The Research Data Browser allows you to view Epic Patient Data through the Cogito Data Warehouse.

It includes a de-identified view so you can see patient data prior to CHR approval.

You are able to search, view results, and export to Excel patient demographics, encounters, diagnosis, medications, labs, and procedures.

The dashboard has an Exploration area that allows you to design custom searches and display the results in a number of visualizations.

Offered by ARS at UCSF, contact its-arssupport@ucsf.edu for help.
In order to access the Research Data Browser, you need to submit a request through the ARF – Account Request Form system and complete an Account Request Form (ARF).

The link to the ARF system is http://arf.ucsfmedicalcenter.org
Completing the ARF:

1. Complete the first page of the ARF, click the Next button.
2. Select “Other Applications”.
3. Locate and check the “Qlikview” check box. A new sub-screen displays.
4. Select “Research”.

After you submit your request, your manager needs to approve the request.

Once the request has been approved, a ServiceNow ticket is generated and routed to the appropriate person for fulfillment of your request.

The Account Request Form is a requirement to activate the link.
Accessing the Research Data Browser – Cont’d

The Research Data Browser can be accessed on the Portal window in your MyResearch account and on your UCSF MyAccess page.
Giving Feedback to ARS

Your feedback is important to us.

Our goal is to:

- Make the Research Data Browser as useful as possible. Your feedback as to how we can make the tool and underlying data more useful is appreciated.
- Let us know how we can improve the tool, data training, and other related materials

The Academic Research Systems (ARS) staff is here to assist you in using the tool, validating your results, and to help document any issues.

Please use the Report an Issue link located in the upper right-hand corner of each page to report any issues or questions. You may also contact ARS at its-arssupport@ucsf.edu
Production Environment Overview

- Typically the data is two days behind production and includes data from APeX starting 06/01/2012
- If there is a problem in production, data may lag for longer than two days behind production

The Data as of: box displays the date of the data you are viewing
The goal is to accelerate the clinical scientific discovery process for UCSF investigators by enabling:

- Accelerated hypothesis generation to a wider audience authorized to use de-identified data
- Rapid Query – all data in main memory
- Visual Profiling of selected patients
- Export to Excel or Flat File
Limitations of the Research Data Browser

- Only data from encounters after June 1, 2012 are included (APeX go-live date)
- Data is typically two days old – see the Data as of: field
- Procedures and Med Orders are limited to orders manually entered in APeX by a provider

(OPTIONS_METRICS):
- No child orders
- No orders created by an interface
- No pending orders
- No historical orders
- No cabinet overrides
Limitations of the Research Data Browser – Cont’d

- Data has been de-identified per HIPPA guidelines
- Patient and Encounter identifiers have been scrambled
- Dates have a random offset of up to a year in the past and each patient has the same offset for all dates
- Ages over 90 are shown as 90
When you access the Research Data Browser, the Select View is the first page displayed. There are two separate views of the same data: Patient View and Encounter View.

**Patient View** – looks across all encounters for a specific patient. For example: Find all patients who ever had this lab and medication ordered.

**Encounter View** – looks at a specific encounter. For example: Find a specific encounter during which this lab was performed and this medication was ordered.
You will most likely want to use the Patient View when using the Research Data Browser. The main difference between the two views is how each one treats queries.

To view a set of patients who had Order A and Diagnosis B:

- **Patient View** – displays all the patients who ever had both Order A and Diagnosis B, regardless of the encounter on which they occurred.

- **Encounter View** – displays all patients where Order A and Diagnosis B occurred on the same encounter. It also displays all the information from that encounter(s).
Sensitive Patient Information

Any data you view in the Research Data Browser is de-identified. **However, you must still treat this data as sensitive patient information.**

**YOU MUST NOT:**

- Attempt to re-identify any information without approval from the CHR
- Share any extracted data with people who are not authorized to use this data

If you have any questions about how to handle the data, please click the Report an Issue link at the top right-hand side of each screen.
Helpful Hints for Mac Users

- Right-click on a PC becomes **Control + click** on a Mac

- To select multiples of anything on a Mac you need to hold down the **Command** key while making your selection

- When using the **Command** key to select multiple items, after you are done selecting the items, press **Enter** to accept the multiple entries. (Using the **Ctrl** key in Windows accepts the multiple items when you release the **Ctrl** key.)
The Research Data Browser contains the same tabs for both the Patient and Encounter views.

The tabs are:
- Encounter or Patient – Identifies your current view
- Demographics
- Encounters
- Diagnoses
- Medications
- Labs
- Procedures
- All Selections
- Exploration
- Export
- ? Info

The **Search** field and the **Current Selections** options are located in the upper left side of each tab.
A timesaver for future searches is the Add Bookmark icon, the star with the plus sign, on the Research Data Browser toolbar.
Add Bookmark – Cont’d

Make Bookmark apply on top of the current selection – This is useful if you plan to combine a current selection criteria with other search criteria.

Include Layout State – This option saves the tab that is currently active.
The **Delete Bookmark** icon, the star with the minus sign, on the Research Data Browser toolbar allows you to delete previously created bookmarks.
The Question Mark button displays definitions of each variable in a specific list.

*In the example below, the question mark button in the Patients (Latest Values) list displays a definition of each of the fields.*
Research Data Browser

Tabs Overview
The following eleven screens display the tabs in the Encounter View of the Research Data Browser.

A brief description of how each tab is used is included.

The Patient View contains the same tabs with the exclusion of the first tab which is labeled Patient instead of Encounter.

An example of the Patient tab follows the Encounter View examples.
• Use this tab to get an overall snapshot of your encounters and patients.
• This tab is an overview.
• Most of your examination and selections will come on more specific tabs to drill down on data.
Encounter View – Demographics Tab Overview

- Use this tab to review details about patients.
- This tab provides a breakdown of patient demographics for your selected encounters.
- This tab can be used to get a snapshot of attributes about patients found by your search criteria.
Use this tab to review encounter details.
This tab displays the types of encounters found by your selections.
From here you can examine when the encounters occurred, as well as what specialty the encounters fell under.
Encounter View – Diagnoses Tab Overview

- Use this tab to review diagnoses.
- This tab displays the diagnoses associated with your selected encounters.
- From here you can examine common diagnoses as well as ICD9 codes for your selected encounters.
Use this tab to review medications.
This tab displays the medications associated with your selected encounters.
From here you can review common medications ordered on your selected encounters.
Use this tab to review the labs resulted.
This tab displays the common labs resulted for your selected encounters.
From here you can review the resulted labs as well as their procedure category.
Encounter View – Procedures Tab Overview

- Use this tab to review the procedures ordered.
- This tab displays the common procedures ordered for your selected encounters.
- From here you can review the procedures ordered as well as their procedure category.
• Use this tab to enter your criteria and selections for your search.
• This tab is the tab central to making your selections and adding your criteria.
• Typically you will begin your search on this tab before navigating to other tabs to review the encounters found by your selections.
Encounter View – Exploration Tab Overview

- Use this tab to create your own charts and graphs.
- This tab allows you to create your own graphs to analyze data. You can create charts by adding dimensions on the left side.
- You can use the Table tab to export additional fields where you have not yet made selections. To do this, add the additional fields as dimensions.
**Encounter View – Export Tab Overview**

- Use this tab to extract data to Excel.
- This tab allows you to quickly export the patients found by your selections. In addition to pulling the Encounter ID and Patient ID, this table displays one column for each of the fields in which you have currently made selections.
- If you would like to pull data from a field in which you have not made a selection, use the Exploration tab Table functionality.
• Use this tab to get more resources for using the application.
• This tab provides a reference point for what data this application displays and additional resources for using the Research Data Browser.
The Patient View contains the same ten tabs with the exclusion of the first tab which is labeled Patient instead of Encounter.

- Use this tab to get an overall snapshot of your patients.
- This tab is an overview.
- Most of your examination and selections will come on more specific tabs to drill down on data.
Encounter Tab Example
Using a Graph to Change Search Criteria

1. Click the Skilled Nursing Homes (the green pie piece) on the Top 5 Discharge Disposition graph.

2. The Top 5 Discharge Disposition graph now only displays Skilled Nursing Homes information.

3. Click the Demographics tab to view the current selection, Skilled Nursing Homes.

NOTE: As you select your criteria on one tab, it carries over to all the other tabs.
When using the Research Data Browser, you typically select your criteria and then use the subsequent tabs to review the attributes of the encounters that match your criteria.
1. Click the All Selections tab.
2. Locate the Diagnoses Name box, then find the Diagnosis Name field.
3. Click the box to the right of the Diagnosis Name field and enter “Diabetes”.
4. Press Enter on your keyboard to select all.
Research Data Browser

All Selections Tab Example
All Selections Tab – Encounters with a DX of Diabetes

Once you are satisfied with your selection, you can navigate to other tabs.

The Current Selections field displays Diabetes.

Number of Encounters and Patients has changed with the Diabetes selection.

To clear the Current Selections field, click the back or forward button.

The Diagnosis Name field is highlighted in green.
Demographics Tab Example
Select the Demographics Tab

Use the Toggle button to switch between Age and Age Group
Research Data Browser

Requesting PHI
After locating the de-identified information you need, you can request identified data (PHI) through the Clinical Data Request Consultation (CDRC) application in your MyResearch account.
Additional Help and Resources

- For assistance with technical issues while using the Research Data Browser contact its-arssupport@ucsf.edu
- IT Help Desk 415 514-4100