

## Use Case\_ Run a query from Panel Definition

- Validate the user by calling the **Project Management cell**.
- Select a data mart based on the combination of domain\_id, project\_id, and user\_id.
- Call the **Ontology cell** with the item key and determine the dimension table to join with the fact table.
- Save the query panel definition and the generated SQL statements.
- Generate the list of output like the patient count, patient gender count, patient set, etc.
- To scale the application and to support long running SQL, the execution of SQL is handled inside a set of queues. At first the query SQL statements will be executed inside a small job queue. If it doesn't complete within a certain time period then the jobs will be transferred to a mid-size job queue and then to a large size job queue.
- If the SQL execution completes before the "result\_waittime\_ms" which is specified in the request, then the query results are passed in the response message. Otherwise the status of the query is passed in the response message.