

Introducing Clinical Query

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Clinical Query

- Web-based graphical tool to query BIDMC's Clinical Data Repository
- Includes 2 million patients and 200 million "facts" (e.g., demographics, diagnoses, medications, lab tests, and procedures) from 1997 to the present
- Aggregate counts (e.g., preliminary data for grant proposals, population studies, etc.) do not require an IRB protocol
- With IRB approval, data sets can be obtained with help from the Decision Support team

Clinical Query Web Interface

The screenshot displays the Clinical Query Web Interface within a Windows Internet Explorer browser window. The interface is titled "Clinical Query 2" and includes a navigation pane on the left, a central query tool, and a query status panel at the bottom right.

Navigation Pane: The "Navigate Terms" pane shows a hierarchical tree structure with categories: Demographics (Age, Gender, Race), Diagnoses, Laboratory Tests, and Medications. Under "Gender", "Female" and "Male" are listed. Under "Race", "Unknown" is listed.

Query Tool: The "Query Tool" pane shows the query name "Hyper-BETA -Male@02:28:25" and a "Temporal Constraint" set to "Treat all groups independently". The query is composed of three groups:

Group 1	Group 2	Group 3
Hypertensive disease	BETA BLOCKERS/RELATED ACE INHIBITORS	Male

The groups are connected by "AND" operators. The logic is: "one or more of these" (Group 1) AND "none of these" (Group 2) AND "one or more of these" (Group 3).

Query Status: The "Query Status" pane shows the query is finished. The query name is "Hyper-BETA -Male@02:28:25" and the compute time is 10.8 seconds. The number of patients returned is 39,000 ± 3.

Clinical Query and SHRINE

- Both are based on the same software
- SHRINE/I2B2
 - Patients from BIDMC, BWH, CHB, DFCI, and MGH
 - Fewer types of medical concepts can be queried
 - Queries must first go through approval process
 - Fellows and Post-docs must have a faculty sponsor; study staff cannot access SHRINE
 - Aggregate counts only
- CQ2
 - Patients from BIDMC only
 - More years of data, more medical concepts, more query options, more frequent data updates
 - Can be used by anyone at BIDMC with HIPAA training
 - Patient level data sets can be extracted