TEXAS
Health and Human Services

Texas Department of State Health Services

Tuberculosis and Hansen's Disease Unit
NEDSS Tuberculosis (TB) Training Course
for
Public Health Regions and Local Health Departments (R/LHDs)

January 2024

Course Number 1:
Navigating NEDSS and Creating a TB Patient File

After completing this course, you should be able to:

- Understand key terminology used in NEDSS specific to TB.
- Log into NEDSS and be familiar with the dashboard.
- Search and create a patient file.
- Use the advanced search features.
- Address duplicate patient records.

Key Terminology

What is NEDSS?

NEDSS is the National Electronic Disease Surveillance System (NEDSS)

- Assists local, state, and territorial public health departments to manage reportable disease data.
- Transmits nationally notifiable disease (NND) data to the Centers for Disease Control and Prevention (CDC).
- Used by R/LHDs to report TB and other diseases.

Features

- Patient records with surveillance and case management data
- Ability to merge duplicate patient records
- Reports that may be customized
- Ability to transfer records to other jurisdictions
- Continuous data entry and real-time reporting

NEDSS Terminology

General Terms Across Diseases

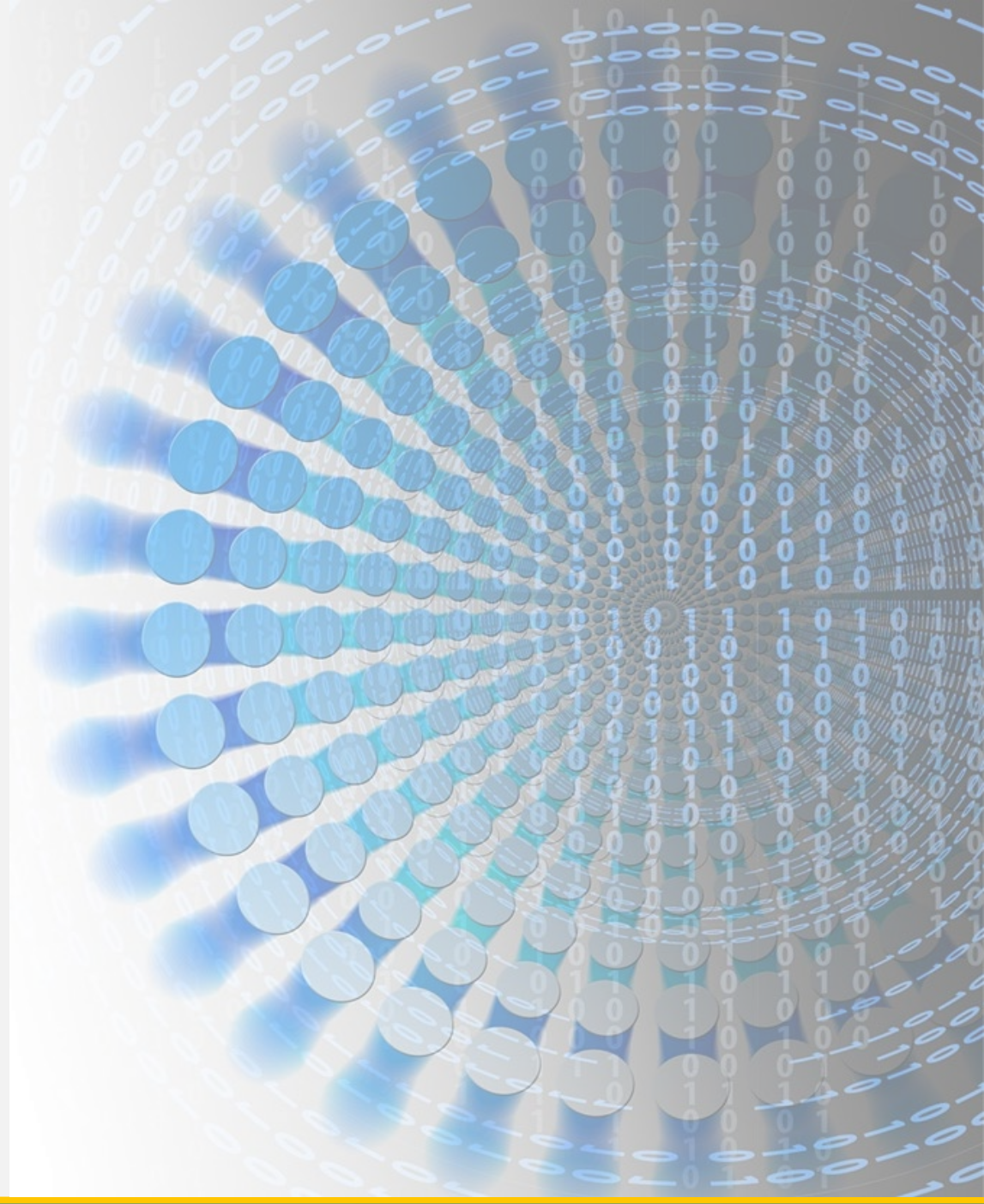
NBS: NEDSS-based system

ELR: Electronic Laboratory Report

Events: Surveillance information associated with a patient such as an investigation, lab report, morbidity report, vaccination record, treatments, documents, and contact records

Condition – Specifies the reportable disease for an event

Notifications: Electronic messages sent to CDC to report a verified case of an NND



NEDSS Terminology

General Terms Across Diseases

- **Patient File** –allows a view of the patient's information, including demographics, observations, investigations, and vaccination records, if they exist in the system.

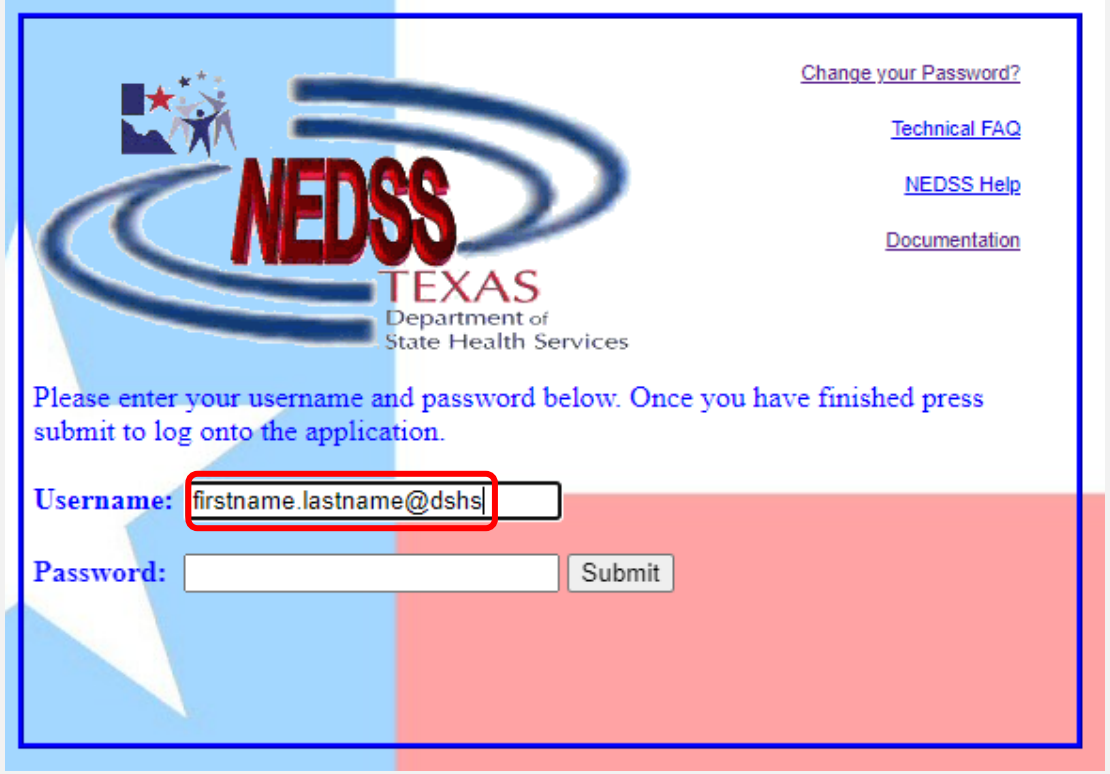
- **Investigation** – Information regarding one incidence of a disease. The bulk of TB data entry occurs here.

    - **Tuberculosis (RVCT 2020)**: the condition for all investigations for patients who have not been diagnosed with latent TB infection.

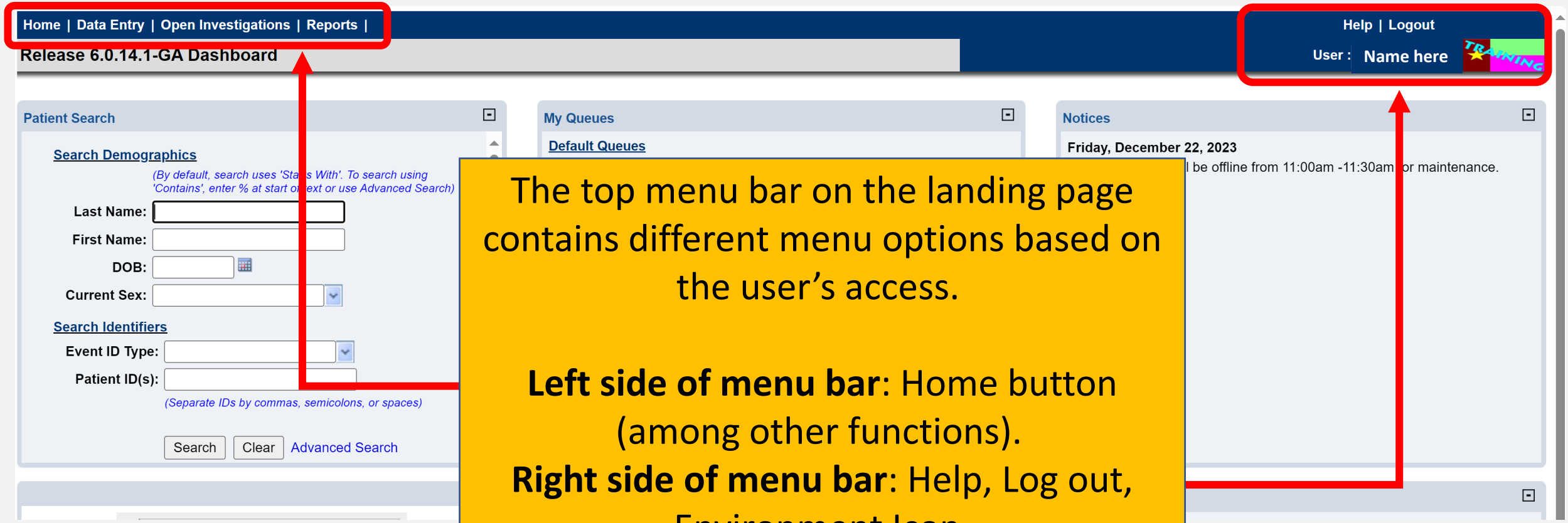
    - **Latent TB infection (TBLISS 2020)**: the condition for investigations for patients who have been diagnosed with TB infection.

Log In and Navigate the Dashboard

Logging into NEDSS: *Training Site*



NEDSS Homepage Dashboard



The top menu bar on the landing page contains different menu options based on the user's access.

Left side of menu bar: Home button (among other functions).

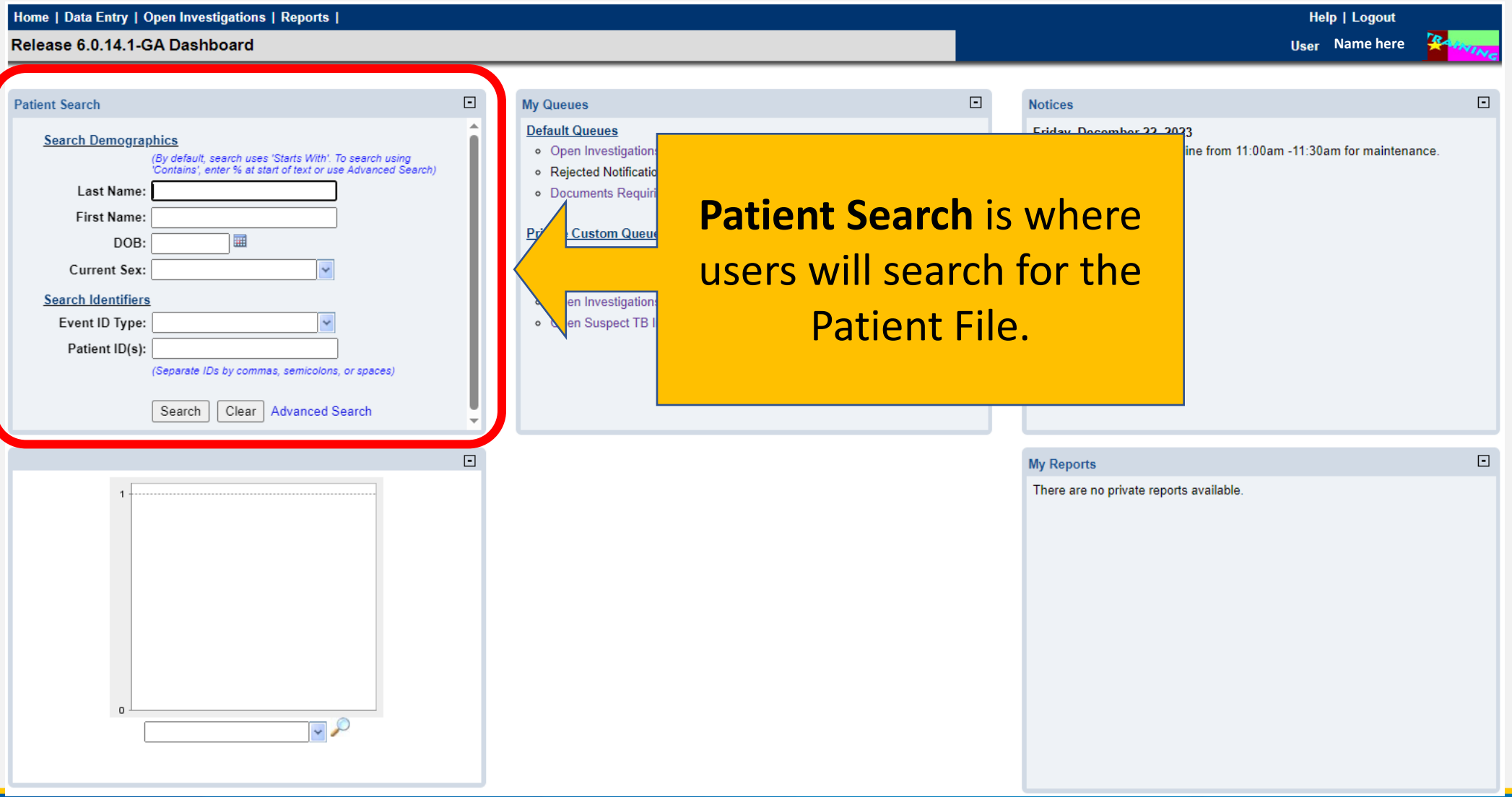
Right side of menu bar: Help, Log out, Environment Icon.

NEDSS Homepage Dashboard

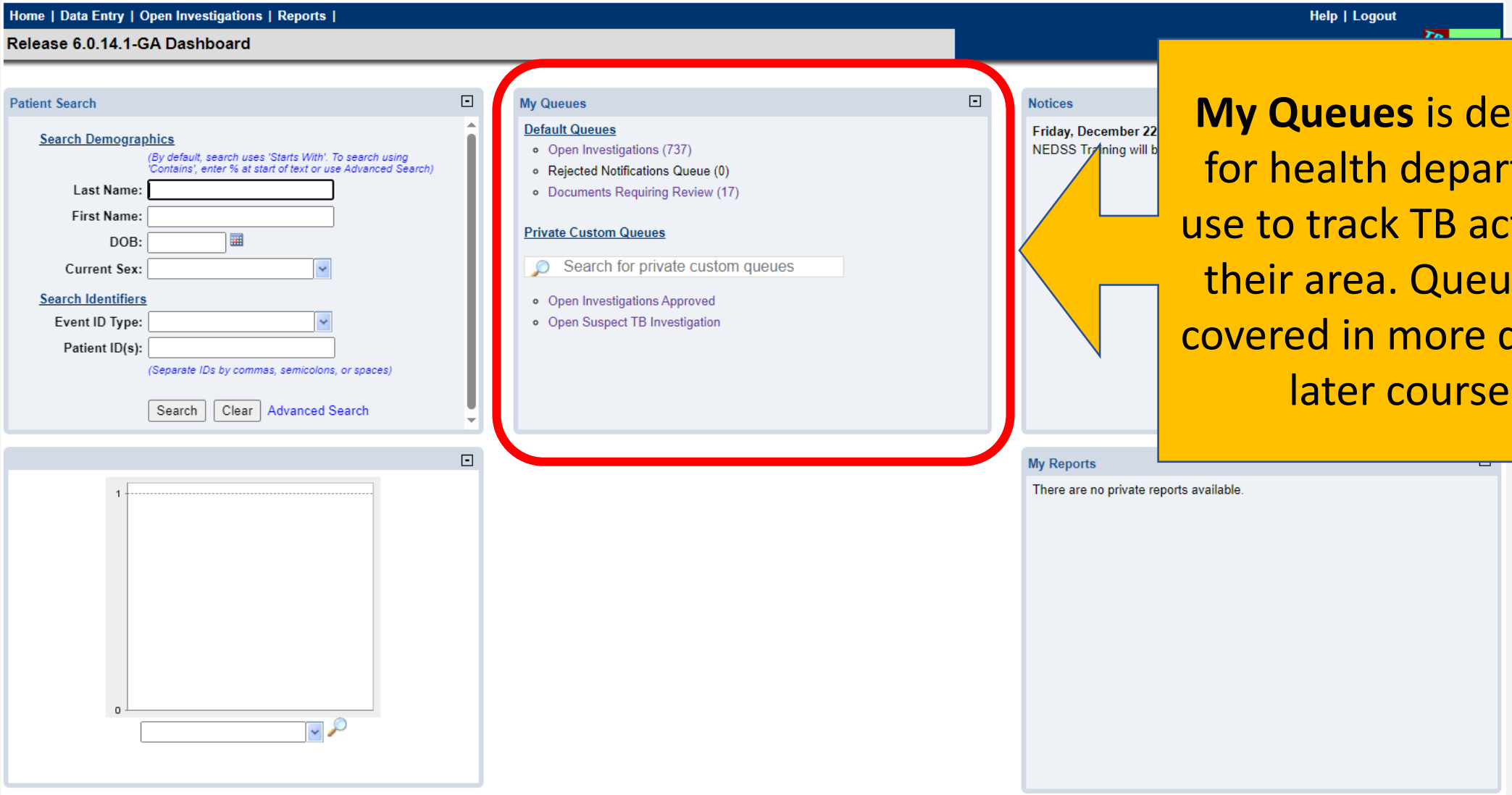
NOTE: Users should be sure they are in the correct site, training (above) vs. production (below).

*Patient Identifiable Information **should not** be entered in the training environment.*

NEDSS Homepage Dashboard

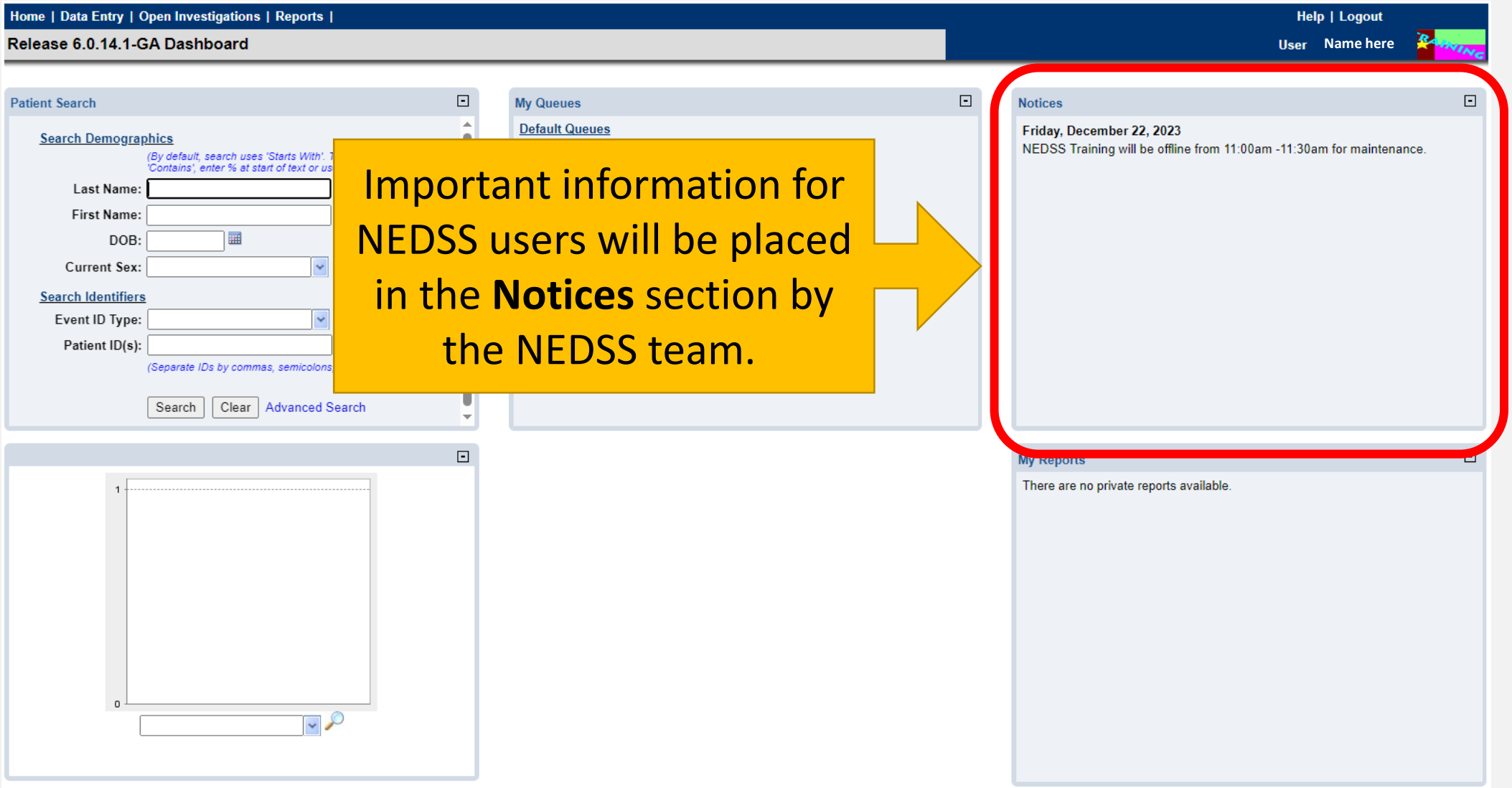


NEDSS Homepage Dashboard

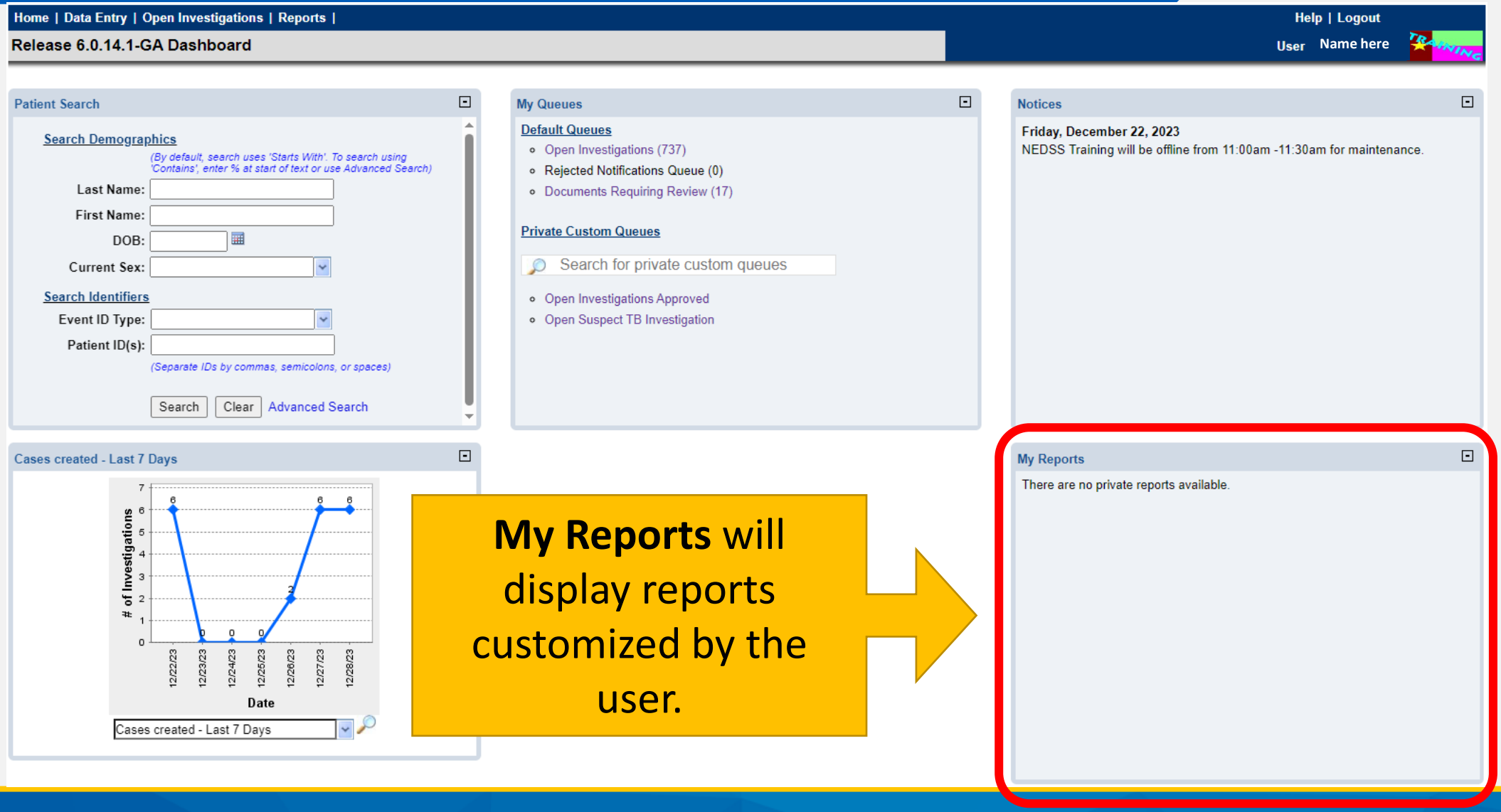


My Queues is designed for health department use to track TB activity in their area. Queues are covered in more detail in later courses.

NEDSS Homepage Dashboard

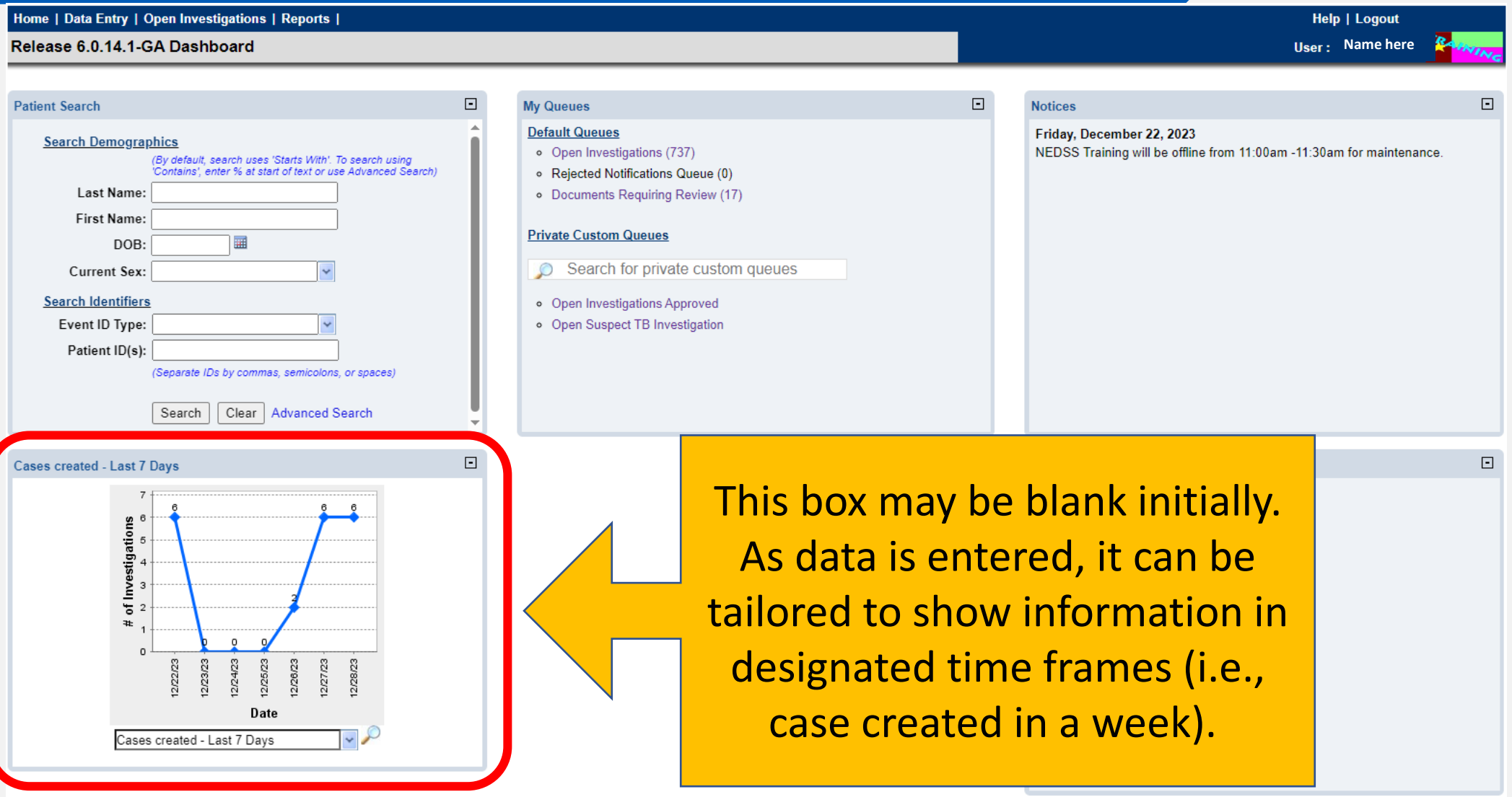


NEDSS Homepage Dashboard



My Reports will display reports customized by the user.

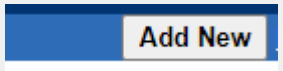
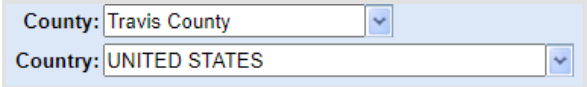
NEDSS Homepage Dashboard



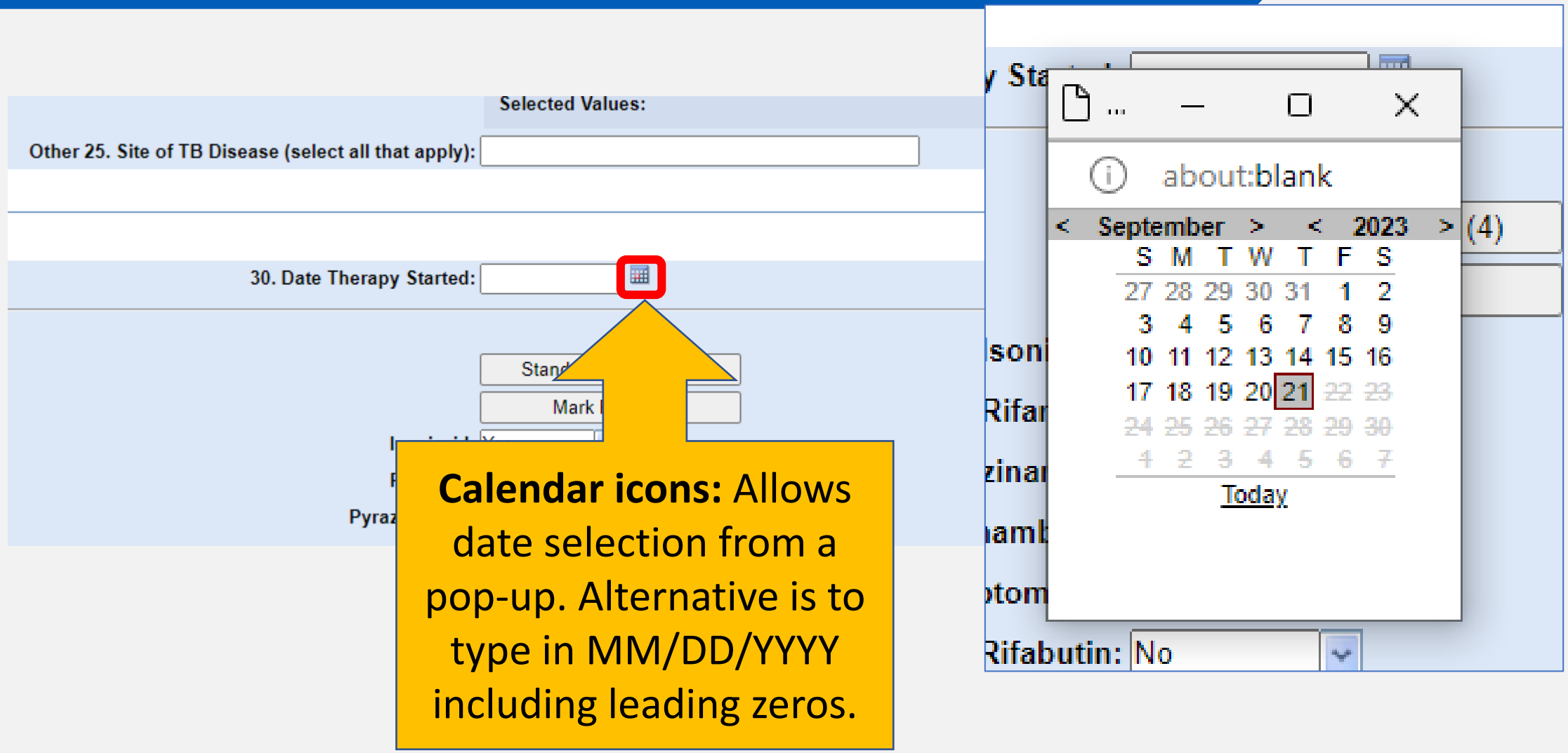
This box may be blank initially. As data is entered, it can be tailored to show information in designated time frames (i.e., case created in a week).

Understand the Visual Interface and Common Icons in NEDSS

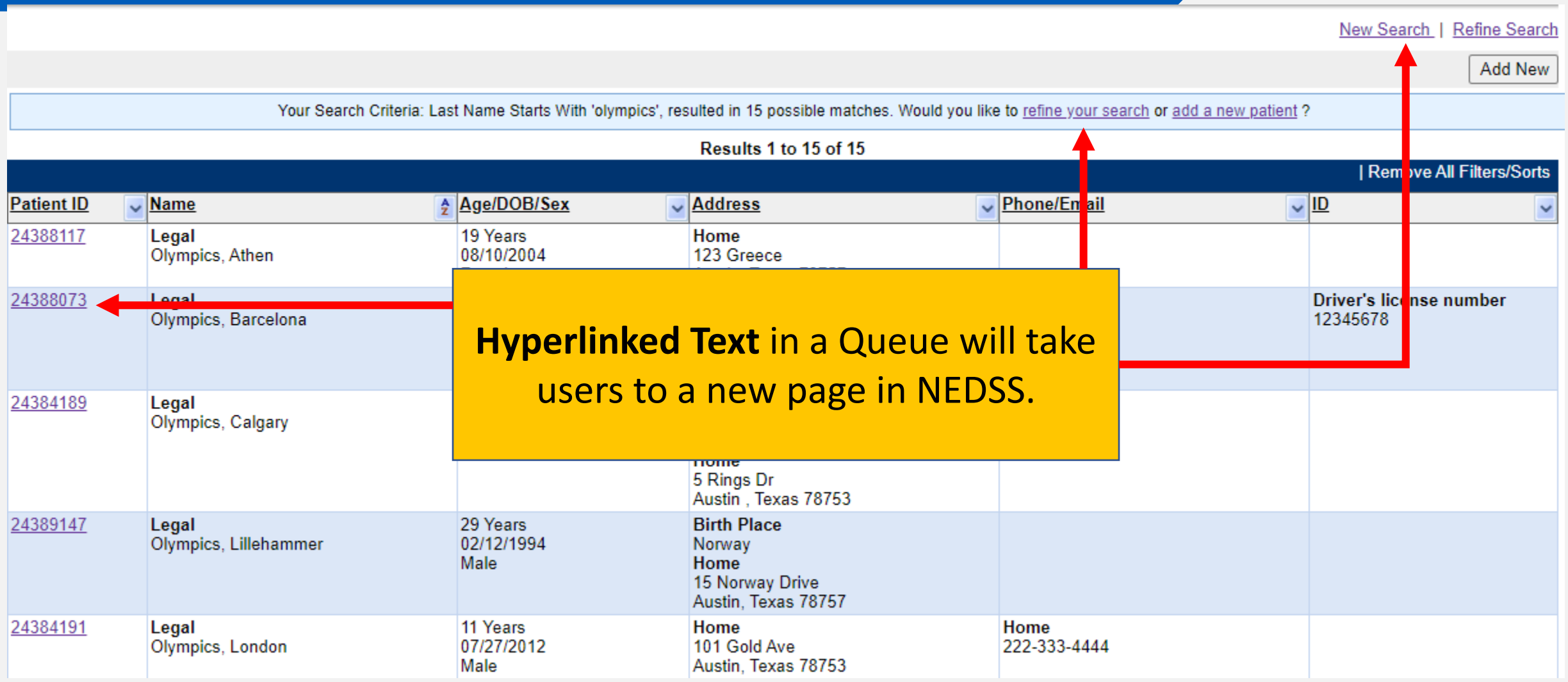
NEDSS Icons and Features

NEDSS Feature Images	Feature Name	Tips for Use
	Home Button	Always use the ***Home*** button to return to the main dashboard navigating in NEDSS. Do NOT use the web browser back button.
	**Add New Button**	Click the ***Add New*** button to create a new event (i.e., patient file, investigation, lab report).
	Submit and Cancel Buttons	Click ***Submit*** to save work. NEDSS times out after 20 minutes of inactivity. Click ***Cancel*** to stop editing the page without saving the data that was entered.
	Edit and Print Buttons	Click the ***Edit*** button to update previously submitted items. Click ***Print*** to print the current event (i.e., investigation or lab report).
	**Drop Down Menus**	Click the arrow and scroll through the drop-down options ***or*** click inside the field and start typing if the drop-down values are known.
	Date Fields and Calendar Icons	Click the calendar icon or start typing the date in MM/DD/YYYY format, including leading zeros for month and day.

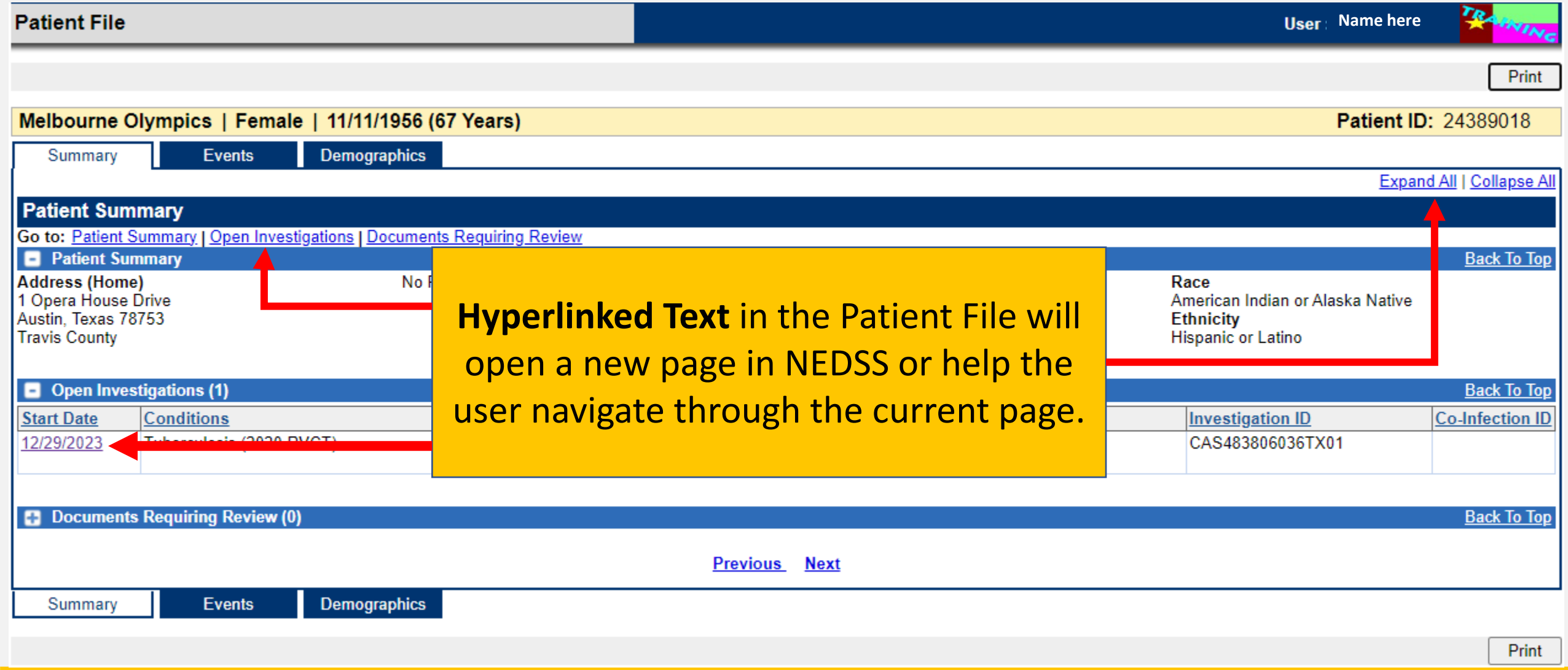
NEDSS Icons and Features



NEDSS Icons and Features

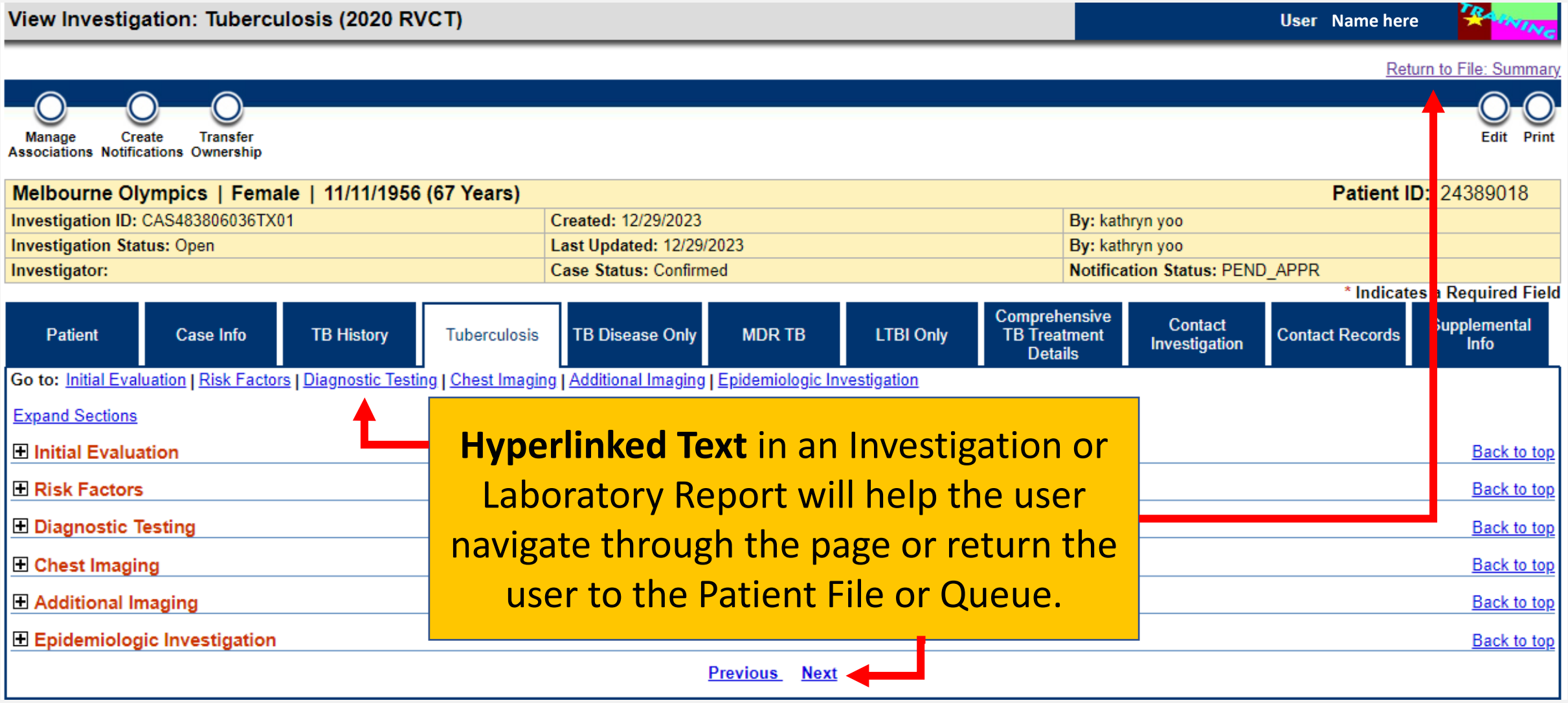


NEDSS Icons and Features



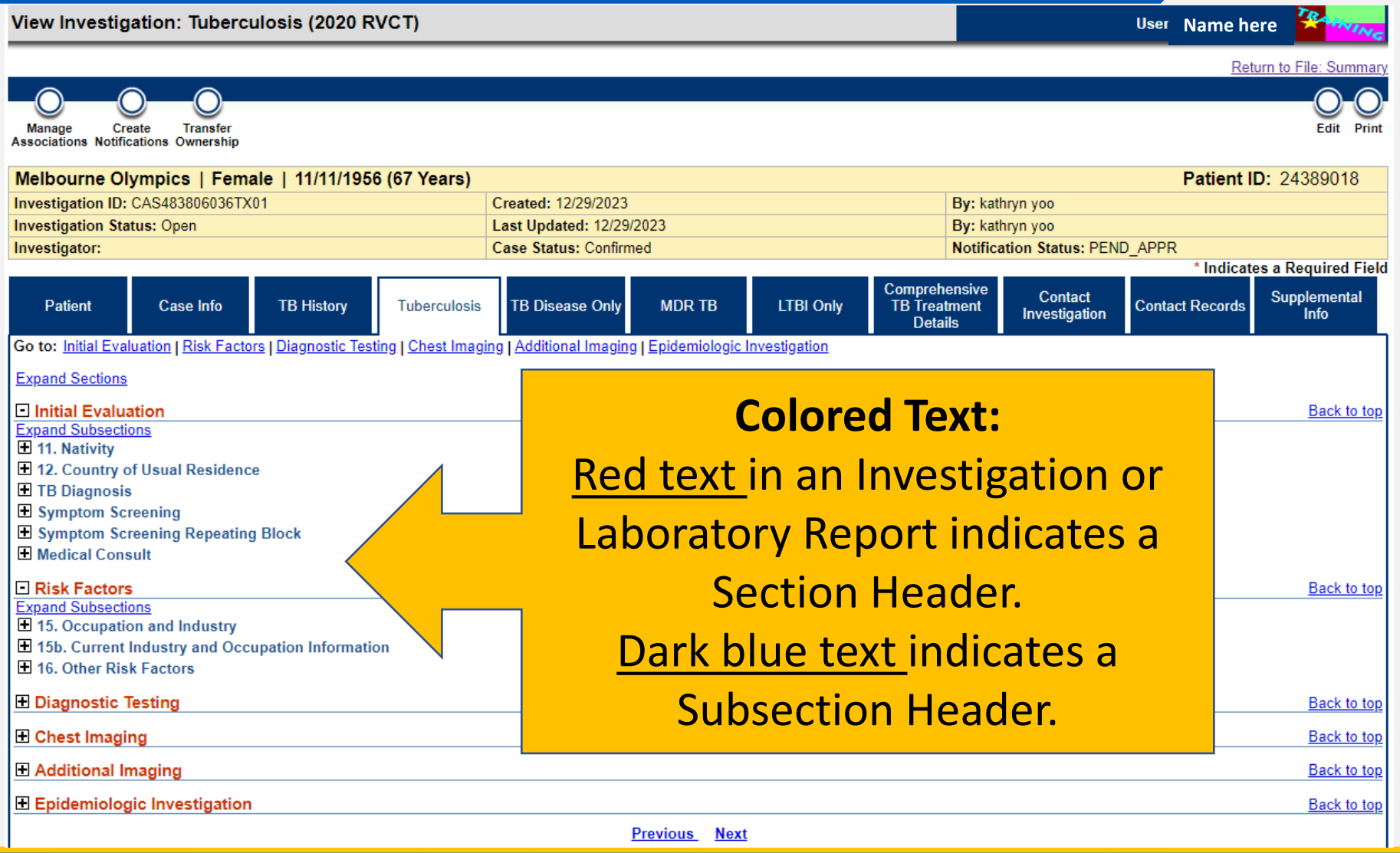
Hyperlinked Text in the Patient File will open a new page in NEDSS or help the user navigate through the current page.

NEDSS Icons and Features



Hyperlinked Text in an Investigation or Laboratory Report will help the user navigate through the page or return the user to the Patient File or Queue.

NEDSS Icons and Features



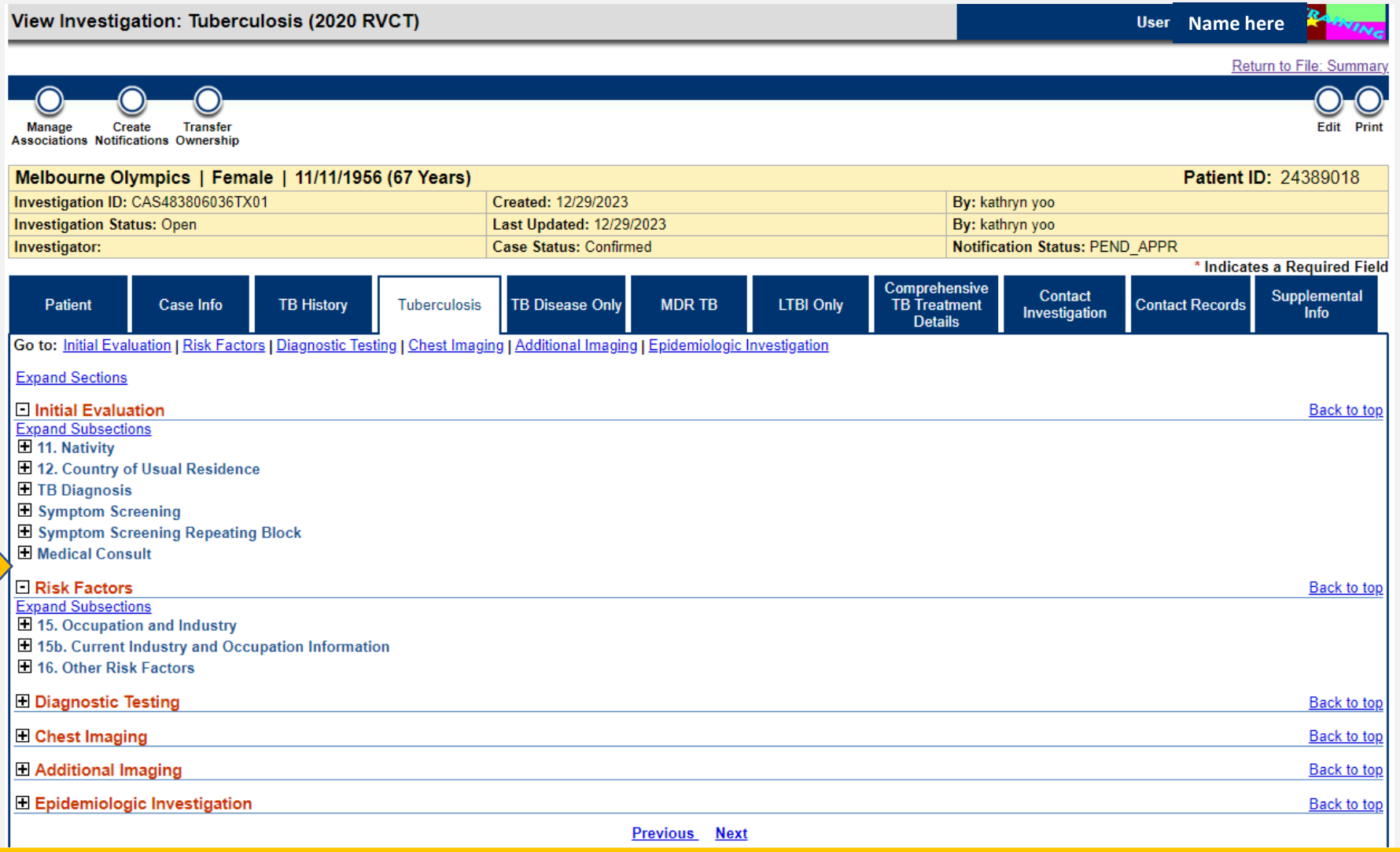
Colored Text:

Red text in an Investigation or Laboratory Report indicates a Section Header.

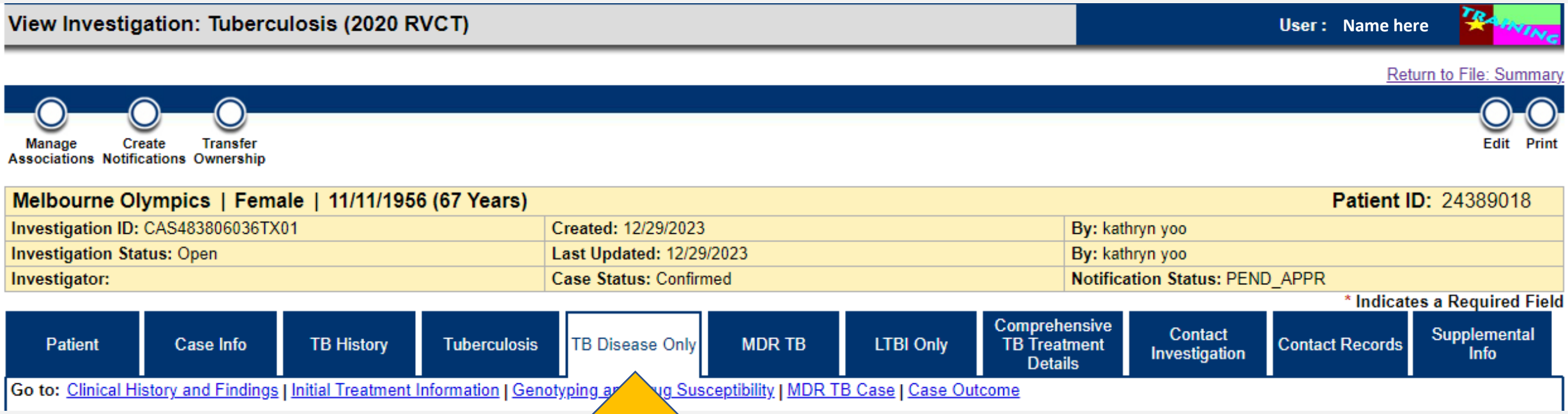
Dark blue text indicates a Subsection Header.

NEDSS Icons and Features

The *plus* and *minus* signs can be used to collapse or expand a Section or Subsection.

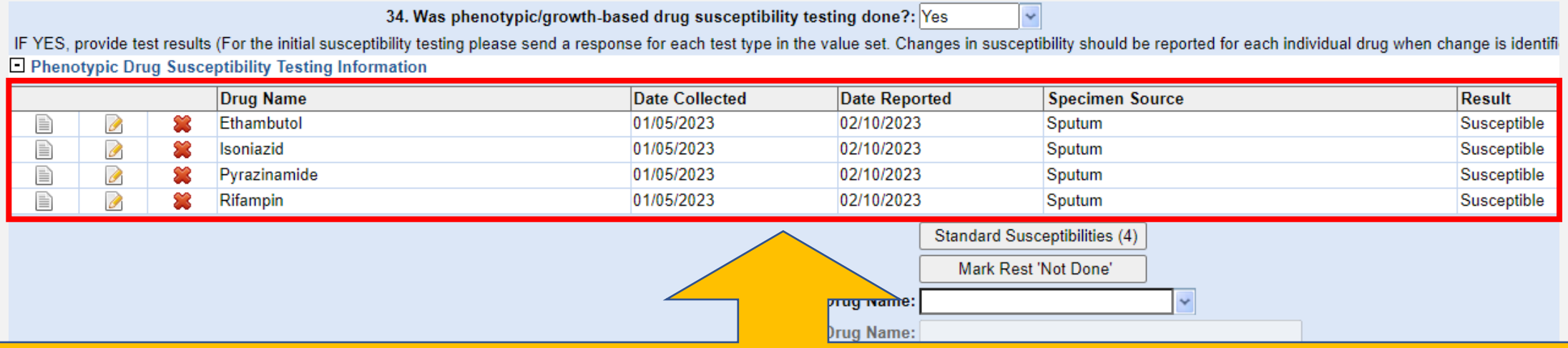


NEDSS Icons and Features



Tabs – Similar to dividers in a notebook, each tab "opens" and becomes white, allowing user to view the data in the patient's record.

Repeating Block Questions

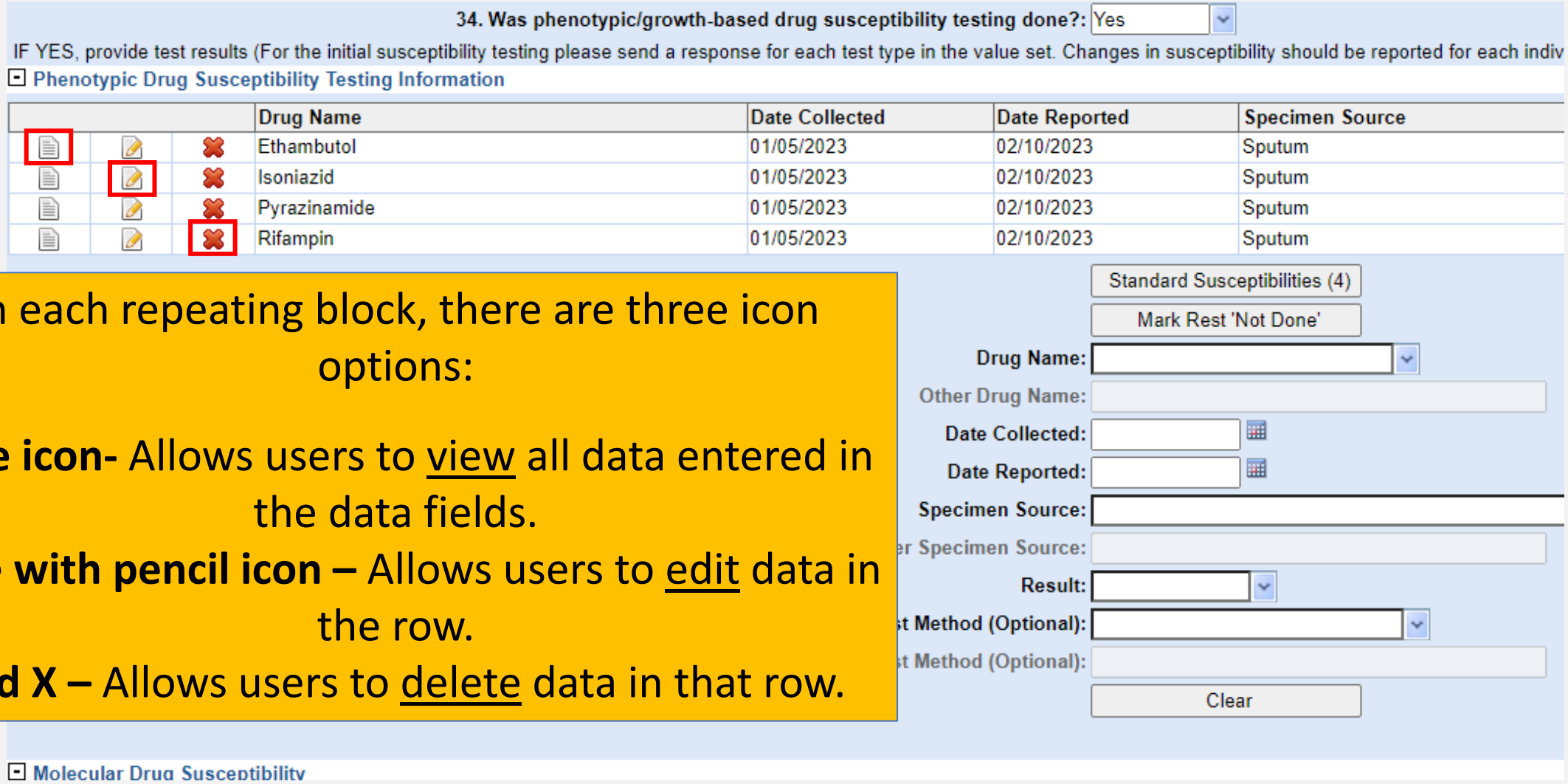


NEDSS allows for data entry into what is called a *repeating block format*.

Repeating blocks - a series of data fields that are repeated in a table format; each row includes unique data of the same type.

In this example, the repeated data type to be entered is Phenotypic Drug Susceptibility Testing Information. Each row contains results of each unique drug.

Repeating Block Questions



In each repeating block, there are three icon options:

Page icon- Allows users to view all data entered in the data fields.

Page with pencil icon – Allows users to edit data in the row.

Red X – Allows users to delete data in that row.

Tips and Tricks

Keyboard Shortcuts

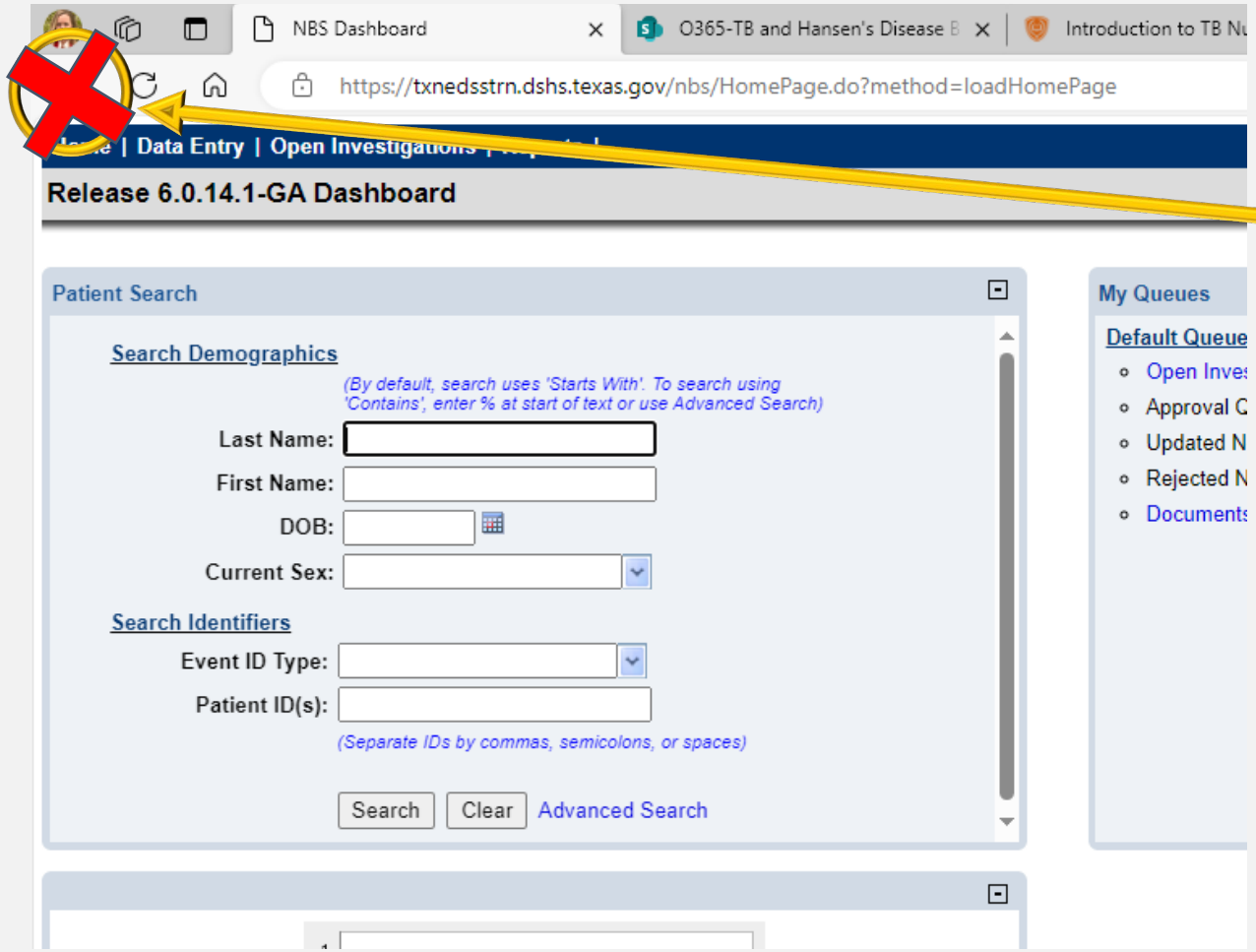
Ctrl	To select more than one item in a list press the Ctrl button and click on the desired items.
Tab	Moves user forward one field.
Shift	Allows user to select multiple items. To select all items between two items in a list or drop-down menu, select the first item, hold shift and select the second item.
Backspace	Moves user back one character within a field.

Helpful Reminders

Use Microsoft Edge if possible. It is most compatible with using NEDSS.

Avoid opening multiple sessions of NEDSS. Having multiple sessions open/running may corrupt data. If a new session must be referenced, use two different web browsers.

Reminder



Back Button on Internet Browser

1. The back button on your internet browser should **NOT** be used when navigating in NEDSS.
2. Some browsers/versions of browsers behave differently, and the back button may or may not be visible.
3. Use of the back button may cause the open record or other records to become corrupted.
4. If you use the back button by mistake, **return to the home page** to start again.

Test Your Log-in

How to Search for a Patient

What To Know about Searching

Always conduct a search, even if you believe the patient or their investigation does *not* exist. The patient may be in NEDSS due to another condition.

Search broadly. Enter only the first 3 letters of the first and last name and date of birth (DOB).

Review the search results carefully. Consider if the search should be refined before adding a new patient file (to avoid duplicates).

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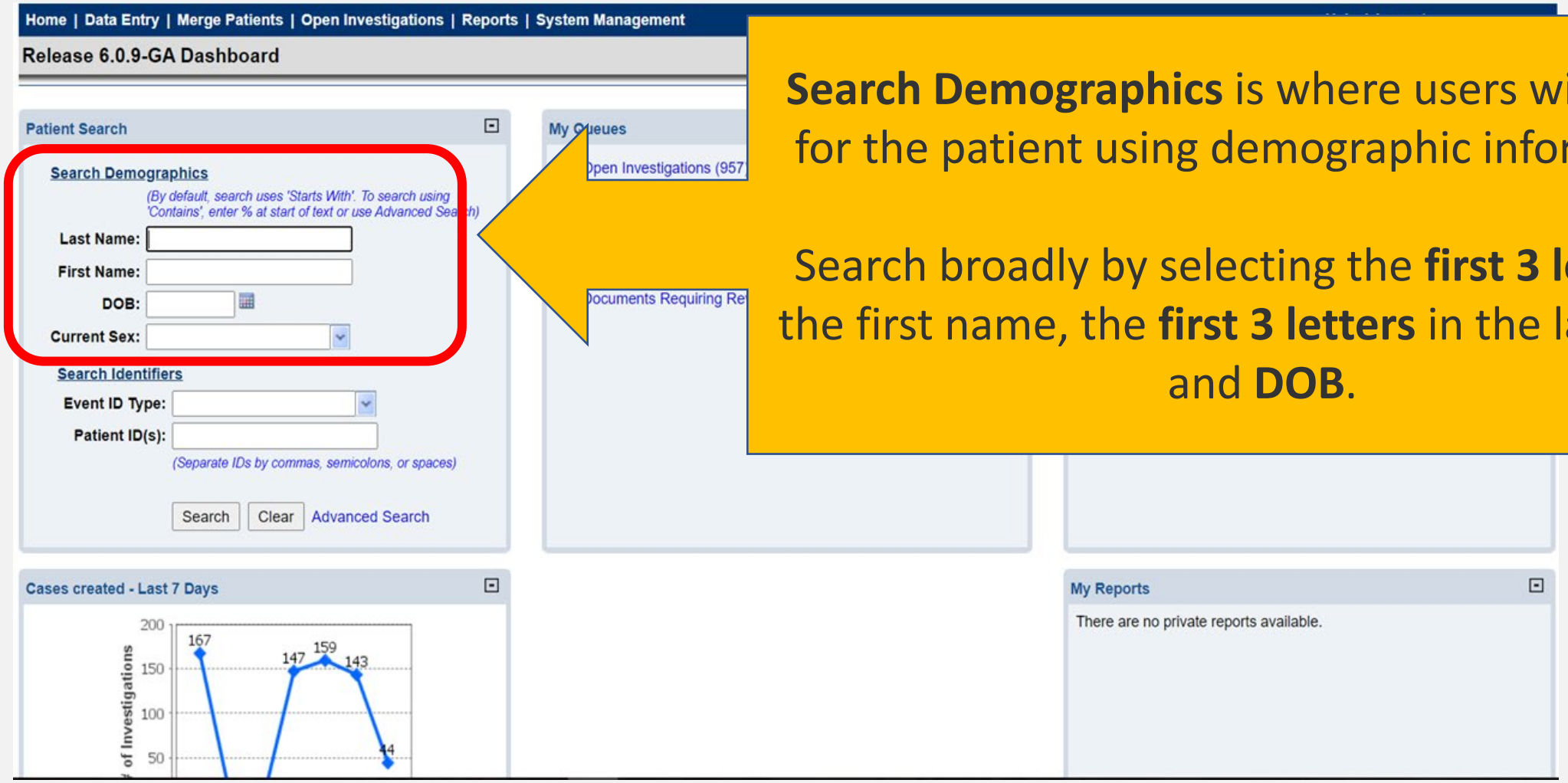
Why Search Broadly?

- If the patient is in NEDSS from a previous notifiable disease condition, their name may have been entered differently from the data provided in their TB record.
- Search broadly to avoid creating a duplicate patient file, in the event the patient already exists in NEDSS with a variation of their name.

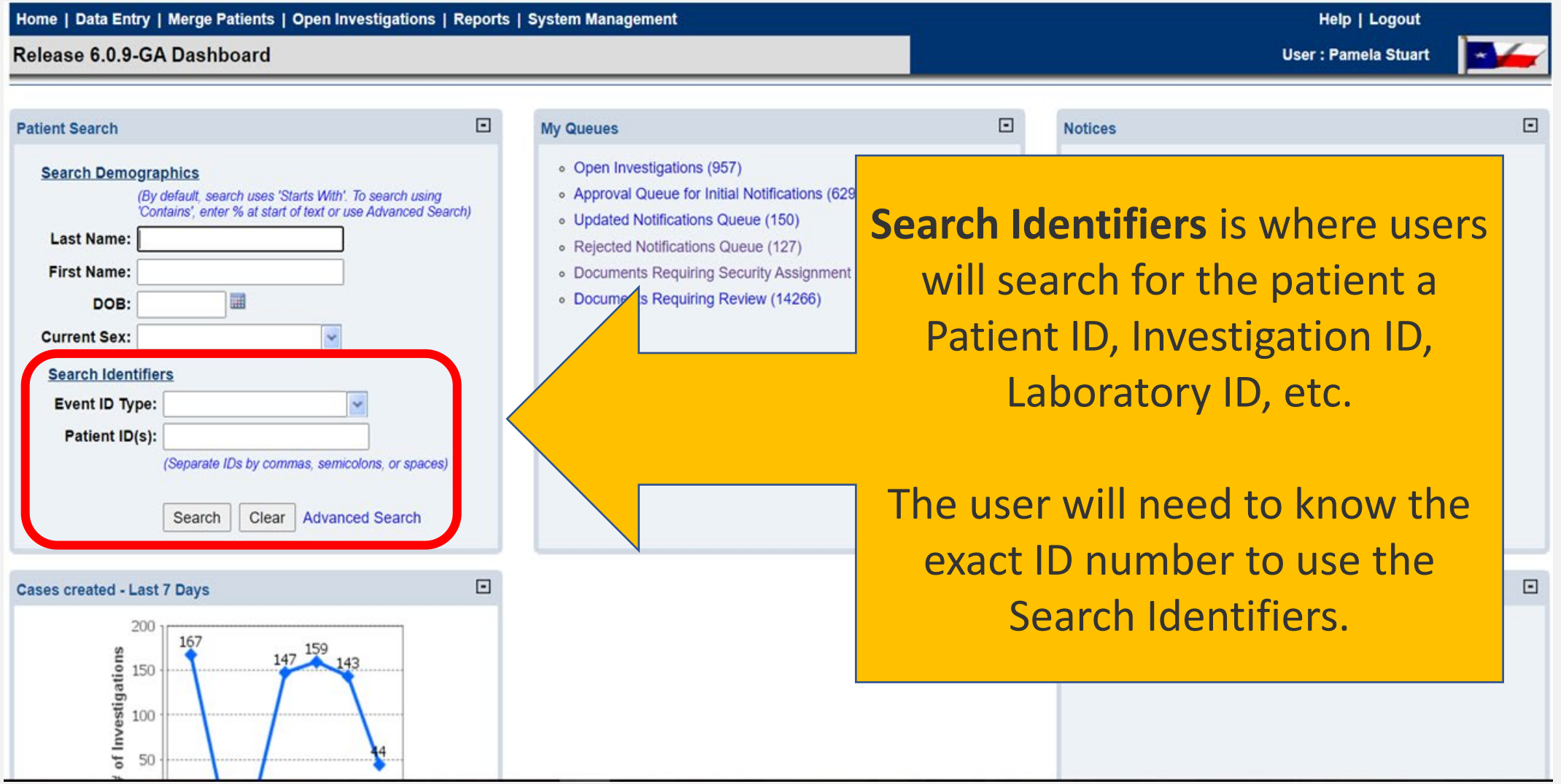
NEDSS Homepage Dashboard



Search Demographics is where users will search for the patient using demographic information.

Search broadly by selecting the **first 3 letters** in the first name, the **first 3 letters** in the last name and **DOB**.

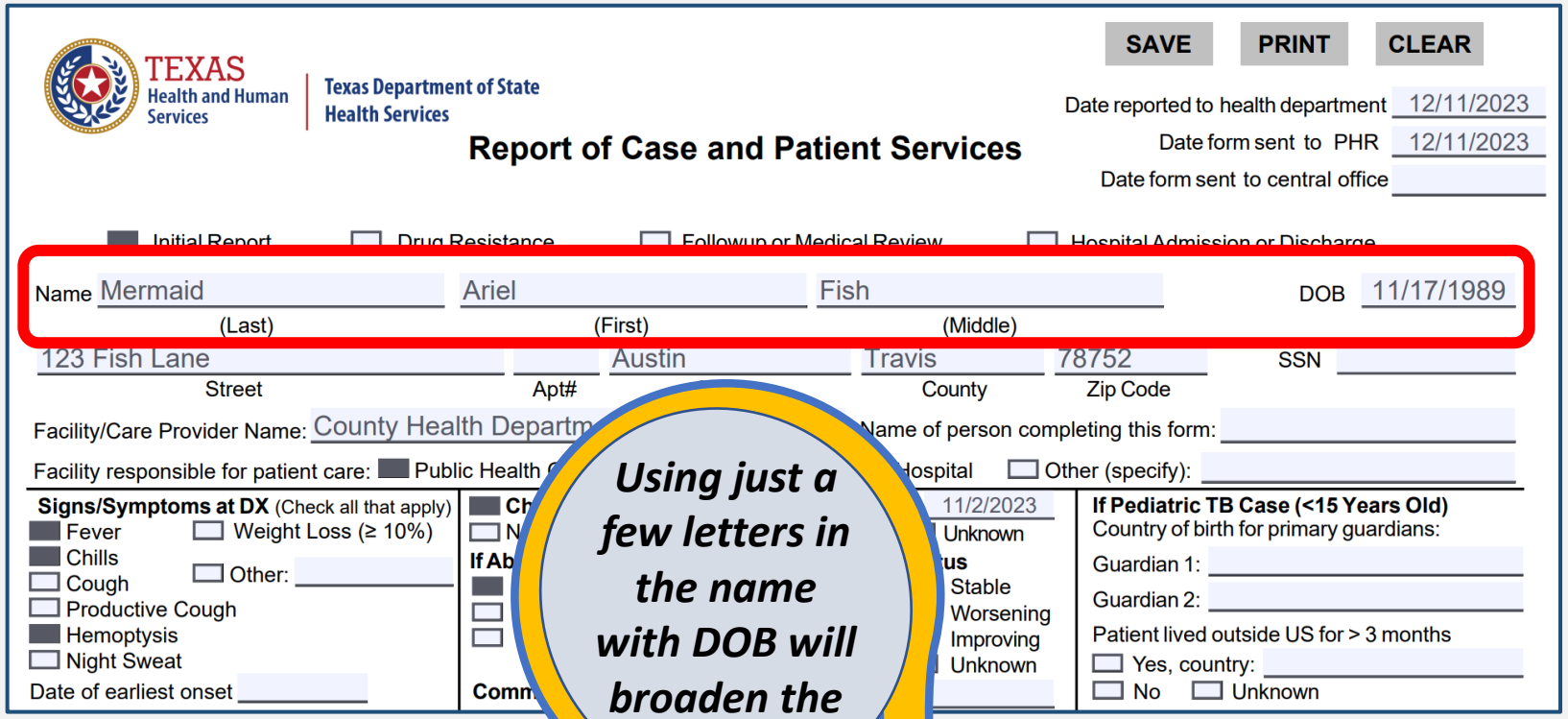
NEDSS Homepage Dashboard



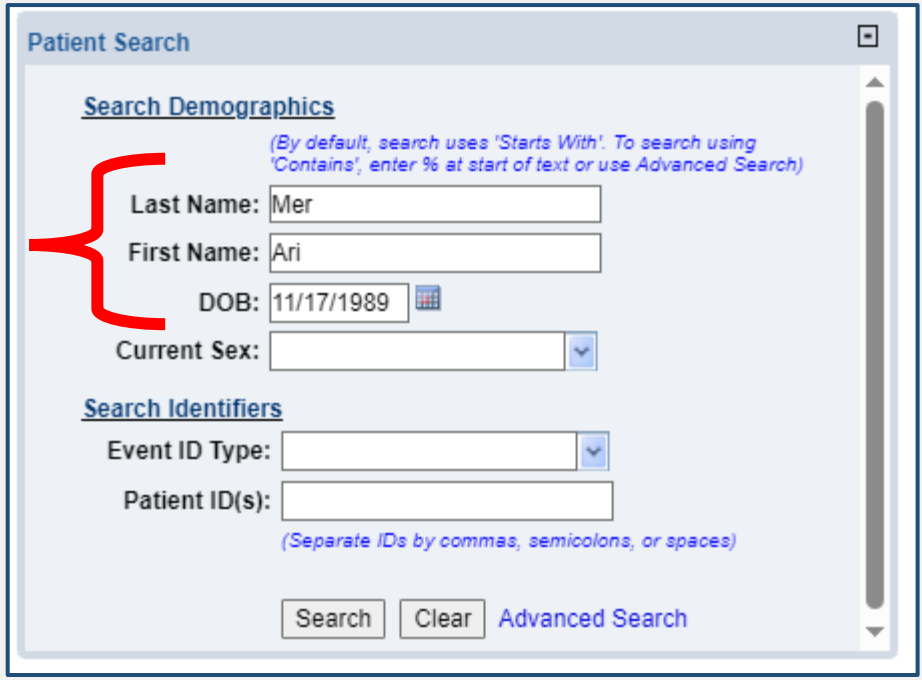
Search Identifiers is where users will search for the patient a Patient ID, Investigation ID, Laboratory ID, etc.

The user will need to know the exact ID number to use the Search Identifiers.

Search for a Patient File



Using just a few letters in the name with DOB will broaden the search.



Data Entry:

Use the name and date of birth provided to enter in the **Search Demographics** fields.

Two Situations Can Occur in a Patient Search

Situation 1

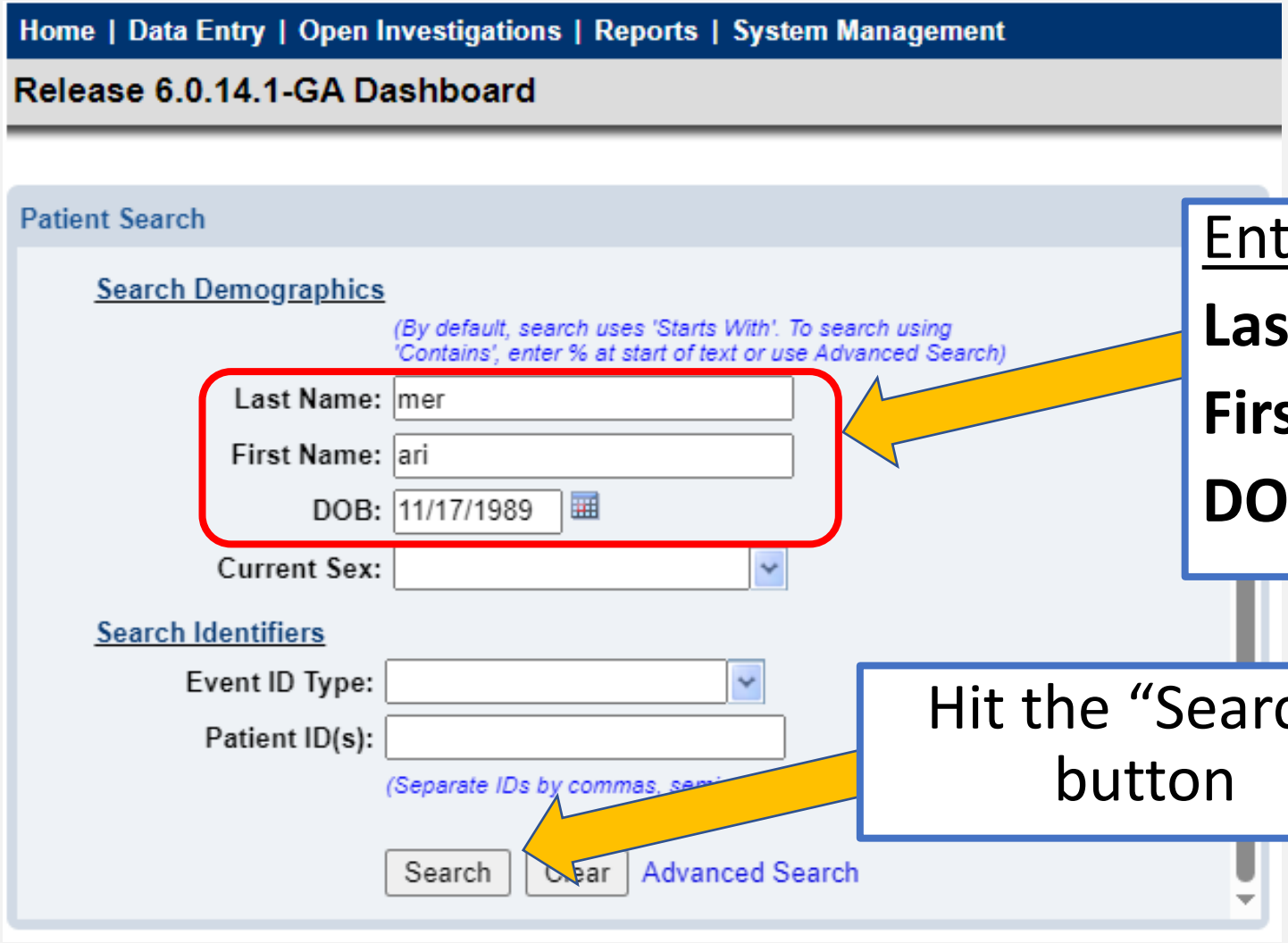
- The broad search yields multiple patients with the same letters in their first/last name.

Situation 2

- The broad search yields no patients with those letters in their first/last name.

Situation 1: The search yields multiple results.

Situation 1: Multiple Results



Enter:

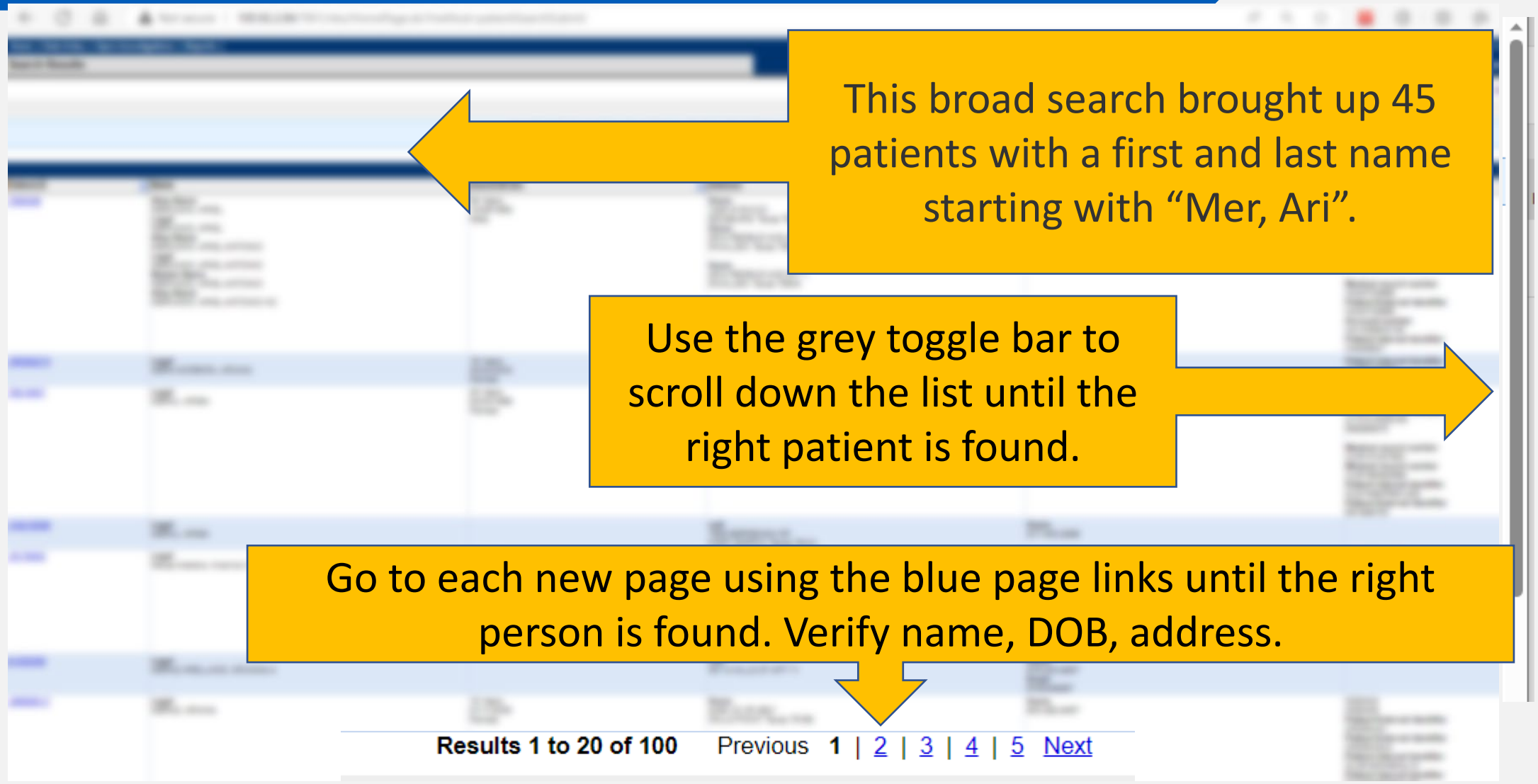
Last Name: Mer

First Name: Ari

DOB: 11/17/1989

Hit the “Search” button

Situation 1: Multiple Results



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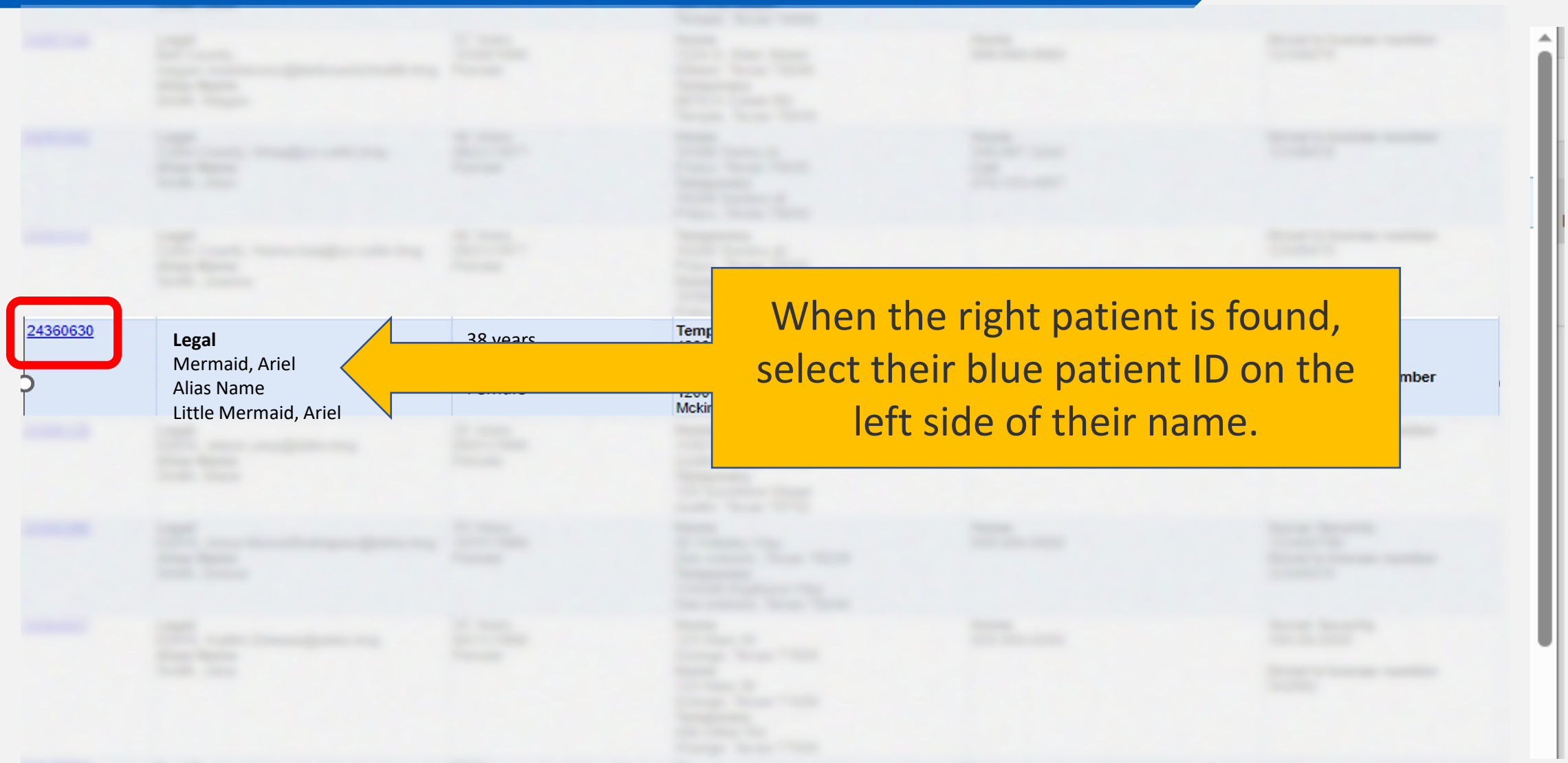

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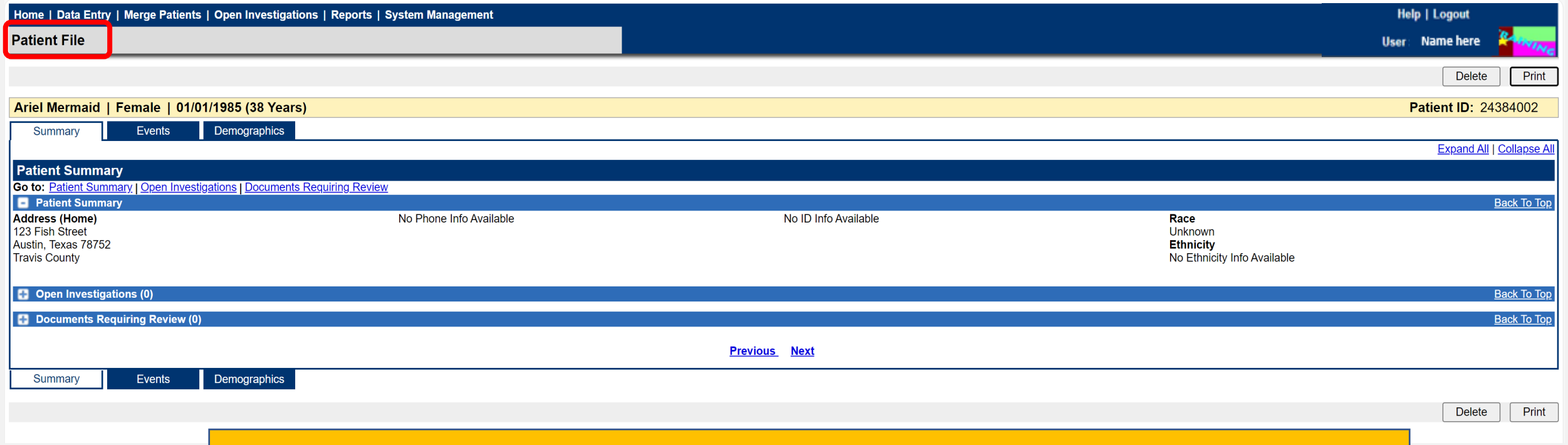
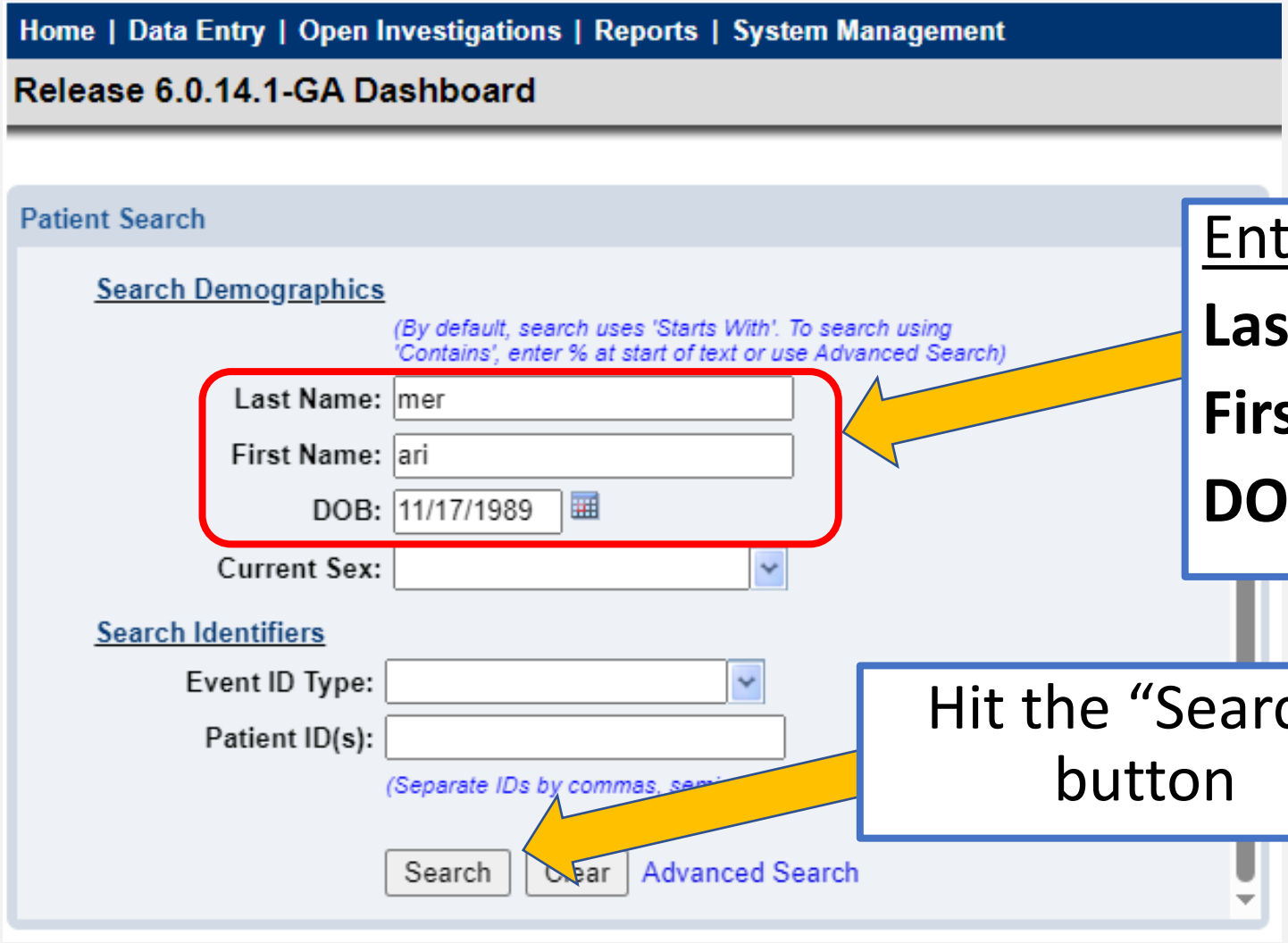


Users are now in the **Patient File**. It is possible the patient exists in NEDSS because of having another disease condition (i.e., COVID 19*). Users may need to create a TB investigation* before entering TB specific data. Creating Investigations will be covered in Course #2.

Situation 2: The search does not yield any results.

Situation 2: No Results



Enter:

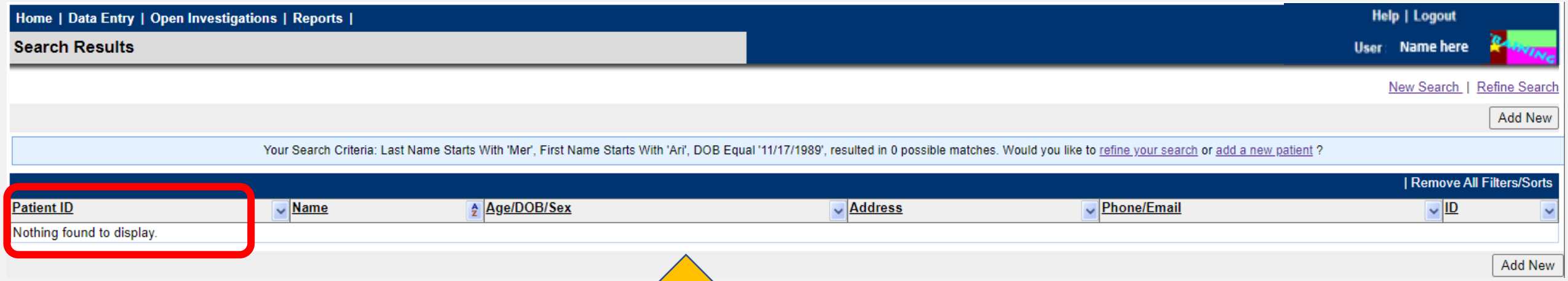
Last Name: Mer

First Name: Ari

DOB: 11/17/1989

Hit the “Search” button

Situation 2: No Results



Nothing is found, so the person does not currently exist in the database. Users will need to **Create** this person's Patient File before entering their TB specific data.

Performing an Advanced Patient Search

Purpose of Advanced Search

Avoiding Duplicate Records

To make sure a duplicate record is not created in NEDSS, a thorough search is required.

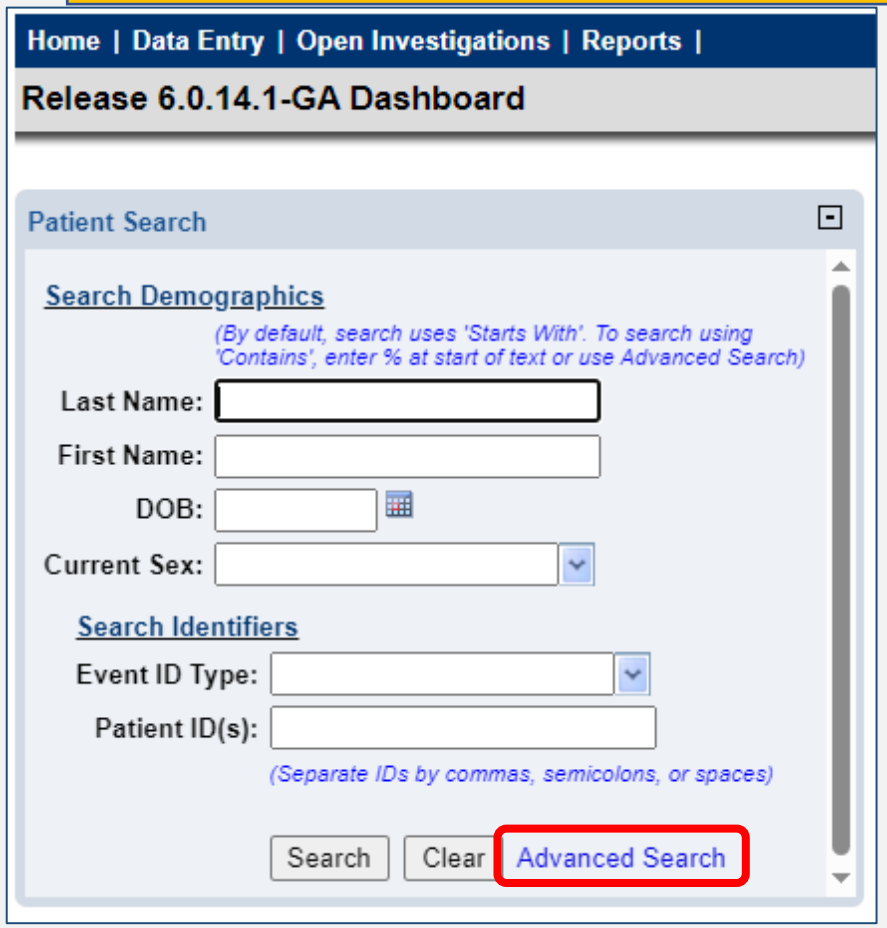
R/LHD TB users should be sure a patient file does not exist before creating a new patient file.

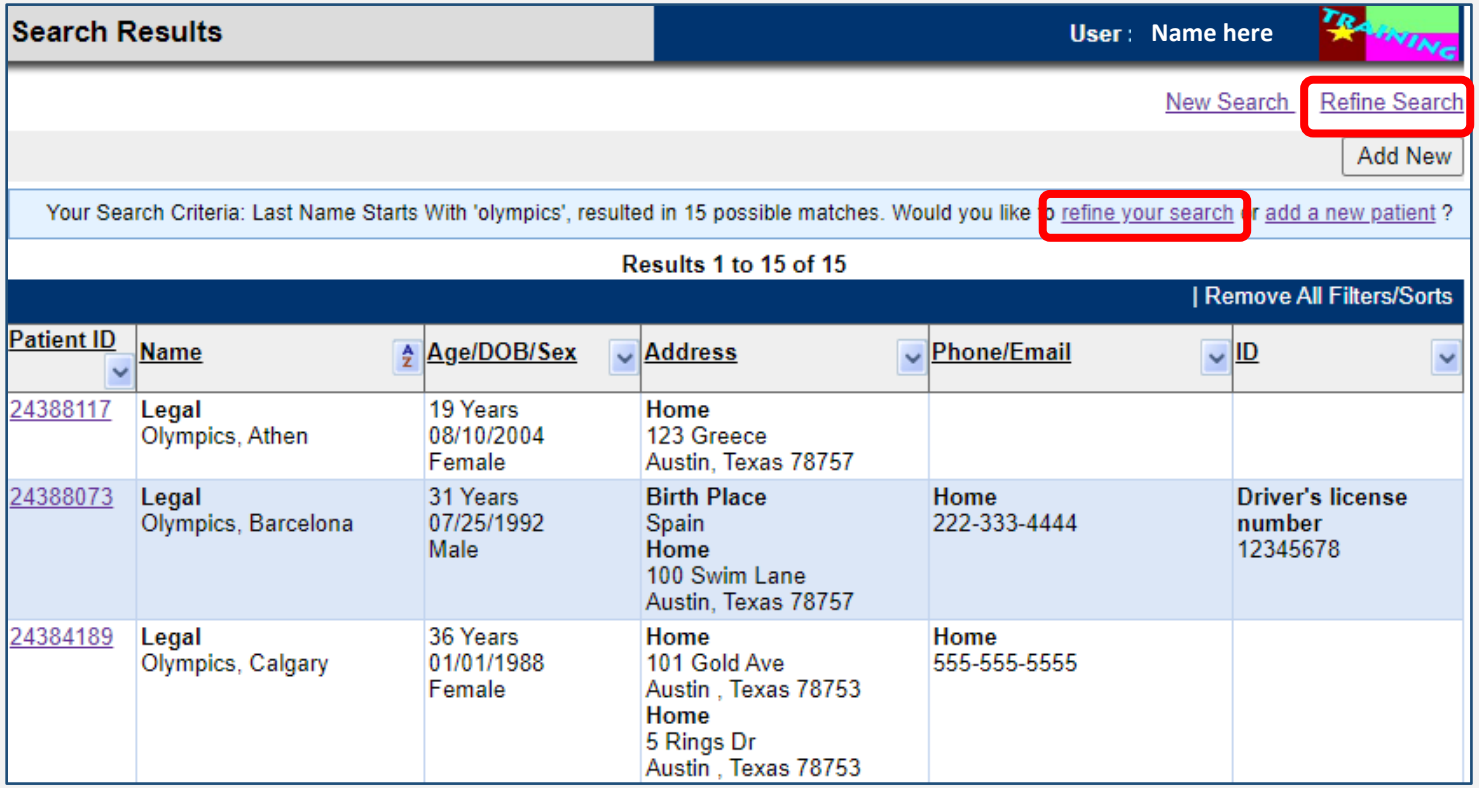
The *Advanced Search* feature can:

- assure the user that the patient does not exist, and/or
- assist with finding a patient under various data fields.

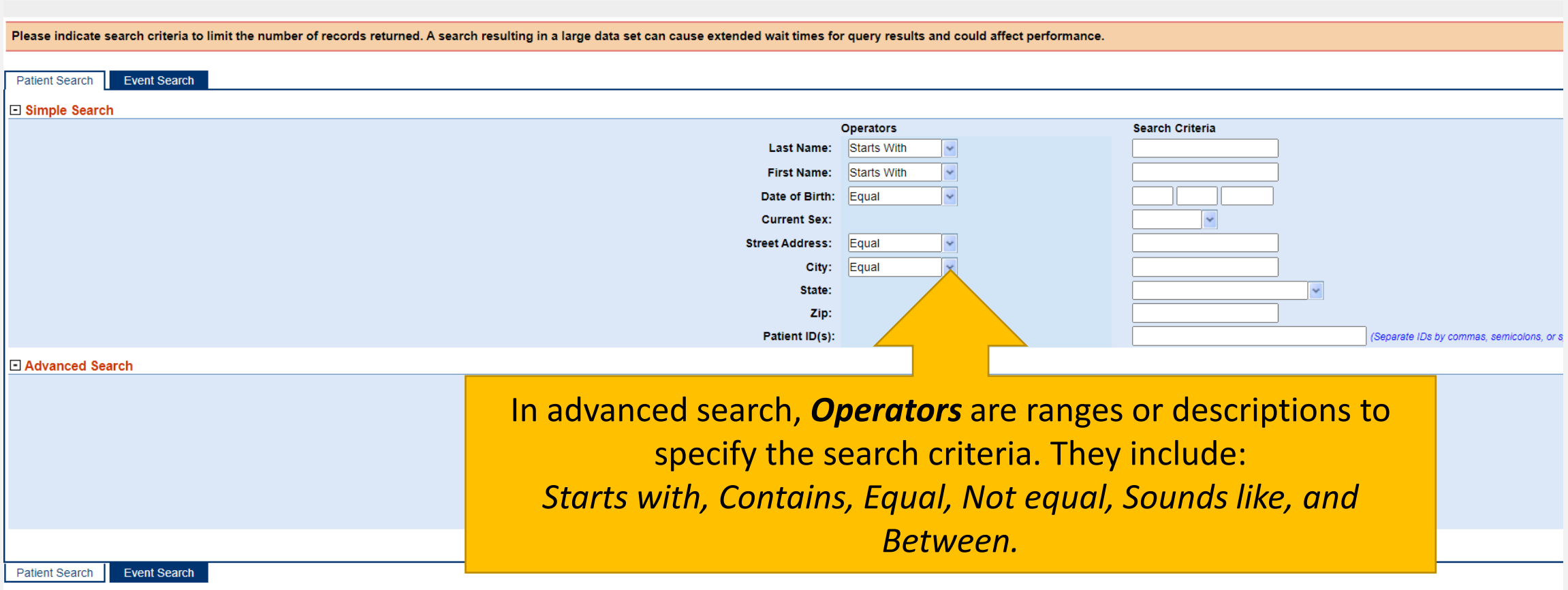
Initiate an Advanced Search

An Advanced Search can be initiated from the Patient Search section of the NEDSS home screen ***or*** the Refine Search option within the search results page.





The Advanced Search Page

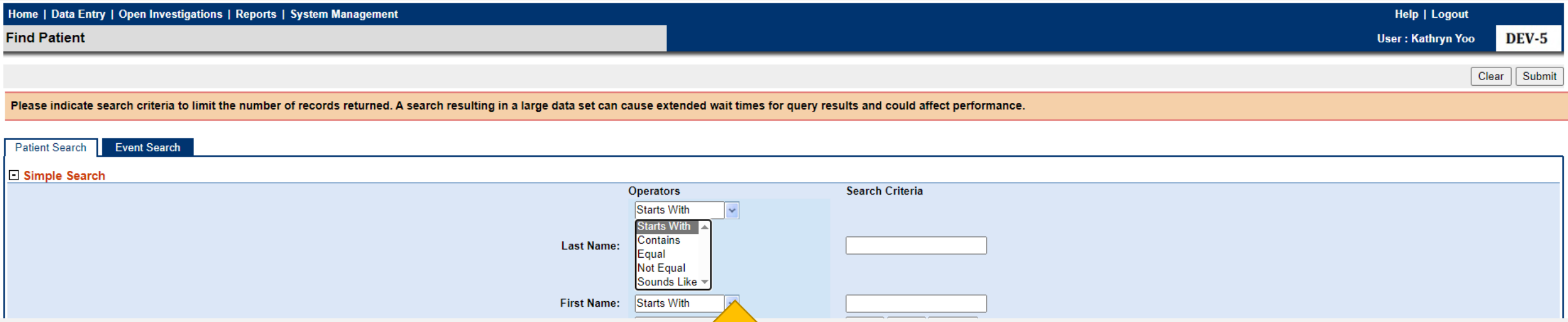


In advanced search, ***Operators*** are ranges or descriptions to specify the search criteria. They include:
Starts with, Contains, Equal, Not equal, Sounds like, and Between.

Advanced Search Operators

- ‘Starts with’ option is where users would enter the first 3-4 letters of the last/first name.
- ‘Contains’ option allows users to search any part of the last/first name.
- ‘Equal’ option is used to search for the complete last/first name.
- ‘Not equal’ option is not recommended, as it does not provide the most effective search results.
- ‘Sounds like’ option is used if the spelling of the name is unknown; enter it as it sounds.
- ‘Between’ option is used to search for a date within a specific range.

Searching by Name



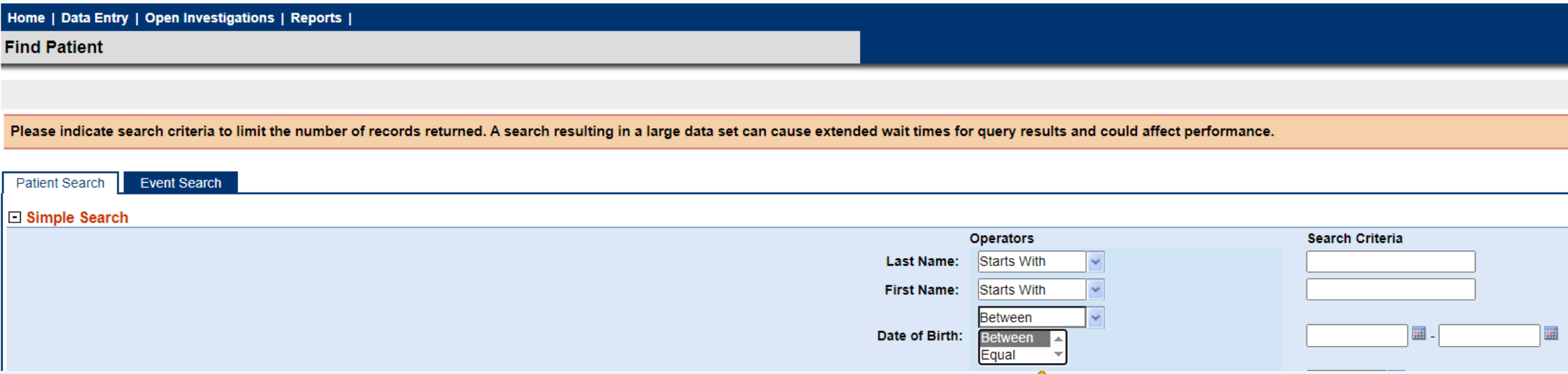
Example: If searching for Winter Olympics, users could search in the following ways:

Starts with: Last Name ‘Oly’ + First Name ‘Win’

Contains: Last Name ‘pic’ + First Name ‘int’

Equals: Last Name ‘Olympics’ + First Name ‘Winter’

Searching by Date of Birth

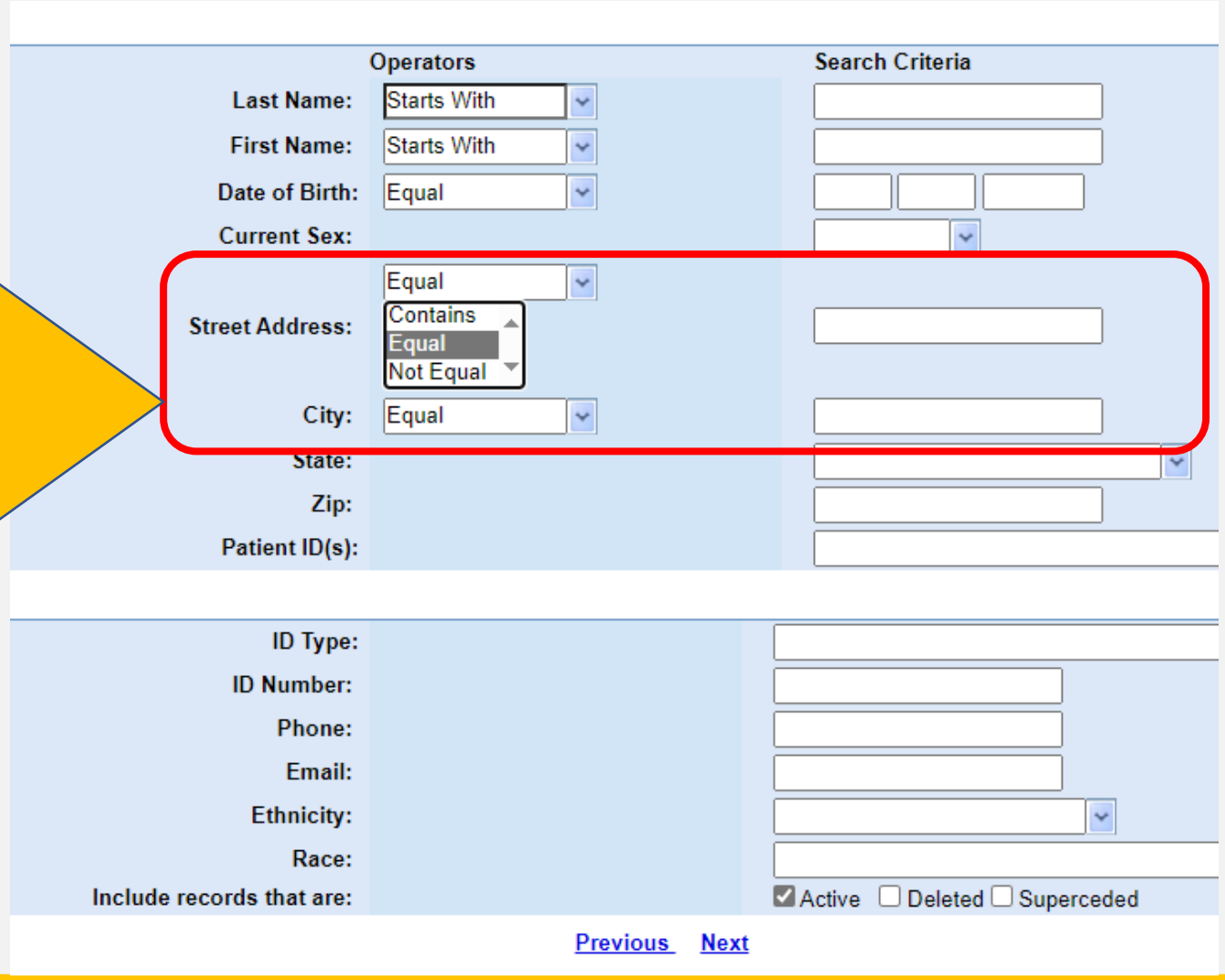


'**Equal**' option is used to search for a specific date
'**Between**' option is used to search for a date within a specific range.

Searching by Patient Address

There are three options in ***the Street Address*** and ***City*** drop-downs that are used the same way as the name search:

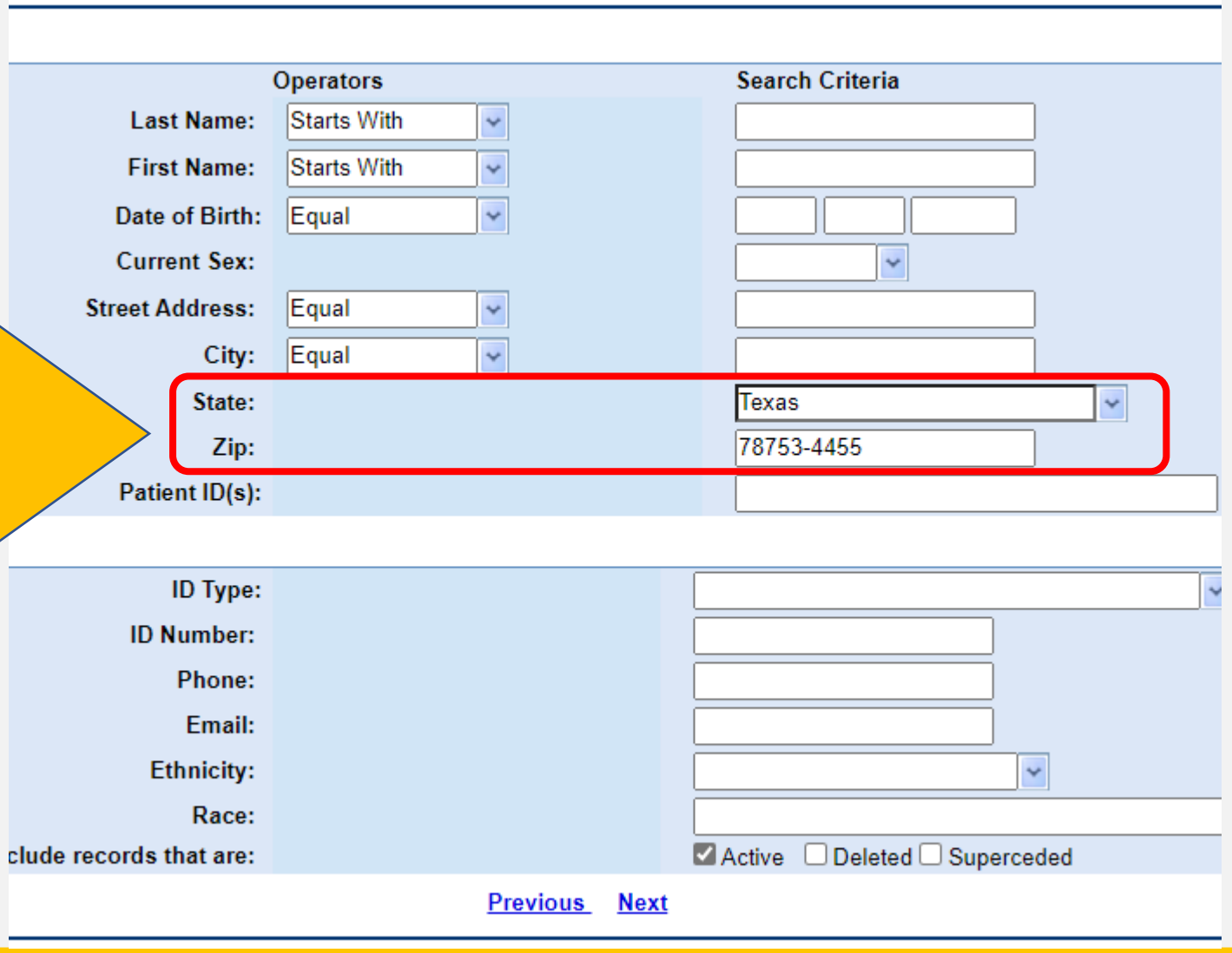
1. '**Contains**' option can be used when user has a partial address, i.e., the street number but not street name.
2. '**Equal**' is used when user has the full address.
3. '**Not Equal**' should not be used.



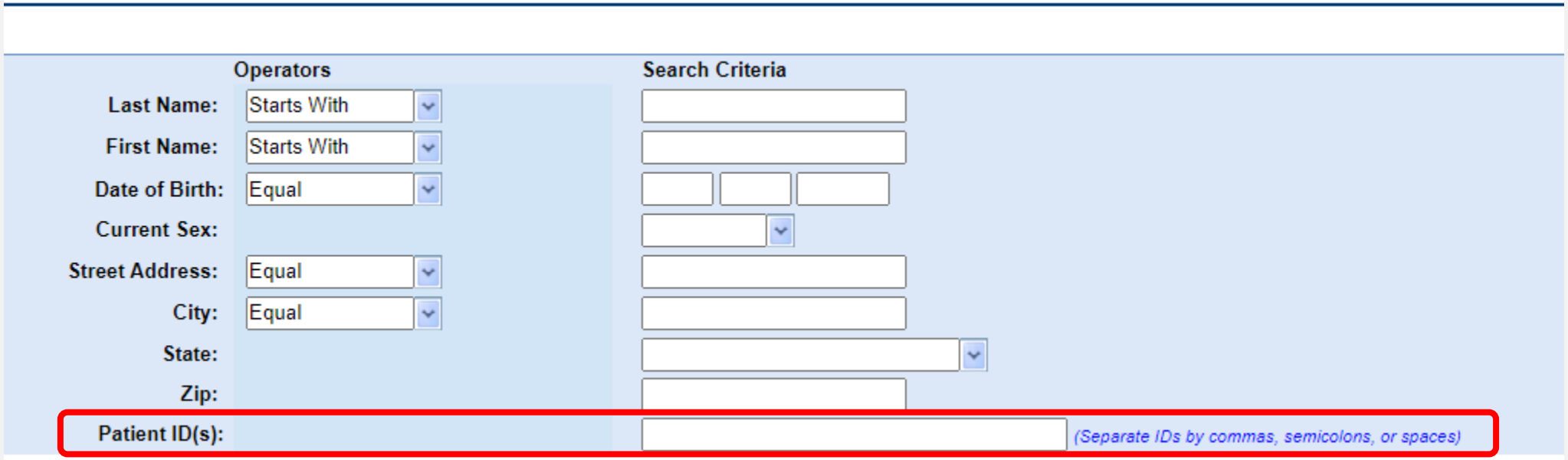
Searching by Patient Address

The **State** drop-down lists all 50 states and the District of Columbia.

The **Zip Code** is free text and can be entered as the five digit or extended zip code.



Searching by Patient ID(s)



The **Patient ID(s)** search allows users to search for specific NEDSS Patient ID(s).

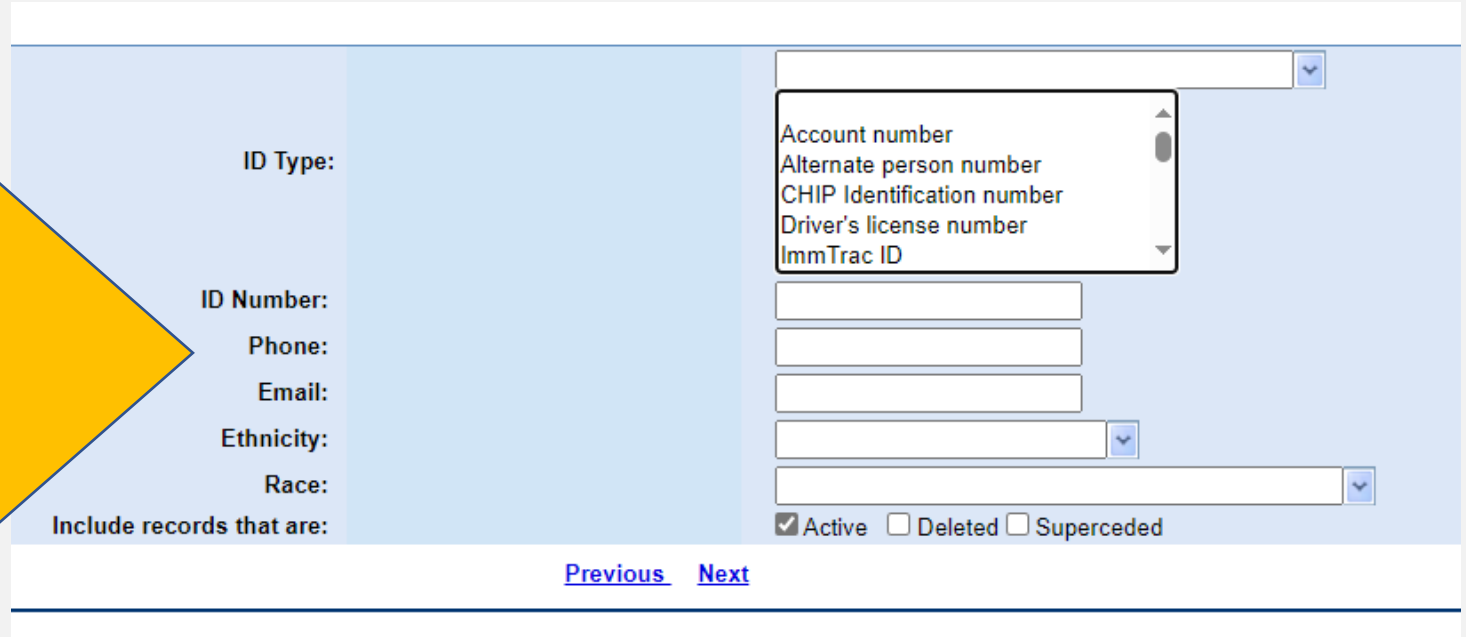
Searching by ID Type and Other Available Data

The **ID Type** drop-down options include various identification numbers the patient may have, if available.

Use this feature as needed to help in the advanced search.

Phone, **Email**, **Ethnicity**, and **Race** can also be specified in the Advance Search.

Always search Active records (do not select Deleted or Superseded fields).



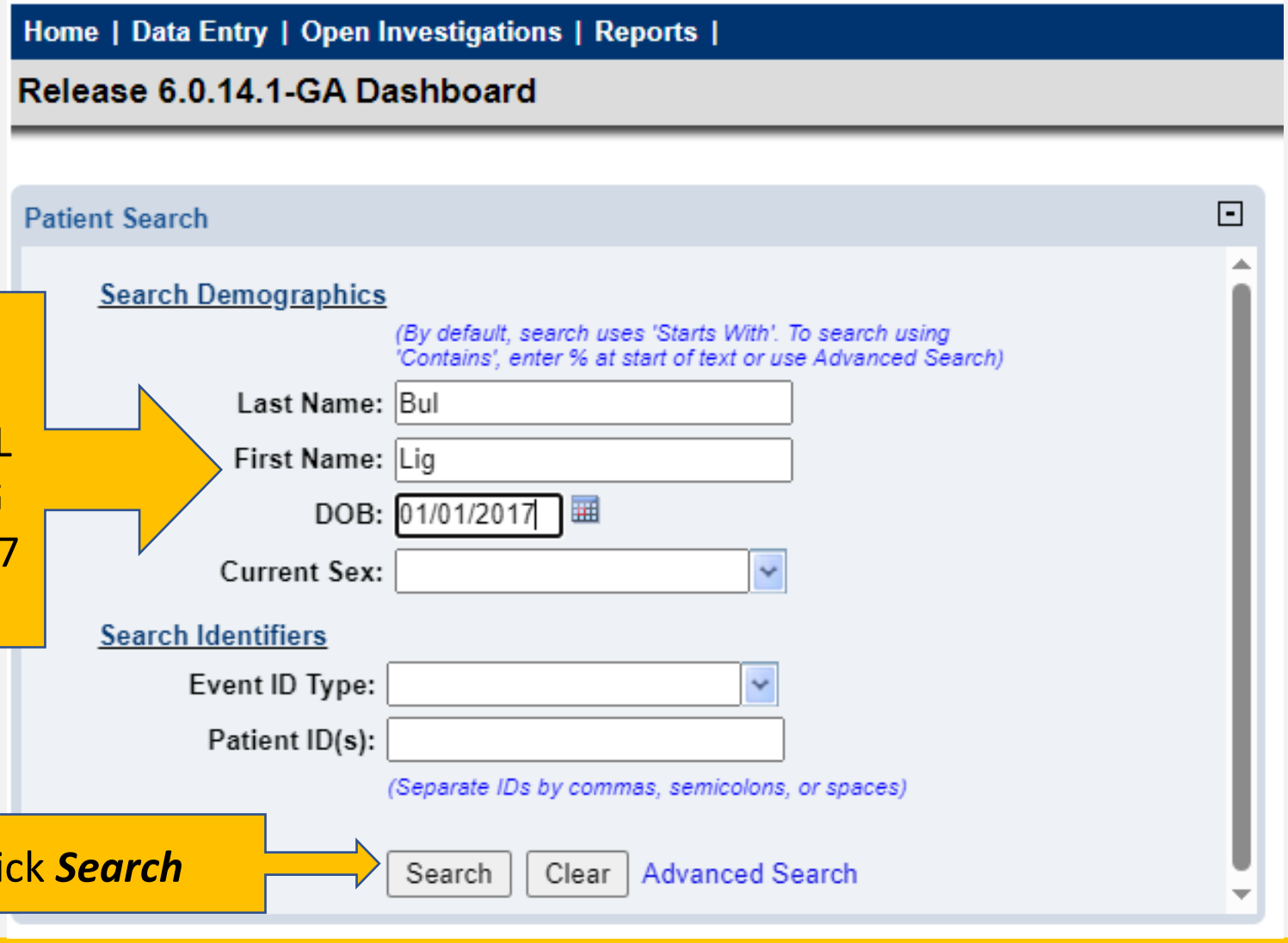
Practice Searching for a Patient

Create a New Patient File

Creating a Patient File for ‘Light Bulb’

- **Last name:** Bulb
- **First name:** Light
- **Date of Birth**: 01/01/2017
- **Sex at Birth**: Female

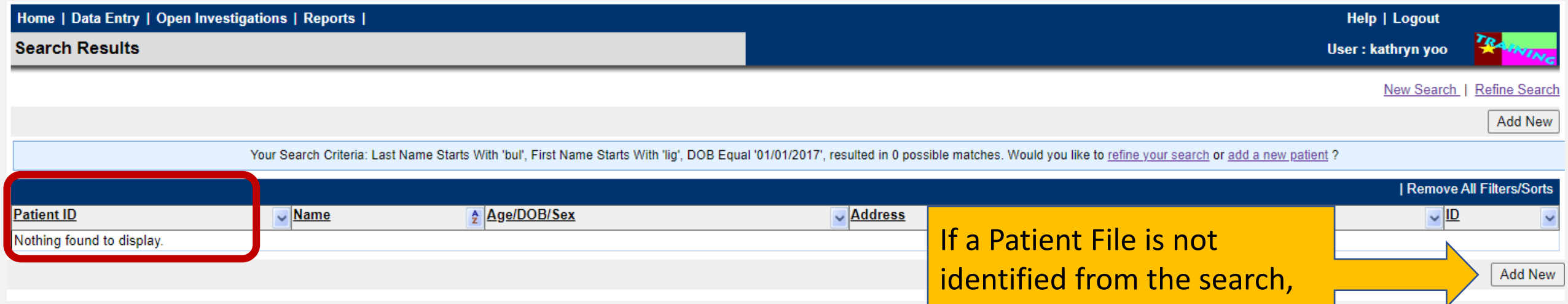
Creating a Patient File
Start with a Search



Search for:
Last Name: B-U-L
First Name: L-I-G
DOB: 01/01/2017

Click ***Search***

Creating a Patient File
Start with a Search



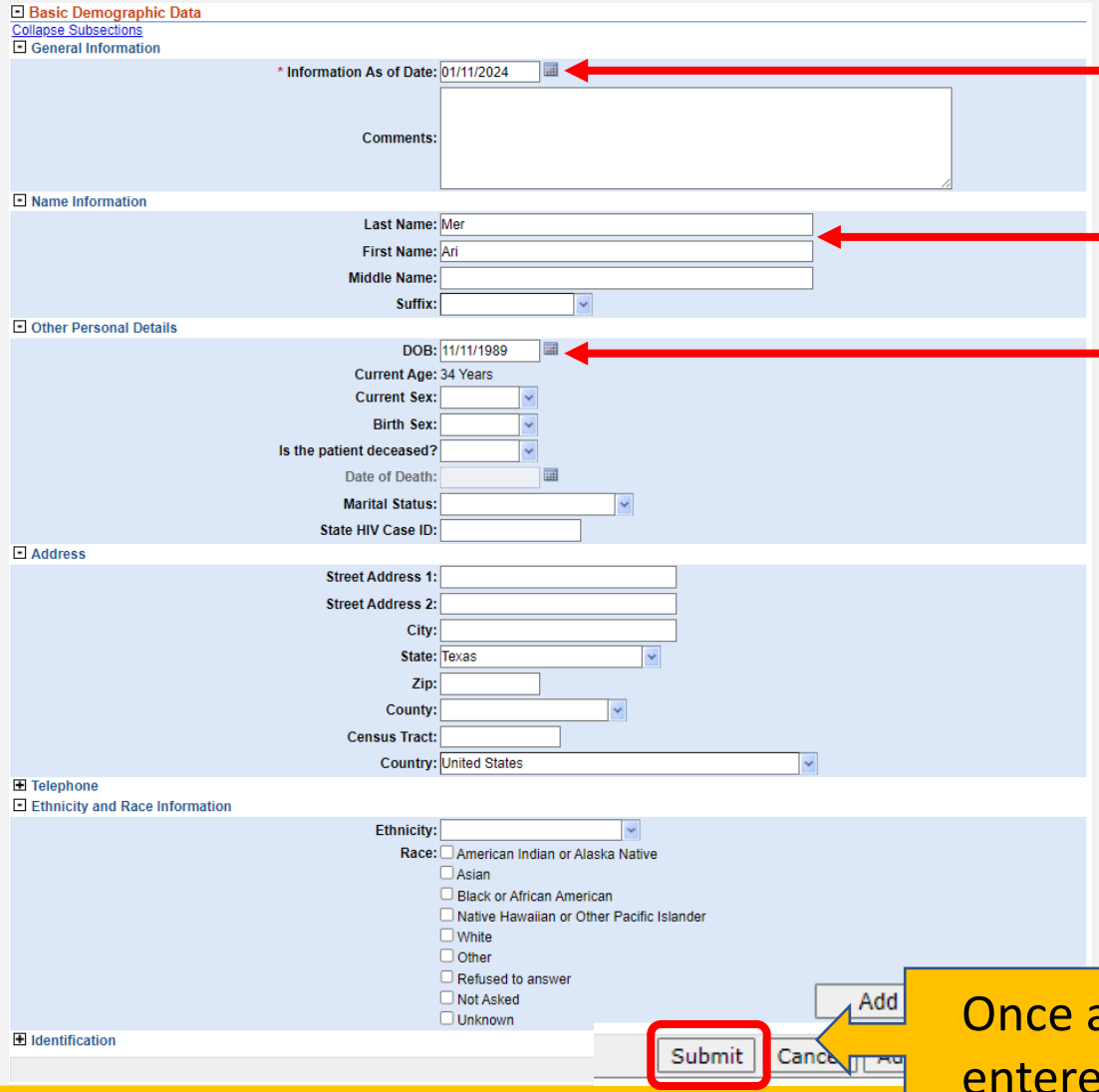
If a Patient File is not identified from the search, Click ***Add New.***

Creating a Patient File
Enter Patient Data

After clicking ***Add New***, users are directed to a page where demographic data entry will occur.

Enter all available patient information.

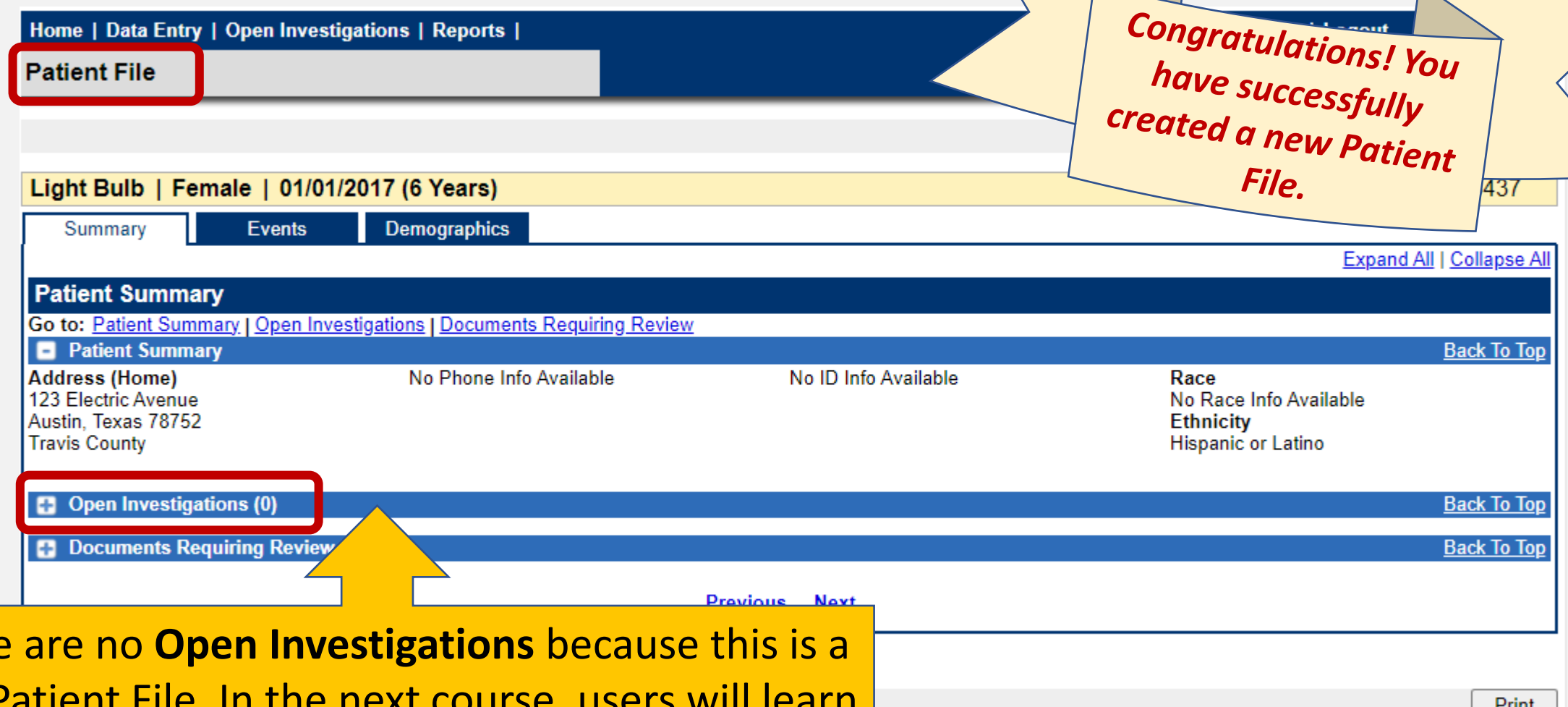
NOTE: Fields are *case sensitive*- be sure to capitalize proper nouns such as name, address, etc.



Information As of Date will auto-populate the date that data entry occurs. The information in the **Name** and **DOB** fields will populate from the search criteria.

Once all information is entered, Click **Submit.**

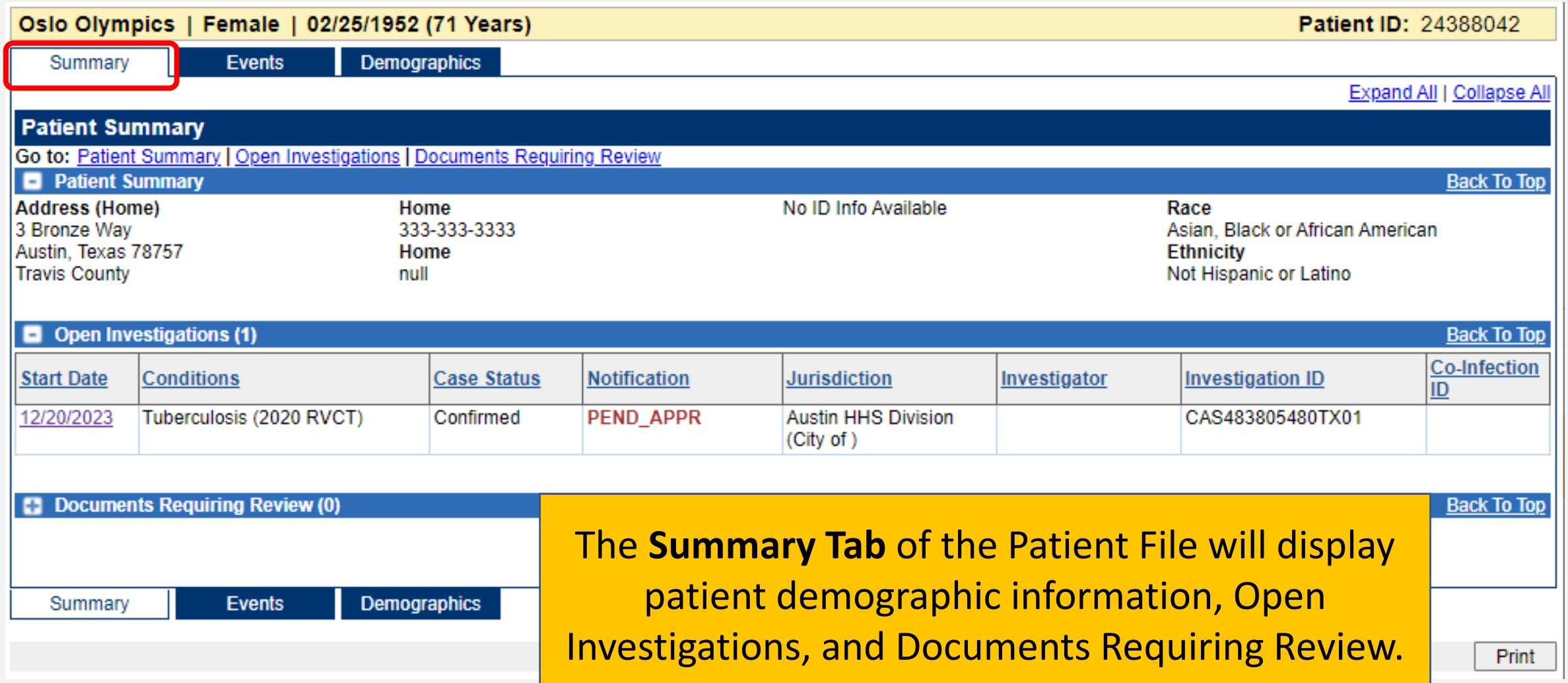
Creating a Patient File



Congratulations! You have successfully created a new Patient File.

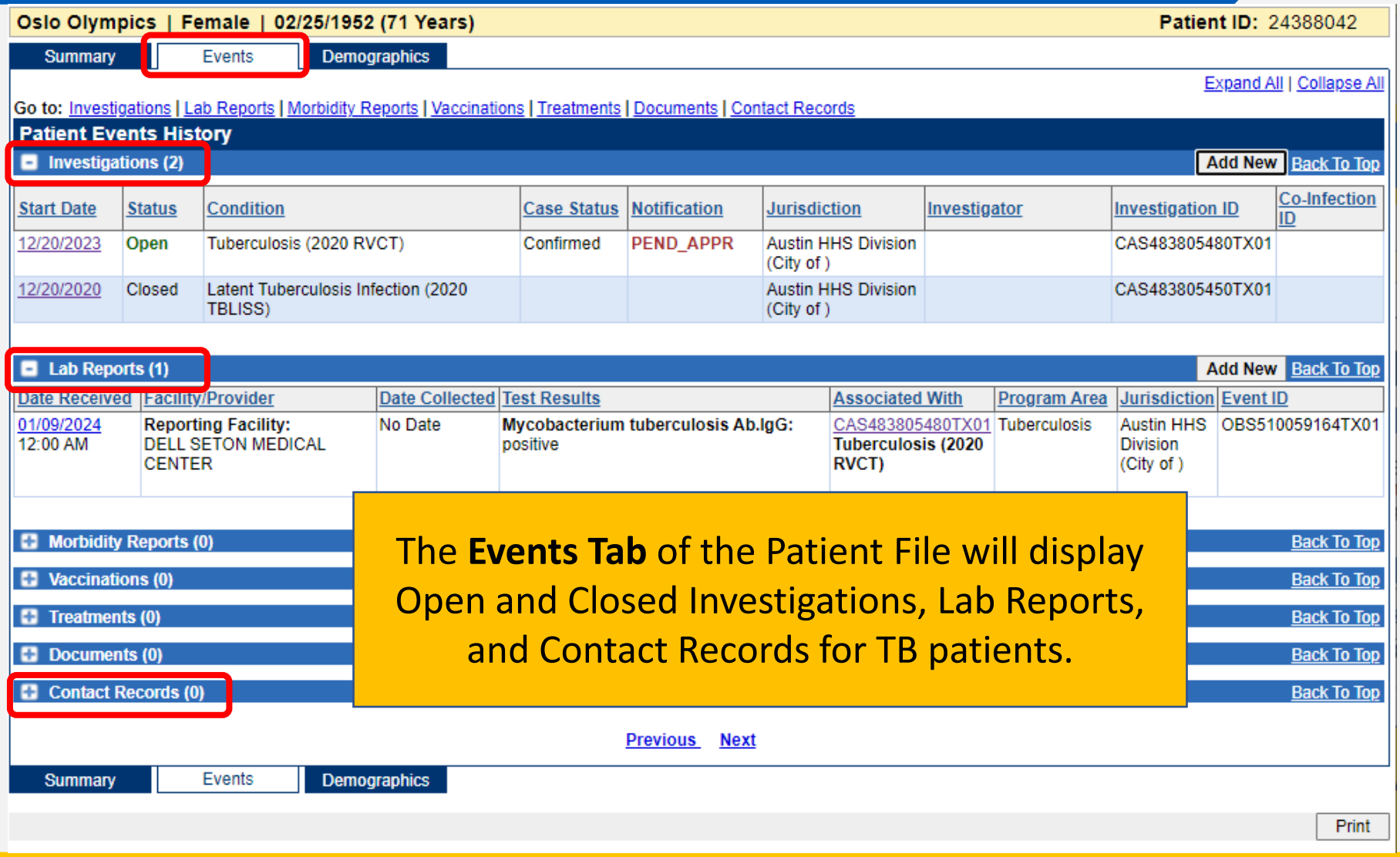
There are no **Open Investigations** because this is a new Patient File. In the next course, users will learn how to create an investigation.

Navigating the Patient File: Summary Tab



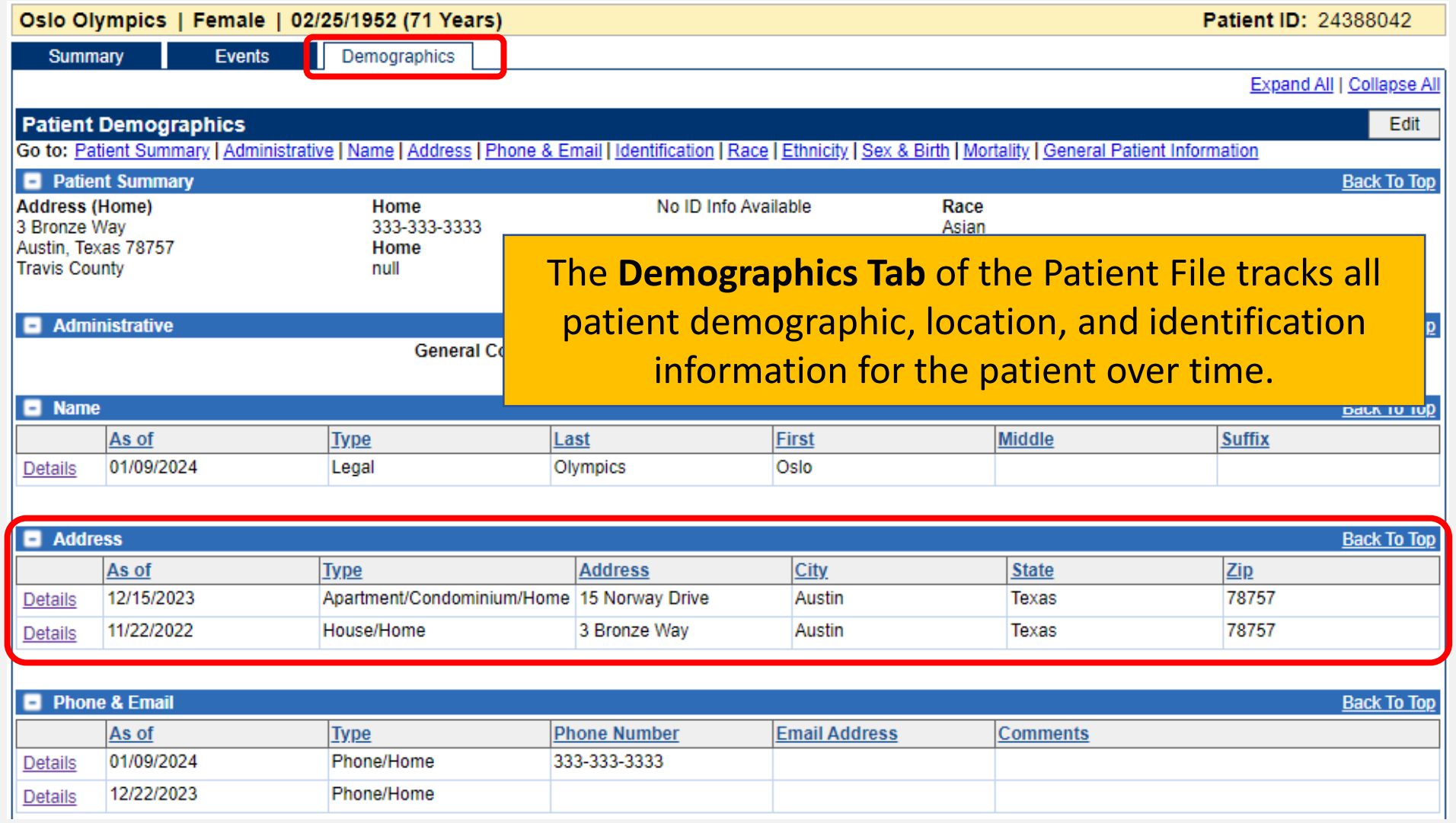
The **Summary Tab** of the Patient File will display patient demographic information, Open Investigations, and Documents Requiring Review.

Navigating the Patient File: Events Tab



The **Events Tab** of the Patient File will display Open and Closed Investigations, Lab Reports, and Contact Records for TB patients.

Navigating the Patient File: Demographics Tab



The **Demographics Tab** of the Patient File tracks all patient demographic, location, and identification information for the patient over time.

Addressing Duplicate Records

How Duplicate Records Occur

Duplicate records will undoubtedly be created, either by Electronic Lab Reports(ELRs) or by a user who has not done a complete search.

When this happens, duplicate records will need to be addressed by the DSHS TB Unit.

Duplicate Record Example

Search Results

Your Search Criteria: Last Name Starts With 'Oly', First Name Starts With 'Win', resulted in 2 possible matches. Would you like to refine your search or add a new patient ?

Results 1 to 2 of 2

Patient ID	Name	Age/DOB/Sex	Address	Phone/Email
168163185	**Legal** Olympics, Winter	35 Years 02/13/1988 Male	**Home** 123 Calgary Drive Austin, Texas 78753	**Email** winter.olympics@yahoo.com **Home** 555-555-5555
168163186	**Legal** Olympics, Winter	35 Years 02/13/1988 Male	**Home** 5 Rings Drive Katy, Texas 77449	**Email** winter.olympics@yahoo.com **Home** 555-555-5555

Results 1 to 2 of 2

This broad search resulted in two Patient Files with the same information except the address. It is possible a user or ELR created a new patient file since the addresses did not match, but they are the same person.

How to Address Duplicate Records

R/LHDs should do the following when a duplicate record is found:

1. Notify the assigned TB Unit surveillance case consultant of the duplication, including investigation numbers.

   a) Investigation ID Numbers will start with ‘CAS’

2. The TB Unit surveillance case consultant will notify the R/LHD once the merge is complete and provide the surviving Investigation ID.

3. Until the user hears back from the consultant, data should not be entered into either investigation.

Demo

https://vimeo.com/901264716/92db90c977?share=copy

Course Number 1 Demonstration:
Navigating NEDSS and Starting a TB Patient File

NEDSS Tuberculosis (TB) Training Course for
Public Health Regions and Local Health Departments (P/LHDs)
Texas Department of State Health Services

Questions?

End of NEDSS TB Training, Course 1