Managing Patients

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Because ImmuNet receives immunization information from multiple provider sources, including birth record downloads, you should always attempt to find a patient in ImmuNet before entering them as a new patient. However, ImmuNet will attempt to deduplicate (compare entered information against information saved to the system for duplicate patients) patient records prior to saving the information on the Enter New Patient screen.

**Finding Patients**

As mentioned above, it is extremely important that you always search for a patient in ImmuNet before entering them as new. This will prevent duplicate patient records from being entered into the system. There are many different combinations of search criteria that can be used to locate patients in ImmuNet. Remember, when searching for patients in ImmuNet, you are searching on a statewide level and not just within your organization. With this in mind, when searching for an existing patient in ImmuNet, more information is not always better. By entering too much information about a patient (mother’s maiden name, phone number, birth date, etc.) you will increase your data entry time and decrease the odds of finding the patient due to typing and interpretation errors. To review recommended search criteria examples, please review the section “Examples of ImmuNet Search Criteria” later in this chapter.

1. Click on **Manage Patient** under the Patients menu group on the menu panel.

2. In the Patient Search Criteria box, you have several options for finding your patient.
   - **Last Name**: Entering the first three letters of the patient’s last name, along with the first two letters of the first name, will initiate a search of all patients matching those letters. Entering fewer than three letters in the last name field will result in an exact name search; for example, entering the letters “Li” will produce only last names of “Li.” If the patient’s name is common, typing in the full name will narrow the search.
   - **First Name**: Entering the first two letters of the patient’s first name, along with the first three letters of the last name, will initiate a search of all patients matching those letters. If the patient’s name is common, typing in the full name will narrow the search.
Entering Names
On all first and last names entered into ImmuNet for patient searches, ImmuNet disregards spaces, apostrophes, and hyphens entered.

- **Middle Name**: Entering the first two letters of the patient’s first name, along with the first three letters of the last name, and the patient’s Middle Name will initiate a search of all patients matching those letters. If the patient’s name is common, typing in the middle name will narrow the search.

- **Mother’s Maiden Last**: Entering the mother’s maiden last name in combination with the data entered in the Last Name and First Name fields, will narrow a search for a patient with a common name. Alternately, you may find all patients associated with a mother by entering only the mother’s first name and maiden last name.

- **Mother’s First Name**: Entering the mother’s first name, in combination with the data entered in the above Last Name and First Name fields will narrow a search for a patient with a common last name. Alternately, you may find all patients associated with a mother by entering only the mother’s maiden last and first names.

- **Birth Date**: Entering the patient’s birth date in conjunction with his or her first and last name will narrow a search for a common name.

- **Gender**: Indicating the gender of the patient will narrow a search for a common name, especially if the first name is androgynous.

- **Phone**: Entering the patient’s phone number only will identify patients with the exact phone number in ImmuNet. However, this method is not recommended, as a phone number may not be entered for a patient and phone numbers may change over time.

- **Patient ID**: Entering the Patient ID only will produce a single name match, if the patient ID is unique to the organization. To find a patient using this method, the Patient ID must have been entered previously in the patient record.

3. Press  

4. If multiple records are found matching the criteria you entered, a table listing up to 75 matches with detailed information on each patient will be shown below the Find Patient Information box. To choose a patient from this list, click on the patient’s last name, underlined in blue.
5. If only one patient matches your search, ImmuNet will bring you directly to that patient’s demographic screen in ImmuNet.

6. If no patients match your search, review the search criteria information you entered for accuracy. If you suspect the patient has not been entered into ImmuNet, proceed to “Entering A New Patient.”

7. If multiple records are found matching the criteria you entered, and there are over 75 matches, ImmuNet will give a warning that there are too many patients matching your search criteria. Please refine your search criteria to limit your patient list.

Finding Patients with no First Name

To search for a patient with no first name, you may:

- Search using only the last name with no other fields filled. Enter the full last name to return patients whose last name matches what is entered and who do not have a first name.

- Search using the last name and enter “No First Name” in the first name field. You may narrow the search of patients with no first name by entering other criteria, such as middle name, gender or birth date, etc.

Manage Patient vs. Manage Immunizations

Manage Patient and Manage Immunizations are the same query; in other words, they both utilize the patient search function. The difference is that the Manage Patient query will display the Demographic screen, while the Manage Immunizations query will display the patient’s Immunization History screen.

Examples of ImmuNet Search Criteria

It is recommended that users utilize the “3-2” search when attempting to find patients in ImmuNet. The 3-2 search includes the first three letters of the patient’s last name, followed by the first two letters of the patient’s first name. However, the following alternative search options can help refine or narrow search results:

- Patient Last Name and Date of Birth (DOB)
- Patient First Name and DOB
- Patient DOB and Gender
- Patient ID
- Patient DOB

It is recommended that additional criteria are used when searching for patients with common names. This will help narrow the list of possible matches in ImmuNet.
Use of Drop Down Lists in ImmuNet

When entering information on new patients or editing patient information, you will use drop down lists for many fields. ImmuNet uses drop down lists — fields that contain a list of options from which you may choose — rather than free text fields for certain input data. The advantages of drop down lists over free text fields include:

- **Ease of use.** Drop down lists allow users to quickly fill in a data field without typing in the information.
- **Health Level 7 (HL7) compliance.** HL7 is a method of categorizing data so that it is uniform across all health reporting systems. This standardization allows providers using different systems to transfer data easily. With predefined drop down lists ImmuNet stays in HL7 compliance.
- **Uniformity of entered data.** By choosing information from a drop down list, users do not risk entering conflicting information that could decrease the accuracy of ImmuNet reports. For example, one user using a free text field might enter a county name using an abbreviation, while another user might spell out the entire name.
- **Confidentiality.** By using standard drop down lists, ImmuNet avoids confidentiality issues associated with the typing of free text that could be construed as medical record information.

Editing/Entering Patient Information

The demographic screen allows you to update or change specific, non-immunization information relating to any patient in ImmuNet. The Enter New Patient screen, accessed by clicking this option on the menu panel, allows you to input information for a new patient into ImmuNet. The demographic and Enter New Patient screens are divided into the following sections: Personal Information, Patient Information, Address Information, Responsible Persons, Patient Comments, and Patient Notes.

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**Note:** Organizations participating in a pandemic exercise or event will utilize the CRA Event Information module located directly beneath the Patient Information section of the demographic screen.

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Personal Information Section

The Personal Information Section at the top of the Demographic/Enter New Patient screens contains patient-specific information used primarily to identify patients when conducting patient searches. All fields shown in blue font are required. Refer to Appendix 2 of this manual for information on allowable entry characters and names for these fields.

1. **Last Name:** This is a required field.
2. **First name:** This is a required field.
3. **Middle name:** This is an optional field.
4. **Suffix:** This is an optional field.
5. **Birth Date:** This is a required field. Fill in the field using the MM/DD/YYYY format, or use the pop-up calendar by clicking the calendar icon to the right of the field. Then choose a month and year from the drop down lists at the top and choose a day by clicking on the appropriate calendar day. Press OK.

   Children entered by the Maryland Vital Records program do not have editable birth dates. The parent/guardian must contact the Maryland Vital Records program in the event an incorrect birth date is in dispute. Contact the ImmuNet Help Desk to obtain the Vital Records phone number.

6. **Mother’s Maiden Last Name:** This is a required field. ImmuNet will allow you to save the record without this field completed; however, it will request you gather this information for future deduplication of patients.
7. **Mother’s First Name:** This is a required field. ImmuNet will allow you to save the record without this field completed; however, it will request you gather this information for future deduplication of patients.

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**Note:** It is critical that the information in the Mother’s Maiden Name fields is accurate. If you do not have the correct information, leave these fields blank. Please do NOT use a fake name, foster mother or type “unknown” in the fields.
8. **Gender:** This is a required field. Select the appropriate option from the drop down list to choose male or female.

9. **Medicaid ID:** This is an optional field. Medicaid ID of the patient.

10. **Birth Order:** This is an optional field that identifies the birth order of the patient. This field should only be used for multiple births (e.g. twins, triplets).

11. **Birth Country:** This field defaults to “United States.” Use the drop down list to select a different country of birth, if applicable.

12. **Last Notice:** This field shows the last date that a recall/reminder notice was created for the patient.

13. **Patient Consents to Share Immunization Data:** This field indicates written consent has been obtained for a patient 19 years of age or older.

**Patient Information Section**

The Patient Information Section gives additional information about the patient.

Click on the Patient Information Section.

1. **Patient ID:** Type in your organization’s patient ID for the patient. A patient may have numerous patient IDs associated with him or her; each ID is organization dependent.

2. **Ethnicity:** Choose the patient’s ethnic background from the drop down list provided.

3. **Race:** Choose the patient’s race from the drop down list provided.

4. **Provider-(PCP):** Fill in the patient’s primary care physician (PCP) or health care organization from the drop down list, if provided. This information is used only for reporting and must be set up by the organization’s ImmuNet administrative user. For instructions on how to set up the Provider (PCP) field, refer to “Managing Physicians” in Chapter 8.

5. **School:** Fill in the patient’s school from the drop down list, if provided. This information is used only for reporting and must be set up by the organization’s ImmuNet administrative user. For instructions on how to set up the School field, refer to “Managing Schools” in Chapter 8.

6. **Tracking Schedule:** This required field defaults to the Advisory Committee on Immunization Practices (ACIP) schedule.
7. **Status:** Choose Active from the drop down list if you want this patient to be associated with your organization, meaning he or she is receiving services from you. When you specify a patient as Inactive, you make him or her inactive for your organization only.

This information affects recall and reminder notices and Comprehensive Clinic Assessment Software Application (CoCASA) reporting. Choosing Permanently Inactive — Deceased will inactivate the patient for all organizations using ImmuNet. Choose this option only if you know the patient to be deceased.

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**Note:** Once a status of Permanently Inactive – Deceased has been entered in the Status field, the field can no longer be edited by the organization. To change a status of Permanently Inactive – Deceased, contact the ImmuNet Help Desk.

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8. **Allow Reminder and Recall Contact?:** Choosing Yes from the drop down list, you are allowing reminder/recall notices to be sent to this patient when you run the reminder/recall report. If the patient’s parent chooses not to have reminder/recall notices sent, choose No from the drop down list to exclude the patient from the report.

9. **Language Spoken:** Choose the primary language spoken by the Patient.

10. **Insurance Provider:** Choosing an insurance provider from the drop down list selects an Insurance Provider.

11. **Policy Number:** Fill in the policy number of the Insurance Provider.

12. **VFC Eligibilities Verification Date:** Fill in the field using the MM/DD/YYYY format, or use the pop-up calendar by clicking the calendar icon to the right of the field. Then choose a month and year from the drop down lists at the top and choose a day by clicking on the appropriate calendar day. Press **OK** to enter the VFC Eligibility Verification Date.

13. **VFC Eligibility:** By choosing a VFC eligibility from the drop down list selects the patient’s eligibility to receive publicly funded vaccines from the Vaccines for Children (VFC) Program.

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**Generation of reminder and recall notices**

When running the reminder/recall report, letters are generated for every patient, given that the following conditions are met:

- The patient’s status is not set to “Inactive” or “Permanently Inactive-Deceased on the Patient Information tab.
- The “Allow Reminder and Recall Contact? Indicator on the Patient Information tab is set to “Yes.”
- The patient has sufficient name and address information listed in the Address Information Section.
Address Information Section

The Address Information Section allows you to identify the current address of the patient. In the future, it will also allow you to identify other siblings in the same household.

Click on the Address Information Section.

1. **Undeliverable Address**: Mark this checkbox if information was sent to the patient and the information was returned as not deliverable.

2. **Start Date**: Fill in the start date of the address using the MM/DD/YYYY format, or use the pop-up calendar by clicking the calendar icon to the right of the field. Then choose a month and year from the drop down lists at the top and choose a day by clicking on the appropriate calendar day. Press **OK** to enter the Start Date. This is the Start Date of the Patient’s New Address.

3. **Street Address**: Street Address of the Patient.

4. **Other Address**: Additional address information, if any, for example, a suite number or apartment number could be entered here.

5. **Zip**: Zip code of the patient.

6. **+4**: Extended Zip code numbers of the Patient, if available.

7. **City**: City (or town) of the patients address.

8. **State**: State of the patient’s address.

9. **County**: County where the patient resides.

10. **Phone Number**: Phone Number of the Patient.

11. **Extension**: Phone extension if applicable.
12. Clicking the view Patient Address History link will present a window with the patient’s address History.

13. Clicking the Find command button will take you to a search screen to search and add patients that are at the same address of this patient. This feature will be available once the Household function is added to ImmuNet.

**Responsible Persons Section**

The Responsible Persons Section allows you to identify patient emergency contact information. The only required fields under this section are the Last Name, First Name and Relationship fields.

Click on the **Responsible Persons** Section.

1. To edit an existing responsible person, do the following:
   - Click on the Review radio button next to the name of the person you wish to edit.
   - Press **Review**
   - Change or add information for the fields listed.
   - Press **Apply Changes**
   - Press Save.

2. To enter a new responsible person, do the following:
   - Click the Add New command button.
Enter Information into the following fields:

- **Last Name**: Enter the last name of the responsible person into this field. This is a required field.
- **First Name**: Enter the first name of the responsible person into this field. This is a required field.
- **Middle Name**: Enter the responsible person’s middle name in this field.
- **Relationship**: Choose the relationship of the responsible person to the patient from the drop down list provided. This is a required field.
- **Phone Number**: Enter the responsible person’s telephone number, including the area code, in this field.
- **Extension**: Enter the responsible person’s extension to the above telephone number, if any, into this field.
- **Email**: Enter the responsible person’s Email address into this field.
- **Street Address**: Enter the responsible person’s street address into this field.
- **Other Address**: Enter the responsible person’s additional address information, if any, into this field. For example, a suite number or apartment number could be entered here.
- **P.O. Box**: Enter the responsible person’s post office box, or mailing address, if different than the street address, into this field.
- **City**: Enter the responsible person’s city (or town) into this field.
- **State**: Choose the responsible person’s state from the drop down list provided.
- **ZIP**: Enter the responsible person’s ZIP code in this field.
- **+4**: Enter the responsible person’s +4 code in this field, if it is known.

3. To enter a new responsible person and save the information you entered in the Responsible Person Listing or view the next responsible person’s record click the Save command button.

4. To clear existing information and enter a new responsible person, press **Add New**.

**Deleting an existing record**

1. Select the Remove check box next to the record you wish to delete on the Responsible Person Listing table.
2. Press **Remove**.
3. Press the Save button

**Patient Comments Section**

The Patient Comments Section allows you to enter immunization-related comments, such as, contraindication information for a patient. The patient comments list is derived from a pre-selected CDC-standardized list and is displayed in drop down list form.

Although the “Start Date” is not a required field, a start date must be entered with a contraindication comment in order to properly interact with the immunization schedule for the
specified vaccine group. If a start is not entered the vaccine group that is contraindicated will still be recommended.

The patient comments are visible at the top of the Immunization History, Edit Immunization, Pre-Select Immunization, and Record Immunization screens. Also, when using the Print button on the immunization history page, the comments are displayed on separate lines in the Comments box.

Click on the Patient Comments Section.

1. Enter the following information:
   • Choose the appropriate comment/contraindication from the Patient Comment drop down list.
   • Enter the date to which the comment refers in the Start Date field. Fill in the field using the MM/DD/YYYY format, or use the pop-up calendar by clicking the calendar icon to the right of the field. Then choose a month and year from the drop down lists at the top and choose a day by clicking on the appropriate calendar day. Press OK.
   • Enter the date to which the comment Ends in the End Date field. Fill in the field using the MM/DD/YYYY format, or use the pop-up calendar by clicking the calendar icon to the right of the field. Then choose a month and year from the drop down lists at the top and choose a day by clicking on the appropriate calendar day. Press OK.
2. To enter the comment into the Patient Comments Listing, press Add Comment.
3. Press the Save button

Restart Comments
If a physician decides to repeat a vaccine series and the appropriate comment and Start Date are entered in ImmuNEt, then all vaccinations prior to that date are not evaluated as part of the series. Any doses recorded on or after the Start Date will be evaluated as if they were the first doses received for that vaccine group.

Immunity Comments
Immunity comments are linked to vaccine group recommendations. If a patient has an immunity comment and a Start Date is specified, a recommendation for that vaccine group will not display on the patient’s record.
Patient Refusal of Vaccine Comments
ImmuNet users should enter refusal comments with appropriate start dates to document vaccine refusal. This information will help other providers understand why a vaccine group might be overdue for a particular patient in ImmuNet.

Deleting an existing comment
1. Select the Remove check box next to the comment you wish to delete on the Patient Comment Listing table.
2. Press Remove.
3. Press the Save button.

Patient Notes Section
The Patient Notes Section allows you to enter notes for a patient. Click on the Patient Notes Section.

1. Enter Text of Note: Enter text up to 4,000 characters in the text box.
2. Press the Save button.

Saving Patient Information
There are several ways to save information on the Demographic/Enter New Patient screens:

Save: When pressed, the Save command button at the top of the screen will save all information fields within the Personal Information Section, Patient Information Section, Address Information Section, Responsible Persons Section, Patient Comments Section and the Patients Notes Section to the ImmuNet database. Once the patient data is saved, the
message “Patient record successfully saved” will appear at the top of the Personal Information Header.

History/Recommend: As with the SAVE command button, the History/Recommend command button will save all information fields. Once the information is saved, the patient's Immunization History screen will display.

Record Immunization: When the Record Immunization command button is pressed, all information fields will be saved and the Pre-Select immunization screen will display. This button allows you to bypass the history screen for a patient and go directly to adding immunizations.

Reports: As with the Save command button, the Reports command button will save all information fields. Once the information is saved, the Reports Available for Patient screen will display, so that a report may be generated for the patient. Refer to the Reports and Forms chapter of this manual for more information on reports.

Cancel: When pressed, the Cancel command button clears all entered information and does not save it to ImmuNet. The Find Patient or Enter New Patient screen is displayed.

Deduplication of Patient Records
After you enter a new patient and press one of the command buttons that will save the data, ImmuNet initiates a process that ensures that the patient information you entered does not duplicate a patient that already exists in ImmuNet.

If, after attempting to save a new patient, you receive a message box titled “Patient Match Detected,” ImmuNet has determined that the patient you are attempting to save already exists in the database. A table below the message box will contain one or more names of potential matches within ImmuNET. Click on each last name to display his or her information. ImmuNet will identify matching patients even if the patient has had a name change; therefore, if you do receive a list of potential matches, click on the link(s) to determine whether one of the links matches your patient’s record.
If after reviewing all the names given in the table you do not find a match for your patient, press the Create New Patient button. A confirmation box will appear; press OK. Be aware that if you do override the listed matches and end up creating a duplicate record for a patient, it will be difficult to manage the patient’s immunization and personal information and the registry will lose its accuracy and efficiency. If you identify possible duplicate patient records, you should call the ImmuNet Help Desk immediately.

### Countermeasure and Response Administration Module (CRA)

**Note:** In the event of a public health emergency, ImmuNet may be used to track the administration of vaccine. In some instances specific groups may be identified as being at higher risk than the general population and targeted as priority groups to receive the vaccination first.

#### CRA Event Information Section

If your organization is selected for an event, the CRA Event Information section will be displayed below the Patient Information section of the Demographic screen. The CRA Event Information section is used to collect Public Health data during a pandemic response event or preparedness exercise (such as the response event to a Pandemic Influenza outbreak.) During an ongoing event the CRA Event Information section will be displayed on the Edit/Enter New Client screen. Based on candidate screening, select the appropriate priority group category for each patient.
1. Effective Events are displayed.
   - The Age Group is not required and will be calculated at the time of vaccination.
   - The Priority Group Value (Code) is displayed in the drop down list. When selected, a full description of the selected priority group will be listed to the right of the priority group drop down list.