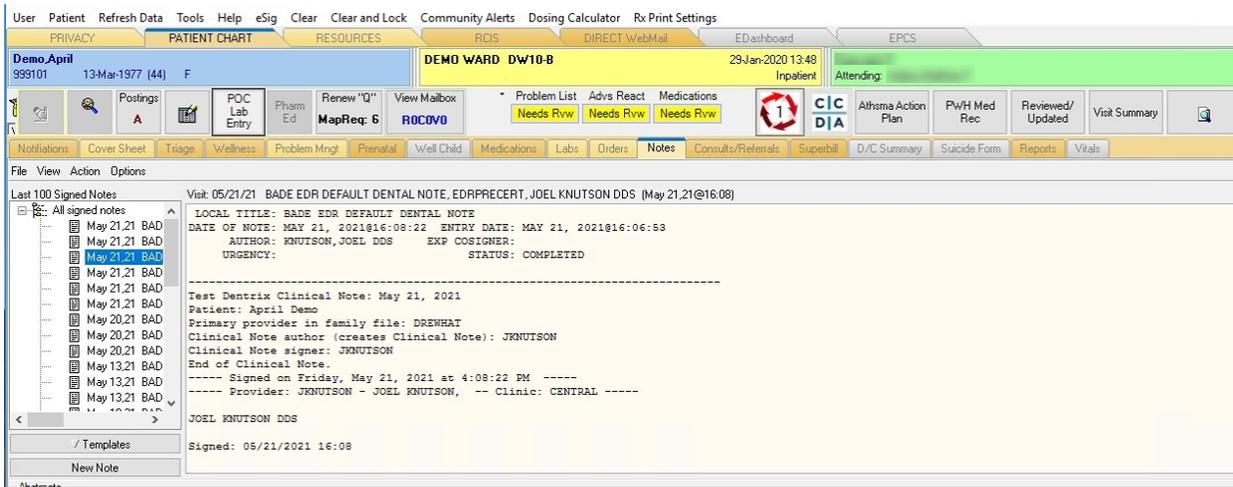


Figure 4-8: Dentist (with Different PROV 1) Author and Dentist Signer

5.0 Adding a New User to RPMS

Creating a new user requires access to various options and keys which local Site IT or CAC's should already have access to. Below are the instructions for creating new users. Keys are not allocated in this guide, so the newly created user has minimal access. Add additional keys and FileMan Access Codes if you wish the user to have access to more options and capabilities.

1. Use the AVA menu (IHS Provider/Person Add/Edit menu), to get to the Add/Edit New Persons option (requires the **AVAZMENU** and **AVAZPER** keys) to create a new user, making sure you do not create a duplicate. If the user already exists in RPMS, ensure they are the correct user and their name matches exactly between both systems, with the correct title (Dental Assistant or Dental Hygienist). Below are screen shots showing examples of this process.

```
AVA v 93.2
IHS Provider/Person Add/Edit

2013 DEMO HOSPITAL

INA  Inactivate/Reactivate Persons & Providers
PER  Add/Edit New Persons
PRV  Add/Edit Providers
NPI  Add/Edit NPI values for Providers
```

Figure 5-1: Add/Edit New Persons Option

```

ADD/EDIT NEW PERSONS

Use this option to enter names of employees, contractors,
and volunteers who will be referenced by other software. If
the person is also a provider, you do NOT need to use this
option as the ADD/EDIT PROVIDERS option includes the data
fields asked for here.

Enter NEW PERSON's name (Family Given Middle Suffix): TEST,ZANY
Are you adding 'TEST,ZANY' as a new NEW PERSON (the 3041ST)? No// y (Yes)
Checking SOUNDEX for matches.
TEST,RCIS
TEST,ASSISTANT
TEST,HYGIENIST

Do you still want to add this entry: NO//Y
Name components.
FAMILY (LAST) NAME: TEST//
GIVEN (FIRST) NAME: ZANY
MIDDLE NAME:
SUFFIX:]
Now for the Identifiers.
INITIAL:
SSN:
SEX:
NPI:
Identifiers Completed. Now for other data fields

NAME: TEST,ZANY//
INITIAL:
SEX:
DOB:
TITLE: DENTAL ASSISTANT
SSN:
SERVICE/SECTION: ??
SERVICE/SECTION: BUSINESS OFFICE
STREET ADDRESS 1:
STREET ADDRESS 2:
STREET ADDRESS 3:
CITY:
STATE:
ZIP CODE:
PHONE (HOME):
OFFICE PHONE:

Enter NEW PERSON's name (Family Given Middle Suffix):

```

Figure 5-2: Adding a New Person (User) in RPMS

- After the user is created with the AVA option, select the User Management menu (requires **XUUSERZMENU** key), then select **Edit an Existing User** option (requires the **AZXPAXUSERZEDIT** key) to enter their Title, Primary Menu Option (usually AKMOCORE), Access and Verify codes, File Manager Access Code (use the “#”, unless you have specific files you want the user to access), Division, and Service/Section. The Service/Section field depends upon the site and whether a Dental service/section exists.

For example, “Business Office” can be used for this field. Most of these fields, such as the service/section, are not needed for the creation of the dental note but are required when creating a new user.

```

                                Edit an Existing User
NAME: TEST,ZANY                                     Page 1 of 5
-----
NAME... TEST,ZANY                                INITIAL:
TITLE: DENTAL ASSISTANT                          NICK NAME:
SSN:                                             DOB:
DEGREE:                                          MAIL CODE:
DISUSER:                                TERMINATION DATE:
Termination Reason:

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

                Select DIVISION: 2013 DEMO HOSPITAL
                SERVICE/SECTION: BUSINESS OFFICE
  
```

Figure 5-3: Edit an Existing User

- Have the user login to RPMS, using the access/verify codes you created. Have them type in **^TBOX**, then select **Electronic Signature code Edit** option to add their electronic signature fields as shown below.

```

Select IHS Core <TEST ACCOUNT> Option: ^TBOX   User's Toolbox

APHY  Enter/Edit/Re-activate Lab ESIG Physicians **NEW**
      Change my Division
      Display User Characteristics
      Edit User Characteristics
      Electronic Signature code Edit
      Menu Templates ...
      Spooler Menu ...
      Switch UCI
      TaskMan User
      User Help
  
```

Figure 5-4: TBOX (User's Toolbox)

4. The Signature Block Printed Name, Signature Block Title, and an Electronic Signature Code must be present in RPMS in order to process dental notes for Providers, Dental Hygienists, and Dental Assistants who sign the notes in Dentrrix.

```
Select User's Toolbox <TEST ACCOUNT> 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: JK
SIGNATURE BLOCK PRINTED NAME: JOELLE KNUTSON//
SIGNATURE BLOCK TITLE: JOELLE KNUTSON
OFFICE PHONE:
VOICE PAGER:
DIGITAL PAGER:

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

Figure 5-5: Signature Block & Electronic Signature Code Fields

6.0 RPMS Dental MailMan Group

All RPMS users who will be reviewing the dental alerts (errors) must be added to the RPMS Dental MailMan group. Use Manage MailMan/Group Distribution Management/Mail Group Edit to add users to this group. An example is Figure 6-1.

```
Select Group/Distribution Management <TEST ACCOUNT> Option: mail group
  1   Mail Group Coordinator's Edit
  2   Mail Group Coordinator's Edit W/Remotes
  3   Mail Group Edit
CHOOSE 1-3: 3 Mail Group Edit

Select MAIL GROUP NAME:   RPMS DENTAL
MAIL GROUP NAME: RPMS DENTAL//
Select MEMBER: DEMO,DOCTOR//
  MEMBER: DEMO,DOCTOR//
  TYPE: INFO//
Select MEMBER: DEMO,PROVIDER MN      MAN
  Are you adding 'DEMO,PROVIDER MN' as a new MEMBER (the 6TH for this MAIL GROUP
)? No// y (Yes)
  TYPE: I  INFO
Select MEMBER: ^

Do you wish to forward past mail group messages
to the user(s) you just added to the mail group(s)? No// n NO

Select MAIL GROUP NAME: █
```

Figure 6-1: Adding users to Manage Mailman/Group distribution

Acronym List

Acronym	Term Meaning
CAC	Clinical Application Coordinator
DHAT	Dental Health Aide Therapist
EDR	Electronic Dental Record
EHR	Electronic Health Record
IHS	Indian Health Service
KIDS	Kernel Installation and Distribution System
MDM-T04	HL7 message containing patient notes/observations
MDM	Medical Document Management
RPMS	Resource and Patient Management System
XML	Extensible Markup Language

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