Quick Guide to Epi Info™

How to use this document

This document gives you brief instructions to set up the Paul Coverdell National Acute Stroke Program (PCNASP) Data Collection Tool within Epi Info™ 7. This quick start user guide should not be used as a complete user guide to Epi Info™ 7. Epi Info™ is a powerful tool with a suite of modules and tools to collect, analyze, and manage data. For the complete Epi Info™ User Guide, visit https://www.cdc.gov/epiinfo/support/userguide.html.

This user guide covers the following instructions (navigation links):

Downloading the Epi Info™ software

Follow this link to download Epi Info™: https://www.cdc.gov/epiinfo/pc.html

System Requirements

- Microsoft Windows XP or above
- Microsoft .NET Framework 4.0 or above
- Recommended: 1 GHz processor
- Recommended: 256 MB RAM

NOTES

Epi Info™ 7 may be downloaded in two different formats: as a ZIP or a setup file. The following explains what scenarios may be best suited for each format.

ZIP (.zip file) Installation

- Can be downloaded to most user desktops and run without requiring administrative or elevated privileges.
- Can be extracted to and run from any folder on which the user has read/write/execute privileges (including thumb drives).
- Assumes that the machine already has Microsoft .NET 4.0 and other prerequisites installed.
- Recommended for disconnected laptops and other emergency use if IT support or infrastructure is unavailable.

Setup Installation (.msi file)

- Traditional setup mechanism that deploys Epi Info™ 7 to the location required by IT policy.
- Allows network administrators to centrally manage and push Epi Info™ 7, including updates and patches, to users using Microsoft System Center Configuration Manager.
- Ensures that the machine's configuration matches the software's minimum requirements.
- Pre-compiles and registers Epi Info™ 7 components on the machine, enabling certain components to run faster.
- Requires administrative or elevated privileges during installation.

- Recommended for centrally managed IT environments.

Helpful links for additional assistance

Epi Info™ User Guide: https://www.cdc.gov/epiinfo/support/userguide.html
Support and Resources: https://www.cdc.gov/epiinfo/support.html
Frequently Asked Questions: https://www.cdc.gov/epiinfo/support/faqs.html
Help Desk: https://www.cdc.gov/epiinfo/support/helpdesk.html

Downloading the PCNASP data collection forms

After installing the Epi Info™ 7 software, you are ready to download and begin setting up the PCNASP data collection forms. **A few things to note about Epi Info™ 7 and the PCNASP files available to set up a data collection tool:**

- Data collection in Epi Info™ 7 is organized by projects. Each project can include one or many forms, which can have one or many pages. Each page contains data entry fields that collect individual data elements.
- This initial setup includes an Extensible Markup Language (XML) file that Epi Info™ refers to as a template. Templates allow users to package all features and information of an already developed project, form, page, or group of fields in an XML format. This then provides a shareable file ready to be used by any number of users without sharing collected data. As mentioned, you will use an XML file to create the PCNASP data collection forms.
- Once this template file creates a new project in the Form Designer of Epi Info™, it is advised that you not make changes to the fields, pages, or forms. If any changes are necessary, it is best to familiarize yourself with Epi Info™ by reading the Epi Info™ User Guide. Please note that once you begin entering data, you will not be able to make certain edits to fields in the project.
  - The project file you will download contains three forms to collect data: The in-hospital form and nested within are the pre-hospital [Emergency Medical Services (EMS) data] form and the post-discharge follow-up form. This means that for each record, you will begin entering the in-hospital data then have the option to enter data for the pre-hospital patient record report (PCR) from EMS and/or the follow-up post-discharge form.
- CDC may need to make certain updates to the PCNASP Data Collection Tool. These changes may be needed to keep PCNASP data collection accurate and current with updated scientific guidelines and research. Future releases and updates will be detailed on the PCNASP website.
- You will only need to do this initial setup once.

Instructions (select screenshots below):

1. In the PCNASP webpage, click to download the file titled PCNASP Data Collection Forms.
2. The Epi Info™ XML file will begin to download. You may choose to save the file in a desired location in your system.
3. To open and prepare the existing PCNASP Epi Info™ files and begin entering data, follow these directions to create a project file:
   a. Click the Epi Info™ icon to open the software.
   b. Click **Create Forms**.
      i. Epi Info™ will open to a blank canvas that is called the Form Designer.
   c. Go to **File** → Click **Get template**.
   d. Navigate to the location of the XML file (titled **PCNASP_Registry_Collection_Form**)
   e. Click the XML file.
      i. Note: The location of the folder and file will be where it is saved in your system.

    f. Click to open (or select and press **OK**). A dialog box should appear in the Epi Info™ canvas, prompting you to create a new project from template (Figure 1 below).
    g. Create a name for this project file. This project file will serve as the data collection form and the data collection database.
        i. Note: The name cannot start with a number or contain spaces.
    h. Note the location where the project is saved.
        i. Optional: If you would like to save this data collection form under a different location, click **Browse** and navigate to the desired folder in your system.
        ii. Note: The data repository is a Microsoft Access Database (.mdb).
    i. Click **OK**.
4. The project file should then begin to load onto the canvas. Allow a few minutes for the entire project to load (Figure 2 below).
5. You have just created the data collection forms for the registry (Figure 3 below). You will not be able to enter data in this format. Proceed with next steps to complete preparing the project files to begin entering data.

Figure 1: New Project from Template File

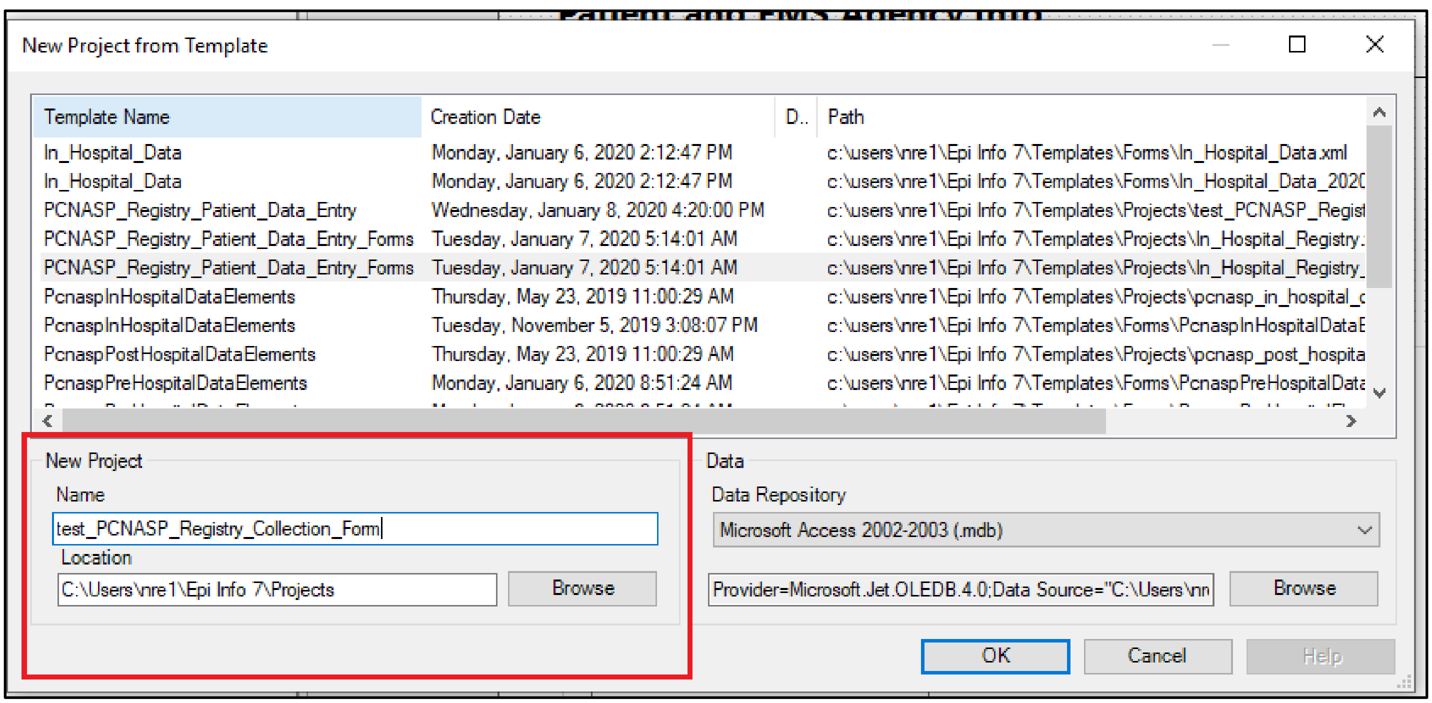


Figure 2: Epi Info™ Loading and Creating a Project File

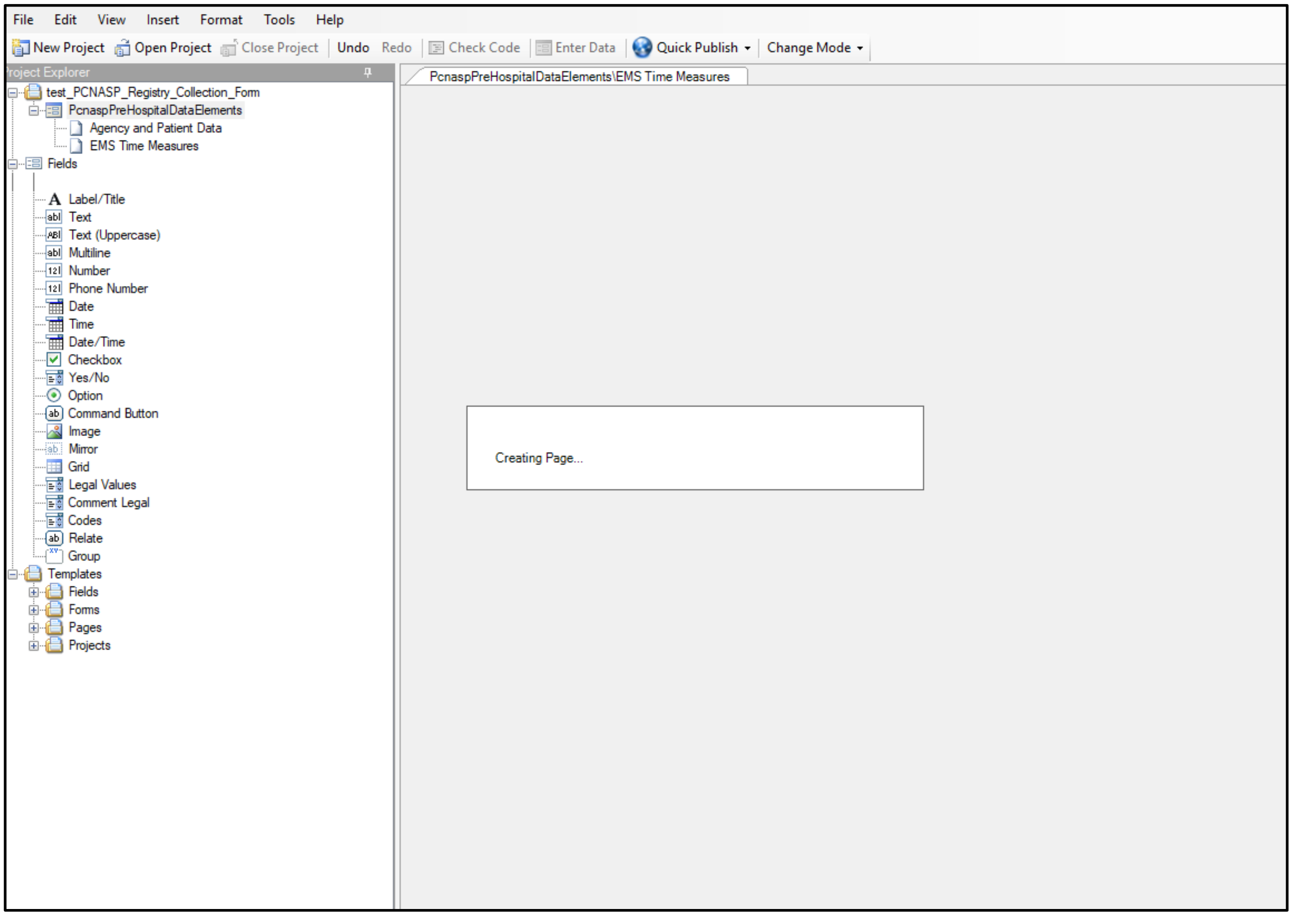
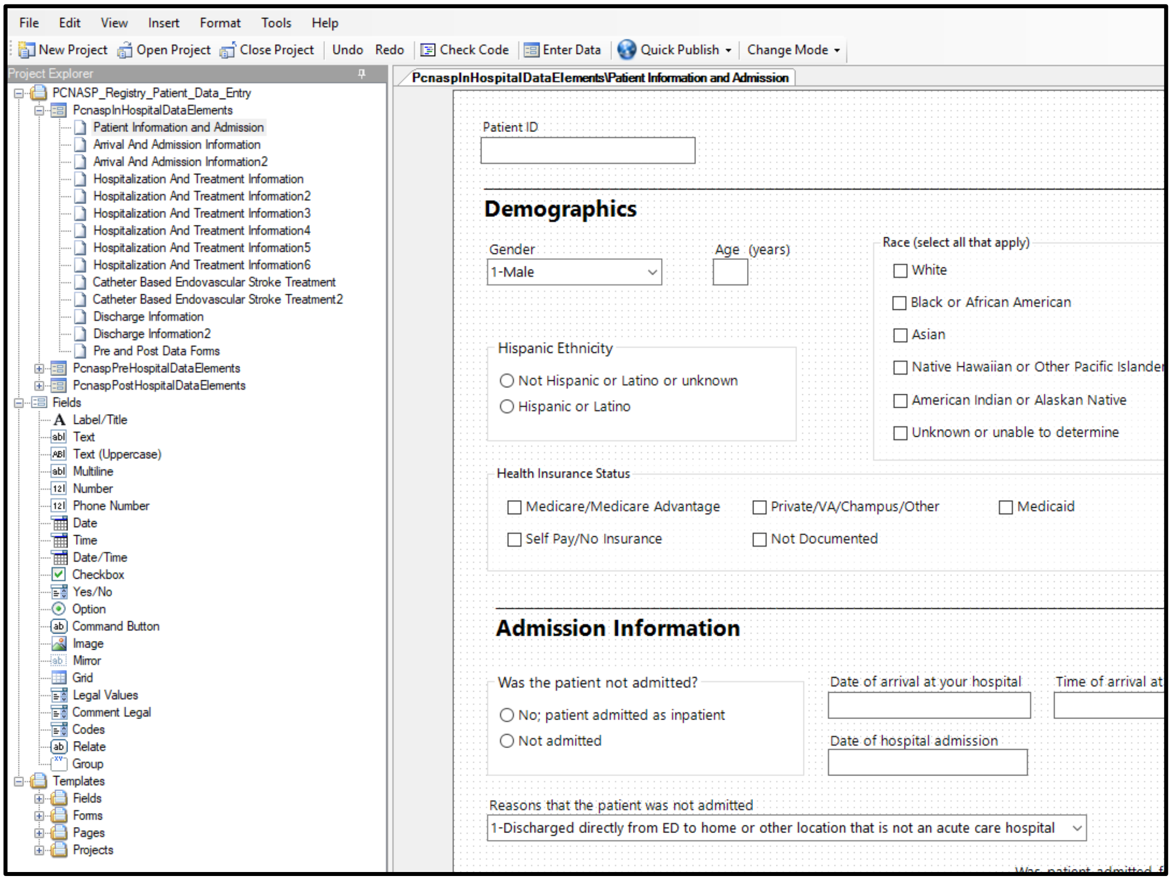


Figure 3: Project Is Loaded and Displays the First Page of the In-Hospital Form



How to enter data in Epi Info™

The **Enter** module in Epi Info™ can be used to enter new data, modify existing data, or search for records. When data are entered into a form, the data table inside the project is populated. The **Find** function allows records to be located based on a series of matched variables. As data are entered, the cursor moves according to the tab order from field to field, page to page, and saves data when navigating to a new page. If you try to exit a page before data are saved, you will be prompted to save the data.

A data table must be initially created before data are entered. The data table stores all records for each form in the project. The data table will contain record IDs.

To access the **Enter** module and begin entering data using the PCNASP forms, follow the directions below (selected screenshots provided):

1. If Epi Info™ is already open to the Form Designer, click **Enter Data** on the toolbar or select **Tools** > **Enter Data.** (If you are on the Epi Info™ home screen, go to step 2.)
    a. You will be prompted to create a data table. Click **Yes** (Figure 4 below).
    b. Create a name for the data table with a starting record ID (Figure 5 below). Click **OK**.
2. If you are on the Epi Info™ home screen, click **Enter Data** on the main menu. Then select **Open Form** from the toolbar or **File** > **Open Form**.
    a. A dialog box to open a form will appear. Click the **Ellipsis** button next to the Current Project field to browse for a project (Figure 7 below).
    b. Select the PCNASP project file you just created (this will be a PRJ file). The project file path will display in the Current Project field and the PCNASP in-hospital data elements form will appear in the Forms field. Click **OK**.
    c. You will be prompted to create a name for the data table with a starting record ID (Figure 5).
        1. Enter a name for the data table.
        2. Enter a record number.
        3. Click **OK.**

The project and form will now display with the first record in the project appearing on the canvas (Figure 6 below). This is the in-hospital data form and should display 14 pages listed on the left, with the first page being Patient Information and Admission. Epi Info™ will refer to the in-hospital form as the **parent** form, with the nested pre-hospital and post-hospital forms as **child** forms. To navigate to the pre-hospital and post-discharge forms you will need to navigate to the last page in this in-hospital form (named Pre and Post data forms). You will then see two buttons to link you to the corresponding form. These nested forms will save the pre-hospital and/or post-hospital data entered to the same patient record.

Navigation buttons within Enter. Navigation of records is provided on the toolbar: You can use the **New Record** button and navigation buttons for **next (▶)**, **previous (◀)**, **first (◀|)**, and **last (|▶)** records. You can also manually type the record ID number into the record list to jump to that record. When entering data into a child form (a nested form, like pre-hospital or post-hospital forms), use the **Back** button to return to the parent form (the in-hospital form).

How to save a page or record

The **Enter** module saves data automatically as you move from page to page. Data are also saved when navigating to another record. You can move out of a record by tabbing out of the last field of the last page or clicking **New**

Record from the toolbar to open a new record. Records can also be saved manually. There are two ways to save the current record manually:

1. Click **Save** from the toolbar.
2. Press **Ctrl+S** from the keyboard.

Helpful links for additional assistance with entering data

Navigating the Enter Workspace: https://www.cdc.gov/epiinfo/user-guide/enter-data/navigating-the-enter-workspace.html
Enter Data: https://www.cdc.gov/epiinfo/user-guide/enter-data/introduction.html
How to: Find Records: https://www.cdc.gov/epiinfo/user-guide/enter-data/how-to-find-records.html

Figure 4: Prompt to Create a New Data Table for the Project

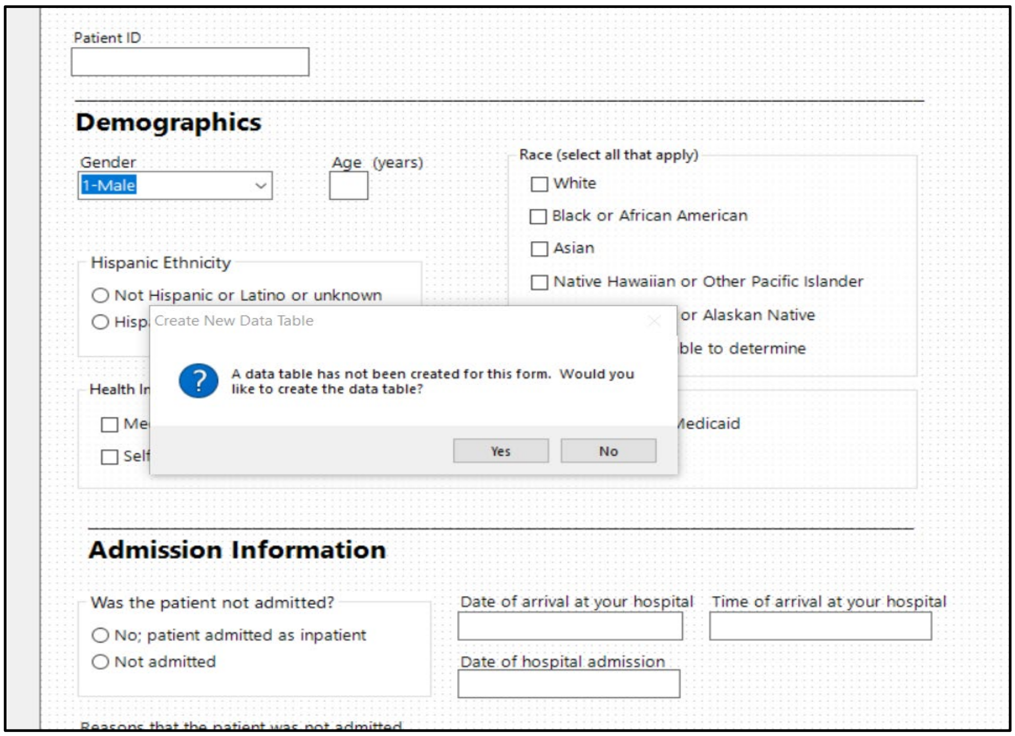


Figure 5: Creating a Name for the Data Table and Starting ID

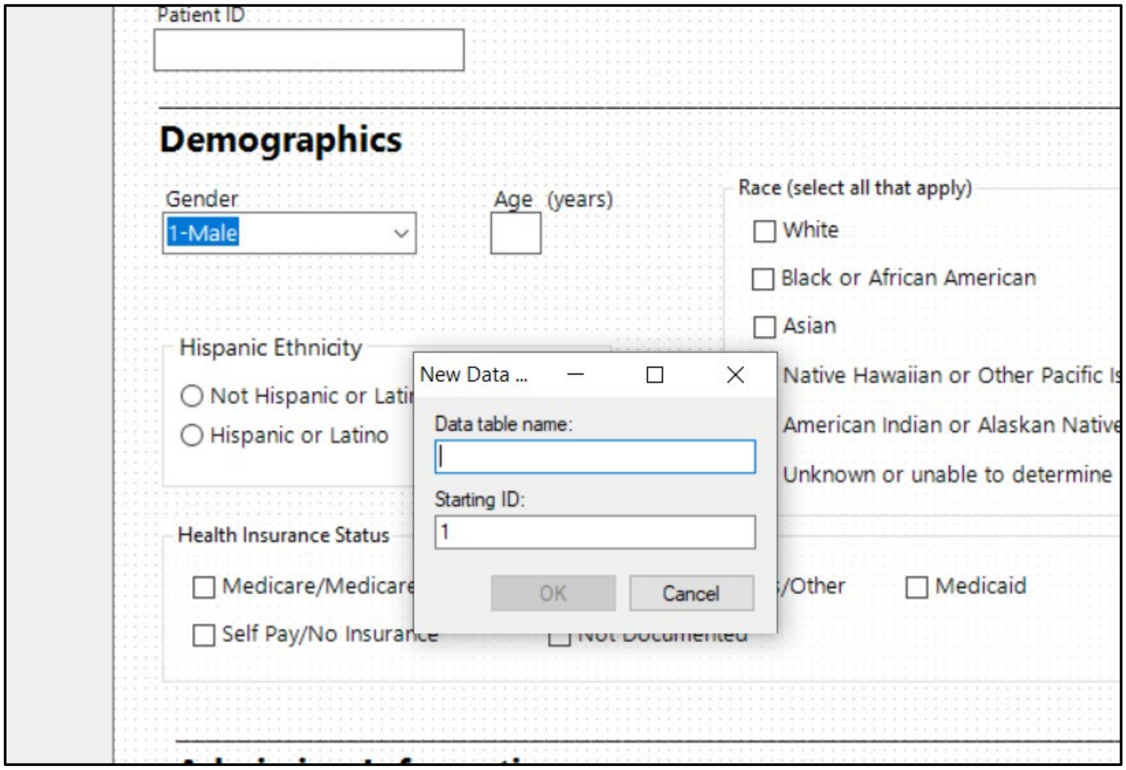


Figure 6: Page Display When Selecting Enter Data

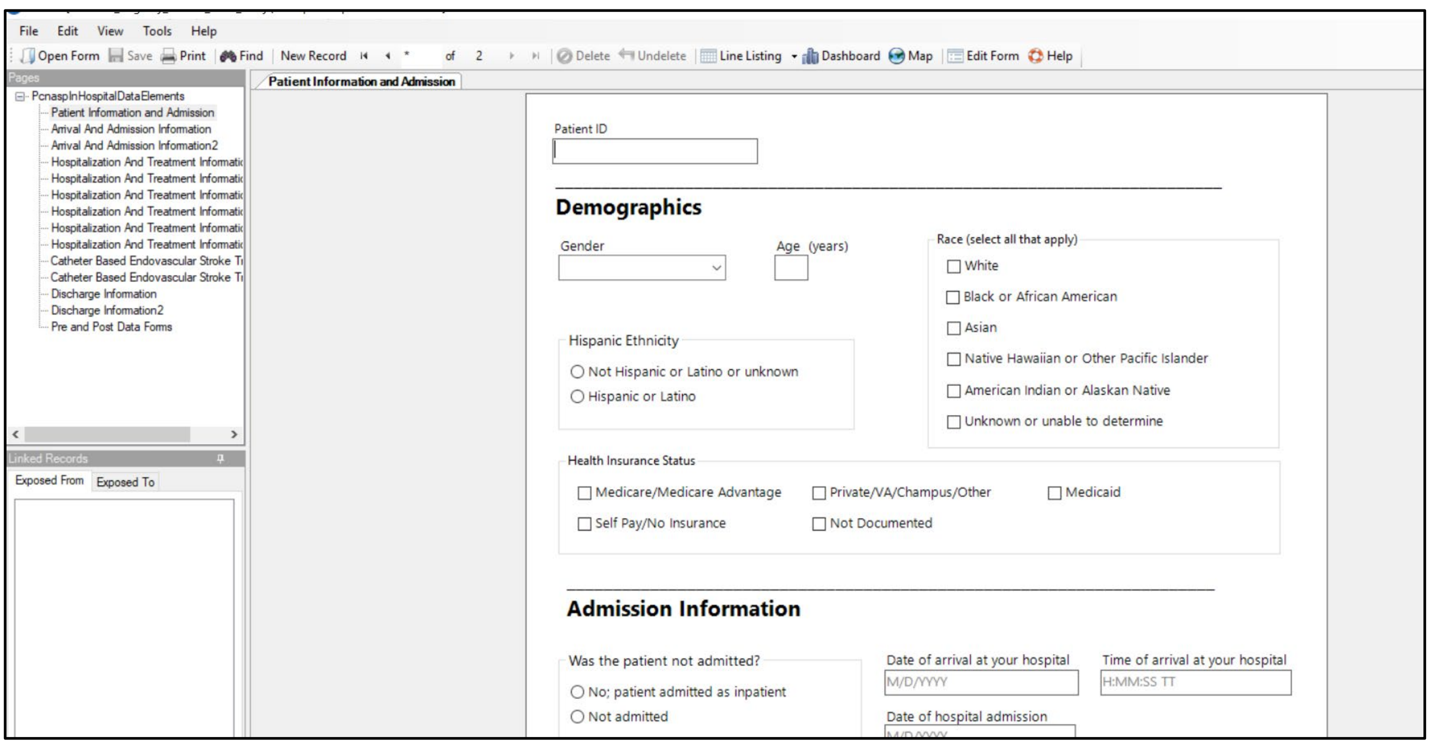
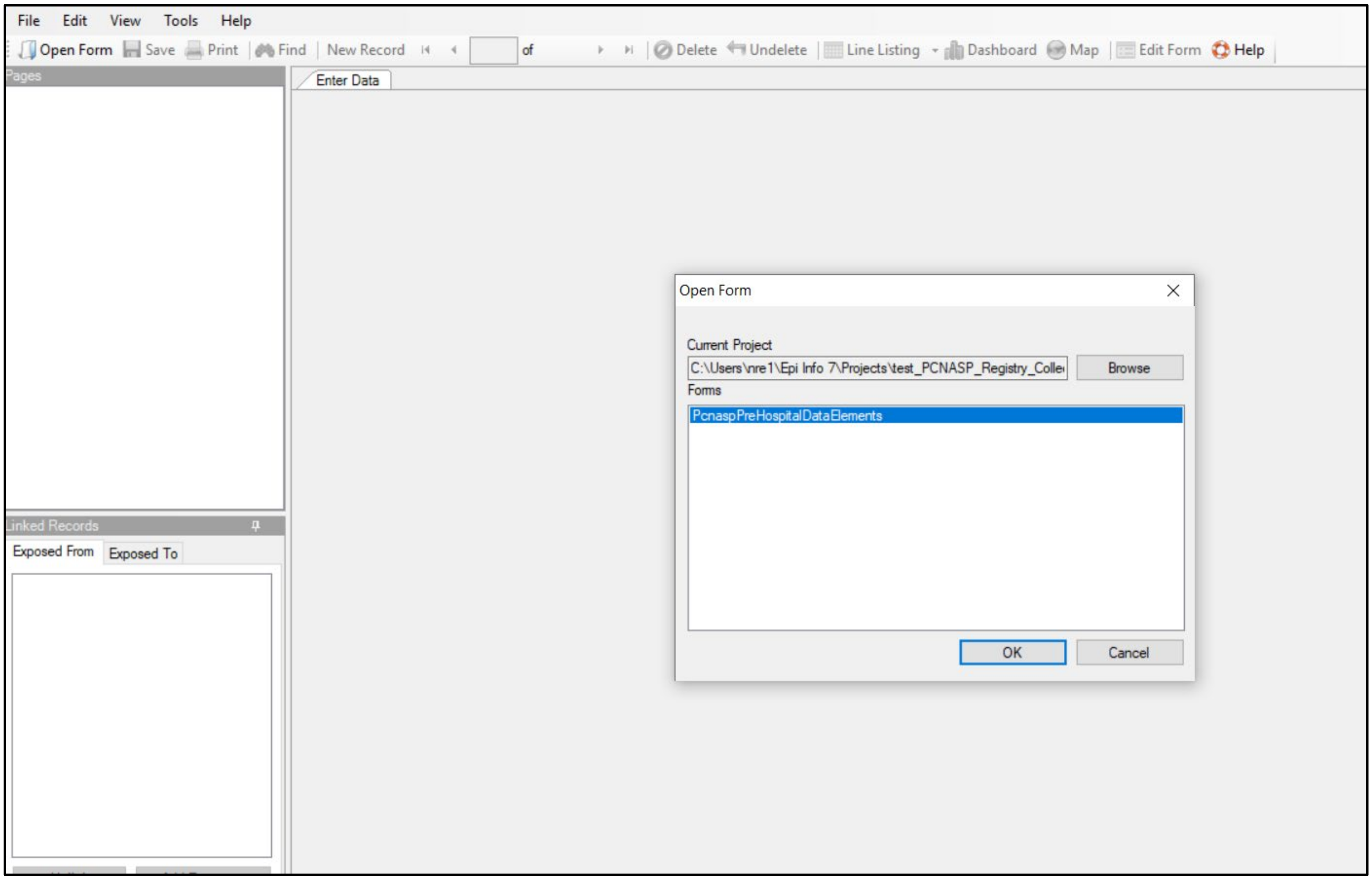


Figure 7: Opening the Data Entry Form from the Epi Info™ Home Screen



How to view a data table

In the **Enter** module, you can use **Line Listing,** located on the toolbar, to view the data table for all records that have been saved. Also, you can view the data in MS Excel and HTML formats. **Line Listing** gives you three options to view records (only records of the current form displayed):

1. **Interactive** will display the data table in the **Dashboard** module. This allows you to modify and apply certain settings for other display options and to conduct analyses (see the Epi Info™ User Guide, section 8, page 268, for more information on the Epi Info™ **Dashboard**).
2. **Printable (HTML)** displays the data table for all records in the form in HTML format and will output to a web browser.
3. **MS Excel** exports the data to an Excel spreadsheet.

Remember, the pre-hospital and post-hospital forms are nested within the in-hospital form (child forms within a parent form). Therefore, each child form will store data in a separate data table. Using **Line Listing** will not display the records for data entered in all forms (e.g., in-hospital records along with their pre-hospital data and post-hospital data). Viewing this linked data will need to be done in the **Dashboard** module, to link records across the three data tables (in-hospital, pre-hospital, and post-hospital).

If you access the **Dashboard** (either from the Epi Info™ home screen or from the toolbar), the **Add a Related Data Source** option links one or more tables using a common identifier to find matching records. The form/table to be linked requires a key field that relates records in the two forms/tables together. The keys in the main and related tables or forms do not need to have the same name. In the case of PCNASP data collection forms, you should be able to use the data element **PatientID** to link all three forms. You may also use other data elements. Follow these instructions to use the **Dashboard** to display a data table for the PCNASP forms using a common identifier:

1. From the Epi Info™ 7 home screen, click **Visual Dashboard** (if you are in **Enter** with the in-hospital form displayed, click **Dashboard** and the in-hospital data table will readily load into the **Dashboard**—go to step 5).
2. Click the arrow to **Set a data source now**.
3. In the dialog box, click **Browse** and select the PCNASP Data Collection Tool project file (from wherever you saved it in your system). Three forms should show up under Data Source Explorer.
4. Select the PCNASP in-hospital form. This should begin processing in the **Dashboard** canvas.
5. Right-click the canvas and select **Add Related Data Source**. The **Select Data Source** dialog box will open.
6. Select the PCNASP pre-hospital or post-hospital form from the list of forms in the Data Source Explorer. The **Child Key Field** drop-down list will populate.
7. From the **Parent Key Field** drop-down list, select **PatientID**.
8. From the **Child Key Field** drop-down list, select **PatientID**.
9. Click **OK**. The related form information appears on the canvas. Data from the two tables can now be used for analyses options within the **Dashboard**.
10. To view the data table, on the top or the **Dashboard**, click the gray box with a down arrow and select **Data**. A data table with both linked records will display.
11. To add another data source, follow the same directions from steps 5–10.

How to use Find to search for records and update records

Find can search for a record matching any field value or combination of field values.

1. From the toolbar, select the **Find** icon or **Edit > Find**. The **Find Records** window will open.
2. The **Select/Unselect Search Fields** list will display on the left side of the **Find Records** window with all fields contained in the form. Click a field name to select one or more fields. The selected search fields will turn blue and populate the gray area to the right of the list.
3. To unselect a field, click the selected field highlighted in blue. The field will no longer be highlighted and is removed from the search criteria.
4. Enter the search criteria for each field and click **Search**. Note that certain fields require specific formatting for the search criteria. If more than one field is selected, the search will display records that match all search criteria. This is considered an “AND” search.
5. Open a record by double-clicking the arrow on the chosen row. The record will display in the **Enter Data** workspace.
6. You will now be able to edit the record or enter new data for this record.