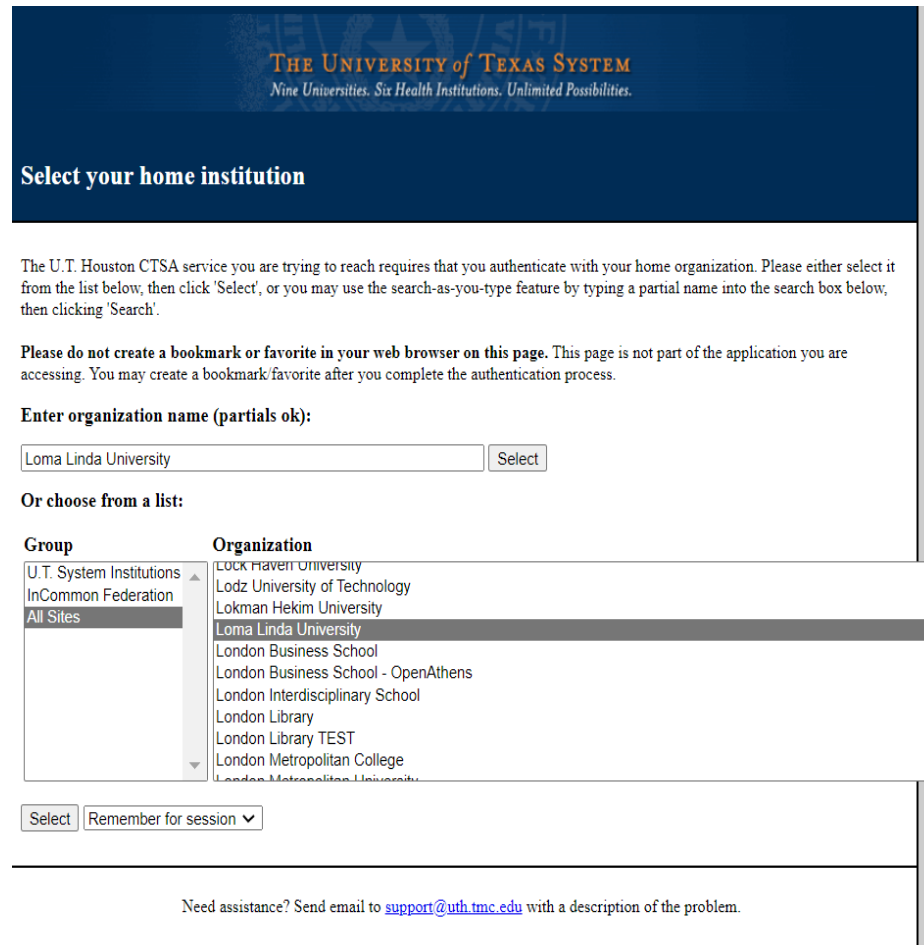


Using BigMouth – Registered user

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 Single Sign-On authentication page. Please use your organization's username and password to login.



THE UNIVERSITY of TEXAS SYSTEM
Nine Universities. Six Health Institutions. Unlimited Possibilities.

Select your home institution

The U.T. Houston CTSA service you are trying to reach requires that you authenticate with your home organization. Please either select it from the list below, then click 'Select', or you may use the search-as-you-type feature by typing a partial name into the search box below, then clicking 'Search'.

Please do not create a bookmark or favorite in your web browser on this page. This page is not part of the application you are accessing. You may create a bookmark/favorite after you complete the authentication process.

Enter organization name (partials ok):

Or choose from a list:

Group	Organization
U.T. System Institutions	Lock Haven University
InCommon Federation	Lodz University of Technology
All Sites	Lokman Hekim University
	Loma Linda University
	London Business School
	London Business School - OpenAthens
	London Interdisciplinary School
	London Library
	London Library TEST
	London Metropolitan College
	London Metropolitan University

Need assistance? Send email to support@uth.tmc.edu with a description of the problem.



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Please select the 'Public Computer' option if this is not a machine you use regularly, then enter your User ID below and click 'Submit' to access the system.

- This is a public computer**
 This is a private computer

User ID:

Password:

Submit

Login [here](#) to request transcripts

For assistance, contact the LLU Helpdesk at x48611 or
lluhelpdesk@llu.edu or 909-558-8053.

BigMouth layout

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

Navigate Terms **Find Terms**

- [-] Axiom
 - [-] 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]

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								

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]

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

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

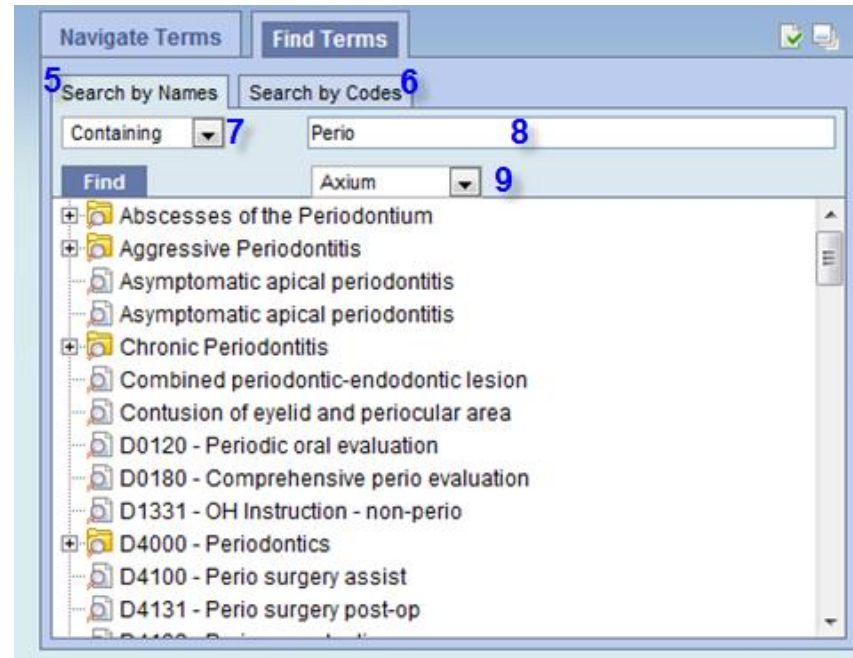
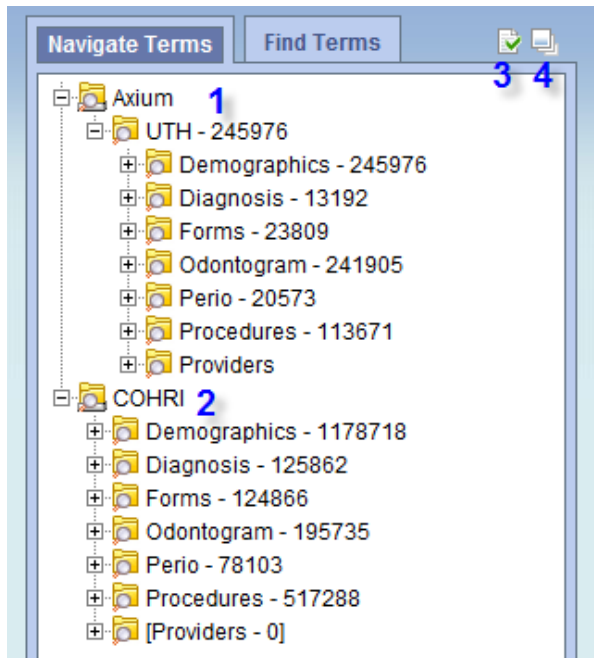
Find Terms Tab: Search concepts using a word.


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

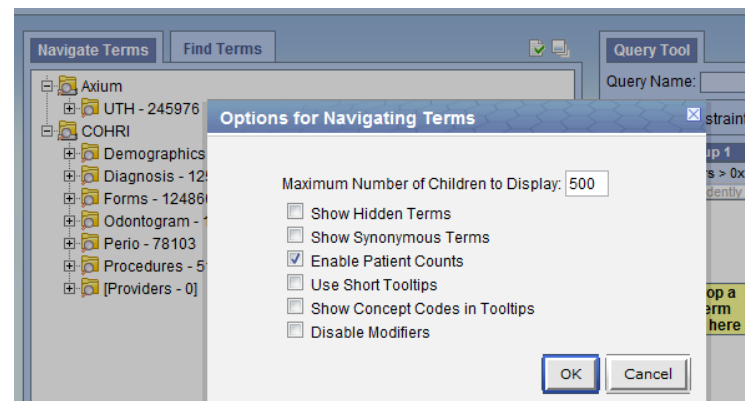
Previous Queries: Queries previously run by the logged in user.


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



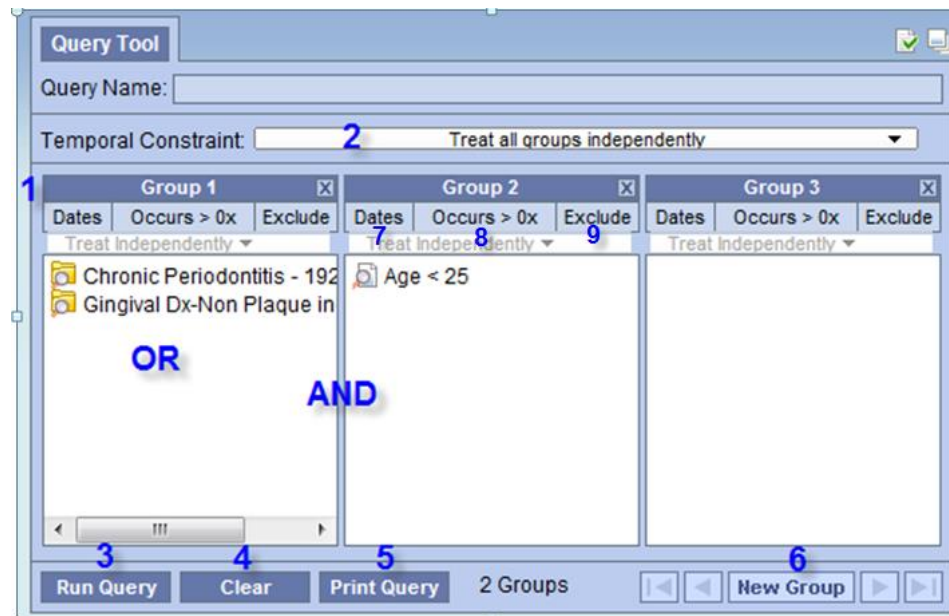
1. Site specific terminology: The axiUm node contains the site specific terminologies. Users can query for data available in axiUm at their own site. The number displayed adjacent to each folder/leaf node represents the number of patients.
2. COHRI terminology: This folder provides an integrated terminology 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.

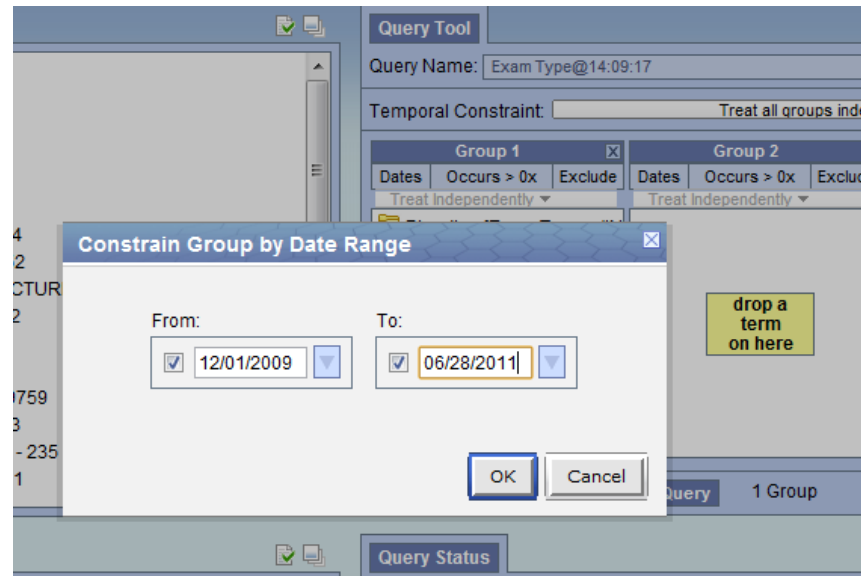
2. Query Tool Section

The query tool comprises of many groups where a user can specify the inclusion and exclusion criteria of patients.



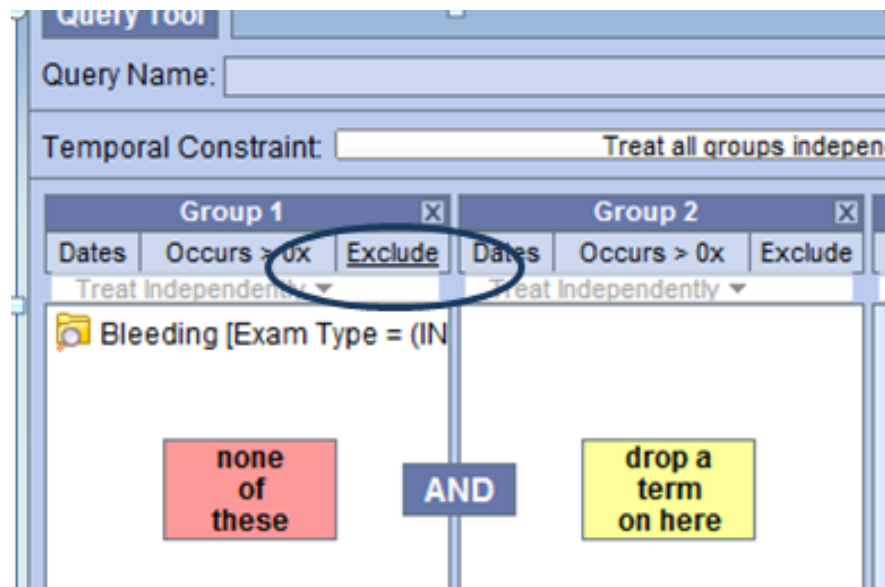
1. **Groups:** User can create as many groups as they like. A group can contain more than one term. A patient satisfying any one of the terms (conditions) in a group will be counted towards the final result. If more than one group is used, only patients satisfying conditions in all groups will be considered 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



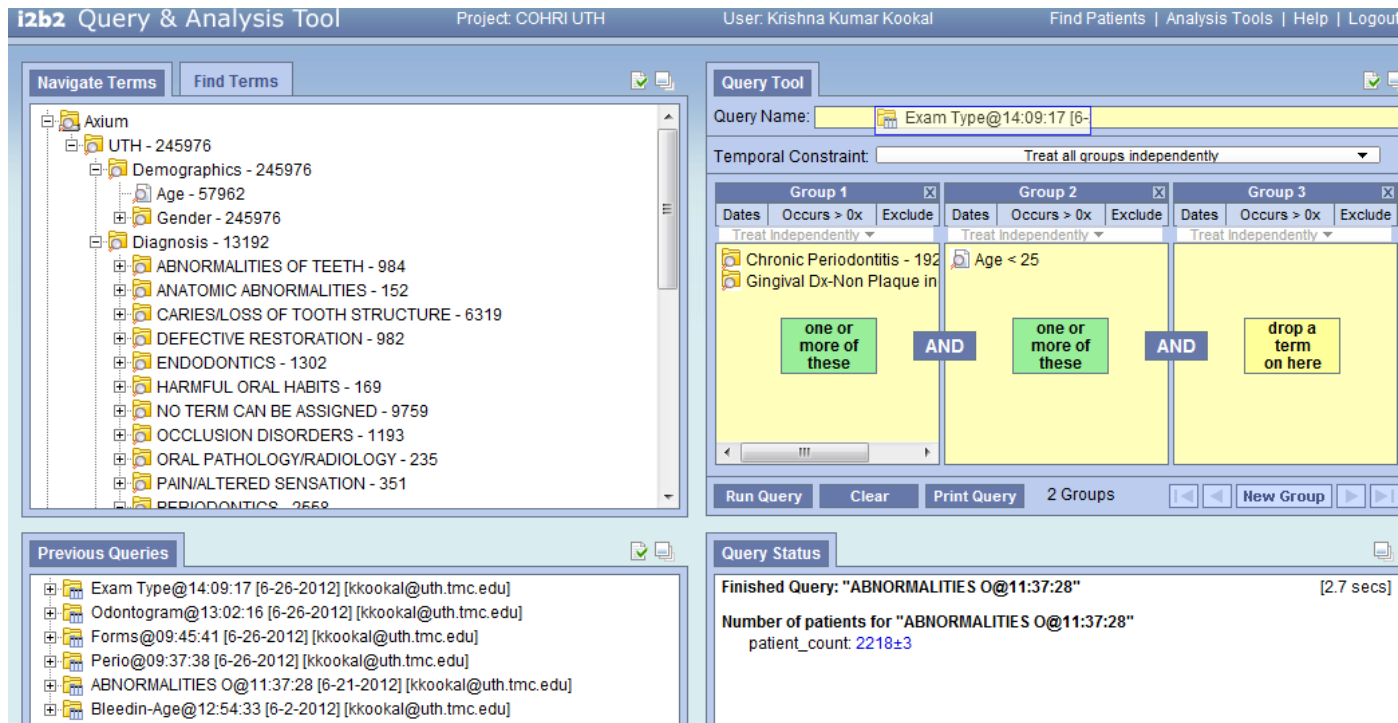
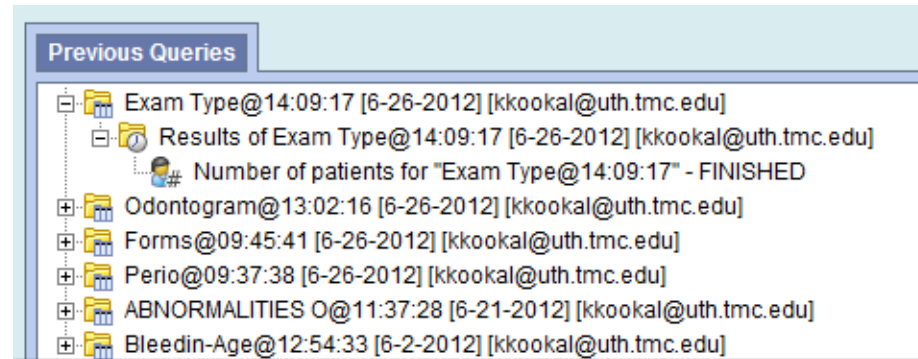
8. **This function is disabled**

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?

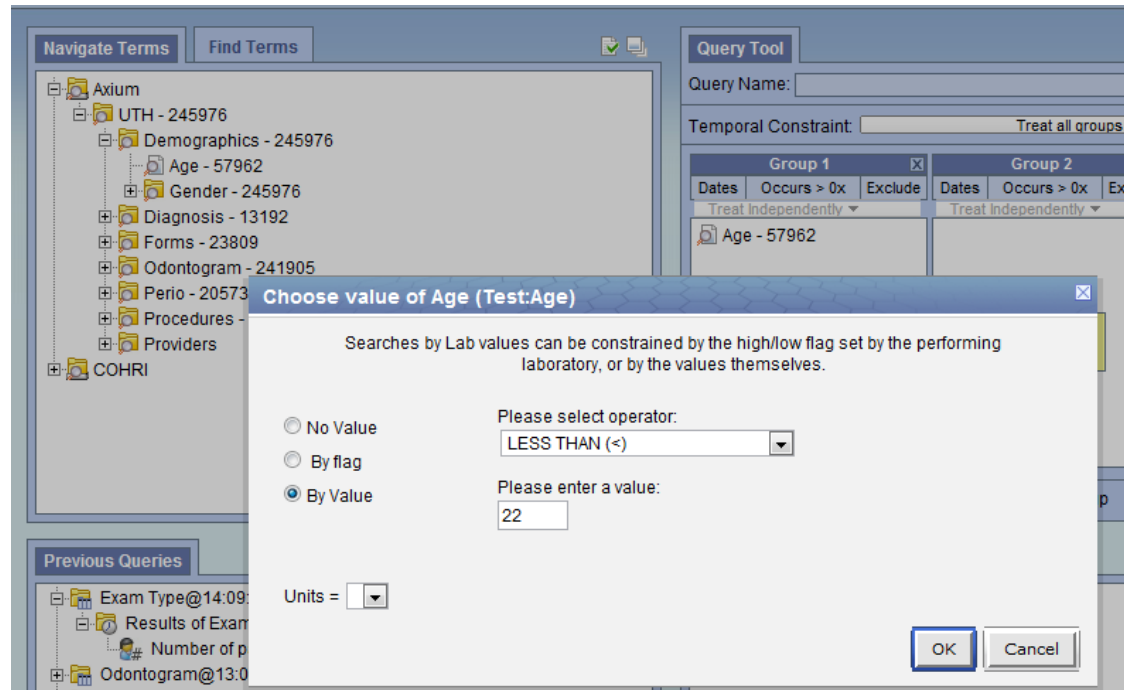
STEP 1: Identify the concept(s)/term(s) from the “Navigate Terms” section

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

The screenshot displays a software interface for building a query. It is divided into several sections:

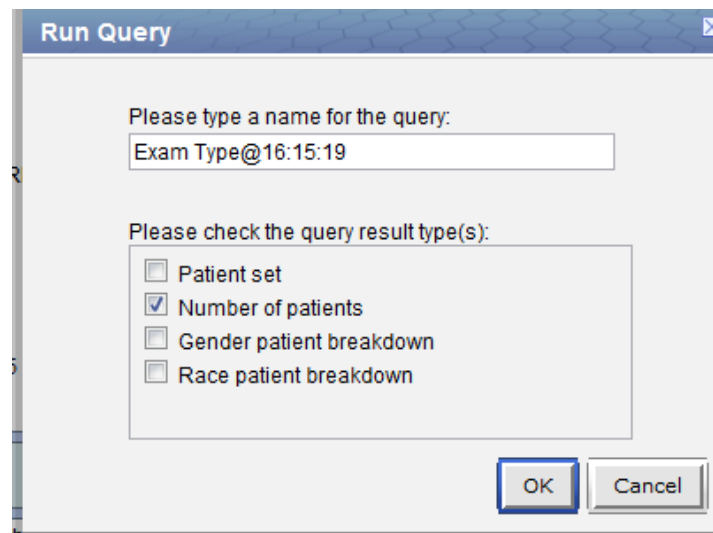
- Navigate Terms:** A hierarchical tree view showing a structure starting with 'Axiom' and 'UTH - 245976'. Under 'Demographics - 245976', there are 'Age - 57962' and 'Gender - 245976'. Under 'Diagnosis - 13192', there is a sub-section 'ABNORMALITIES OF TEETH - 984' which includes terms like 'Cementum Defect - 23', 'Dentin Defect - 40', 'Enamel and Dentin Defect - 163', 'Enamel Defect - 158', 'Eruption Abnormalities - 541', 'Number Alteration - 77', 'Pulp Abnormalities - 4', 'Shape Alteration - 26', 'Size Alteration - 9', and 'ANATOMIC ABNORMALITIES - 152'.
- Query Tool:** A panel for constructing the query. It has a 'Query Name' field, a 'Temporal Constraint' dropdown set to 'Treat all groups independently', and three groups (Group 1, Group 2, Group 3). Each group has a 'Dates' field, an 'Occurs > 0x' field, and an 'Exclude' checkbox. Group 1 contains 'Age < 22'. Group 2 contains 'ABNORMALITIES OF TEETH' and 'Dentin Defect - 40'. Group 3 is empty. Between the groups are 'AND' operators. A yellow box in Group 3 says 'drop a term on here'. A green box in Group 1 says 'one or more of these'. A green box in Group 2 says 'one or more of these'. At the bottom are buttons for 'Run Query', 'Clear', 'Print Query', and 'New Group'.
- Previous Queries:** A list of recent queries with details like 'Exam Type@14:09:17 [6-26-2012] [kkookal@uth.tmc.edu]' and 'Results of Exam Type@14:09:17 [6-26-2012] [kkookal@uth.tmc.edu]'. One entry is marked 'FINISHED'.
- Query Status:** An empty panel for displaying the results of the query.

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 screenshot displays the i2b2 Query & Analysis Tool interface. The top navigation bar includes the tool name, project (COHRI UTH), user (Krishna Kumar Kookal), and various utility links. The main workspace is divided into several panels:

- Navigate Terms:** A hierarchical tree view of medical terms. A callout box points to the 'PERIODONTICS - 2558' term, stating: "Number of patient having information regarding this condition".
- Query Tool:** The central area for building the query. It shows a query name 'Age-Chron-073 -@12:42:11' and a temporal constraint 'Treat all groups independently'. The query is structured into three groups:
 - Group 1:** 'Age > 45'
 - Group 2:** 'Chronic Periodontitis - 192' with sub-terms like 'Generalized Moderate', 'Generalized Severe', etc.
 - Group 3:** A list of cardiovascular conditions such as '073 - YES-Infective endoc...', '074 - YES-Coronary artery', etc.The groups are connected by 'AND' operators, and the overall structure is defined by 'OR' operators between the groups.
- Workplace:** A large empty area for visualizing the query results.
- Previous Queries:** A list of recent queries, including the current one.
- Query Status:** A panel at the bottom right showing the query execution details: "Finished Query: 'Age-Chron-073 -@12:42:11'" with a compute time of 41.6 seconds and a result of "Number of patients for 'Age-Chron-073 -@12:42:11'" with a patient count of 586.

Note: a common question regarding patient count: why the patient counts don't add up?

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".

The screenshot displays a clinical data query tool interface. On the left, a "Navigate Terms" panel shows a hierarchical tree structure. The "Diagnosis" folder is expanded to show "ABNORMALITIES OF TEETH - 984", which includes subcategories like "Cementum Defect - 23", "Dentin Defect - 40", "Enamel and Dentin Defect - 163", etc. The "Query Tool" panel on the right features a "Query Name" field, a "Temporal Constraint" dropdown set to "Treat all groups independently", and three query groups. Group 1 contains "Age < 22". Group 2 contains "ABNORMALITIES OF TEETH" and "Dentin Defect - 40". Group 3 is empty. The groups are connected by "AND" operators. A yellow highlight is over Group 2, and a box says "drop a term on here". At the bottom, there are buttons for "Run Query", "Clear", "Print Query", and "New Group". The "Previous Queries" panel at the bottom left lists recent queries such as "Exam Type@14:09:17 [6-26-2012] [kkookal@uth.tmc.edu]" and "ABNORMALITIES O@11:37:28 [6-21-2012] [kkookal@uth.tmc.edu]".