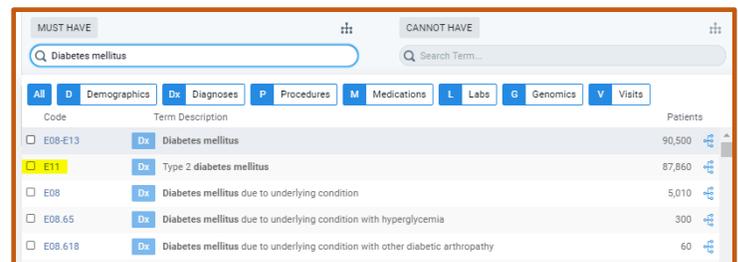# EXAMPLE DIABETES STUDY IN TRINETX

DEFINED COHORT

Stony Brook patients age 50 or older with a history of Type 2 Diabetes and who have been admitted to the hospital for cellulitis in the years 2016-2019

BUILD THE QUERY

Try following along with these steps in TNX to become familiar with building a query. Please also refer to the Tip Sheet "Building Queries".

1. **Set the Network:** Choose Stony Brook University

2. **Set the Age/Sex:** Enter 50 years and older, any sex

3. **Add relevant Terms to the query using the Must Have search field:**
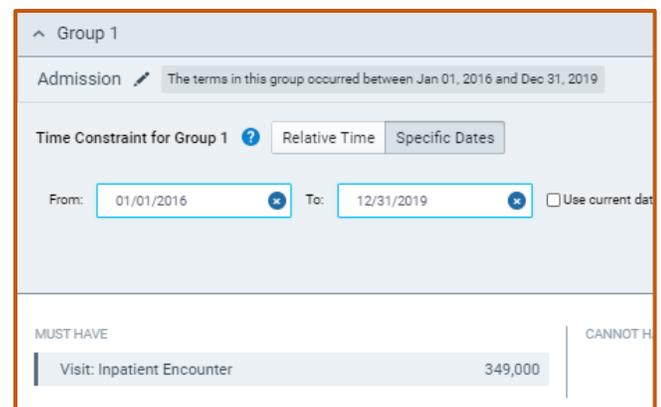

   - Type 2 diabetes mellitus (E11)

   - Cellulitis and acute lymphangitis (L03)

   - Visit: Inpatient Encounter

4. **Create constraints for time**

   Create a New Group (Group 1) and add Terms for Inpatient. Then click to add a Time Constraint and enter specific dates –

   1/1/2016 - 12/31/2019

5. **Connect the diagnosis of cellulitis with the hospital admission**

Relate the cellulitis diagnosis to the hospital admission.

Click on Related Group in Group 1. In this new box, add that term for cellulitis. Now you see we have 1A and 1B boxes in Group 1.

Set the Relationship between the cellulitis and the admission, so that any instance of 1B occurred within 3 days before and up to 1 week before any instance of 1A.

By creating this relationship, we attempt to exclude patients who had an admission to the hospital for another reason other than cellulitis.

6. **Demonstrate a history of Diabetes Type 2**

First, you will need to search terms and re-select and re-add the term for "Cellulitis and acute lymphangitis" to the query AGAIN, as this time, we want to show that the patients who were diagnosed with cellulitis had a history of diabetes.

Create another Group (Group 2), add the term for "Cellulitis and acute lymphangitis", and make the same Time Constraint for this group for 1/1/2016 - 12/31/2019.

Relate the diabetes 2 diagnosis to cellulitis by clicking on Related Group in Group 2. In this new box, add the term for "Type 2 diabetes mellitus". Now you see we have 2A and 2B boxes in Group 2.

Set the Relationship between the "Cellulitis and acute lymphangitis" and the "Type 2 diabetes mellitus", so that any instance of 2B occurred no later than 1 day before any instance of 2A.

By creating this relationship, we ensure that patients already had a diagnosis of Type 2 diabetes prior to any occurence of cellultis in their record.

7. Last step! Click Count Patients!