Using BigMouth – Registered user

Logging in to BigMouth

Open the URL https://bigmouth.uth.edu/secure/ in a web browser

For InCommons Federation Members - Select 'All Sites' under 'Group' section and select your respective organization under the under 'Organization' section. Click Select button. You will now be redirected to the Shibboleth authentication page. Please use your organization's username and password to login.

Web Authentication

COMPUTING SERVICES & SYSTEMS DEVELOPMENT

Authentication Required

You are connecting to a Web resource that requires authentication. Please enter your University Computing Account username and password below and click the Login button to continue.

Username:

Password:

Remember to close all your Web browsers when you have finished using an online resource and have logged out.

Login

Need help?

Contact the Technology Help Desk online or by phone at 412-624-**HELP** [4357].

BigMouth layout

i2b2 Query & Analysis Tool — Project: COHRI UTH — User: Krishna Kumar Kookal — Find Patients | Analysis Tools | Help | Logou

Navigate Terms | Find Terms

- Axium
  - UTH
    - Demographics - 245976
    - Diagnosis - 13192
    - Forms - 23809
    - Odontogram - 241905
    - Perio - 20573
    - Procedures - 113671
    - Providers
  - COHRI
    - Demographics - 1178716
    - Dental Procedures - 517288
    - Diagnosis - 125862
    - Forms - 124866
    - Odontograph - 193163
    - [Perio - 0]
    - [Providers - 0]

Navigate Terms Tab: Users can manually lookup for terms by browsing through the hierarchy.

Find Terms Tab: Search concepts using a word,

Query Tool

Query Name: Forms@09:45:41

Temporal Constraint: Treat all groups independently

Group 1	Group 2	Group 3
Dates	Occurs > 0x	Exclude	Dates	Occurs > 0x	Exclude	Dates	Occurs > 0x	Exclude
Treat Independently	Treat Independently	Treat Independently

Forms - 23809

Query Tool: Area where user build their question (query) by dragging and dropping concepts/terms from Navigate Terms/Find Terms tab.

one or more of these   **AND**   drop a term on here

Run Query | Clear | Print Query | 1 Group | New Group

Previous Queries

- Forms@09:45:41 [6-26-2012] [kkookal@uth.tmc.edu]
- Perio@09:37:38 [6-26-2012] [kkookal@uth.tmc.edu]
- ABNORMALITIES O@11:37:28 [6-21-2012] [kkookal@uth.tmc.edu]
- Bleedin-Age@12:54:33 [6-2-2012] [kkookal@uth.tmc.edu]

Previous Queries: Queries previously run by the logged in user.
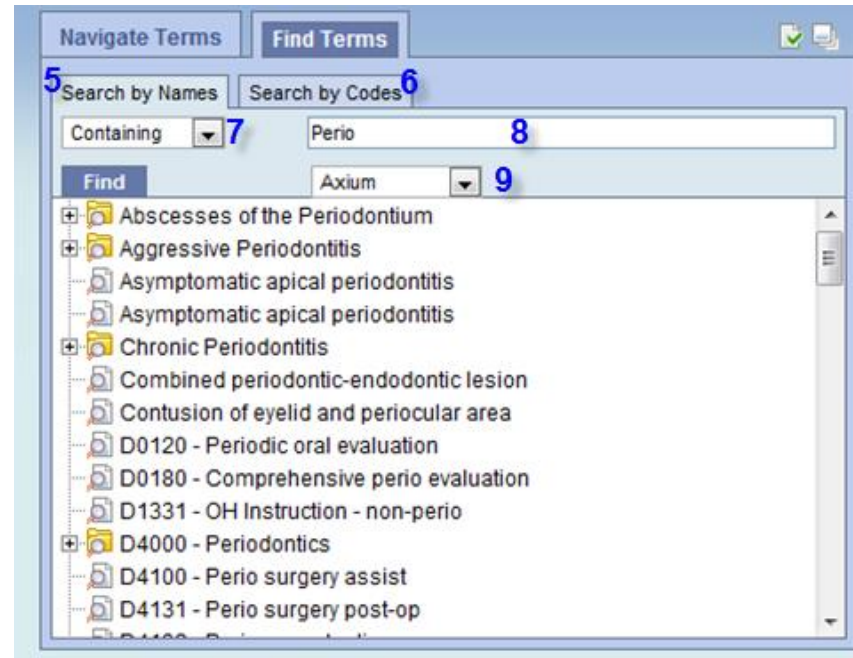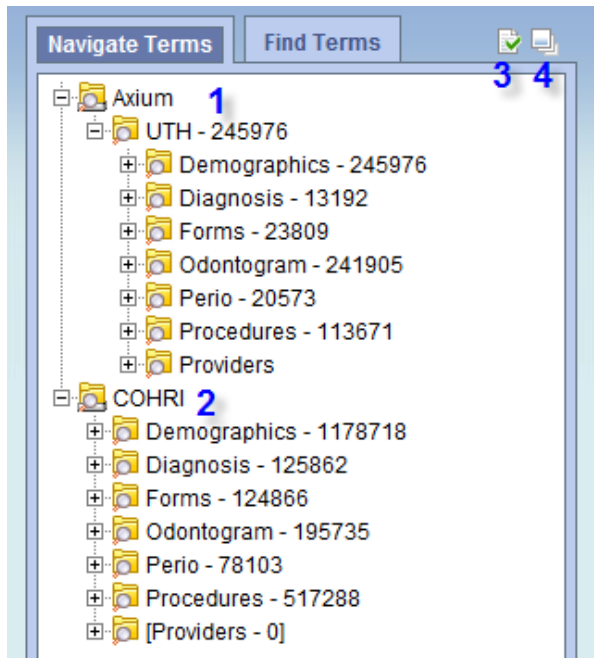
Query Status

Finished Query: "Forms@09:45:41"   [17.0 secs]
   Compute Time: 14.7 secs

Number of patients for "Forms@09:45:41"
   patient_count: 23809

Query Status: User can view the status of the current query. Once the query completes its execution, the patient count and other details are displayed here.

1. **Navigate Terms/Find Terms Section**

1. Site specific terminology: The axiUm node contains the site specific terminologies. Users can query for data available in axiUm at their own site. The number displayed adjacent to each folder/leaf node represents the number of patients.
2. COHRI terminology: This folder provides an integrated terminology system that allows users to query for data from more four schools
3. Options: Clicking on the icon opens a small popup window (shown below) where users can customize the way the terms are displayed.
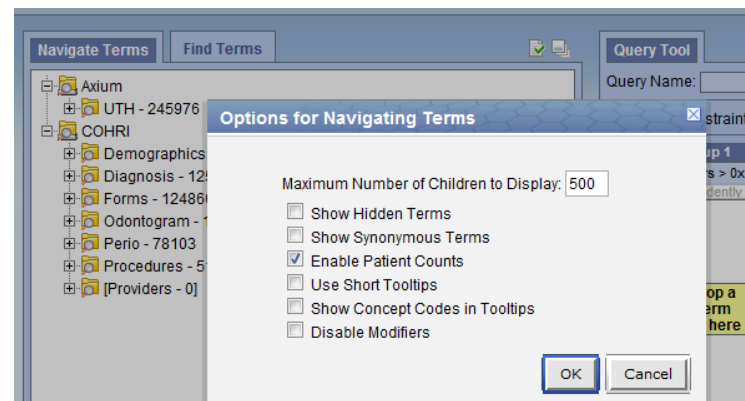
4. Expand: Clicking on the ▣ icon expands the "Navigate Terms" section.
5. Search by Names: Users can use this tab to search terms by its name.
6. Search by Code: Users can search terms using their BigMouth code and description. These codes are different from the axiUm codes. These codes can be found by hovering over the terms.
7. Operators: User can use various operators while searching the term by name and code.
8. User can specify the search text in the space provided.
9. Users can specify whether they want to search in the site specific terminology or COHRI terminology.

2. Query Tool Section

The query tool comprises of many groups where a user can specify the inclusion and exclusion criteria of patients.
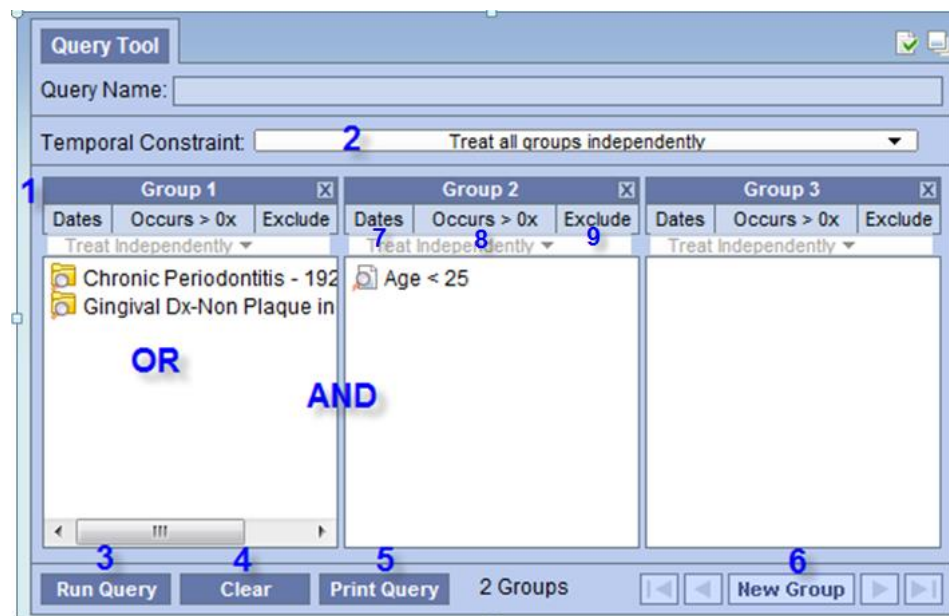
1. **Groups**: User can create as many groups as they like. A group can contain more than one term. A patient satisfying any one of the terms (conditions) in a group will be counted towards the final result. If more than one group is used, only patients satisfying conditions in all groups will be considered towards the final result. Users can add as many groups as required.
2. **Temporal Constraint**: This lets users specify if they would like to find patients from the same encounter. This feature is currently (as of June 2012) not supported in COHRI i2b2.
3. **Run Query:** Users can execute queries by clicking on the "Run Query" button.
4. **Clear:** Users can reset the content in the query tool by clicking on the "clear" button.
5. **Print Query:** Users can print the query for future reference by clicking on "Print Query" button.
6. **New Group:** Users can create new groups by clicking on "New Group" button.

7. **Dates:** Users can specify the date range of the encounters as shown below
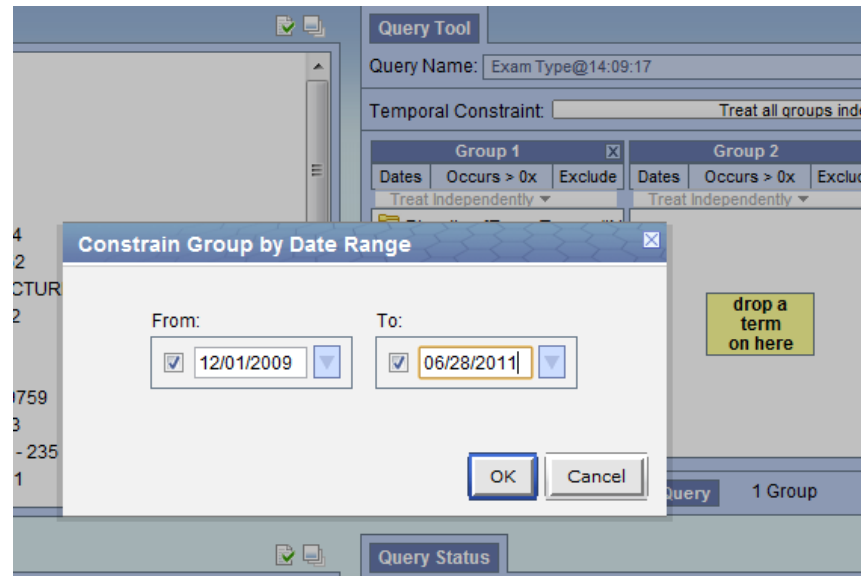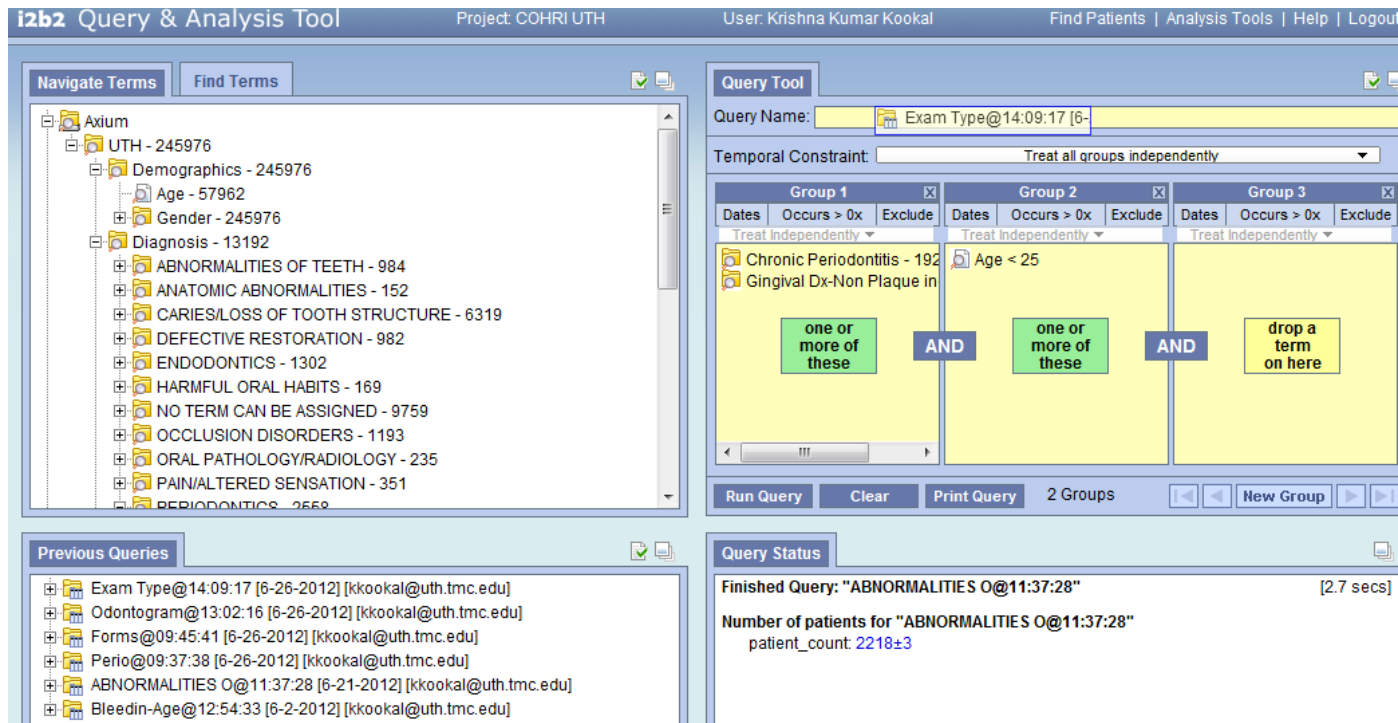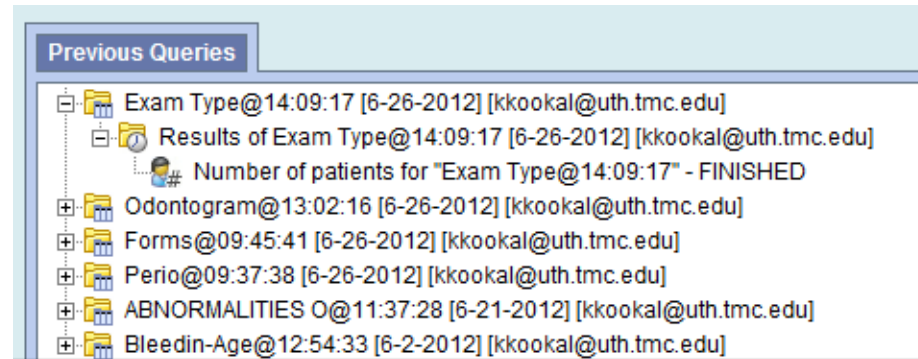

8. **This function is disabled**
9. **Exclude/Include:** Users can exclude or include the terms in a group.
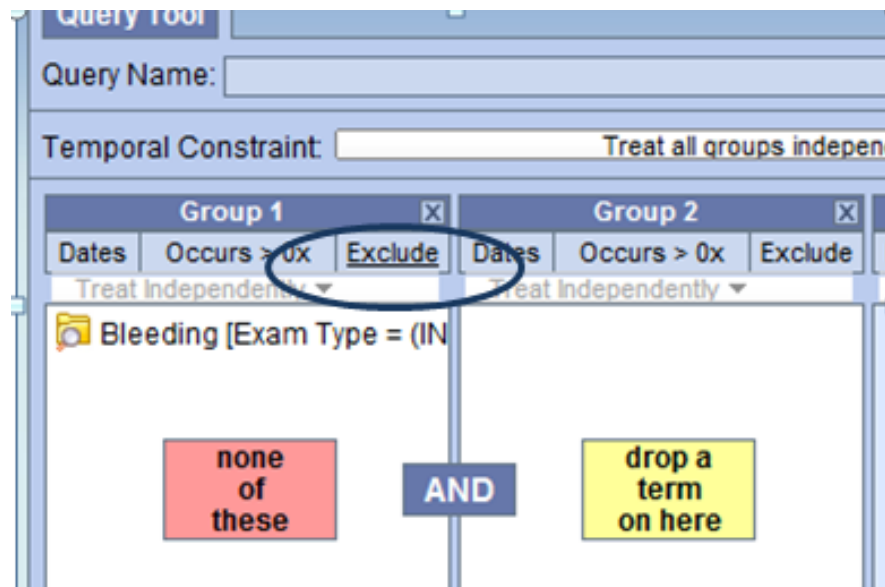
3. Previous Queries Section

Users can view a summary of previously run queries in the "Previous Queries" section. In order to view the complete details of the query, user can drag and drop the query to the "Query Name" area within the "Query Tool" section.

How to run a query?

STEP 1: Identify the concept(s)/term(s) from the "Navigate Terms" section

STEP 2: Drag and drop the selected term to a group in the "Query tool" section. Specify date range, exclusion criterion as needed.

Modifiers can be added to certain terms. A popup window is displayed when such terms are added to the "Query Tool" section. For example, when querying for age, users can specify the operator and the value (example shown below).
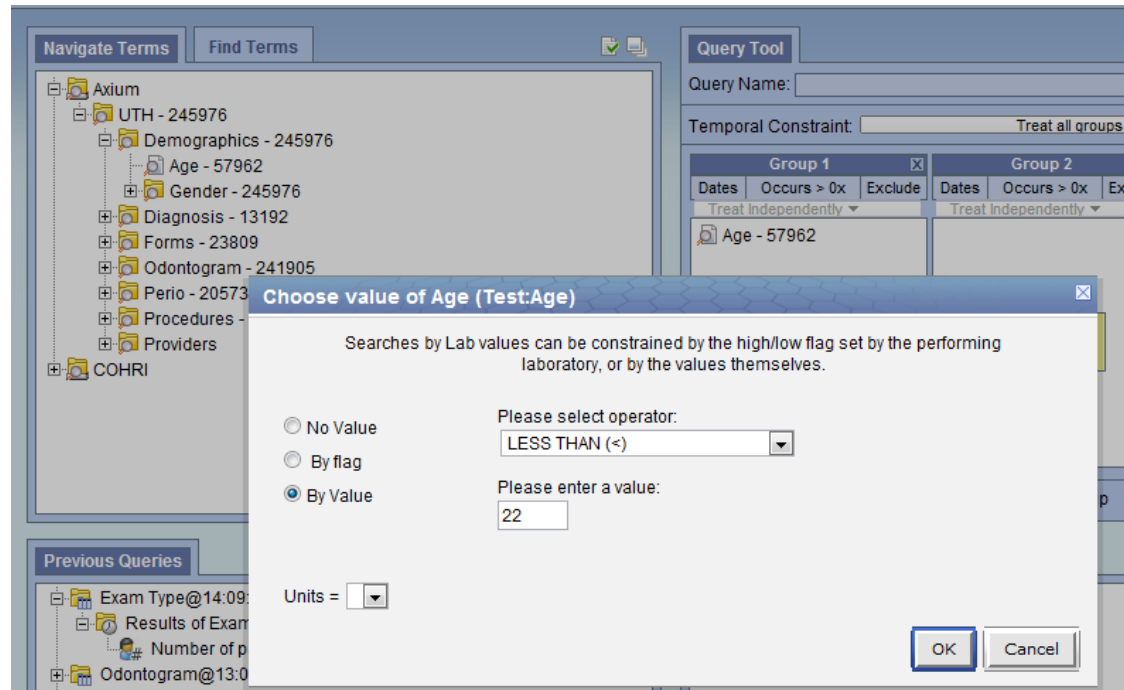
STEP 3: Click on the Run Query button

STEP 4: Specify the format of the result in the small popup window that appears after clicking on "Run Query" button. Please note that the "Patient Set" option is not available to all users.
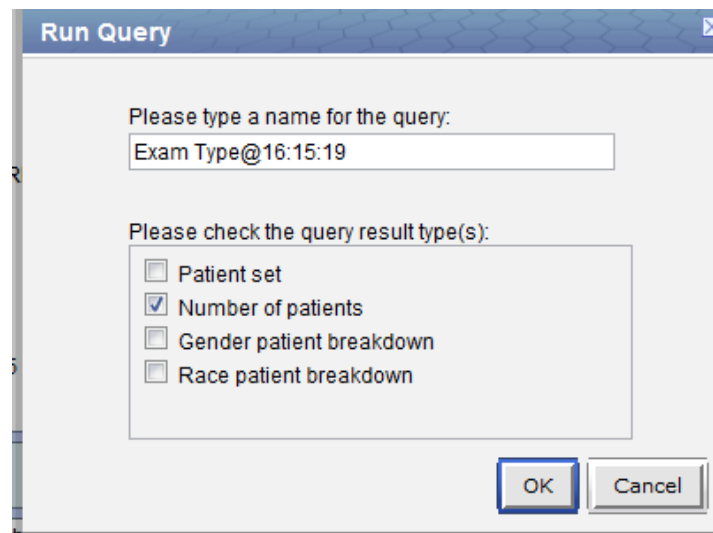
Step 5: View results in the "Query Status" section

Finished Query: "Perio@16:18:11"
    Compute Time: 7.5 secs

Patient Set for "Perio@16:18:11"

Race patient breakdown for "Perio@16:18:11"
    American Indian or Alaska Native: 61
    Asian: 1231
    Black or African American: 2675
    Some Other Race: 4185
    White: 6525

Gender patient breakdown for "Perio@16:18:11"
    Female: 11940
    Male: 8062
    Others: 2
    Unknown: 569

Number of patients for "Perio@16:18:11"
    patient_count: 20573

Example Query

How many patients ages 45 and older have been diagnosed with chronic periodontitis and a cardiovascular condition?

The reason is because one patient may have more than one specific condition. For example, total number of patients of the category "Abnormalities of teeth" in the picture below is 984. The number of patients of the subcategories of the category "Abnormalities of teeth" adds up to 1041. This is because one patient may be in both subcategories such as "Cementum Defect" and "Dentin Defect".