



RESOURCE AND PATIENT MANAGEMENT SYSTEM

IMMUNIZATION MODULE (BI)

User Manual

Version 8.0
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PREFACE

The purpose of this manual is to provide users with the information they need to appropriately understand and use the RPMS Immunization Module. This manual describes all of the processes and procedures involved in collecting and managing patients' immunization data and on the specific steps involved in the setup and customization of the software for use at individual sites.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	History of Changes	1
1.2	New Features of Version 8.0	3
2.0	ORIENTATION.....	6
2.1	Overview of the System	6
2.2	Menu System.....	7
2.2.1	Patient Menu	7
2.2.2	Reports Menu.....	8
2.2.3	Managers Menu	8
2.3	Menu Diagram	9
2.4	Case Managers and the Program Manager.....	9
2.5	ImmServe Forecasting Program	9
2.6	Conventions in the Software and Manual	10
2.6.1	The Return Key	10
2.6.2	Double Slash (//)	10
2.6.3	Screenshots	10
2.6.4	On-line Help	11
2.6.5	Backspace and Arrow Keys	11
2.6.6	The Up-Hat (^)	11
2.6.7	The “Select Device: ” Prompt.....	12
2.7	ListMan Screen Displays	12
2.7.1	Generic Actions.....	13
2.8	ScreenMan Displays.....	14
3.0	PATIENT MENU	16
3.1	Single Patient Record (SGL).....	17
3.1.1	Add Immunization (A).....	18
3.1.2	Skin Test Add (S).....	22
3.1.3	Edit Visit (E)	22
3.1.4	Delete Visit (D).....	23
3.1.5	ImmServe Profile (I)	23
3.1.6	Health Summary (H)	24
3.1.7	Patient Edit (P).....	25
3.1.8	Contraindications (C)	26
3.1.9	Letter Print (L).....	27
3.2	Print Individual Patient Letter (LET)	28
3.3	Patient Lists and Letters (LLS).....	29
3.3.1	Overview of Patient List and Letters Parameters	30
3.3.2	Specifying Parameters for a List or Letter	30
3.3.3	Printing a List	36
3.3.4	Print a Due Letter	37
4.0	REPORTS MENU	38
4.1	Adult Immunization Report(ADL)	39
4.2	Quarterly Immunization Report (QTR).....	41

4.3	Two-Yr-Old Immunization Report	44
4.4	Vaccine Accountability Report (VAC).....	46
5.0	MANAGER MENU	50
5.1	Edit Patient Errors (ERR).....	51
5.2	Add/Edit Case Manager (CMG).....	52
5.3	Transfer a Case Manager's Patients (CMT)	52
5.4	Site Parameters Edit (ESP)	52
5.5	Module Information (PKG)	56
5.6	Form Letters Add/Edit (LET)	56
5.6.1	Form Letter Section Descriptions:	58
5.7	Lot number Add/Edit (LOT).....	59
5.8	Vaccine Table Edit (VAC)	60
5.9	Re-standardize the Vaccine Table (RES)	62
5.10	Export Immunizations (EXP).....	62
5.10.1	Export Patients Individually	63
5.10.2	Export by Group	64
5.11	Allocate/De-allocate Imm Menu Keys (KEY).....	65
6.0	APPENDIX A: VACCINE TABLE FOR V8.0	67
7.0	APPENDIX B: IMMSERVE	70
8.0	APPENDIX C: PACKAGE SETUP INFORMATION	73
8.1	Options	73
8.2	Security	74
8.3	Devices	74
8.4	Old MCH Immunization Menus/Options.....	75
8.5	Site Parameters	76
8.6	Vaccine Table	76
8.7	Duplicate Lot Numbers	77
8.8	Protocols for Use by Other Packages.....	77
9.0	APPENDIX D: WORD PROCESSOR HELP.....	79
9.1	Summary of Key Sequences	79
9.1.1	Navigation	79
9.1.2	Exiting/Saving	79
9.1.3	Deleting.....	79
9.1.4	Settings/Modes	79
9.1.5	Formatting	79
9.1.6	Finding	80
9.1.7	Cutting/Copying/Pasting.....	80
9.2	Change to RPMS MailMan Full Screen Editor	80
10.0	GLOSSARY	81
11.0	INDEX	84
12.0	CONTACT INFORMATION.....	86

TABLE OF FIGURES

Figure 2-1: Main Menu	7
Figure 2-2: Menu Diagram	9
Figure 2-3: Sample screenshot	11
Figure 2-4: ListMan Screen	12
Figure 2-5: Sample Screen of ScreenMan	15
Figure 3-1: Main Menu	16
Figure 3-2: Patient Menu.....	16
Figure 3-3: Patient Immunization Record Screen.....	17
Figure 3-4: Add/Edit Immunization Visit Screen	19
Figure 3-5: Add/Edit Immunization Visit	22
Figure 3-6: Delete an Immunization Visit Screen	23
Figure 3-7: ImmServe Profile Screen	24
Figure 3-8: Health Summary Screen.....	25
Figure 3-9: Patient Edit Screen	25
Figure 3-10: Contraindications Screen.....	27
Figure 3-11: Letter Print Screen	28
Figure 3-12: Patient Menu.....	28
Figure 3-13: Sample Official Immunization Record	29
Figure 3-14: Patient Menu.....	29
Figure 3-15: Immunization Lists and Letters Screen	30
Figure 3-16: Patient Group Screen	31
Figure 3-17: Select Communities Screen.....	33
Figure 3-18: Additional Items of Patient Information Screen	35
Figure 3-19: Select Order of Listing Screen	35
Figure 3-20: List of Patients Selected Screen	36
Figure 3-21: Print a Due Letter Screen.....	37
Figure 4-1: Main Menu-Reports Option.....	38
Figure 4-2: Reports Menu	38
Figure 4-3: Adult Immunization Report Screen	40
Figure 4-4: Sample Adult Immunization report.....	40
Figure 4-5: Quarterly Immunization Report Screen.....	42
Figure 4-6: Sample Quarterly Immunization report	43
Figure 4-7: Two-Yr-Old Immunization Rates Report	44
Figure 4-8: Sample of Two-Year-Old Immunization report.....	46
Figure 4-9: Vaccine Accountability Report Selection Screen	47
Figure 4-10: Sample Vaccine Accountability Report	49
Figure 5-1: Main Menu - Manager Option	50
Figure 5-2: Manager Menu.....	51
Figure 5-3: Edit Patient Errors Screen.....	51
Figure 5-4: Add/Edit Case Managers Screen.....	52
Figure 5-5: Transfer a Case Manager's Patients Screen	52
Figure 5-6: Edit Site Parameters Screen.....	53
Figure 5-7: Module Information for Immunization.....	56
Figure 5-8: Form Letter Add/Edit Screen.....	58

Figure 5-9: Lot Number Add/Edit Screen	60
Figure 5-10: Vaccine Table Edit Screen.....	61
Figure 5-11: Warning message	62
Figure 5-12: Export Immunizations Screen	63
Figure 5-13: Export Data By Individuals Screen.....	63
Figure 5-14: Export Data by Group Screen	64
Figure 5-15: Allocation/De-allocation of Immunization Keys Screen	65

1.0 Introduction

This manual describes the use of the Indian Health Service (IHS) Resource and Patient Management System (RPMS) Immunization Module, Version 8.0. The manual is designed to aid healthcare staff and computer personnel in the use of the new Module. While there is context-sensitive on-line help available at all prompts (by typing ?), this manual provides a more organized presentation of the features of the software.

The original RPMS Immunization tracking software was written in the 1980s. Version 7.0, which was a complete rewrite of the Immunization software, began in 1996 with consultation from a national team of IHS field staff who developed a set of design requirements for the software. Version 7.1, which offered many enhancements to v7.0, was released in 2001. The current v8.0 software replaces all previous versions.

1.1 History of Changes

Features of Version 6.8

Version 6.8 features included the ability to track patients' immunization due dates, enter and edit patients' immunization histories, print due lists and letters, print a Quarterly Immunization Report of Age-appropriate Immunizations, and print a Vaccine Accountability (Doses Administered) report.

Features of Version 7.0

Version 7.0 contained the features that were found in the old version 6.8 of the Immunization software and many new or updated features. Immunization due dates were forecast by a regularly updated forecasting algorithm, ImmServe, developed and maintained by Medical Decision Associates. ImmServe also provided a detailed report or "profile" on each patient's immunization history and forecast. An unlimited number of Letters could be created. An export function was developed. A new Two-Year-Old Report was added which presented vaccine-specific and vaccine-combination reports of immunizations for two-year olds to chart progress toward Year 2000 Health Objectives.

Features of Version 7.1

Version 7.1 contained the following enhancements and updates to v7.0:

1. **Updated forecasting:** for polio, and influenza (forecast at age 50) and rotavirus (inactivated)

2. **Patient View Screen:** On the Patient View screen, in the Forecast section on the right hand side, the dates have been removed because they caused confusion. Only the vaccines due on the date of the forecast will be displayed.
3. **Forecasting options:** Nine forecasting Rule sets are offered.

Please note: in Version 7.1 the Immunization package does not list “Comvax” as a separate vaccine. Comvax should be entered as PedvaxHIB and Hep B vaccines, using the same Lot# to link the two vaccines.

4. **Measles dose numbers:** We have added a dose number to Measles.
5. **Pneumococcal Conjugate Vaccine:** There are now 2 pneumococcal vaccines:
 - Pneumo-PS- (Pneumovax) - forecast for adults > 65 (in AK forecast >55, every 6 years);
 - Pneum-conj.- pneumococcal conjugate vaccine (Prevnar) - forecast for children < 59 months of age.
6. **Reports:** Pneumococcal conjugate vaccine has been added to the Quarterly Immunization Report (but pneum-conj doesn’t count in the totals), the Two-Year-old report and the Vaccine Accountability Report.
7. **Reports:** A “Health Care Facilities” parameter has been added to the Quarterly Immunization and the Two-Yr-Old Immunization Reports
8. **Letters:** If the RPMS Scheduling Package is being used at a site, you can now choose to have the patient’s next scheduled appointment to appear on a Due Letter. Next Appointment will also appear at the bottom of the Patient View Screen, is now an element that may be included in the Due List as Additional Information.
9. **Export:** Two new Data Elements have been added to the Export: “Mother’s Maiden Name” and “Patient Beneficiary Type”.
10. **Data entry:** If a patient is hospitalized and has not yet been discharged, the Immunization software will ignore a hospitalization if it has a Visit Type of “Contract”.
11. **Patient Menu Change:** Wording of options on the Patient Menu has been changed to “Patient Lists and Letters” to more clearly indicate that the Lists and Letters option is not limited to “Due Lists”

1.2 New Features of Version 8.0

1. **Combination vaccines** – Every potential vaccine (CVX) code, including combination vaccines, will be available for data entry. For combination vaccines, the nurse/data entry person can enter either the product name (e.g. Pediarix™) or antigens (e.g DTaP-IPV-HepB). Immserve will forecast the individual antigens and list the individual antigens in their own series group on the vaccine history as follows:

DTaP (Pediarix)	10/1/03	Due for:	DTaP
Hep B (Pediarix)	10/1/03		Hep B
IPV (Pediarix)	10/1/03		IPV

- a. Combination vaccines are displayed in this way throughout the Immunization Package and split into their component antigens for all reports (except Vaccine Accountability Report).
 - b. When you enter a combination vaccine you will only be able to enter one VIS date. In the future, the CDC hopes to have one VIS date for all childhood vaccines.
 - c. The vaccine table, spellings, CVX codes and CPT codes are taken directly from the CDC table <http://www.cdc.gov/nip/registry/hl7/hl7-cvx.pdf>.
 - d. Contraindications to a combination vaccine will prevent the forecast of the related antigens (eg. Contraindication to Pediarix™ prevents forecast of DTaP, IPV, or Hib).
2. There will be **no dose numbers** on vaccines. Vaccines are forecast based only on the actual number of doses included in RPMS, and the age/ intervals. All reports will only count the number of doses in RPMS.
 3. We have added to the Health Summary the **age** at which the dose was given.
 4. **Vaccine Forecasting Options:** There will be 10 Vaccine Forecasting options. For each of the options, the site can choose to use or not to use the **4 day grace period**. The forecasting options vary by use of Comvax, and by the recommended age for the 3rd IPV, 4th DTaP, final Hib, final Hep B, 4th Pn, MMR, and Varicella. The options are:

	6 Months	12 Months	15 Months
1)		IPV, MMR, Pn, Var	DTaP, Hib
2)		Hib, IPV, MMR, Pn, Var	DTaP
3)	IPV	DTaP, Hib, MMR, Pn, Var	
4)		DTaP, Hib, IPV, MMR, Pn, Var	
5)	IPV	Hib, MMR, Var	DTaP, Pn
6) Comvax		HepB, Hib, MMR, Pn, Var	DTaP, IPV

7) Comvax	IPV	DTap, HepB, Hib, MMR, Pn, Var	
8) Comvax		HepB, Hib, IPV, MMR, Pn	DTaP, Var
9) Comvax	IPV	HepB, Hib, Var, MMR	DTaP, Pn
10)	IPV	Hib, MMR, Pn	DTaP, Var

5. **Forecast Influenza in children:** All children who are 6-23 months of age between September 1st and January 31st will be forecast for a first dose of influenza during this time period. We do not have the sophistication to forecast a second dose the first year.
6. **Updated Adult Pneumococcal Forecasting:** Pneumococcal vaccine is forecast automatically at 65 years of age (or you can choose 55 years in the Managers' Menu) for all adults. Adults who receive a pneumococcal dose < 65 years of age will have another dose forecast at 65 (or 55) years of age. In Alaska, you can choose to have pneumococcal vaccine forecast every 6 years after 55 years of age.
7. **Force invalid/valid doses:** In the "Edit vaccine" option there will be an option to "force" a dose to be invalid (because it was expired or had inappropriate temperature exposure) or to be valid (if it is invalid according to Immserve because it doesn't meet minimum age/interval criteria but it is valid in your State). The "forced" valid or invalid doses (determined by the ImmServe forecast or forced invalid by the provider) will be tagged with an asterisk and brief explanation on the Health Summary and Vaccine History, but not on Due Letters.
8. **Reports:**
 - a. **Adult Report (New)** - will print a vaccine report on "today's date" for adults > 50 and adults >65 years with a visit to the reporting facility in the past year with the proportion who received:
 - i. Influenza in past year,
 - ii. Pneumo ever,
 - iii. Pneumo in past 6 years,
 - iv. Td in past 10 years.
 - b. **Two Year Old Report** will change age range to 19-35 months to be consistent with age ranges for the National Immunization Survey.
 - c. **Vaccine Accountability Report**
 - i. will not show dose numbers
 - ii. added "location type so that providers can look at doses by PHNs vs.IHS
 - d. **Quarterly Report:**
 - i. When you view the report, you can print a line list of: a) patients on the report who are age- appropriate, b) patients who are not age-appropriate, or c) all patients included in the report.
 - ii. You can choose to include or not include Hep A, Varicella and Pneumococcal vaccine in the total age-appropriate rate. Even if you don't

include it in the total rate, the report will still report these vaccines individually.

9. **Direct Data Entry**

- a. Added fields for new options:
 - i. forcing valid or invalid
 - ii. site/route of administration (eg Left thigh IM)
 - iii. dose amount (default 0.5cc for most). You can change default in Vaccine Edit Table (MGR→VAC).
- b. For entries other than today's date, the default will be historical immunization.
- c. Data entry screen is reorganized for more efficient navigation.

10. **Standard Manufacturers Table:** We will be using standard Manufacturer's codes. Currently, providers have a non-standard Manufacturer's list.

11. The new version will only run on the **CACHE platform**. Site managers will need to have their systems upgraded from MSM to CACHE.

12. **Orphan Visits modified in PCC** - the PCC Visit relinking program in PCC was modified to link "orphan" or "incomplete" immunization visits created by direct data entry to a visit entered by data entry personnel which has a provider and purpose of visit. If the re-linker cannot link immunizations to a visit, then the PCC data entry staff can use a newly created option called "Complete Orphaned Immunization Visits". This program will assign a purpose of visit and a provider of service to the visit. This option should be run only for a time period for which the data entry staff has completed all PCC forms to prevent automatically completing visits that will eventually be completed by the normal data entry process. (For example, if data entry is 2 weeks behind in data entry this option should be run for a time period the ends with a date that is 2 weeks ago.)

2.0 Orientation

2.1 Overview of the System

The Immunization Module provides a means to track and recall patients for immunizations, to provide feedback to the providers and administrators about immunization rates in their patient population, and to share immunization information with authorized agencies.

Any patient whose immunizations are to be forecast must first be registered in the main patient database through the RPMS Registration Module. Immunization data for all registered patients is stored along with all other patient medical information in the Patient Care Component (PCC) files. Patients who are to be tracked for Immunizations may be added to the Immunization Register, which is a subset of all registered patients. Patients in the Immunization Register are those being tracked and followed by the immunization coordinator at the site. Patients in the Immunization Register may have a status of either Active or Inactive. This allows healthcare staff to focus on Active patients (young children and other special needs patients) and to change patients to Inactive status if they move or go to another provider.

Note that patients who have never been entered into the Register but have received immunizations show up with a status of Not in Register in displays and reports in this Immunization Module

The RPMS Immunization Module is composed of a Main Menu, with three submenus, and options presented on each submenu. An option is selected by typing the name of the option or by typing the 3-character synonym that appears in the column to the left of the option name and then pressing the Return key. Options on the submenus are grouped by the type of function they perform. Several screens also have actions at the bottom of the screen, which perform various operations on the information presented on the screen.

Not all options and Actions are available to all users. Some options and actions require special knowledge or display confidential information. These options may be locked with Keys that are given only to certain staff, such as the Program Manager. It may be that not all of the options or Actions described in this User Manual appear on your screen, possibly because you have not been given the Key to that particular option. If you have questions regarding locked options and actions, or questions in general regarding how to navigate through RPMS menus, please contact your Site Manager.

In the **Print Individual Patient Letter** option you can view and print for a patient any of the customized letters that have been set up, including the Official Immunization Record.

In the **Patient Lists and Letters** option you can select various groups of patients by Age Range, Active Status, Community, Immunizations received, Lot Numbers and more. You can also print either a master list of the group patients, or send a selected letter to the group of patients.

2.2.2 Reports Menu

This menu is the portion of the software used to generate the following standard reports:

- **Adult Immunization Report** – Presents immunization rates for patients over the age of 50 and over the age of 65.
- **Quarterly Immunization Report** – Presents age-appropriate immunization rates in 3 to 27 month-old Active children.
- **Two-Yr-Old Immunization Rates** – Presents age-specific immunization rates for 19 to 35 month old Active children, including the 4-3-1-3 rate (4DTP, 3polio, 3Hib, 1MMR) used for national Year 2010 Objectives.
- **Vaccine Accountability Report** – Presents doses administered for a given time period by age group and series.

2.2.3 Managers Menu

This menu is the portion of the software used by managers to perform such functions as adding and editing Form Letters, editing Site Parameters, re-standardizing the Vaccine Table, and exporting immunizations in flat ASCII Text. The Managers Menu is locked and is only available to those who hold the Manager Key.

2.3 Menu Diagram

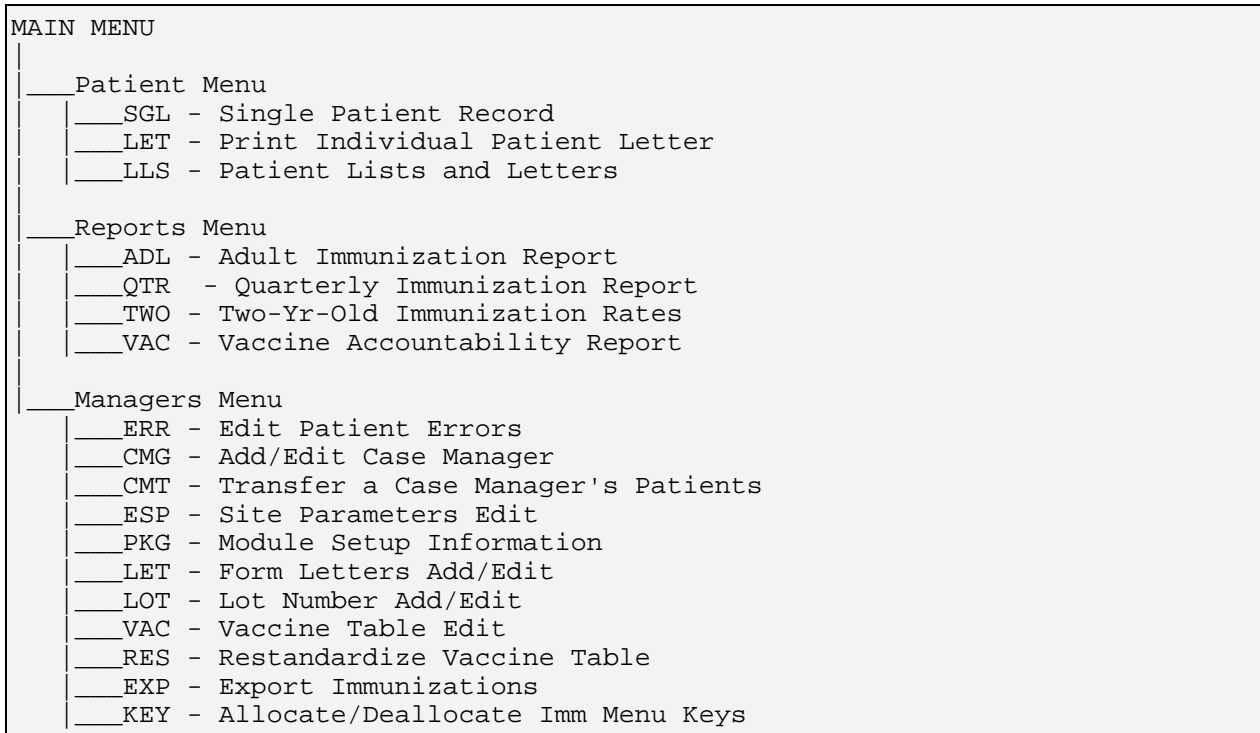


Figure 2-2: Menu Diagram

2.4 Case Managers and the Program Manager

A **Case Manager** is a user of the RPMS Immunization Module who is responsible for managing patients. This can include immunization tracking and recall, entering or editing patient data, selecting appropriate letters, scanning for delinquent needs, and more. Every patient in the RPMS Immunization Register should be assigned a Case Manager.

The **Program Manager** is the person chiefly responsible for the setup and operation of the RPMS Immunization Module at a given site. This person works with the computer site manager on the technical aspects of the software and performs maintenance tasks that require a more detailed understanding of the software than is required of Case Managers. At small sites, the Program Manager may also be the only Case Manager. (This individual is assigned the BIZ MANAGER key by the site manager.)

2.5 ImmServe Forecasting Program

Indian Health Service is contracting with a company, Medical Decision Associates, for use of their rule-based software, ImmServe, to evaluate immunization histories and determine due dates. ImmServe contains immunization logic for childhood and

adult immunizations except influenza and pneumovax (forecast by RPMS) and can be customized for different immunization schedules. ImmServe will be refined as immunization logic evolves or new vaccines and vaccine combinations are added. See Appendix B: ImmServe.

2.6 Conventions in the Software and Manual

The Resource and Patient Management System (RPMS) has established certain terms and operating procedures (conventions) for the Immunization module. The following is a brief discussion on those conventions, knowledge of which will enable you to learn how to use the system quickly. As you read the following explanations, refer to your keyboard. This will insure that you have correctly identified each of the keys and command functions.

2.6.1 The Return Key

At many points in this manual you are instructed to type some letters and press the Return key. The Return key refers to the key on your keyboard marked with the word *Return* or *Enter*. (On electric typewriters, it was the carriage return key.) Press the Return key and press the Enter key are synonymous commands. Most PC computer keyboards have an Enter key rather than a Return key. Whenever you see [RET] or the Return key, press the Return or Enter Key.

2.6.2 Double Slash (//)

Frequently, the software will ask you a question, followed by a prompt, followed by two slashes //. The answer displayed in front of the two slashes is the default answer for that question. Pressing the Return key selects the default answer (this is so you do not have to type it out). If you do not want to take the default answer (or if no default answer is presented with double slashes), simply type in your response and then press the Return key. If a prompt has a default, but you want the answer to be blank, you can leave an answer blank by deleting the default or typing @ at the default prompt.

2.6.3 Screenshots

Figure 2-3 shows an example of a screenshot or screen capture.


```
IMMUNIZATION v8.0          *   PATIENT MENU   *           Site: DEMO MED CTR
                           =====           User: USER, MARTHA

SGL   Single Patient Record
LET   Print Individual Patient Letter
LLS   Patient Lists and Letters

Select Patient Menu Option: PAT   Patient Immunization Record
```

Figure 2-3: Sample screenshot

When you see boldface type in a screenshot, it indicates a user action. After every entry that you type, you must press the Return key to create the entry. If the screenshot displays only the two double slashes (//) without any boldface/italic type, simply press the Return key without entering anything.

2.6.4 On-line Help

On-line help is available for most menu options and data entry prompts. Typing a single question mark (?) at the data entry prompt produces instructions for entering requested data. Typing two question marks (??) causes the system to display a more complete message. Some prompts display a list of available choices. Typing a single question mark (?) can be entered any time you are not sure of how to answer a particular question or if you want to know more about the menu choices.

2.6.5 Backspace and Arrow Keys

The Backspace key moves the cursor to the left erasing characters as it moves. The Up and Down arrow keys move you up and down fields. The Left and Right arrow keys generally are not used. If you are having problems with these keys check with your site manager.

2.6.6 The Up-Hat (^)

Use the up-hat also known as the caret (^) (Shift-6), a special control character, to exit from a particular activity or data entry sequence. Typing the caret at any prompt will usually take you back to the preceding prompt or menu level. Use the caret also to exit from long data displays such as vendor lists that usually involve many screens.

Activate the caret by pressing the Shift key and the 6 key located at the top of the typewriter keyboard. Note that pressing the Shift key and the 6 key on the adding machine-like keypad will not create a ^ character.

2.6.7 The “Select Device: ” Prompt

Whenever the software is about to display a list or report, it will display the “Select Device:” prompt. In order to send the report or list to a printer, enter a printer name or number. In order to display the report or list on your screen, type HOME (or 0). For help in answering the “Select Device:” prompt, please contact your site manager.

Some reports will allow you to type Q (for Queue) at the “Device:” prompt. This enables you to send a report to a printer and then returns you immediately to your screen, while the report is printing—rather than waiting for the report to finish before returning you to your screen. This is a good idea if the report you are running typically takes a long time to run (search) or print. After typing Q, the system displays the “Queue To Print On Device:” prompt. At this point you enter the name of the printer you wish the report to come out on.

2.7 ListMan Screen Displays

The RPMS Immunization Module v8.0 makes extensive use of ListMan Screens to display information and to provide a means of taking various actions on the information presented. Figure 2-4 shows a typical ListMan Screen:

PATIENT VIEW (IMM v8.0)		Sep 15, 1998 16:52:30		Page: 1 of 2	
Patient: DEMO,PATIENT		DOB: 01-May-1998 4 months)			
Chart#: 00-00-54 at UNSPEC MED CTR		Inactive		Female M HBsAg: UNK	
#	Immunization History			Immunizations DUE on 01/27/2004	
1	03/27/03 DTaP (PEDIARIX) unsp			Td-ADULT past due	
2	03/27/03 IPV (PEDIARIX) unsp			Last Letter: None	
3	03/27/03 HEP B PED (PEDIARIX) unsp				
4	11/17/03 *VARICELLA unsp				
	-INVALID--EXPIRED-				
ADDITIONAL PATIENT INFORMATION					

Case Manager.....: AVRITT,RALPH					
+ Scroll down to view more. Type ?? or Q to QUIT.					
A	Add an Immunization	D	Delete a Visit	P	Patient Edit
S	Skin Test Add	I	ImmServe Profile	C	Contraindications
E	Edit a Visit	H	Health Summary	L	Letter Print
Select Action: Next Screen//					

Figure 2-4: ListMan Screen

These three screen areas can be described as follows:

Header Area

The header area is a “fixed” (non-scrollable) area that displays the Screen Title and Patient Demographic Information (e.g., lines beginning on the left with *Patient* and *Chart*).

List Area

This area scrolls (with the Up or Down Arrow keys) if there are more items than will fit on one page. It displays a list of items, such as “Immunizations” or “Date of Forecast” that you can take action on. If there is more than one page of items, the page number is listed in the upper right-hand corner of the screen (Page 1 of #).

Action Area

This screen section contains the following three elements:

- **Message Line:** This line displays a plus (+) sign, a minus (-) sign, a string of periods (...), or an informational statement (e.g., Enter ?? for more actions). If you enter a plus sign at the action prompt, the display moves forward a page. If you enter a minus sign at the action prompt, the display moves back a screen. The plus, minus, and > signs are only valid actions if they are displayed on this message line.
- **Actions:** This section contains a list of actions. If a double question mark (??) is entered at the “Select Action:” prompt, a “hidden” list of additional actions is displayed.
- **Action Prompt:** At the “Select Action:” prompt, type the name or abbreviation of options and press the Return key to perform any of the following actions:
 - Browse through the list
 - Select items that need action
 - Take action against those items
 - Select other actions without leaving the option

2.7.1 Generic Actions

In addition to the Actions specific to the ListMan screen, the system provides generic “Hidden Actions” applicable to all ListMan screens. To view these generic actions, enter a double question mark (??) at the “Select Action:” prompt. The abbreviation for each action is shown in brackets following the action name:

Action	Description
Next Screen [+]	Move to the next screen (may be shown as a default)
Previous Screen[-]	Move to the previous screen
Up a Line [UP]	Move up one line
Down a Line [DN]	Move down one line
Shift View to Right [>]	Move the screen to the right if the screen width is more than 80 characters
Shift View to Left [<]	Move the screen to the left if the screen width is more than 80 characters
First Screen [FS]	Move to the first screen
Last Screen [LS]	Move to the last screen
Go to Page [GO]	Move to any selected page in the list
Re Display Screen [RD]	Redisplay the current screen
Print Screen [PS]	Prints header and portion of the list currently displayed
Print List [PL]	Prints the list of entries currently displayed
Search List [SL]	Finds selected text in list of entries
Auto Display (On/Off) [ADPL]	Toggles the menu of actions to be displayed/not displayed automatically
Quit	Exits the screen (may to shown as a default)

2.8 ScreenMan Displays

The RPMS Immunization Module v8.0 makes extensive use of ScreenMan to allow editing of data relating to patients and their immunizations, skin tests, contraindications, etc.

Much like the ListMan, ScreenMan displays Header information in the top third of the screen, editable information in the middle third of the screen, and commands and help in the bottom third of the screen.

Figure 2-5 shows a sample of a ScreenMan display.

```

* * * ADD/EDIT IMMUNIZATION VISIT * * *

Patient: DOE, FLORENCE                      DOB: 05-Oct-1997 (20 months)
Chart#: 00-00-04 at UNSPEC MED CTR          Inactive      Female

-----
Date: MAR 27, 2003                          Category: Ambulatory
Vaccine: DTaP-Hep B-IPV                      Lot#:
Inj Site:                                     Vol:      ml
Location Type: IHS                           Location: UNSPEC MED CTR
Provider:                                     Reaction:
VIS Date:                                    Dose Override:

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

```

Figure 2-5: Sample Screen of ScreenMan

ScreenMan Tips:

- Context sensitive help (messages relating to the particular prompt/question your cursor is resting at) will be automatically displayed in the bottom third of the screen. Type ? at any prompt to display more help at the bottom of the screen.
- In general, it is most efficient to press the Return key to move from one prompt to the next; however, you may jump around the screen using the cursor keys.
- The key combination PF1-E will allow you to exit and save your data from any point on the screen without moving to the Command Line at the bottom. This is the most efficient method of exiting ScreenMan screens. (PF1-E means you press and hold the PF1 key and then press the E key.) PF1-Q allows you to exit *without* saving your work.

Note: PF1 refers to the PF keys on a computer terminal. If you are using a PC, then simply substitute the F1 key in place of the PF1 key. See your site manager for support with this.

3.1 Single Patient Record (SGL)

With this Patient Menu option you can view the immunization history of an individual patient and perform any of the following functions for that patient:

- Add or edit immunizations.
- Add or edit skin tests and results.
- Delete wrong immunization information.
- Update contraindications, refusals or history of chicken pox.
- Update patient registration information.
- View a health summary (including immunization health summary).
- Print a due letter and Official Immunization Histories
- View the complete immunization profile for any patient in the Immunization register.

Selecting the Single Patient Record option

To select a Single Patient Record, type **SGL** at the “Select Patient Menu Option:” prompt. Type the patient’s name, chart #, or DOB at the “Select Patient Name:” prompt (Figure 3-3).

PATIENT VIEW (IMM v8.0)		Jan 31, 2004 18:28:51		Page: 1 of 3	
Patient: DEMO,PATIENT		DOB: 01-May-1998 (4 months)			
Chart#: 00-00-54 at UNSPEC MED CTR		Inactive		Female M HBsAg: UNK	
#	Immunization History	Immunizations DUE on 15-2ep-1998			
1	02/15/03 PEDVAXHIB UNSP	DTaP past due			
2	05/05/03 *PEDVAXHIB UNSP -INVALID--DEFECTIVE- (Arthritis or Arthralgias)	IPV past due PNEUM-CONJ past due INFLUENZA due			
3	05/29/03 PEDVAXHIB (COMVAX) UNSP	Last Letter: None			
4	09/05/03 PEDVAXHIB (COMVAX) UNSP				
5	02/16/03 HEP B PED UNSP	-----			
6	05/07/03 *HEP B PED UNSP	* CONTRAINDICATIONS/REFUSALS *			
HIBTITER: Anaphylaxis					
ADDITIONAL PATIENT INFORMATION					

Case Manager.....: AVRITT,RALPH					
Next Appointment : 01/04/04					
+ Scroll down to view more. Type ?? or Q to QUIT.					
A Add Immunization D Delete Visit P Patient Edit					
S Skin Test Add I ImmServe Profile C Contraindications					
E Edit Visit H Health Summary L Letter Print					
Select Action: Next Screen//					

Figure 3-3: Patient Immunization Record Screen

Important Notes

- The line at the bottom of the Additional Patient Information section displaying Next Appointment will only appear *if your site is running* the RPMS Scheduling package and *if the patient has a future appointment*.
- Patient ages throughout this module are determined by a count of months or years, just as birthdays are counted. That is, a patient is not 3 months old until the same date in the third month, regardless of how many days are in the intervening months.
- If the patient is NOT in the Immunization register and you have the BIZ EDIT PATIENTS Key, the software displays the following prompts:
 - <Patient Name> is not currently in the Immunization database.
 - Do you wish to add this patient to the Immunization Database?
 - Enter Yes or No. NO//
- If a patient is recorded as “deceased” in the Registration module, this will be displayed. Letters do not print for “deceased” patients.
- At the “Select Action:” prompt on most of the ListMan screens, you can type ?? to view the list of hidden actions.

Note: Cross reference Section 2.7.1, Generic Actions, for a description of actions.
--

3.1.1 Add Immunization (A)

With this action on the Patient View screen you can enter new or historical immunizations into RPMS, regardless of whether the patient is a child or adult, inactive or active, registered or not (Figure 3-4).


```

* * * ADD IMMUNIZATION VISIT * * *
Patient: DOE,JOHN          DOB: 04-Feb-1976 (28 yrs)
Chart#: 00-00-05 at UNSPEC MED CTR          Active      Male
-----
Date: FEB 2,2004          Category: Ambulatory

Vaccine: HIB (PRP-OMP)          Lot#: 123456
(PEDVAXHIB)

Inj Site: Left Thigh IM          Vol:.5 ml

Location Type: IHS          Location: UNSPEC MED CTR

Provider: DOCTOR,NURSE
VIS Date: DEC 16,1998
-----
Exit      Save      Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND:          Press <PF1>H for help      Insert
    
```

Figure 3-4: Add/Edit Immunization Visit Screen

The RPMS Immunization Package is designed to include all the information required to be documented when immunizations are given. Each site that chooses to do direct data entry should require that all fields be completed.

Changes to data entry in this version are few but significant – combination vaccines can now be entered by name i.e., Comvax or Pediarix. There will no longer be any dose numbers and last but not least the site, route and amount can be recorded in RPMS.

The categories for entries remain the same but work a little differently:

Ambulatory refers to visits occurring today.

Historical are immunizations not given today. If a date other than today is entered the category automatically defaults to historical (if it is an ambulatory visit being entered late it can be changed).

Inpatient refers to those immunizations given while a patient is admitted to the hospital.

	Ambulatory	Historical	Inpatient
Date	Today's date – the default	Enter the date of the immunization.	Today's date – the default
Vaccine	Enter vaccine name – can use name of combination –	Enter vaccine name – can use name of combination –	Enter vaccine name – can use name of combination –

	Ambulatory	Historical	Inpatient
	Comvax® or Pediarix®	Comvax® or Pediarix®	Comvax® or Pediarix®
Lot #	Enter the Lot # on the vial	Leave blank as unknown	Enter the Lot # on the vial
Injection Site	Enter site	Leave blank as unknown	Enter site
Volume	Accept default unless different	Delete the default - @ sign	Accept default unless different
Location Type	Accept default (IHS)	Accept default (IHS) or change to other (O) if not an IHS location	Accept default (IHS)
Location	Accept default – your facility	Enter location immunization given	Accept default – your facility
Provider	Accept default – change if person entering not the same as person who gave immunization	Delete default - @ sign (shift 2)	Accept default – change if person entering not the same as person who gave immunization
VIS date	Accept default	Delete default - @ sign (shift 2)	Accept default
Category	Accept default - Ambulatory	Accept default – Historical	Change to Inpatient

Shortcut Keys

- Exit and Save – press F1 and then E
- Exit and not save –press F1 and then Q
- Delete a specific entry –type @
- To accept the last IHS location entered if different than the default – press the spacebar and then the press the Return key

Lot #:

The manager sets a default lot number for each vaccine in the Manager Menu, and chooses whether to make Lot # required or optional.

Note: Cross reference Section 5.0 Manager Menu.
--

If you select a duplicate Lot Number, you will get one of the following messages, depending upon whether or not you hold a Manager level security key:

For users who do not hold the BIZ MANAGER Key

You have selected a "Duplicate Lot Number." This means that this Lot Number exists at least one other time in the Lot Number file, and the Immunization visit you are entering cannot be stored until the duplicate has been resolved.

Only a person with access to the Immunization Manager's menu can resolve duplicate Lot Numbers. Since you do not have this access, you should contact your Immunization Program Manager or your Computer Site Manager for support with this problem.

In the meantime, you can either finish entering the Immunization visit without a Lot Number, and come back to add the Lot Number to this visit after the duplicate has been resolved. Or you can simply quit without adding this visit at this time.

For users who hold the BIZ MANAGER Key

You have selected a "Duplicate Lot Number." This means that this Lot Number exists at least one other time in the Lot Number file, and the Immunization visit you are entering cannot be stored until the duplicate has been resolved. Refer to the Lot Number Add/Edit option on the Manager menu for resolution of duplicate lot numbers.

Location Type:

Used to designate whether a location is IHS - any location that has a recognized IHS Facility Location Code, or OTHER- an unofficial locations, such as private doctors without a IHS Facility Location Code. All "OTHER" locations point to one Location Code which is set in Section 5.4 Site Parameters Edit (ESP).

Location:

If the location is an official IHS location, you must enter the correct code. If you chose "OTHER" for Location Type, you may put non-official locations (e.g., Dr. Ray Beck).

Reaction:

Choose from the following list:

- Anaphylaxis or Collapse
(Contraindicates next dose.)
- Arthritis or Arthralgias
- Convulsions
- Fever
- Irritability
- Lethargy
- Local Reaction or Swelling
- Local Reaction or Swelling
- Other
- Rash or Itching
- Respiratory Distress
- Vomiting

Vaccine Information Statement (VIS) Date:

Each provider is required to give a parent/patient a VIS for each vaccine administered and document the Date of Publication as evidence of Informed Consent. You can set a default VIS date in the Vaccine Table Edit option, Section 5.8.

3.1.2 Skin Test Add (S)

With this action on the Patient View screen (Figure 3-5) you can enter dates for placement of new or historical skin tests (PPD, Monovac, Tine) and the results of the skin tests in the same manner you add immunizations.

```

* * * ADD/EDIT SKIN TEST VISIT * * *

Patient: DEMO, PATIENT                DOB: 16-Mar-1999 (6 months)
Chart#: 00-00-99 at UNSPEC MED CTR      Active      Male

Date: FEB 15,2003                      Category: Ambulatory
Skin Test: CHLAMYDIA                    Result: NEGATIVE
Reading: 13mm      Date of Reading:
Location Type: IHS      Location: UNSPEC MED CTR
Skin Test Provider:
Skin Test Reader:

COMMAND                                Press <PF1>H for help      Insert
    
```

Figure 3-5: Add/Edit Immunization Visit

Use the procedure outlined in Section 3.1.1 Add Immunization (A) to add a skin test. To display a list of skin tests type ?? at the “Skin Test:” prompt. The result of the skin test is Positive or Negative. While the reading is the induration in *mm* (e.g., 0, 02, or 12mm). Identify the skin test provider and reader.

3.1.3 Edit Visit (E)

With this action on the Patient View screen you can change wrong vaccine or skin test information in RPMS, including wrong dates, vaccine, etc. The screens and actions are identical to those described in Section 3.1.1 Add Immunization (A) except you have two additional choices when editing a vaccine:

	Ambulatory	Historical	Inpatient
Reaction	Use ?? to see choices – Enter if there was a reaction to a vaccine.	Leave blank – will probably not know on historical – enter if known	Use ?? to see choices – Enter if there was a reaction to a vaccine.
Dose Over-ride*	Use to force a dose valid (if given a day or so early but won’t affect school) or invalid (due to expired vaccine, etc). Use ?? to see choices. Use only with provider approval.	Use to force a dose valid (if given a day or so too early but won’t affect school) or invalid (due to expired vaccine, etc). Use ?? to see choices. Use only with provider approval.	Use to force a dose valid (if given a day or so too early but won’t affect school) or invalid (due to expired vaccine, etc). Use ?? to see choices. Use only with provider approval.

* Using dose over-ride affects the forecasting – will ignore invalid doses and will count forced valid doses.

Short Cut Keys

- Exit and Save – press F1 and then E
- Exit and not save –press F1 and then Q
- Delete a specific entry – type @
- To accept the last IHS location entered if different than the default – press the spacebar and then the Return key.

3.1.4 Delete Visit (D)

With this action on the Patient View screen shown in Figure 3-6, you can delete a complete immunization visit or a skin test that was erroneously entered (e.g. a duplicate immunization record). The screen below displays an example of the Delete confirmation screen, once you have chosen a visit to delete:

```
Immunization v8.0          *  DELETE AN IMMUNIZATION VISIT  *
Do you really wish to DELETE this Visit?
Patient: DOE,DIANA        Chart#: 99977
26-Mar-1999 @12:00  COCCI  Negative  2 mm  Dr. Black
Enter Yes or No? NO//
```

Figure 3-6: Delete an Immunization Visit Screen

3.1.5 ImmServe Profile (I)

With this action on the Patient View screen, you can view an in-depth immunization forecast for any patient in the Immunization register, including explanations of errors in the immunization history (e.g., DTaP 1 because it was given before 42 days of life). (Refer to the Module Information (PKG) option on the Manager menu or to Appendix B: ImmServe for more information about ImmServe forecasting.)

Figure 3-7 displays an example of the ImmServe Profile screen.

```

Patient:
PATIENT, JANE      DOB:27-APR-1998 (7m) Chart#:11-11-70 at UNSPEC MED CTR
Active           Female
-----
ImmServe (Release 5.1, Rule Set 3.0, Version: IHS_1)
  Case run Fri Oct 9 09:11:47 1998
INDIAN HEALTH SERVICE Report Writer 1.0
Requested Numbered Doses Processing Method: HIGHEST NUMBERED DOSE
Requested Series Forecasting: HepB DTP Td/B Hib OPV/IPV MMR/Me
  HepA Var
Series Forecasted: HepB DTP Td/B Hib OPV/IPV MMR/Me HepA VAR
Requested Series Failure Modes: None.
-----
Case: DOE, JANE Chart#: 10-45-60
Date used for forecast: 10/9/98
Date of birth: 4/27/1998
Contraindicated vaccines: Varicella (Hx of chicken Pox)
Other facts: Mother HBsAg status unknown

DtaP 1: 6/6/1998 HbOC 1: 6/6/1998
The following immunizations are due on 10/9/98
  HepB 1 (past due)
  DtaP 2 (past due)
  HbOC 2 (past due)
  Polio 1 (past due)
The following immunizations will be due:
  HepB 2, on or after 11/9/1998
  DtaP 3, on or after 12/9/1998
  HbOC 3, on or after 12/9/1998
  Polio 2, on or after 12/9/1998
The following vaccine series are either complete or no longer relevant for
this case:
  Hib           VAR

```

Figure 3-7: ImmServe Profile Screen

3.1.6 Health Summary (H)

With this option on the Patient View screen you can view or print a health summary for the patient. You can select from a number of health summaries including Immunization, Adult Regular, Cancer, CHR, Dental, Diabetes Standard, Mental Health/Social Services, Patient Merge (Complete), Pediatric, Problem List, and Sample. A sample Health Summary screen is shown in Figure 3-8.

```

***** CONFIDENTIAL PATIENT INFORMATION -- APR 14,1999  8:36 AM  [JEC] *****
DOE,PATIENT #99999  (IMMUNIZATION SUMMARY)  pg. 1 *****

DOE,PATIENT      DOB: AUG 8,1982
INDIAN HOSP.    HEALTH RECORD NUMBER: 99906
5 PALM DR, MYTOWN, NM  87999

----- IMMUNIZATIONS -----
IMMUNIZATION FORECAST:

  HEP B          past due

      DTP          03/07/91  18 mths UNSPEC Med Ctr
      DTP          04/07/95   5 yrs  UNSPEC Med Ctr
      Td-ADULT     08/09/02  12 yrs  UNSPEC Med Ctr          U0520AA
+   Enter ?? for more actions                                >>>
+  NEXT SCREEN      -  PREVIOUS SCREEN      Q  QUIT
Select Action: +//
    
```

Figure 3-8: Health Summary Screen

3.1.7 Patient Edit (P)

With this action on the Patient View screen (Figure 3-9), you can edit a patient record in the following ways:

- Change a patient status in the Active Immunization register to Inactive.
- Add or edit a case manager
- Edit Mother’s HBsAg status.
- Forecast Influenza/Pneumo.
- Add the name of a parent or guardian for due letters.

```

* * *  EDIT PATIENT CASE DATA  * * *

Patient Name: PATIENT,PATIENT (46 years)          Chart#: 99999
Street: 123 ANYWHERE                             Patient Phone: Unknown
City/St/Zip: ANYWHERE, AK 99503

(The above data may be edited through Patient Registration)
Case Manager:  YOUR NAME
Parent/Guardian:
Other info:

Inactive Date: 12/21/98
Inactive Reason:  moved to Yakima

Forecast Influenza/Pneumo: Both
Mother’s HBsAg Status: Unknown

COMMAND:      Press <PF1>H for help  Insert
    
```

Figure 3-9: Patient Edit Screen

Important Notes

- Entering a date in the Inactive field will flag the patient as Inactive as of that date. Several reports and letters allow the user to specify whether to include Inactive patients or only Active patients. CAUTION: If the patient is “inactivated” in the RPMS Patient Registration package, it will not be possible to select and edit the patient in the Immunization package (for the given site). This can lead to a problem in which a patient counts as delinquent for immunizations but cannot be edited or even inactivated in the Immunization package. Therefore it is important to inactivate the patient in the Immunization package first and then inactivate the patient in the Patient Registration package.
- If the Parent/Guardian field is left blank, the due letters are addressed to "Parent/Guardian of" followed by the patient name.
- Use the Forecast Influenza/Pneumo field to add the patient to the group who are forecast for Influenza every year between September 1 and January 31 and, or forecast for Pneumo. Select whether Normal (0), Influenza (1), Pneumococcal (2), or Both (3) vaccines should be forecasted for this patient. Leave it blank or enter Normal to forecast these vaccines only in later life (>65yrs).
- If you enter HBsAg “positive”, this status shows up each time you view the Patient’s Immunization Record on the Patient View screen.

3.1.8 Contraindications (C)

With this action on the Patient View screen (Figure 3-10), you can add or delete contraindications for specific vaccines. The reasons for contraindication include:

Anaphylaxis	Immune Deficiency
Carrier (e.g. HBsAg Carrier)	Immune Deficient
Convulsion	Lethargy/Hypotonic Episode
Egg Allergy	Neomycin Allergy
Fever > 104	Parent Refusal
Hx of Chicken Pox	Patient Refusal
Immune	Persistent Crying

CONTRAINED (IMM v8.0)		Apr 16, 1999 16:04:36	Page: 1 of 1
Patient: DOE,PATIENT		DOB: 23-Jan-53 (46 years)	
Chart#: 99999 at UNSPEC MED CTR		Active	Female
#	Vaccine	Reason	Date Noted
1	VARICELLA:	Hx of Chicken Pox	10-Dec-1998
Enter ?? for more actions.			
A	Add Contraindication		E Explanation
D	Delete Contraindication		
Select Action: Quit//			

Figure 3-10: Contraindications Screen

This is the Patient Contraindication screen, the point from which you add or delete the patient's contraindications.

The TOP of the screen lists the patient's demographic information, most of which is edited through the RPMS Patient Registration.

The MIDDLE of the screen lists any Contraindications to vaccines that the patient may have, along with the Reason for the contraindication and the Date it was Noted.

The BOTTOM of the screen provides the Actions to Add or Delete Contraindications, or to view this Explanation.

Contraindications added for the patient here will cause the contraindicated vaccine to be eliminated from the Forecast (in the right column of the main Patient View screen). However, if the Reason chosen for a Contraindication is "Patient Refusal", the vaccine will NOT be eliminated from the Forecast. If you choose "Immune Deficiency," then MMR, Varicella, OPV, and Flu-Nasal (all live vaccines) are automatically contraindicated.

3.1.9 Letter Print (L)

With this action on the Patient View screen (Figure 3-11), you can print any form letter (Due Letter, Official Immunization Record, etc.) for the given patient. The form letters are set up by the Site manager. There should be at least one Standard Due Letter and one Official Immunization Record. At the prompt, type the name of the letter or ? to select from a list of form letters.

```

                                DEMO Clinic
                                123 MAIN
                                Anywhere, Alaska 12345
                                (123) 456-7890

30-Mar-1999
                                Date of Birth: 01-Jan-1900 (6 Months)
Chart#: 99960                    Parent/Guardian of
DEMO PATIENT
100 5TH ST.
Anywhere, Alaska 12345

Dear Parent or Guardian:

Your child, DEMO, is due for immunizations. According to our records, the
following immunizations have already been received:

CARLA will be due for the immunizations listed below:

                                HEP B
                                Td-ADULT

If you feel our records are not correct, please notify us so that we may make
the corrections to update our records. Otherwise, please come to our clinic.
We would surely appreciate you bringing your own personal immunization records
so that we can update our records as well as your records!

23-April-1999 at UNSPECIFIED MEDICAL CENTER

Sincerely,

Dr. ADAM ADAM
Printed: 30-Mar-1999 @12:26          Case Manager: DEMO USER
    
```

Figure 3-11: Letter Print Screen

3.2 Print Individual Patient Letter (LET)

With this Patient Menu option (Figure 3-12), you display or print any one of a list of form letters for a patient. This option is identical to the Action described in Section 3.1.9, however the option here is offered entirely by itself and not in conjunction with all the other Patient Edit actions. The purpose in offering this capability by itself is to provide clerical staff with the ability to send letters to patients, without giving the clerical staff access to edit patient treatment data.

```

IMMUNIZATION v8.0          *  PATIENT MENU  *          Site: UNSPEC MED CTR
                          =====          User: USER, DEMO

SGL  Single Patient Record
LET  Print Individual Patient Letter
LLS  Patient Lists and Letters

Select Patient Menu Option: LET    Print Individual Patient Letter
    
```

Figure 3-12: Patient Menu

This option displays prompts for selection of the patient, selection of the Form Letter, and selection of the device to print the letter on. At the “Form Letter Prompt:” type the name of the letter or ? to select from a list of form letters. Figure 3-13 shows an example of an Official Immunization Record for an individual patient.

```

CHILDHOOD OFFICIAL IMMUNIZATION RECORD
UNSPECIFIED MEDICAL CENTER
      801 Vassar
      Anywhere, Alaska 12345
      (123) 256-4000

30-Mar-1999
                                     Date of Birth: 01-Jan-1999 (2 months)

Parent/Guardian of
DEMO PATIENT
100 Main Street
ANYWHERE, ALASKA 12345

Our records show that DEMO has received the following immunizations:

      Immunization      Date Received      Location
      -----
      1-DtorP           26-Mar-1999       UNSPECIFIED Medical Center
      1-Hib             26-Mar-1999       UNSPECIFIED Medical Center

If you feel our records are not correct, please notify us so that we may make
the corrections to update our records.

Sincerely,
Your Outpatient Nursing Department
    
```

Figure 3-13: Sample Official Immunization Record

3.3 Patient Lists and Letters (LLS)

With this Patient Menu option (Figure 3-14) you can print a Due list, Master list, or various letters for groups of patients. You may print the list or group of letters for a given forecast date, age range, patient group, a community or group of communities, or one or more case managers. This option gives you the ability to search for and print lists for a specific lot number(s) or a specific vaccine type. Note that you can accept all default settings or change specific ones as necessary.

```

IMMUNIZATION v8.0          *  PATIENT MENU  *          Site: UNSPEC MED CTR
                          =====          User: DEMO, USER

SGL  Single Patient Record
LET  Print Individual Patient Letter
LLS  Patient Lists and Letters

Select Patient Menu Option: LLS      Due Lists and Letters
    
```

Figure 3-14: Patient Menu

The Immunization Lists and Letters screen (Figure 3-15) contains a header at the top, a numbered list in the center, and actions at the bottom of the screen.

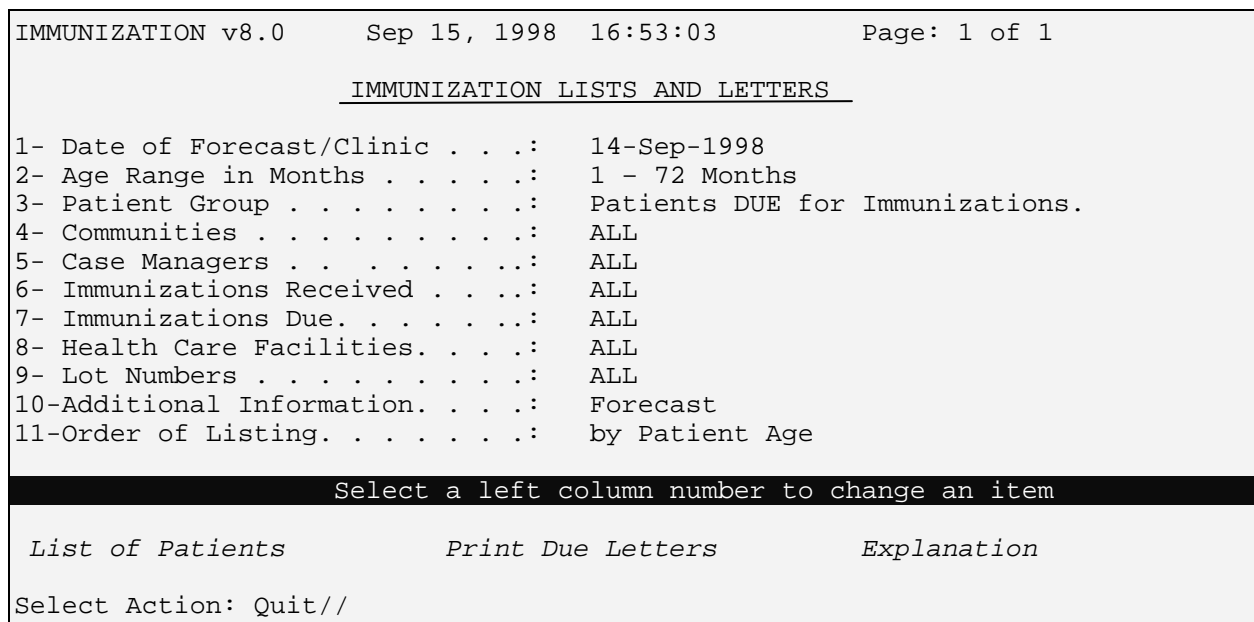


Figure 3-15: Immunization Lists and Letters Screen

On the Patient Menu, type LLS at the Select Patient Menu Option prompt. The system displays the Immunization lists and Letters screen with a “Select Action:” prompt.

3.3.1 Overview of Patient List and Letters Parameters

The Immunization Lists & Letters screen provides a single point from which to view Due Lists and Master Lists, and to print Due Letters.

There are 11 parameters on the screen that you may change in order to select for a specific group of patients (see Immunization Lists and Letters Screen). To change parameter, enter its left column number (1-11) at the prompt on the bottom of the screen. Type ? at any prompt where you would like help or more information on the parameter you are changing.

Once you have the parameters set to retrieve the group of patients you want, select L to print or view the List of patients, or select P to Print Due Letters.

In building this list to view or print, the computer must examine every patient in the Immunization Register. For this reason, on some computer systems it may take some time before the list appears.

3.3.2 Specifying Parameters for a List or Letter

This section will describe how to adjust each parameter in order to specify the kind of information included in a selected list or letter.

Date of Forecast/Clinic (1):

The Forecast Date or Clinic Date is the date that will be used for calculating which immunizations patients are due for. For example, if you choose today, the letter or report will list the immunizations that patients are due for today. If you choose a future date (the date of a clinic), the letter or report will list immunizations due on that future date.

NOTE: If you select a Forecast date in the future, some patients may appear as Past Due for that date in the future, even though they are not Past Due today.

Age Range in Months (2):

Enter the patient Age Range in months using a dash in between the limits of the range (e.g., 6-23). The Age Range will include patients whose ages span from the minimum age all the way up to one Day Less than a month after the maximum age. For example, 6-23 includes patients 6 months old, up to, but not including 24 months old. You may also enter a single age, such as 12, to select for only 12-month-old patients. Enter ALL if you wish to simply include patients of ALL ages. Or, if you wish to select a range in years, enter Y (no quotes) to change from months to Years.

Patient Group (3):

This item allows you to select the group(s) of patients to include in the list. You may include any combination of the descriptors listed from 1-5 by entering the numbers separated by commas. (For example: 1,3,4) Due and Past Due, if selected alone, include only Active patients. Selection of #1, DUE, automatically includes #2, Past Due, as well. Note that Search Template cannot be combined with any other group.

```

IMMUNIZATION v8.0          *   PATIENT GROUP   *
Please select the Patient Group for this list:

1- DUE.....(Patients Due for Immunizations)
2- PAST DUE.....(Only Patients who are PAST Due)
3- ACTIVE.....(Master List of Active Patients)
4- INACTIV.....(Master List of Inactive Patients)
5- NOT IN REGISTER..(Patients from the main database)
6- SEARCH TEMPLATE..(Pre-selected group of patients)

Select Patient Group: 1,3//
    
```

Figure 3-16: Patient Group Screen

In producing lists or letters, you may select the group of patients you wish to include by specifying attributes, such as Due or Active. (This group may be further limited by the other criteria you select on the main Immunization Lists & Letters screen, such as Age Range, Communities, Lot Numbers, etc.)

The Master list choices of Active and Inactive will simply list patients in the Register, whether due or not--unless they are combined with Due or Past Due. For example, "3" will list all Active patients in the Register; "1,3,4,5" will list all Patients (Active, Inactive, and Not In Register), but only those due for immunizations.

Another example would be if you wanted to list (or send a letter to) all patients who have received a particular vaccine or lot number. For Patient group here you would select "3,4,5"; then on the main Immunization Lists & Letters screen you would specify the Vaccine under "Immunizations Received" or the Lot Number under "Lot Numbers".

Not In Register produces a list of patients from the main Patient database (in Patient Registration), who are not in the Immunization register. This can be used in combination with "Age Range" and "Communities" on the main Immunization Lists & Letters to search for children who should be actively tracked in the Register but have not been added to it.

Search Templates are groups of individual patients that have been produced and stored by other software, usually QMan, and saved under a Template Name. If you choose this attribute, you will be asked to select from a file of existing Search Templates.

For more information about Search templates and how to create your own, contact your computer support people for training.

Communities (4):

This item allows you to select and save one or more communities for which you can print a list or letters. The default is all communities. If you select for specific Communities, only patients whose Current Community (under Patient Registration) is one of the selected Communities will be included in the export (See Figure 3-17).

NOTE: Several of the parameters involve a list of items, such as Communities, Case Managers, Immunizations Received, Lot Numbers, etc. When editing these parameters you will have the opportunity to build a list of one or more of the items pertaining to the parameter. The list you build will be saved as your own personal list of this particular item and will be presented again whenever you return to make selections from that list.

```
SELECT ITEM      Oct 09, 1998 10:33:13      Page:  1 of 1

Select one or more Communities:

#  Community          State
-----
1  ANYWHERE           ALASKA
2  DEMO                ALASKA
3  ANY COMMUNITY      ALASKA
-----

Type ?? for more actions

  A  Add an Item  E  Entire File (Add ALL Items)
  D  Delete an Item C  Clear All (Delete ALL Items)

Select Action: Quit//
```

Figure 3-17: Select Communities Screen

Four Actions are available for editing these lists:

- **Add** to add another item to the list.
- **Delete** to delete an item from the list.
- **Entire File (E)**. This selects all of the specified items.
- **Clear All (C)**. This deletes all of the specified items from the list.

Your personal list of Communities is saved each time you build it. Whenever you return to this list, the previous list of Communities you built is presented as a default list.

Case Managers (5):

This item allows you to select and save one or more Case managers of patients for whom you want to print a list or letters. The default is All Case managers. If you select for specific Case Managers, only patients who have the selected Case managers will be included. The procedure for selecting Case managers is the same as described above for selecting Communities. Your personal list of Case managers is saved each time you build it.

Immunizations Received (6):

This item allows you to select and build a list of vaccines received for your report. The default is All vaccines. If you select for specific vaccines received, then only patients who have received the selected vaccines will be included in the Lists and Letters. The procedure for selecting vaccines is the same as for selecting Communities. Your personal list of vaccines is saved each time you build it.

Immunizations Due (7):

This item allows you to select and build a list of vaccines due for your report. The default is All vaccines. If you select for specific vaccines due, then only patients who are due for the selected vaccines will be included in the Lists and Letters.

The procedure for selecting vaccines is the same as described above for selecting Communities. Your personal list of vaccines is saved each time you build it.

Health Care Facility (8):

This item allows you to select and build a list of Health Care facilities for your report. The default is All Health Care Facilities. If you select for specific Health Care facilities, only patients who have had AT LEAST ONE immunization at one of the selected Health Care facilities will be included in the Lists and Letters.

The procedure for selecting Health Care facilities is the same as described above for selecting Communities. Your personal list of Health Care facilities is saved each time you build it.

Lot Number (9):

This item allows you to select and build a list of Lot Numbers for your report. The default is All Lot Numbers. If you select for specific Lot Numbers, only patients who have received immunizations with the specified Lot Numbers will be included in the Lists and Letters.

The procedure for selecting Lot Numbers is the same as described above for selecting Communities. Your personal list of Lot Numbers is saved each time you build it.

Additional Information (10):

When you print a list, you may select additional Items of Patient Information to be included in the display or printout of this Patient List (Figure 3-18). (This selection does not pertain to the printing of Letters.)

Any combination of Items may be selected by entering the corresponding numbers, separated by commas. Items may also be selected inclusively by using a "-" dash. For example, 1-5 will include items 1, 2, 3, 4, and 5.

"Directions to House", Item 6, refers to the physical "Location of Patient's Home", as edited on Page 9 of Patient Registration.

"Current Community", Item 7, refers to Page 1 (Field# 6) of Patient Registration.

"Next Appointment" refers to the patient's next appointment, *if* the RPMS Scheduling package is in use on this system and *if* the patient has a future appointment scheduled.


```

IMMUNIZATION v8.0
                *   ADDITIONAL INFORMATION   *

Please select any Items of Additional Patient Information you wish to be
included in the Due List by entering the corresponding number(s).

To include more than one Item, separate the numbers with commas. For example:
1,2,4 would include Phone Number, Address, and Directions to House.

    0   No Additional Information
    1   Phone Number
    2   Address
    3   Immunization History
    4   Immunization History w/Lot#'s
    5   Immunization Forecast
    6   Directions to House
    7   Current Community
    8   Next Appointment (RPMS Scheduling)

Select Items:

```

Figure 3-18: Additional Items of Patient Information Screen

Order of Listing (11):

This screen (Figure 3-19) allows you to select the order in which patients will be sorted.

```

IMMUNIZATION v8.0
                *   SELECT ORDER   *

Select the Order by which patients should be sorted.

    1   Patient Age
    2   Patient Name (alphabetically)
    3   Patient Chart#
    4   Case Manager
    5   Case Manager, then Community
    6   Community, then Case Manager
    7   Community, then Patient Age
    8   Community, then Patient Name
    9   Community, then Patient Chart#
   10   Zipcode, then Patient Name

Select Order: Patient Age//

```

Figure 3-19: Select Order of Listing Screen

- **Patient Age** - will list patients in order of increasing age.
- **Patient Name** - will list patients by "Last Name, First Name" alphabetically.
- **Patient Chart#** - will list patients by increasing Chart Number (Health Record Number).
- **Case Manager** - will list patients grouped by Case Manager (and then by Patient Name alphabetically under each Case Manager).
- **Case Manager, then Community** - will list patients grouped first by Case Manager and then by Community.

- **Community, then Case Manager** - will list patients grouped first by Community and then by Case Manager.
- **Community, then Patient Age** - will list patients grouped first by Community and then by Patient Age.
- **Community, then Patient Name** - will list patients grouped first by Community and then by Patient Name.
- **Community, then Patient Chart#** - will list patients grouped first by Community and then by Patient Chart#.
- **Zipcode, then Patient Name** - will begin with lowest Zip codes first, then patient name (useful for bulk mailing discounts).

3.3.3 Printing a List

This action either displays the list of selected patients on your screen, from which you can also print it, or it sends the list directly to the printer queue (Figure 3-20).

Print: If it customarily takes a long time for your computer to produce a List of Patients, it may be more efficient for you to QUEUE it to a printer. That way you can be free to do other things until the printout is finished.

View: You will have to wait while the computer retrieves the information. However, once the List of Patients comes up on the screen, you will be able to browse the list on screen by scrolling up and down using the arrow keys. If you view it on your screen, you can also print it, but it takes longer this way than it does by initially selecting the Print action.

```

IMMUNIZATION v8.0

      WARNING: Confidential Patient Information, Privacy Act applies.

                UNSPECIFIED MEDICAL CENTER
                -----
Report Date: 31-Mar-1999      Total Patients: 6 (1-72 Months)
Clinic Date: 31-Mar-1999      Patient Group: Active

Name           HRCN#      DOB           Age
Parent/Guardian
=====
PATIENT, DEMO      12345      01-Jan-1999   (2 months)
Needs: HIB
      POLIO
-----
DEMO, JOANNE      67890      01-Jan-1999   (2 months)
Needs: HEPB
      HIB
      POLIO
-----
    
```

Figure 3-20: List of Patients Selected Screen

3.3.4 Print a Due Letter

This action sends a selected Due letter to your printer or displays it on your screen (from which you can also print it). If you send a letter to your printer for a patient or group of patients, the Patient Immunization (Patient View screen) shows the date on which you printed it. Refer to the Manager Menu if you need to modify the Standard Form Letter. An example of a Print a Due Letter screen is shown in Figure 3-21.

```
IMMUNIZATION v8.0
*   DATE/LOCATION LINE   *

The Letter you have selected prints a Date/Location line between
The Bottom Section and the Closing Section of the letter.
An example would be:

    5-May-1998 at the Children's Clinic, UNPECIFIED Medical Center

This line may be up to 70 characters long.
Please enter/edit the Date/Location line now.

Line
  10/9/1998 at the Children's Clinic, UNPECIFIED Medical Center
```

Figure 3-21: Print a Due Letter Screen

NOTE: If you have a Date/Location in your Form letter and you are asked to choose a DATE/LOCATION of CLINIC, you may enter a specific Clinic Appointment Date, or you may change this line to request that the parent call clinic for an appointment.

4.1 Adult Immunization Report(ADL)

This report will provide statistics on Adult Immunizations. The population of patients reviewed are those over the age of 50 who have been seen at least once in the past year and who live in a community specified by the user. Figure 4-4 displays a sample Adult Immunization report.

Criteria:

- **Tetanus:** The patient must have had a tetanus immunization documented in the past 10 years. This includes any of the following CVX Codes: 1, 9, 20, 22, 28, 35, 50, 106, 107, 110.
- **Influenza:** The patient must have had an influenza immunization documented in the past year. This includes CVX Codes 15, 16, 88, 111 or a diagnosis of V04.8 or V06.6 or a CPT Code of 90657, 90658, 90659, or 90660.
- **Pneumovax:** The patient must have had a pneumococcal immunization documented ever (or 6 years in Alaska). This includes any of the following CVX Codes: 33, 100, 109.

Report Parameters

The Immunization Adult Report screen allows you to adjust the report to your needs.

There are 4 parameters on the screen that you may change in order to select for a specific group of patients. To change an item, enter its left column number (1-4) at the prompt on the bottom of the screen. Type ? at any prompt where you would like more information on the parameter you are changing.

Once you have the parameters set to retrieve the group of patients you want, select V to View the Adult Report or P to print it.

If it customarily takes a long time for your computer to prepare this report, it may be preferable to Print and Queue the report to a printer, rather than Viewing it on screen. (This would avoid tying up your screen while the report is being prepared.)

Community (1): If you select Communities, only patients whose current community matches one of the Communities selected will be included in the report. "Current Community" refers to Item 6 on Page 1 of the RPMS Patient Registration package.

Health Care Facility (2): If you select Health Care Facilities, only patients who have active chart numbers at one or more of the selected facilities will be included in the report.

Beneficiary Types (3): If you select Beneficiary Types, only patients whose beneficiary type is one of those you select will be included in the report.

"Beneficiary Type" refers to Item 3 on Page 2 of the RPMS Patient Registration package.

CPT Coded Visits (4): If you type YES in this field, the report will search for any immunizations that were only entered as CPT Codes, and it will include those immunizations in the statistical results of this report.

```

                                ADULT IMMUNIZATION REPORT

1 - Community.....: ALL
2 - Health Care Facility.....: UNSPEC MED CTR
3 - Beneficiary Type.....: ALL
4 - Include CPT Coded Visits...: NO

      Select a left column number to change an item.

View Quarterly Report      Print Quarterly Report      Explanation
Select Action: Quit//
    
```

Figure 4-3: Adult Immunization Report Screen

```

                                UNSPECIFIED Medical Center
                                Adult Immunization Report
                                30-Jan-2004 to 30-Jan-2003
-----
Facility: UNSPEC MED CTR
-----
                                Number      Percent
=====
Total Number of Patients over 50 years old.....: 14,183
  TETANUS: # patients w/Td in past 10 years.....:  5,911      41.7
  INFLUENZA: # pts w/Influenza vaccine in past year...:  1,314       9.3
  PNEUMOVAX: # patients w/Pneumovax ever.....:  6,498      45.8
  PNEUMOVAX (Alaska): # pts w/Pneumovax in past 6 yrs.:  4,644      32.7
Total Number of Patients over 65 years old.....:  5,088
  TETANUS: # patients w/Td in past 10 years.....:  2,026      39.8
  INFLUENZA: # pts w/Influenza vaccine in past year...:    592      11.6
  PNEUMOVAX: # patients w/Pneumovax ever.....:  3,431      67.4
  PNEUMOVAX (Alaska): # pts w/Pneumovax in past 6 yrs.:  2,372      46.6
    
```

Figure 4-4: Sample Adult Immunization report

4.2 Quarterly Immunization Report (QTR)

With this Reports Menu option you can generate a report of the age-appropriate immunization rates for Active children 3 to 27 months of age (Figure 4-6). The Immunization Quarterly Report screen allows you to adjust the report to your needs.

The IHS and Tribal programs report the current age-appropriate immunization rate of active children 3-27 months of age. The criteria listed below are used by IHS to determine the up-to-date status of children in each age group, and the age-specific rates are combined into a total rate. Pneumococcal, Varicella, and Hepatitis A vaccines can be included in the report totals by typing **Yes** for option 6; however, for your report to Headquarters type **No** to exclude these from the totals. Age-appropriate immunization rates are given for each age group as well as a total 3-27 months age-appropriate rate, using the following criteria: (Note that Hib requirements match the PedvaxHIB schedule.)

3-4 months old	1-DTaP 1-IPV 1-Hib 1-HepB
5-6 months old	2-DTaP 2-IPV 2-Hib 2-HepB
7-15 months old	3-DTaP 2-IPV 2-Hib 2-HepB
16-18 months old	3-DTaP 2-IPV 3-Hib 2-HepB
19-23 months old	4-DTaP 3-IPV 3-Hib 3-HepB 1-MMR
24-27 months old	4-DTaP 3-IPV 3-Hib 3-HepB 1-MMR

Quarter Ending Date (1): The report will compile immunization rates as of the date entered. Typically, this date would be the end of a Quarter. The system will interpret most forms in which you type the date. If you type in only a month and a year, the system assigns the last day of the month for the report. The patient ages (3 months, 5 months, etc.) will be calculated as of the date you enter here.

Community (2): If you select Communities, only patients whose Current Community (under Patient Registration) will be included in the report. "Current Community" refers to Item 6 on Page 1 of the RPMS Patient Registration package.

Health Care Facility (3): If you select Health Care Facilities, only Patients who have active chart numbers at one or more of the selected facilities will be included in the report. (The default facility will be the one you have logged in under.)

Case Manager (4): If you select Case Managers, only patients who have the selected Case Managers will be included in the report.

Beneficiary Types (5): If you select Beneficiary Types, only patients whose Beneficiary Type is one of those you select will be included in the report. "Beneficiary Type" refers to Item 3 on Page 2 of the RPMS Patient Registration package.

Include Hep A, Pneumo & Var (6): Answer "YES" if you wish to have the Hep A, Pneumo, and Varicella rates included in the “Appropriate for Age” statistics at the top of the report.

```

Immunization v8.0                Feb 17, 2004 16:23:04                Page: 1 of 1
                                QUARTERLY IMMUNIZATION REPORT
1 - Quarter Ending Date.: 31-Mar-1998
2 - Community. . . . .: ALL
3 - Health Care Facility: UNSPECIFIED MEDICAL CENTER
4 - Case Manager . . . .: ALL
5 - Beneficiary Type....: ALL
6 - Include Hep A, Pneumo & Var: NO

      Select a left column number to change an item.

View Quarterly Report      Print Quarterly Report      Explanation
Select Action: Quit//
    
```

Figure 4-5: Quarterly Immunization Report Screen

NOTE: The software stores every patient in the report. If you View the Report you will get a prompt at the bottom of the screen that will allow you to print lists of patients who were: Rejected Patients (Not Age Appropriate), Age Appropriate Patients, or Both Groups. (This is only available if the report is viewed rather than printed.)

It is possible that some children were “Not Age Appropriate” because they were behind on vaccines so they may not be DUE for any immunizations. Immunizations given after the recommended age cutoff causes a patient to be rejected from the “Appropriate For Age” tally. Also, any immunizations given after the Quarter Ending Date of the report are not counted.

UNSPECIFIED Medical Center Quarterly Immunization Report For Children 3-27 Months of Age 30-Sep-2003							

Facility: UNSPEC MED CTR							

	Age in Months						Totals
	3-4	5-6	7-15	16-18	19-23	24-27	
# in Age	138	138	587	190	275	271	1599
Minimum Needs	1-DTaP 1-POLIO 1-HIB 1-HEPB	2-DTaP 2-POLIO 2-HIB 2-HEPB	3-DTaP 2-POLIO 2-HIB 2-HEPB	3-DTaP 2-POLIO 3-HIB 2-HEPB 1-MMR	4-DTaP 3-POLIO 3-HIB 3-HEPB 1-MMR	4-DTaP 3-POLIO 3-HIB 3-HEPB 1-MMR	
Approp. for Age	119 86%	101 73%	458 78%	148 78%	186 68%	217 80%	1229 77%
1-DTaP	119	126	539	179	258	259	1480
2-DTaP	28	102	515	170	248	253	1316
3-DTaP		25	463	160	237	248	1133
4-DTaP			15	68	190	222	495
1-POLIO	120	126	538	178	257	258	1477
2-POLIO	28	101	512	169	243	252	1305
3-POLIO		26	459	158	228	243	1114
1-MMR			168	154	238	247	807
1-HIB	120	126	538	178	258	260	1480
2-HIB	27	102	506	171	243	253	1302
3-HIB			181	149	223	236	789
4-HIB			6	10	16	26	58
1-HEPB	128	133	548	182	262	264	1517
2-HEPB	101	125	521	176	249	252	1424
3-HEPB	19	77	456	166	236	244	1198
1-VAR			141	139	215	226	721
1-HEPA				1	1	134	136
2-HEPA						1	1
1-PNE	118	126	533	177	252	256	1462
2-PNE	26	99	506	167	238	250	1286
3-PNE		25	405	131	214	234	1009
4-PNE			7	24	111	132	274

Figure 4-6: Sample Quarterly Immunization report

4.3 Two-Yr-Old Immunization Report

The Two-Yr-Old Immunization report (Figure 4-8) provides age-specific immunization rates for individual vaccines (e.g. DTaP) as well as groups of vaccines (e.g. DTaP 4, polio 3, MMR 1) in Active children currently 19 to 35 months of age.

```

Immunization v8.0                Feb 17, 2004 16:23:04                Page:    1 of    1
                                TWO-YR-OLD IMMUNIZATION RATES REPORT
1 - Quarter Ending Date.: 09-Oct-1998
2 - Community. . . . .: ALL
3 - Health Care Facility: UNSPECIFIED MEDICAL CENTER
4 - Case Manager . . . .: ALL
5 - Beneficiary Type....: ALL

        Select a left column number to change an item.

View Rates Report                Print Rates Report                Explanation
Select Action: Quit//
    
```

Figure 4-7: Two-Yr-Old Immunization Rates Report

The Two-Yr-Old report audits immunization data in the same manner as CDC’s CASA (Clinic Assessment Software Application) software and the Year 2000 Health Objectives.

Single vaccines: e.g. % with DT(a)P 1 by age 3 months

- % with DT(a)P 2 by age 5 months
- % with DT(a)P 3 by age 7 months
- % with DT(a)P 4 by age 19 months, by 24 months, by the date of the report

Vaccine groups: e.g. % with DT(a)P 1, polio 1, Hib 1, Hep B 1 by age 3 months

- % with DT(a)P 4, polio 3, Hib 3, MMR 1 by age 24 months, by the report date

UNSPECIFIED Medical Center IHS Two-Yr-Old Immunization Rates For Children between 19 and 35 Months of Age							
As of: 30-Sep-2003				Total Patients: 1066			
----- Facility: UNSPEC MED CTR -----							
Received by	3 mo # %	5 mo # %	7 mo # %	16 mo # %	19 mo # %	24 mo # %	09/30/03 # %
=====							
1-DTaP	941 88%	980 92%	998 94%	1011 95%	1016 95%	1019 96%	1021 96%
2-DTaP	12 1%	760 71%	912 86%	982 92%	989 93%	993 93%	995 93%
3-DTaP	1 0%	4 0%	647 61%	923 87%	941 88%	957 90%	963 90%
4-DTaP	1 0%	1 0%	3 0%	297 28%	710 67%	830 78%	867 81%
1-POLIO	932 87%	981 92%	997 94%	1010 95%	1015 95%	1016 95%	1017 95%
2-POLIO	12 1%	751 70%	907 85%	975 91%	978 92%	982 92%	984 92%
3-POLIO	2 0%	5 0%	628 59%	908 85%	922 86%	934 88%	942 88%
1-HIB	931 87%	975 91%	992 93%	1014 95%	1019 96%	1021 96%	1022 96%
2-HIB	11 1%	747 70%	897 84%	975 91%	979 92%	984 92%	985 92%
3-HIB	1 0%	5 0%	89 8%	849 80%	893 84%	915 86%	920 86%
4-HIB	1 0%	1 0%	2 0%	108 10%	124 12%	128 12%	132 12%
1-HEPB	984 92%	1005 94%	1015 95%	1029 97%	1031 97%	1033 97%	1035 97%
2-HEPB	829 78%	919 86%	951 89%	985 92%	986 92%	990 93%	991 93%
3-HEPB	12 1%	560 53%	707 66%	916 86%	935 88%	947 89%	950 89%
1-MMR				876 82%	926 87%	956 90%	969 91%
1-VAR			1 0%	660 62%	769 72%	828 78%	877 82%
1-HEPA				5 0%	5 0%	20 2%	509 48%
2-HEPA							61 6%
1-PNE	834 78%	935 88%	966 91%	992 93%	997 94%	999 94%	1002 94%

2-PNE	11 1%	660 62%	850 80%	946 89%	954 89%	961 90%	964 90%
3-PNE	1 0%	6 1%	529 50%	821 77%	854 80%	882 83%	895 84%
4-PNE	1 0%	1 0%	4 0%	141 13%	352 33%	422 40%	555 52%
1-DTaP 1-POL 1-HIB 1-HEPB	911 85%	964 90%	985 92%	1006 94%	1009 95%	1010 95%	1012 95%
2-DTaP 2-POL 2-HIB 2-HEPB	10 1%	720 68%	873 82%	954 89%	961 90%	967 91%	968 91%
3-DTaP 2-POL 3-HIB 2-HEPB	1 0%	4 0%	83 8%	836 78%	879 82%	905 85%	911 85%
4-DTaP 3-POL 1-MMR				290 27%	702 66%	825 77%	862 81%
4-DTaP 3-POL 1-MMR 3-HIB				286 27%	696 65%	816 77%	852 80%
4-DTaP 3-POL 1-MMR 3-HIB 3-HEPB				280 26%	686 64%	805 76%	841 79%
4-DTaP 3-POL 1-MMR 3-HIB 3-HEPB 1-VAR 1-HEPA 3-PNE					1 0%	13 1%	429 40%
Total Active Patients reviewed: 1066							

Figure 4-8: Sample of Two-Year-Old Immunization report

4.4 Vaccine Accountability Report (VAC)

The Vaccine Accountability report (Figure 4-10) provides “doses administered” by vaccine series (e.g., DTaP) and by age group. This report can be printed for any time period (typically, these are monthly reports), for a given facility, visit type (e.g. PHN, 638), or for a community or group of communities.

```
Immunization v8.0          Oct 21, 1999 15:00:58          Page:    1 of    1
                               VACCINE ACCOUNTABILITY REPORT
1 - Date Range.....from: 21-Oct-1998
                             to: 21-Oct-1999
2 - Community.....: ALL
3 - Health Care Facility: ALL
4 - Case Manager.....: ALL
5 - Beneficiary Type....: ALL
6 - Visit Type.....: YES
7 - Include Historical...: YES
    Select a left column number to change an item.
View Account Report      Print Account Report      Explanation
Select Action: Quit//
```

Figure 4-9: Vaccine Accountability Report Selection Screen

UNSPECIFIED Medical Center Vaccine Accountability Report 28-Jan-2004												
Reporting period: 30-Sep-2002 to 30-Sep-2003										(Historical Included)		
<1	-1-	-2-	3-5	-6-	7-10	11-12	13-18	19-24	25-44	45-64	65+	TOTAL
DT-PEDS												
5	3		3		1	1	2			1		16
DTP												
17	5		5		2			1	4	1		35
DTaP												
3207	1259	184	1401	22	3	1	4		4	1		6086
Td-ADULT												
	1		4		61	941	1142	517	1625	948	295	5534
IPV												
3170	282	54	1342	22	15	12	45	3	5	7	1	4958
OPV												
10			1									11
HIBTITER												
40	18	2	1					1				62
PEDVAXHIB												
2209	1280	62	32	2	1		6	1	1	4		3598
HBIG												
3							2		1	1		7
HEP B												
134	165	7	8	6	3	8	50	35	86	49	5	556
HEP B ADLT												
			1			1	30	238	571	290	35	1166
HEP B PED												
3260	1005	48	90	46	43	57	174	21	11	3	1	4759
MMR												
6	1268	59	1316	12	11	7	61	104	180	19		3043
VARICELLA												
5	1213	158	154	16	75	31	127	4	13	1		1797
HEP A												

3	12	1618	1103	69	148	185	543	111	246	89	2	4129
INFLUENZA												
151	297	186	422	92	331	182	463	534	2763	3351	1948	10720
PNEUM-CONJ												
2878	1062	241	209		2	1	3	2	12	22	21	4453
PNEUMO-PS												
5	4	6	11	2	13	4	34	13	153	605	412	1262
MENING-PS												
3							19	4				26
RSV-Mab												
411	81	18	9									519
COMVAX												
		1										1
PEDIARIX												
7												7
TOTAL IMMUNIZATIONS (for all vaccines in this report)											52745	

Figure 4-10: Sample Vaccine Accountability Report


```

IMMUNIZATION v8.0          *   MANAGER MENU   *           Site: UNSPEC MED CTR
                          =====           User:  USER, DEMO

ERR  Edit Patient Errors
CMG  Add/Edit Case Manager
CMT  Transfer a Case Manager's Patients
-----
ESP  Site Parameters Edit
PKG  Package Setup Information
LET  Form Letters Add/Edit
LOT  Lot Number Add/Edit
VAC  Vaccine Table Edit
RES  Restandardize Vaccine Table
EXP  Export Immunizations
KEY  Allocate/Deallocate Imm Menu Keys

Select Manager Menu Option: ERR      Edit Patient Errors
    
```

Figure 5-2: Manager Menu

5.1 Edit Patient Errors (ERR)

This screen displays patients whose Immunization histories contain errors according to the ImmServe Forecasting utility and provides you with the ability to correct or delete those errors (Figure 5-3). The columns, from left to right, list the following:

1. Patient Name
2. Active/Inactive Status (A=Active, I=Inactive, N=Not In Register)
3. HRCN# (Health Record Number or Chart#)
4. Age (y=years, m=months, d=days)
5. Vaccine Group in which the error is occurring
6. An abbreviated statement of what the error is

The three actions at the bottom of the screen allow you to make corrections to patient errors on the list (Edit Patient Error) or to delete them, either individually (Delete Patient Error) or all at once (Clear/Delete All Errors) from the list.

```

                                Indian Medical Center
                                -----
ALL PATIENT ERRORS (Total: 20)

# Patient      Active  HRCN#  Age  V Grp  Error
-----
1 Patient,Demo      I    123456  9y  HIB    Un-Numbered Dose
2 Patient,Demo      I    654321 10y  HEPB   Un-Numbered Dose
3 Patient,Demo.     I     000001 10y  HIB    Un-Numbered Dose
4 Patient,Demo      A     000002 12y  HEPB   Duplicate Dose#'S

Enter ?? for more actions
E Edit Patient Error   D Delete Patient Error   C Clear/Delete All Errors
Select Action: Quit//
    
```

Figure 5-3: Edit Patient Errors Screen

5.2 Add/Edit Case Manager (CMG)

This option (Figure 5-4) allows the manager to add/edit a Case Manager. When you add new Case Managers, they can be selected when editing a patient's Case Data. A Date Inactivated field makes it possible for you to inactivate case managers.

```

Immunization v8.0
                *  ADD/EDIT CASE MANAGERS  *
Select CASE MANAGER:  MANAGER, DEMO          DM          MANAGER
...OK? Yes//      (Yes)
DATE INACTIVATED:

```

Figure 5-4: Add/Edit Case Managers Screen

5.3 Transfer a Case Manager's Patients (CMT)

The manager can use this option to transfer patients to another case manager in events such as a turnover in staff or a re-assignment of cases. Figure 5-5 shows an example of a Transfer Case Manager's Patients screen. The person indicated as the new Case manager must first be added to the file using the Add/Edit Case Managers option.

```

Select OLD CASE MANAGER: ??
Choose from:
  DEMO, DEMO
  MANAGER, DEMO
  MANAGER, DEMO
  MANAGER, DEMO2
Select OLD CASE MANAGER:  MANAGER, DEMO
Select NEW CASE MANAGER:  MANAGER, DEMO2      RM
All patients currently assigned to:  MANAGER, DEMO
Will be reassigned to.....:  MANAGER, DEMO2
Do you wish to proceed?  Enter Yes or No? Yes
22 patients transferred from MANAGER, DEMO to MANAGER, DEMO2.

```

Figure 5-5: Transfer a Case Manager's Patients Screen

5.4 Site Parameters Edit (ESP)

This option allows the manager to edit parameters that are specific to a site (facility)(Figure 5-6). Refer to the PKG option on the Manager menu or to Site Parameters for more information relating to the Site Parameters.

Immunization v8.0 Oct 09, 1998 10:35:35 Page: 1 of 1

Edit Site Parameters for: INDIAN MEDICAL CENTER

1) Default Case Manager.....: MANAGER, DEMO
2) Other Location.....: OTHER NON-IHS (e.g. private doctor)
3) Standard Imm Due Letter: Standard Due Letter
4) Official Imm Record Letter...: Official Immunization Report
5) Facility Report Header.....: INDIAN MEDICAL CENTER
6) Host File Server Path.....: C:\INETPUB\FTPROOT\PUB\
7) Minimum Days Last Letter.....: 60 days
8) Minimum vs Recommended Age...: Recommended Age
9) ImmServe Forecasting Option..: Option 10, NO 4-Day Grace Period
10) Lot Numbers required.....: No
11) Age Appropriate for Pneumo...: 65 years old
12) Forecasting (Imms Due).....: Enabled
13) Chart# with dashes.....: No Dashes (123456)
14) User as Default Provider.....: No
15) Immserve Directory.....: C:\immserve

Select a left column number to change an item.

Select Action: Quit//

Figure 5-6: Edit Site Parameters Screen

The Site Parameters are defined as follows:

1. **Default Case Manager:** The Case Manager who is presented automatically as a default at all Case Manager prompts, such as when you are adding a new patient.
2. **Other Location:** An entry in the IHS LOCATION file that is designated as the OTHER Location for a PCC Visit when the location is not in the LOCATION File (e.g. private doctor).
3. **Standard Imm Due Letter:** The form letter that is sent to patients or their parents listing their Immunization History and informing them of which immunizations are due next. It may also contain information about where and when to receive the next immunizations. The letter selected here will be presented as the default letter to use when printing Due Letters. In order to select the letter for this Site Parameter, it must already have been created via the LET option on the Manager Menu (MGR→LET). Create a new letter named "Standard Due Letter" and then return to this site parameter to choose it.
4. **Official Imm Record Letter:** The letter that presents all of a patient's Immunization information and is generally sent to schools, parents, other clinics, etc. The letter selected here will be used as the patient's Official Immunization Record whenever users select that action. In order to select the letter for this Site Parameter, it must already have been created via the LET option on the Manager Menu (MGR→LET). Create a new letter named "Official Immunization Record" and then return to this site parameter to choose it.

5. **Facility Report Header:** The name of your site or institution as you would like it to appear at the top of various reports and screens throughout this software. (This may be the same as the Site Name that appears on some of screens; however, that name is often an abbreviated form of the actual site name.)
6. **Host File Server Path:** The directory on the Host File Server where files to be imported and exported are stored. Include ALL necessary slashes in the path name (everything except the filename itself). Examples would be: C:\TEMP\ (on a PC) or /usr/mumps/ (in unix).
7. **Minimum Days Last Letter:** The least number of days that must pass after a letter is printed for a patient before the software automatically prints another letter to the same patient. The software will not print a second Due Letter within this default number of days since the last one was generated. The Case Manager can change this number when printing Due Letters, and you can print an individual letter at any time.
8. **Minimum vs. Recommended Age:** Allows you to direct the ImmServe Forecasting program to forecast Immunizations due at either the Minimum Acceptable Patient Age or at the Recommended Age (eg.10 weeks of age vs. 4 months of age) .
9. **ImmServe Forecasting Rules:** Reference Section 7.0 Appendix B: ImmServe.
10. The Forecasting options govern in part which vaccines are forecast as Due and when. There are 10 Forecasting options listed below. All versions include DTaP for Infants and Hep A.

	6 Months	12 Months	15 Months
1) .....	....	IPV, MMR, Pn, Var	DTaP, Hib
2) .....	....	Hib, IPV, MMR, Pn, Var	DTaP
3)	IPV	DTaP, Hib, MMR, Pn, Var	
4) .....	....	DTaP, Hib, IPV, MMR, Pn, Var.	
5)	IPV	Hib, MMR, Var	DTaP, Pn
6) Comvax	....	HepB, Hib, MMR, Pn, Var	DTaP, IPV
7) Comvax	IPV	DTap, HepB, Hib, MMR, Pn, Var	
8) Comvax	....	HepB, Hib, IPV, MMR, Pn	DTaP, Var
9) Comvax	IPV	HepB, Hib, Var, MMR	DTaP, Pn
10)	IPV	Hib, MMR, Pn	DTaP, Var

4-Day Grace Period: The ACIP recommends that vaccine doses administered 4 days or less before the minimum interval or age be counted as valid. (Not all states accept this "4-Day Grace Period.") The Forecasting Rules allow you to choose "Yes" if you would like to screen using the 4-Day Grace Period or to choose "No" to adhere strictly to the recommended intervals. Note: The 4-Day

Grace Period will not affect vaccine forecasting, only screening for the validity of the dose administered.

11. **Lot Numbers Required:** Indicates whether Lot Numbers should be required when entering Immunization visits (Yes) or should be Optional (No). If Lot Numbers should be required when entering Immunization visits, enter YES for this parameter. If Lot Numbers should be Optional, enter NO. Note: Lot Numbers will NOT be required for Immunizations with a Category of "Historical Event", even if this site parameter is to YES.
12. **Age Appropriate for Pneumo:** The adult age at which pneumococcal immunizations are to be routinely forecast. Typically this is set at 65 (or 55 years of age in Alaska). You can also designate whether to forecast every 6 years after this age (Alaska)
13. **Forecasting (Imms Due):** Indicates whether the ImmServe Forecasting Utility is properly installed (Enable) or is not installed (Disable). If the ImmServe Forecasting Utility is properly installed and Immunizations Due should be forecast when viewing and editing patient histories, printing Due Lists, etc., choose "Enable." If the ImmServe Utility is not installed, choose "Disable." If at any point in the software a forecasting error occurs, this is due to a problem with the ImmServe Utility. In this case, either the ImmServe Utility should be re-installed (see Installation Notes in the Technical Manual), or this parameter should be Disabled until the problem is corrected by technical support people.
14. **Chart # with Dashes:** Indicates whether or not chart numbers (Health Record Numbers) are displayed with dashes throughout the Immunization module.
 - Chart# displayed without dashes..: 12345
 - Same Chart# displayed with dashes: 01-23-45
15. **User as Default Provider:** When entering new Immunizations or new Skin Tests through the Immunization Module, it is possible to have the User appear as the Default Provider. In other words, when the screen for a new Visit first comes up, the Provider field is already filled in with the User's name. (The User is the person logged on and entering the data.)

This will ONLY occur if the User is a Provider (has been given the Provider Key). This will NOT occur on edits of pre-existing Visits, whether they have a Provider or not.
16. **Immserve Directory:** This parameter allows you to enter or edit the full path of the directory in which the ImmServe Files will be stored. (Path length may not be more than 70 characters long.) Typical examples are:
 - AIX: /usr/local/immserve/
 - NT/XP: C:\immserve\

5.5 Module Information (PKG)

This option displays information about the Immunization module v8.0. It addresses software options and access to them, device information, handling of the old software, and reference to site parameters. Information in this Manager Menu option is intended for use by the module manager and the local/site programmer in setting up the new module and maintaining it. Note that the information provided through this option is reproduced in this manual in Appendix C: Package Setup Information.

```
(Immunization v8.0)           Feb 17, 2004 16:33           Page:    1 of   18

          PACKAGE INFORMATION for IMMUNIZATION, Version 8.0

The text presented here is intended to provide Site Managers with
helpful information regarding setup and management of the RPMS
Immunization Package, version 8.0.

OPTIONS:
-----
The main menu Option for the Immunization module is BIMENU. At most
Sites this would be placed on AKMOCORE along with other RPMS modules.
For the sake of consistency from site to site, it is recommended that the
Synonym "IMM" (Immunization) be given to the main menu Option BIMENU,
However, this is not a requirement. BIMENU allows access to every other
Option within the module. (Keys: BIZMENU ,BIZ EDIT PATIENTS, and BIZ

+      Enter ?? for more actions
                                           P  Print this text.
Select Action: Quit//
```

Figure 5-7: Module Information for Immunization

5.6 Form Letters Add/Edit (LET)

This option allows the manager to edit current form letters or create and save a new form letter to use under the Letter Print Action on the Patient View screen or the Immunization Lists And Letters screen.

When you choose to add a new form letter this program loads a sample form letter, which you may then edit to suit the purpose of your new form letter. There are two sample form letters:

- Standard Due Letter
- Official Immunization Record

After you have selected a form letter, it is displayed on the View/Edit Form Letter screen for you to edit and save as your new form letter.

The VIEW/EDIT FORM LETTER Screen allows you to customize Form Letters. The TOP section of the screen displays the name of the Form Letter.

The MIDDLE section of the letter displays the body of the letter in a scrollable region. Use the up and down arrow keys to view all parts of the letter.

The BOTTOM section of the screen lists actions you can take to edit sections of the letter or to print or delete the letter.

Fields in the letter are signified by uppercase text within vertical bars, such as |PATIENT NAME|. These Fields may be moved within the letter or they may be deleted. However, the text within the vertical bars must NOT be altered.

The Form Letter is divided into 7 sections illustrated in Figure 5-8 and described below it. You can edit any portion of the sample letter to create your new form letter by entering the letter or word of the section (e.g., T - Top) at the prompt.

```

Top:
                                UNSPECIFIED Immies Clinic
                                123 MAIN ST
                                ANWHERE, USA 77777
                                [B1 TODAY]

                                Date of Birth: [B1 DATE OF BIRTH]
                                Chart #: [B1 CHART NUMBER]

|BI PARENT/GUARDIAN|
|BI NAME FIRST LAST|
|BI MAILING ADD-STREET|
|BI MAILING ADD-CITY STATE ZIP|
Dear Parent or Guardian:
Your child, |BI NAME FIRST|, is due for immunizations. According to our records, the
following immunizations have already been received:
-----
history:

12-Aug-1994: 1-DTP, 1-OPV, 1-PEDVAXHIB, 1-HEP B VAC
10-Oct-1994: 2-DTP, 2-OPV, 2-PEDVAXHIB, 2-HEP B VAC
-----
middle:

|BI NAME FIRST| will be due for the immunizations listed below:
-----
forecast:

DTP
HEP B VAC
-----
-
bottom:

If you feel our records are not correct, please notify us so that we may make the
corrections
to update our records. Otherwise, please come to our clinic.
We would surely appreciate you bringing your own personal immunization records so
that we can Update our records as well as your records!
-----
date/location:

10-Dec-1994 at UNSEPECIFIED Klinik, UNSPECIFIED Medical Center
-----
closing:
Sincerely,

Dr. Ralph Avritt
-----
+ Scroll down to view more. Type ?? for more actions
T Top      F Forecast    C Closing
H History  B Bottom      P Print Sample Letter
M Middle   D Date/Loc    X Delete Form Letter
Select Action: Quit//
    
```

Figure 5-8: Form Letter Add/Edit Screen

5.6.1 Form Letter Section Descriptions:

T - Top: This section of the letter contains your address, today’s date, and the patient’s name, chart number, and address. You may edit any feature of the “Top” using the Word Processor instructions in Appendix A. Today’s date, the patient’s

name, address, phone number, and date of birth appear automatically as noted by the appropriate text inside brackets (e.g., [TODAY]).

H - History: This section of the letter contains the immunization history of the patient. You can change the immunization history (by date, by vaccine, etc.), and you can choose not to include the immunization history in your form letter. This section will also include the patient's contraindications, if any.

M - Middle: This section of the letter is free text. You can edit any portion of the middle section.

F - Forecast: This section of the letter contains the immunizations for which the child is due on the Forecast/Clinic date chosen in "Immunization lists and letters." The Forecast does not show the series number, just the vaccines for which the patient is due. You may choose not to show the Forecast.

B - Bottom: The bottom section of the letter is also free text. It can contain a line that says "Current Next Appt: [BI NEXT APPOINTMENT]". If your site is running RPMS Scheduling, this field will print the patient's next scheduled appointment. If your site is not running RPMS Scheduling, this line will not print the patient's next appointment.

D - Date/Loc: This section of the letter gives the patient the Date and Location for Immunization Clinic and can be used if you are requesting that the patient come to a specific clinic. This is a special section that may be edited by the user (clerk or clinic staff) at the time the letter is being sent. It allows clinical staff to change the date/time/location of an appointment "on the fly" when printing the letter—without giving them access to edit the other 6 sections of the Form Letter. If you wish to have the patient call for an appointment, you can include that message (e.g., "Please call the Children's clinic, 729-1000, for an appointment to get your child's immunizations updated) in the B BOTTOM section and you can eliminate this portion of the letter.

C - Closing: The closing contains your name and the name of the clinic. You may edit this section.

5.7 Lot number Add/Edit (LOT)

With this option the manager can add or edit a current lot number for any vaccine in the vaccine table. Selection of this option displays the screen shown in Figure 5-9.

```
Immunization v8.0
*   EDIT IMMUNIZATION LOT NUMBERS   *

Select LOT NUMBER: 987076
LOT NUMBER: 987076//
MANUFACTURER: SQUIBB//
STATUS: ACTIVE//
VACCINE: HEPATITIS B IMMUNE GLOBULIN//
```

Figure 5-9: Lot Number Add/Edit Screen

Duplicate Lot Numbers:

Take the following steps to resolve duplicate Lot Numbers:

1. Enter the Lot Number in question. Two or more choices will be presented. Select one of the choices to be the valid Lot Number. Edit this Lot Number, making sure it is Active and that all relevant vaccines are listed under it.
2. Select and edit each of the duplicate Lot Numbers. Edit the Lot Number itself by placing a **z** at the beginning (e.g., 483-116 z483-116). If there is a second duplicate, add **zz** to the beginning of that Lot Number; for a third duplicate, add **zzz**, and so on. The adding of leading **z**'s to the duplicates makes them distinguishable from the valid Lot Number. This method also makes the old duplicate Lot Numbers recognizable on pre-existing visits.
3. The duplicate Lot Numbers should also be made INACTIVE. If an old Visit is to be edited and it has one of the old duplicate Lot Numbers, the old duplicate should be replaced with the current valid Lot Number (easily recognized by ignoring the leading **z**'s).

For additional information, refer to the PKG option on the Manager Menu or to Appendix C: Package Setup Information.

5.8 Vaccine Table Edit (VAC)

With this option the manager can edit five parameters of any vaccine. Figure 5-10 below shows a sample of the table. Selecting “Change List Order” from the Action menu below will toggle the order of the list between alphabetical (by name) and numerical (by CVX Code).

```

Immunization v8.0
                                INDIAN MED CTR
                                -----
                                EDIT VACCINE TABLE
-----
# Vaccine      CVX      Active      Lot# Dflt      VIS Dflt      Vol Dflt      Forecast
-----
1  ACTHIB.....(48)...Active.....987654321234...12/16/98..  .5 ml  ....YES
2  ADENOV,NOS..(82)...Inactive.....                .5 ml  ....YES
3  ADENOVI,T4..(54)...Inactive.....                .5 ml  ....YES
4  ADENOVI,T7..(55)...Inactive.....                .5 ml  ....YES
5  ANTHRAX.....(24)...Inactive.....                .5 ml  ....YES
6  BCG.....(19)...Inactive.....                .5 ml  ....NO
7  BOTULINUM ..(27)...Active.....                .5 ml  ....YES
8  CHOLERA.....(26)...Active.....                .5 ml  ....YES
9  CMVIG.....(29)...Active.....                .5 ml  ....YES
10 COMVAX.....(51)...Active.....123321456654...07/11/01..  .5 ml  ....YES
11 DENGUE FEV..(56)...Inactive.....                .5 ml  ....YES
12 DIPHTHERIA.(12)...Inactive.....                .5 ml  ....YES
13 DT-PEDS.....(28)...Active.....                .5 ml  ....YES
+
+          Scroll down to view more. Type ?? for more actions
+ Vaccine Edit          Change List Order          Explanation
+                               Print List
Select Action: Quit//
    
```

Figure 5-10: Vaccine Table Edit Screen

This screen allows you to edit five fields of each Vaccine.

To edit a particular Vaccine, type V, then select the left column number that corresponds to the Vaccine you wish to edit.

Active/Inactive - If a Vaccine is set to "Inactive", users will not be able to enter NEW patient immunizations for this vaccine. However, previous immunizations with this Vaccine will continue to show up on the patient histories. The Program Manager should inactivate extra vaccines in a vaccine group (eg. Hep A NOS, Hep B NOS) in order to minimize the number of vaccine options for providers. See Appendix E for example of inactivated vaccines.

Lot# Dflt - This is that Lot# default that will be automatically entered in the Lot# field for this Vaccine when users are adding new immunizations for patients. The user, of course, will be able to overwrite or delete the default if it is not correct.

VIS Dflt - This is the Vaccine Information Statement (VIS) default Date (Date of publication--not date given to patient). It gets entered automatically as in the VIS Date field when users are adding new immunizations for this Vaccine.

Vol Dflt - This is the default Volume of the injection for the given vaccine. It gets entered automatically as in the Volume field when users are adding new immunizations for this Vaccine.

Forecast - (YES/NO) This tells the program whether to forecast the Vaccine being edited or not. For example, if you set HEP A to NO, then NO patients will be forecast as due for HEP A.

IMPORTANT NOTE!: Some Vaccines can only be turned off as a group or series. For example, if you turn off any one of the Hib Vaccines, they will ALL be turned off (HL7 Codes 17,46,47,48 & 49). This is true for the Hib, MMR, Tetanus and Hep B groups. If turning ON or OFF forecasting for a Vaccine affects a group of Vaccines, a message listing the other Vaccines will be displayed.

5.9 Re-standardize the Vaccine Table (RES)

The Immunization package v8.0, comes with a Vaccine table (Immunization File), which has been standardized with HL7/CVX codes consistent with the CDC's NIP (National Immunization Program) CVX Code set. There are several fields in the Vaccine table that relate to functions in the package, most notably the ImmServe Forecasting utility. For this reason it is critically important that specific fields within the table not be altered.

Each time a user logs into the Immunization package, the Vaccine table is checked for integrity. If certain fields have been altered, a warning message is issued, and several functions within the package begin to display the warning. Some basic functions of the package will continue to operate, such as the display of a patient's immunization history. Other functions will only display the warning.

Following is the text of the warning. (Users without the BIZ MANAGER Key will not see the last paragraph.) As the warning indicates, restandardizing the table simply involves selecting "RES" from the Manager Menu. This can be done at any time, and users need not log out of the package. Runtime lasts a few seconds at most.

```
WARNING

Vaccine Table (IMMUNIZATION File) is not standard--cannot proceed.
  At this point you should back out of the Immunization Package
  and contact your site manager or the person in charge of the
  Immunization Software.

Or, you may fix this by Restandardizing the Immunization File.
To do so, proceed to the Manager Menu and select Restandardize.
(Menu Synonyms: MGR RES)
```

Figure 5-11: Warning message

5.10 Export Immunizations (EXP)

This program will allow you to select a group of patients and to export their demographic and immunization data either to a file or to your screen (for capture by a PC).

You will have the opportunity to either select individual patients (by Name or Chart#), or to select a group of patients by specifying Status in the Register, Visit History, Age Range, Facility, and Current Community. You will also be able to limit the export data to specific Vaccines.

You will be given the option of exporting the data in an ASCII text format or Immserve data format.

At the Manager Menu, type EXP at the “Select Manager Menu Option:” prompt. This will display the Export Immunization Records screen shown in Figure 5-12.

```

Immunization v8.0
                *   EXPORT IMMUNIZATION RECORDS   *

Do you wish to:

  1) Select patients INDIVIDUALLY by entering their Names or Chart Numbers
Or
  2) Select patients by GROUP, specifying Age Range, Status, Current
    Community, etc.

Enter either 1 or 2:

```

Figure 5-12: Export Immunizations Screen

5.10.1 Export Patients Individually

To export patient individually, type 1 at the “Enter Either 1 or 2:” prompt. A screen similar to Figure 5-13 displays.

```

                EXPORT DATA BY INDIVIDUALS

1 - Survey Date.....: 01-Apr-1999
2 - Patients.....: None
3 - Immunizations Received...: ALL
4 - Data Elements.....: None
5 - File Format.....: ASCII
6 - Output Device.....: SCREEN

      Select a left column number to change an item.
                Export Data

Select Action: Quit//

```

Figure 5-13: Export Data By Individuals Screen

Data Element (#4): This selection only pertains to exports with ASCII Format. (HL7 and Imm/Serv Data Elements are predetermined.) The very first (or top) record will list, by title, the selected Data Elements (or fields) in the order in which they occur in the following records.

File Format (#5): You may export records in either ASCII, HL7, Imm/Serv format. ASCII format positions the Data Elements you specify for each immunization on a separate line or record. Data Elements are separated by quote-comma-quote (known

as a CSV file). HL7 will produce Immunization records according to the HL7 standard. Imm/Serv is a commercial, vendor-specific format of use only to programmers working with this software.

Output Device (#6): You can export the data to your screen or to a file. Export to your screen (PC) allows you to view it, then save it as a file. Export to a file allows you to copy it to a disk or transmit it to another computer for processing. When you select File and are asked to name it, your filename must confirm to the naming convention of your operating system without slashes, colons, or spaces. The path is set in the Site Parameters (MGR→ESP) by your Site Manager or Program Manager.

5.10.2 Export by Group

This screen provides a menu of options for exporting the data of groups of patients. There are 9 parameters on the screen that you may change in order to specify which patients and which data is to be exported, as well as the output device for the export.

When you are asked if you want to select patients individually or by group, type 2 (Select patients BY GROUP) to display the screen shown in Figure 5-14.

```

                                EXPORT DATA BY GROUP
1 - Survey Date.....: 01-Apr-1999
2 - Age Range.....: 1-72 Months
3 - Patient Group.....: ACTIVE in the Register.
4 - Health Care Facility....: ALL
5 - Community.....: ALL
6 - Immunizations Received..: ALL
7 - Data Elements.....: None
8 - File Format.....: ASCII
9 - Output Device.....: SCREEN

      Select a left column number to change an item.
                                Export Data
Select Action: Quit//

```

Figure 5-14: Export Data by Group Screen

Patient Group (#3):

The Patient Group may only be one of the following:

- Only patients who were ACTIVE in the Immunization Register on the Survey Date.
- Both Active and Inactive patients in the Immunization Register.

- All patients who have had an Immunization at the selected facility(s), including those not in the Immunization Register.

Health Care Facility (#4):

If you select for specific Health Care Facilities, only patients who have had AT LEAST ONE immunization at one of the selected Health Care Facilities are included in the export.

Community (#5):

If you select for specific Communities, only patients whose Current Community (under Patient Registration) is one of the selected Communities are included in the export.

Immunizations Received (#6):

If you select for specific Vaccines, only immunizations given with the selected vaccines are included in the export.

Other parameters are similar to those in the Export Patients Individually choice.

5.11 Allocate/De-allocate Imm Menu Keys (KEY)

This option allows the manager to give a user any one of three access levels to the system. Figure 5-15 shows an example of the Allocate/De-Allocate IMM Menu Keys screen.

```

HOLDERS OF IMMUNIZATION KEYS AT INDIAN MED CTR
-----
HOLDER                                BIZMENU    BIZ EDIT PATIENTS    BIZ MANAGER

USER, CHRISTOPHER .....YES
USER, CYNTHIA .....YES
USER, LAZELL .....YES.....YES.....YES
USER, ELLEN .....YES.....YES
USER, BARBARA .....YES.....YES
USER, ALFRED .....YES.....YES

+          Scroll down to view more.  Type ?? for more action

A  Add/Edit a Holder          E  Explanation of Keys      P  Print List

Select Action: Quit//
    
```

Figure 5-15: Allocation/De-allocation of Immunization Keys Screen

This option may be used to assign any of the following security keys to users:

BIZMENU - Access to the Main Menu of the New Immunization Module (BIMENU) and its submenus for viewing Patient data and Reports. The BIZMENU Key does NOT provide any Add or Edit capabilities, however, holders of this key may print patient letters, view patient data, and run reports.

BIZ EDIT PATIENTS - Allows users to ADD and EDIT a patient's Immunization History, Contraindications, Skin Tests, Parent/Guardian, etc. This key does not provide access to any additional menu options; instead it adds several Actions to the main Patient View screen. This key should be given to staff who are responsible for data entry and patient management.

BIZ Manager - Allows managers to access the Manager Menu (BI MENU-MANAGER), which is a submenu of the main menu (BIMENU). The Manager Menu provides access to many sensitive functions pertaining to Site Parameters, Form Letters, the Vaccine Table, Lot Numbers, Exports, and the allocation of Security Keys. The BIZ MANAGER Key should only be given to the manager of the Immunization Module.

Refer to the PKG option on the Manager menu or to Appendix C: Package Setup Information for additional information about security keys. To display the Explanation of Keys type **E** at the prompt, and to print a list of Key Holders type **P** at the prompt.

6.0 Appendix A: Vaccine Table for v8.0

VACCINE TABLE
30-Jan-2004

#	Vaccine	HL7	Active	Default Lot#	VIS Default	Forecast
1	ACTHIB	(48)	Active	12/16/98	.5 ml	YES
2	ADENOV,NOS	(82)	Inactive		.5 ml	YES
3	ADENOVI,T4	(54)	Inactive		.5 ml	YES
4	ADENOVI,T7	(55)	Inactive		.5 ml	YES
5	ANTHRAX	(24)	Inactive		.5 ml	YES
6	BCG	(19)	Inactive		.5 ml	NO
7	BOTULINUM	(27)	Active.		.5 ml	YES
8	CHOLERA	(26)	Active		.5 ml	YES
9	CMVIG	(29)	Active		.5 ml	YES
10	COMVAX	(51)	Active	07/11/01	.5 ml	YES
11	DENGUE FEV	(56)	Inactive		.5 ml	YES
12	DIPHThERIA	(12)	Inactive		.5 ml	YES
13	DT-PEDS	(28)	Active	06/10/98	.5 ml	YES
14	DTAP,5PE	(106)	Inactive	07/30/01	.5 ml	YES
15	DTAP,NOS	(107)	Inactive	07/30/01	.5 ml	YES
16	DTAP-HIB	(50)	Inactive	07/30/01	.5 ml	YES
17	DTP	(1)	Inactive	07/30/01	.5 ml	YES
18	DTP-HIB	(22)	Inactive	07/30/01	.5 ml	YES
19	DTP-HIB-HE	(102)	Inactive	07/30/01	.5 ml	YES
20	DTaP	(20)	Active	07/30/01	.5 ml	YES
21	FLU-NASAL	(111)	Active			YES
22	FLU-SPLIT	(15)	Active	05/06/03	.5 ml	YES
23	FLU-WHOLE	(16)	Inactive	05/06/03	.5 ml	YES
24	HANTAVIRUS	(57)	Inactive		.5 ml	YES
25	HBIG	(30)	Active		.5 ml	YES
26	HEP A	(85)	Inactive	08/25/98	.5 ml	YES
27	HEP A 2PED	(83)	Active	08/25/98	.5 ml	YES
28	HEP A 3PED	(84)	Inactive	08/25/98	.5 ml	YES
29	HEP A ADLT	(52)	Active	08/25/98	1 ml	YES
30	HEP A PED	(31)	Inactive	08/25/98	.5 ml	YES
31	HEP B	(45)	Inactive	07/11/01	.5 ml	YES
32	HEP B ADLT	(43)	Active	07/11/01	1 ml	YES
33	HEP B ADOL	(42)	Inactive	07/11/01	.5 ml	YES
34	HEP B DIAL	(44)	Inactive	07/11/01	1 ml	YES
35	HEP B PED	(8)	Active	07/11/01	.5 ml	YES
36	HEP C	(58)	Inactive		.5 ml	YES
37	HEP E	(59)	Inactive		.5 ml	YES
38	HERPES SIM	(60)	Inactive		.5 ml	YES
39	HIB	(17)	Inactive	12/16/98	.5 ml	YES
40	HIBTITER	(47)	Active	12/16/98	.5 ml	YES
41	HIV	(61)	Inactive		.5 ml	YES
42	HPV	(62)	Inactive		.5 ml	YES
43	IG	(86)	Active		.5 ml	YES
44	IG,NOS	(14)	Inactive		.5 ml	YES
45	IGIV	(87)	Active		.5 ml	YES

#	Vaccine	HL7	Active	Default Lot#	VIS Default	Forecast
46	INFLUENZA	(88)	Inactive	05/06/03	.5 ml	YES
47	IPV	(10)	Active	01/01/00	.5 ml	YES
48	JAPANESE E	(39)	Inactive		.5 ml	YES
49	JUNIN VIRU	(63)	Inactive		.5 ml	YES
50	LEISHMANIA	(64)	Inactive		.5 ml	YES
51	LEPROSY	(65)	Inactive		.5 ml	YES
52	LYME	(66)	Inactive		.5 ml	NO
53	MALARIA	(67)	Inactive		.5 ml	YES
54	MEASLES	(5)	Inactive	01/15/03	.5 ml	YES
55	MELANOMA	(68)	Inactive		.5 ml	YES
56	MEN-C CONJ	(103)	Inactive		.5 ml	YES
57	MENING-PS	(32)	Active	07/28/03	.5 ml	YES
58	MENINGOCOC	(108)	Inactive		.5 ml	YES
59	MMR	(3)	Active	01/15/03	.5 ml	YES
60	MMRV	(94)	Inactive		.5 ml	YES
61	MR	(4)	Inactive	01/15/03	.5 ml	YES
62	MUMPS	(7)	Inactive	01/15/03	.5 ml	YES
63	NO VACCINE	(998)	Inactive		.5 ml	YES
64	OPV	(2)	Inactive	01/01/00	.5 ml	NO
65	OTHER	(999)	Inactive		.5 ml	YES
66	PARAINFLUE	(69)	Inactive		.5 ml	YES
67	PEDIARIX	(110)	Active	07/30/01	.5 ml	YES
68	PEDVAXHIB	(49)	Active	12/16/98	.5 ml	YES
69	PERTUSSIS	(11)	Inactive		.5 ml	YES
70	PLAGUE	(23)	Inactive		.5 ml	YES
71	PNEUM-CONJ	(100)	Active	09/30/01	.5 ml	YES
72	PNEUMO-PS	(33)	Active	07/25/03	.5 ml	YES
73	PNEUMOCOCC	(109)	Inactive		.5 ml	YES
74	POLIO	(89)	Inactive	01/01/00	.5 ml	YES
75	PROHIBIT	(46)	Inactive	12/16/98	.5 ml	YES
76	Q FEVER	(70)	Inactive		.5 ml	YES
77	RABIES,ID	(40)	Active		.5 ml	YES
78	RABIES,IM	(18)	Active	11/04/03	.5 ml	YES
79	RABIES,NOS	(90)	Inactive	11/04/03	.5 ml	YES
80	RESERVED -	(99)	Inactive		.5 ml	YES
81	RHEUMATIC	(72)	Inactive		.5 ml	YES
82	RIFT VALLE	(73)	Inactive		.5 ml	YES
83	RIG	(34)	Active		.5 ml	YES
84	ROTAVIRUS	(74)	Inactive		.5 ml	NO
85	RSV-IGIV	(71)	Inactive		.5 ml	YES
86	RSV-MAb	(93)	Active		.5 ml	YES
87	RUBELLA	(6)	Inactive	01/15/03	.5 ml	YES
88	RUBELLA/MU	(38)	Inactive	01/15/03	.5 ml	YES
89	SMALLPOX	(75)	Active		.5 ml	YES
90	SMALLPOX,D	(105)	Inactive		.5 ml	YES
91	STAPHYLOCO	(76)	Inactive		.5 ml	YES
92	TET TOX	(35)	Active	06/10/94	.5 ml	YES
93	TICK-BORNE	(77)	Inactive		.5 ml	YES
94	TIG	(13)	Active		.5 ml	YES
95	TST,NOS	(98)	Inactive		.5 ml	YES
96	TST-OT TIN	(95)	Inactive		.5 ml	YES
97	TST-PPD	(96)	Inactive		.5 ml	YES

#	Vaccine	HL7	Active	Default Lot#	VIS Default	Forecast
98	TST-PPD TI	(97)	Inactive		.5 ml	YES
99	TULAREMIA	(78)	Inactive		.5 ml	YES
100	TWINRIX)	(104)	Active		.5 ml	YES
101	TYPHOID,N	(91)	Active		.5 ml	YES
102	TYPHOID,OR.	(25)	Active		.5 ml	YES
103	TYPHOID,PA.	(41)	Active		.5 ml	YES
104	TYPHOID,PM.	(53)	Active		.5 ml	YES
105	TYPHOID,VI.	(101)	Active		.5 ml	YES
106	Td-ADULT	(9)	Active	06/10/94	.5 ml	YES
107	VACCINIA I.	(79)	Active		.5 ml	YES
108	VARICELLA	(21)	Active	12/16/98	.5 ml	YES
109	VEE, INACT.	(81)	Inactive		.5 ml	YES
110	VEE, LIVE	(80)	Inactive		.5 ml	YES
111	VEE, NOS	(92)	Inactive		.5 ml	YES
112	VZIG	(36)	Active		.5 ml	YES
113	YELLOW FEV.	(37)	Active	03/14/03	.5 ml	YES

7.0 Appendix B: ImmServe

Vaccine Forecasting Rules

These parameters are in the IMM/Def Table and are used for forecasting vaccine doses.

Vaccine Dose	Acceptable Age	Recommended Age	Past Due Age	Minimum wait since last dose	Maximum Age
HBIG	0M	0M			7D
HepB1	0M	0M	3M		18Y
HepB2	4W	4W	5M	4W	
HepB3	6M	6M	15M	8W	
DTorP1	6W	6W or 2M	3M		7Y
DTorP2	10W	4M	5M	4W	7Y
DTorP3	14W	6M	7M	4W	7Y
DTorP4	12M	12 or 15M	19M	6M*	7Y
DTorP5	4Y	4Y	6Y	6M	7Y
TD_B	11Y	11Y		5Y	
Hib1	6W	2M	3M		59M
Hib2	10W	4M	5M	4W	59M
HibTITE R3	14W	6M	7M	4W	59M
HibTITE R4	12M	12 or 15M	16M	8W	59M
PedvaxHI B3	12M	12M	16M	8W	59M
IPV1	6W	6W or 2M	3M		18Y
IPV2	10W	4M	5M	4W	18Y
IPV3	14W	6,12, or 15M	19M	4W	18Y
IPV4	4Y**	4Y	6Y	4W	18Y
MMR1	12M	12 or 15M	16M		18Y
MMR2	4Y***	4Y	6Y	4W	18Y
Varicella1	12M	12M	19M		18Y
Varicella2	(only > 13 y)			4W	18Y
HepA1	24M	24M	30M		18Y
HepA2	30M	30M		M	

* For screening table, minimum interval is 4 months (-4 days if 4 day grace period)

** For screening table, minimum age is 18 weeks (-4 days if 4 day grace period)

*** For screening table, minimum age is 13 months (if first dose is given at 12 months)

Options for customizing Vaccine Forecasting:

Forecasting options are listed in the “Edit Site Parameters” option of the Manager’s Menu (MGR→ESP). Parameter 8 allows the Program Manager to choose to forecast due dates at the “Acceptable Age” or at the “Recommended Age.” Parameter 9 allows the Program Manager to choose a set of “ImmServe Forecasting Rules.”

Forecasting Adult Vaccines:

The new Immunization software forecasts the minimum Adult Vaccines, including:

- TD-Adult (TD_B) – forecast every 10 years starting 11 years of age
- Influenza vaccine – forecast each year for persons over 50 years
- Pneumococcal vaccine – forecast for persons over 65 (55) years
- HepB – forecast for adults who received a dose < 18 years old.

Version Variant Table (Recommended Ages)

The table shown below is an example of the current set of ImmServe Forecasting Rules, V8.0. Options 1,3,5,7,8,9 forecast the first series at 6 weeks. *Adult vaccine options: TD-Adult -forecast every 10 years starting at 11 years of age. Influenza vaccine -(>50) forecast turned on9/1-/12/31.Pneumococcal - (>65 or >55) forecast once, except in Alaska every 6 years

Recommended Ages (9/19/03)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10
	12m IPV, Pn Var, MMR 15mDTa P Hib	12m IPV, Hib, Var, MMR, Pn,15m DTaP	6m IPV 12m DTaP, Hib, Var, MMR,P n	12m DTaP, Hib, IPV, MMR, Var, Pn	6m IPV 12m Hib, MMR Var, 15m DTaP,Pn	Comvax, 12m HepB MMR, Var, Pn, 15m DTaP, IPV	Comvax, 6m IPV 12m HepB, DTaP, Pn MMR,Var,	Comvax, 12m HepB, IPV, MR, Pn 15m DTaP, Var	Comvax 6m IPV 12mHepB , Var MMR, 15m DTaP, Pn	6m IPV 12m Hib, MMR, Pn 15m DTaP, Var
HepB1	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M
HepB2	6W	2M	6W	2M	6W	2M	6W	6W	6W	6W
HepB3	6M	6M	6M	6M	6M	12M	12M	12M	12M	6M
DTorP1	6W	2M	6W	2M	6W	2M	6W	6W	6W	6W
DTorP2	4M	4M	4M	4M	4M	4M	4M	4M	4M	4M
DTorP3	6M	6M	6M	6M	6M	6M	6M	6M	6M	6M
DTorP4	15M	15M	12M	12M	15M	15M	12M	15M	15M	15M
DTorP5	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y
Td	11Y	11Y	11Y	11Y	11Y	11Y	11Y	11Y	11Y	11Y
Hib1	6W	2M	6W	2M	6W	2MPedvax	6WPedvax	6WPedvax	6WPedvax	6W
Hib2	4M	4M	4M	4M	4M	4MPedvax	4MPedvax	4MPedvax	4MPedvax	4M
Hib3 (if ibtiter)	6M	6M	6M	6M	6M					6M
Hib4 (Hib3 if Pedvax)	15M	12M	12M	12M	12M	12MPedvax	12MPedvax	12MPedvax	12MPedvax	12M
IPV1	6W	2M	6W	2M	6W	2M	6W	6W	6W	6W
IPV2	4M	4M	4M	4M	4M	4M	4M	4M	4M	4M
IPV3	12M	12M	6M	12M	6M	15M	6M	12M	6M	6M
IPV4	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y
MMR1	12M	12M	12M	12M	12M	12M	12M	12M	12M	12M

MMR2	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y	4Y
Varicella	12M	12M	12M	12M	12M	12M	12M	15M	12M	15M
HepA	24M	24M	24M	24M	24M	24M	24M	24M	24M	24M
HepA	30M	30M	30M	30M	30M	30M	30M	30M	30M	30M
PCV7 1	6W	2M	6W	2M	6W	2M	6W	6W	6W	6W
PCV7 2	4M	4M	4M	4M	4M	4M	4M	4M	4M	4M
PCV7 3	6M	6M	6M	6M	6M	6M	6M	6M	6M	6M
PCV7 4	12M	12M	12M	12M	15M	12M	12M	12M	15M	12M
**Flu	50Y	50Y	50Y	50Y	50Y	50Y	50Y	50Y	50Y	50Y
**Pneum	65Y	65Y	65Y	65Y	65Y	65Y	65Y	65Y	65Y	65Y

8.0 Appendix C: Package Setup Information

This appendix contains print-screen of the entire text of the Package Setup Information that is presented under the PKG – Package Setup Information option of the Manager Menu (MGR→PKG).

Setup Information For Version 8.0

The text presented here is intended to provide Site Managers with helpful information regarding setup and management of the RPMS Immunization Package, version 8.0.

8.1 Options

The main menu option for the Immunization package is BIMENU. At most sites this would be placed on AKMOCORE along with other RPMS packages. For the sake of consistency from site to site, it is recommended that the synonym "IMM" (Immunization) be given to the main menu option BIMENU, however, this is not a requirement. BIMENU allows access to every other option within the package. (The Package Keys, BIZMENU ,BIZ EDIT PATIENTS, and BIZ MANAGER, are discussed below under Security in Section II.)

The option BI PATIENT VIEW/EDIT, "Patient Immunization Record", is the main option for all users to view a patient's immunization data. This option allows users to display or print the patient's Immunization History and Forecast, Official Immunization Record, and Health Summary. If the user has the appropriate key (BIZ EDIT PATIENTS), additional actions for adding/editing patient data will be made available under this option.

<p>NOTE: Users accessing this option will have NO ADD/EDIT capability whatsoever--it will be informational only--UNLESS they have the BIZ EDIT PATIENTS Key; in which case additional Add/Edit Actions will be available. (See Security Section II below.)</p>

This option may be attached to any other Kernel menu and need not be accessed via the main menu, BIMENU. This option is found within the package under the Patient Menu of the Immunization Main Menu.

After this package has been installed and the BIMENU and BI PATIENT VIEW/EDIT options added to the appropriate menus, it is a good idea to run the "Build Primary Menu Trees" option under Kernel Menu Management (under AKMOEVE). This will enable users to jump to menu synonyms within the new Immunization Package.

8.2 Security

The Security Key BIZMENU allows users to access the Main Menu of the RPMS Immunization Package, BIMENU, and its submenus for viewing Patient data and Reports. The BIZMENU Key does NOT provide any Add or Edit capabilities, however, Holders of this key may print patient letters, view patient data, and run reports.

The Security Key BIZ EDIT PATIENTS allows users to ADD and EDIT a patient's Immunization History, Contraindications, Skin Tests, Parent/Guardian, etc. This key does not provide access to any additional menu options; instead, it adds several Actions to the main Patient View screen. This Key should be given to staff who are responsible for data entry and Patient Management.

The security key BIZ MANAGER allows a user to access the Manager Menu (BIMENU-MANAGER), which is a submenu of the main menu (BIMENU). The Manager Menu provides access to many sensitive functions pertaining to Site Parameters, Form Letters, the Vaccine Table, Lot Numbers, Exports, and the allocation of Security Keys.

The BIZ MANAGER Key should only be given to the manager of the Immunization Package.

Also see "Explanation of Keys" Action on the HOLDERS OF IMMUNIZATION KEYS" Screen (MGR→KEY→Exp).

8.3 Devices

This package makes extensive use of the VA Screen Manager and List Manager, which requires that several of the cursor and screen handling fields of the Terminal Type file be present for any Device accessing the package. It is recommended that any Device accessing this package be given a Terminal Type ("Subtype") of "C-VT100", since the standard VA Kernel distribution comes with all of the necessary codes pre-loaded. A user whose Terminal Type does not contain a complete set of screen handling codes will receive a message that ScreenMan cannot "load the form."

If you suspect that the screen handling codes for C-VT100 on your system are not complete, this package comes with a routine, BIVT100, that will update (as of 2000) your VT100 codes. The routine must be run from Programmer Mode, and a line with ZIS must be uncommented. This job should be done by a programmer or experienced Site Manager.

Other Terminal Types may also be chosen, however, the screen handling codes for Cursor movements, "PF keys", "Erase Entire Page", etc., may need to be entered manually if they are not already present for the selected Terminal Type.

If for some reason it is not practical to define Devices accessing the package with a Subtype of C-VT100, users of the package may be given a "DEFAULT TERMINAL TYPE FOR LM" in the NEW PERSON File #200 of C-VT100. (They will then be given a Terminal Type of C-VT100 regardless of which DEVICE they sign on through.) It may also be necessary to set the field "ASK DEVICE TYPE AT SIGN-ON" (again in file #200) equal to "ASK" in order to get a user's Terminal Type to change to the C-VT100.

It is important that PC's accessing this software through terminal emulation software have their function keys F1-F4 set to transmit standard VT-100 codes for these keys rather than other customized codes.

This software makes use of basic character format codes such as Reverse Video, Highlight, and Underlining. It may be helpful to adjust the colors that the terminal emulation software employs to display these formats.

There are several network terminal emulation programs available, however many of them have limitations such as not recognizing function keys, not displaying reverse video, not slave printing, etc. As of this printing, February 2004, we have found that NetTerm 4.2e available at a nominal cost from Intersoft International, Inc. via the WWW, is among the best products for use with RPMS software. Trial versions may be obtained online at: <http://www.secureneterm.com/html/netterm.html>

Initial difficulties with the screen handling codes for ScreenMan and ListMan are not specific to Immunization; however, if problems with the setup cannot be resolved, please contact your Computer Support staff for further assistance.

8.4 Old MCH Immunization Menus/Options

WARNING! Execution of certain options in the old MCH Program may cause corruption of the Vaccine Table (IMMUNIZATION File #999999.14) or result in program errors.

It is therefore important to remove any of the old MCH Program options from the Kernel menus. These old options appear as "AMCH..." and are most commonly found under the AMCHMENU and/or AMCHMAIN options.

This installation will automatically place all AMCH options in an "OUT OF ORDER" status.

As an additional precaution, it is advisable to first save and then delete all routines in the AMCH* namespace.

Any local modifications to the AMCH routines should be examined by your local programmer to determine what, if any, steps are needed to replace the previous local modifications/functions.

8.5 Site Parameters

As part of the installation of this new version of Immunization, the site parameters must be reviewed and edited.

The Site Parameter screen may be accessed from the programmer prompt by entering "D ^BISITE" (no quotes). It may also be accessed from within the Immunization menus by selecting Manager Menu from the Main Menu, and then selecting Edit Site Parameters (MGR→ESP). Help text is displayed during the edit each Site Parameter.

8.6 Vaccine Table

The Immunization Package version 8.0 comes with a new Vaccine Table that has been standardized with the CDC's NIP HL7/CVX Code Table. The vaccine table, spellings, CVX codes and CPT codes are taken directly from the CDC table <http://www.cdc.gov/nip/registry/hl7/hl7-cvx.pdf>. There are several new fields in the Vaccine Table that relate to new functions in the package, most notably the ImmServe Forecasting utility. For this reason it is critically important that specific fields within the table not be altered.

Each time a user logs into the Immunization Package, the Vaccine Table is checked for integrity. If certain fields have been altered, a warning message is issued, and several functions within the package begin to display the warning. Some basic functions of the package will continue to operate, such as the display of a patient's immunization history. Other functions will only display the warning.

Listed below is the text of the warning. (Users without the BIZ MANAGER Key will not see the last paragraph.) As the warning indicates, re-standardizing the table simply involves selecting "RES" from the Manager Menu. This can be done at any time, and users need not log out of the package. Runtime is a few seconds at most.

WARNING

Vaccine Table (IMMUNIZATION File) is not standard--cannot proceed.

At this point you should back out of the Immunization Package and contact your site manager or the person in charge of the Immunization Software.

Or, you may fix this by Re-standardizing the Immunization File. To do so, proceed to the Manager Menu and select Re-standardize.
(Menu Synonyms: MGR→RES)

8.7 Duplicate Lot Numbers

Some sites have duplicate Lot Numbers in their IMMUNIZATION LOT File, which will cause the storing of Immunizations in the V IMMUNIZATION File to fail. RPMS Immunization v8.0 recognizes duplicate Lot Numbers ahead of time and informs the user. If the user holds the BIZ MANAGER Key, the text below will be displayed:

Two steps should be taken to resolve duplicate Lot Numbers:

*** STEP 1:**

Duplicate Lot Numbers are resolved under the Manager Menu, "Lot Number Add/Edit" (MGR→LOT). Go to this option and enter the Lot Number in question. Two or more choices will be presented. Select one of the choices to be the valid Lot Number. Edit this Lot Number, making sure it is Active and that all relevant vaccines are listed under it.

*** STEP 2:**

Select and edit each of the duplicate Lot Numbers.

Edit the Lot Number itself by placing "z" at the beginning (e.g., 483-116 z483-116). If there is a second duplicate, add "zz" to the beginning of that Lot Number; for a third duplicate, add "zzz", and so on. The adding of leading "z"s to the duplicates will make them distinguishable from the valid Lot Number. This method will also make the old duplicate Lot Numbers recognizable on pre-existing visits.

The duplicate Lot Numbers should also be made INACTIVE. If an old Visit is to be edited and it has one of the old duplicate Lot Numbers, the old duplicate should be replaced with the current valid Lot Number (easily recognized by ignoring the leading "z"s).

8.8 Protocols for Use by Other Packages

RPMS Immunization v7 contains 3 ListMan Protocols that may be of use to programmers of other packages:

1) BI PATIENT VIEW/EDIT EXT CALL - This protocol calls up the ListMan Patient View/Edit screen. The called assumes that DFN (patient) defined. Other optional parameters are described in routine HAVEPAT^BIPATVW. Users will only have Edit capability if they hold the BIZ EDIT PATIENTS Key.

2) BI IMMUNIZATION ADDED - This protocol is an Extended Action Type of Protocol (any protocols entered as ITEMS will be called when this protocol is called).

The Description field of this protocol lists all of the defined variables that relate to the immunization that has just been added.

3) BI IMMUNIZATION DELETED - This protocol is an Extended Action Type of Protocol (any protocols entered as ITEMS will be called when this protocol is called). The Description field of this protocol lists all of the defined variables that relate to the immunization that has just been deleted.

9.0 Appendix D: Word Processor Help

9.1 Summary of Key Sequences

9.1.1 Navigation

Incremental movement	Arrow keys
One word left and right	<Ctrl-J> and <Ctrl-L>
Next tab stop to the right	<Tab>
Jump left and right	<PF1><Left> and <PF1><Right>
Beginning and end of line	<PF1><PF1><Left>and <PF1><PF1><Right>
Screen up or down	<PF1><Up> and <PF1><Down>
or:	<PrevScr> and <NextScr>
or:	<PageUp> and <PageDown>
Top or bottom of document	<PF1>T and <PF1>B
Go to a specific location	<PF1>G

9.1.2 Exiting/Saving

Exit and save text	<PF1>E
Quit without saving	<PF1>Q
Exit, save, and switch editors	<PF1>A
Save without exiting	<PF1>S

9.1.3 Deleting

Character before cursor	<Backspace>
Character at cursor	<PF4> or <Remove> or <Delete>
From cursor to end of word	<Ctrl-W>
From cursor to end of line	<PF1><PF2>
Entire line	<PF1>D

9.1.4 Settings/Modes

Wrap/nowrap mode toggle	<PF2>
Insert/replace mode toggle	<PF3>
Set/clear tab stop	<PF1><Tab>
Set left margin	<PF1>,
Set right margin	<PF1>.
Status line toggle	<PF1>?

9.1.5 Formatting

Join current line to next line	<PF1>J
--------------------------------	--------

Reformat paragraph <PF1>R

9.1.6 Finding

Find text <PF1>F or <Find>
 Find next occurrence of text <PF1>N
 Find/Replace text <PF1>P

9.1.7 Cutting/Copying/Pasting

Select (Mark) text <PF1>M at beginning and end of text
 Unselect (Unmark) text <PF1><PF1>M
 Delete selected text <Delete> or <Backspace> on selected text
 Cut and save to buffer <PF1>X on selected text
 Copy and save to buffer <PF1>C on selected text
 Paste from buffer <PF1>V
 Move text to another location <PF1>X at new location
 Copy text to another location <PF1>C at new location

9.2 Change to RPMS MailMan Full Screen Editor

Use the following steps for changing from Line Editor to Full Screen Editor in RPMS MailMan:

1. In RPMS: Select IHS Kernel Option: MailMan Menu
2. Select MailMan Menu Option: OML Other MailMan Functions
3. Select Other MailMan Functions Option: EML Edit user options
4. MESSAGE ACTION DEFAULT: ^ PREFERRED EDITOR
5. PREFERRED EDITOR: (Select: SCREEN EDITOR)
6. In Windows: Switch to Program Manager
7. Go into the Terminal Icon: Settings: Terminal Preferences:

“Use Function, Arrow, and Ctrl Keys for windows” should not be checked.

10.0 Glossary

Term	Definition
Active Case Manager	Currently carrying a caseload; available for selection when editing a patient's Case Data.
Case Manager	A user of the RPMS Immunization module responsible for managing patients. This includes immunization tracking and recall, entering or editing patient data, selecting appropriate letters, scanning for delinquent needs, and more.
Contraindication	A symptom or condition that makes a particular procedure or treatment inadvisable.
Data Element	A field in a record (e.g., patient record).
Due Dates	Dates on which ImmServe, a forecasting algorithm, has forecast immunizations as due.
Due Letter	A letter generated and printed by the software that is sent to a patient containing information about immunizations that are due.
Export	A process by which you can send a report to a file or to another computer, site, or agency.
File Format	The layout and style in which data is formatted in a file for export or electronic transmittal.
Forecast	A projection of immunizations that are due and that date on which they should be administered.
Health Summary	A listing of patient information including demographic data, insurance, allergies, scheduled visits, in-hospital visits, outpatient/field visits, referred care, immunizations, health maintenance reminders, missed dental visits, Diabetes and Cancer summary information, mental health/social services data and a problem list.
ImmServe	Software that evaluates immunization histories and determines due dates.
Immunization Rate	The proportion of patients who received a specified vaccine or group of vaccines within a timeframe or by a certain age.
Immunization Register	Also known as Immunization Register; the subset of RPMS registered patients whose immunization administrations are actively being tracked/followed.

Term	Definition
Inactive - Case Manager	Listed for historical purposes; cannot be entered/selected when editing a patient's Case Data.
Key	A "password" that allows or restricts access to specific areas of functionality in the software.
Location Type	An identification of a location as an IHS facility or Other such as a private clinic or physician practice.
Lot Number	The number identifying a manufacturer's batch of a particular vaccine; important in the tracking of recipients of a specific batch with which a problem has been determined.
Official Immunization	The letter that presents all of a patient's Immunization information
Output Device	The equipment to which a file is sent; usually refers to a printer or to the computer monitor screen (Home).
Patient	One who is being tracked and followed up on for immunization purposes because of age and/or vulnerability to disease; generally those patients under a certain number of years of age (e.g., 7 or 8).
Patient	One who is no longer being tracked or followed up on for immunization purposes; generally those patients beyond a certain number years of age (e.g., 7 or 8).
PCC Category	Patient Care Component category; that is, ambulatory, historical event, or inpatient.
Program Manager	The person chiefly responsible for the setup and operation of the RPMS Immunization Module at a given site.
Reaction	An adverse response to the administration of an immunization.
Record Letter	Generally sent to schools, parents, other clinics, etc.
Site Manager	The person responsible for operation of the IHS site; determines and assigns access levels to site users.
Site Parameters	Settings that can be made by the Site Manager to customize the software and data to a particular site.
Skin Test	A subcutaneous test to determine delayed hypersensitivity and thereby exposure to an antigen (e.g., PPD).

Term	Definition
Statement	Vaccine administered and documents the Date of Publication as evidence of Informed Consent for the vaccination.
Translation Table	A table that gives standard alternate names, maximum doses, series types, and HL7 codes for all vaccines; it explains the translation of the old vaccine names and codes in the Old Immunization Table to the new HL7 codes and names.
Vaccine	Currently available; may be entered/selected when entering new immunizations.
Vaccine	Listed only for historical purposes; no longer available as a valid choice.
Vaccine Information	A statement provided to the parent of a patient that identifies each.
Vaccine Table	A standard list of all IHS vaccines and their HL7 codes.

11.0 Index

A

acronym · 6
 Action Area · 13
 Action Options · 13
 Action Prompt · 13
 Active · 31, 64, 81
 Age Range · 31

B

Backspace key · 11
 BIZ Manager · 66
 BIZMENU · 66

C

Case Manager · 9, 25, 29, 33, 50, 52, 53, 81
 Case Manager, defined · 9
 Category · 82
 Community · 32
 Contraindication · 17, 26, 71, 81
 Cutting/Copying/Pasting · 80

D

Data Element · 63, 81
 Date of Forecast/Clinic · 31
 default · 10
 Deleting · 79
 Device prompt · 12
 Doses Administered · 46
 Due Letter · 8, 17, 27, 29, 37, 53, 81
 Due List · 8, 29
 Due Lists or Letters · 9

E

Exiting/Saving · 79

F

Facility Report Header · 54
 Features · 1
 File Format · 63, 81
 Finding · 80
 Forecasting Rules · 54, 71
 Form Letter · 27, 37, 56
 Formatting · 80

H

Header Area · 13
 Health Summary · 17, 24, 81
 Host File Server Path · 54

I

IMM/Def TABLE · 70
 IMM/Serve · 9, 23, 70, 81
 Immunization Profile · 17
 Immunization Register · 6, 17, 18, 23, 25, 81
 Inactive · 31, 64, 82

K

Key, Locking · 6, 9, 65, 82

L

List Area · 13
 Location · 21, 53
 Location Type · 21, 82
 Lot Number · 20, 22, 29, 59, 82
 Lot Numbers · 55

M

Main Menu · 7
 Manager Menu · 8, 20, 37, 50
 Managers Menu · 22
 Manufacturer · 82
 Master List · 29, 31
 Message Line · 13
 Minimum Vs. Recommended Age · 54

N

Navigation · 79

O

Official Immunization Record · 9, 27, 28
 Online Help · 11
 option, defined · 6
 options, locked · 6
 Output Device · 64, 82

P

Patient Group · 31, 64
Patient Immunization Record · 7, 9, 17
Patient Menu · 7, 9, 16, 28, 29, 30
Patient Record · 25
Patient Registration · 17
Program Manager · 6, 9, 50, 64, 70, 80, 82

Q

Quarterly Immunization Report · 8, 9, 38, 39, 41

R

Reaction · 21, 82
Register · 9
Reports Menu · 8, 38
Return Key · 10
RPMS · 1, 6, 7, 9, 18, 22, 80, 81, 82
RPMS MailMan · 80

S

Settings/Modes · 79
Site Manager · 9, 11, 12, 64, 82
Site Parameter · 9
Site Parameters · 8, 52, 64, 70, 82
Skin Test · 17, 22, 23, 82

T

Translation Table · 83
Two-Yr-Old Immunization Rates · 8, 9, 44

U

UP and Down arrow keys · 11

V

Vaccine · 22, 26, 29, 33, 34, 44, 50, 59, 60, 70, 83
Vaccine Accountability Report · 8, 9, 38, 46
Version Variant Table · 71
Visit · 22, 23

12.0 Contact Information

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