Legacy PtPing Data Discussion

11/12/21

Trevor Sands

Core Topics

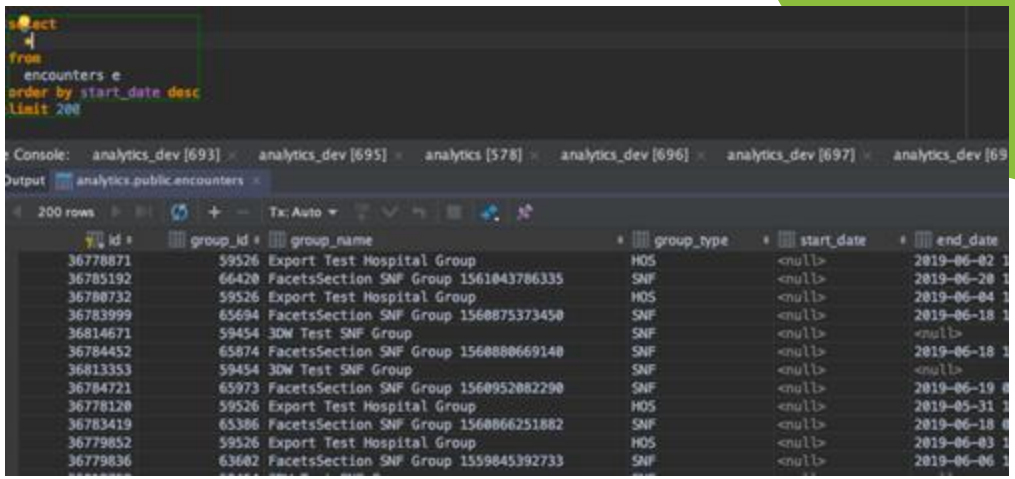
- **Info Tables**
  - groups, encounters, encounter_events, pings
- **Relationship Tables**
  - Encounter_attributed_groups, patient_groups, group_encounter_view, user_groups, entity_preferred_facilities
- **Encounter Chain Tables**
  - hos_inpatient_to_hos_inpatient_transitions
- **Spotlights Tables**
  - reporting_tables
  - Periscope_tables
- **Route Audit Report Table**
  - Analytics has D2P data analytics_dev does not
- **General Notes**
  - Be Deliberate About Your Data Pull
    - Data Quality is NOT perfect (Pick & Document Defensible Position)
    - Networks are Complex - know your audience
  - Plagiarize!
    - Leverage Git and existing dashboards when you can
  - Unsung Heroes (Data Analytics)

Info Tables

Summary: Tables with relevant info about particular backend data fields. For example we have tables with key info on encounters, patients and groups

Popular Info Tables:

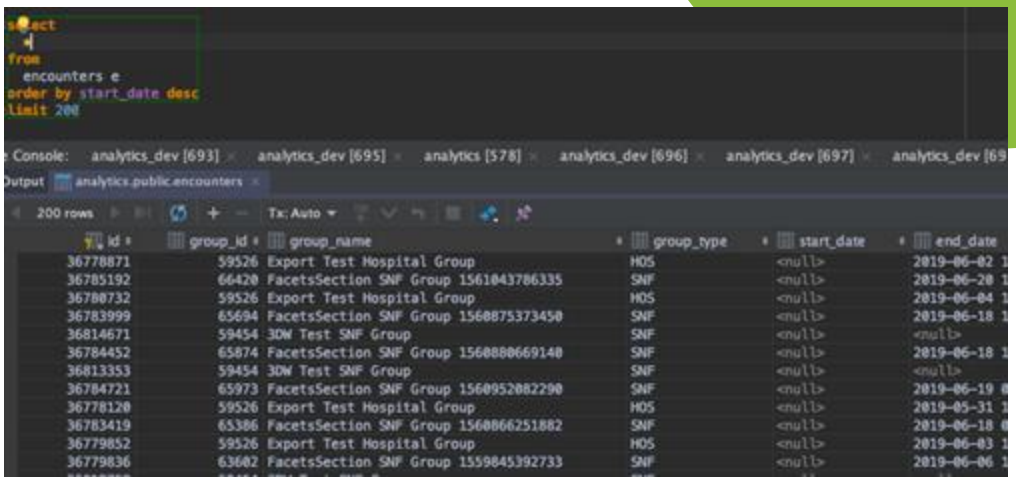
- Encounters
- Groups
- Encounter_events
- Patients
- Users



Bamboo Health

Encounters Table

- **Encounters = Aggregation of Care Event(s) within a Single Patient Visit**
  - Admit → Transfer → Discharge (ADTs)
- **Encounters Only Have**
  - A SINGLE group_id
  - A SINGLE pmpi
- **Links**
  - Confluence Link
  - GitHub Link: encounters.sql



Bamboo Health

Groups Table

Summary: The Source of truth for who is on the PatientPing Network. All Roster Submitters , Admitting Facilities

- **Key Fields**
  - Customer info (group_name, group_type, organization_name)
  - Geographic data (state, city, zip)
  - Product Status (recieves_pings, spotlights_enabled)
- **Includes all Group Types - Roster Submitters, Smart Rosters & Care Facilities**
  - Static Roster Submitters (ENTITY, MAPO) (ACO, Payer, PO)
  - Smart Roster (HL7_BASED_PROGRAM) (Bundles)
  - Admitting Facilities (ADMITTING_FACILITY), (SNF, HOS, HHA)
- **Don't just include everybody**
  - authorized = 1
  - data_excluded_from_aggregation = 0
  - Lookout for test groups (ex: id=17125)
- **Flat Hierarchy**
  - Programs & Practices are Children of an OWNING_ORG (parent_group_name)
- **Links**
  - Confluence Link
  - GitHub Link

Relationship Tables

Summary: Tables used to map/determine network relationships and overlaps. Use these tables to bridge Info Tables. Relationship Tables often only contain unique identifies to facilitate joins between

- How many groups does a user have access to?
  - User_groups
- How many patients are attributed to ACO-1234
  - patient_groups
- How Many Encounters Have Patients attributed to ACO-1235 Have There Been?
  - Encounter_attributed_groups
- How many pings did ACO-12345 receive from groups outside of CT?
  - Pings
- Who is ACO-1236's Preferred SNFs?
  - entity_preferred_facilities

Pings

- **The Key/Basis/Foundation of the Legacy PatientPing Business!**
  - Core Unit of Value Underlying Legacy PatientPing's Value
- **Pings Key Data Fields Elements**
  - PMPI
  - Sender_group_id
  - Receiver_group_id
  - Encounter_id
  - Event_id
- **Questions**
  - What receiver group_types exist on the Pings table, which do not? (Hint: Focus on Roster Submitters)
  - What type of group can be a ping sender_group_id?

Encounter Attributed Groups

Summary: Identify what groups were tracking a patient at the time of the encounter.

- Key Fields
  - encounter_id
  - Encounter_group_id (group where care visit occurred)
  - Attributed_group_id (group tracking pt at time of visit)
- Useful to think about Pings table
  - Encounter_group_id → sender_group_id
  - Attributed_group_id → receiver_group_id
- Practice Question:
  - How many hospital visits did patients attributed to Reliant Medical Group (ID: 24002) have in the past 12 months
- Links
  - GitHub Link

Patient_groups

Summary: Identifies what groups patients are attributed to over time. Is Active field used to quickly ID patients actively being tracked by groups (group_id)

- **Key Data Fields**
  - Pmpi
  - group_id
  - Is_active
  - Start_date (Date patient was added to roster)
  - end_date (Date patient was removed from roster)
- **Links**
  - Confluence Link
  - GitHub Link
- **Questions**
  - How many unique Patients are being actively tracked on our network?
  - How many unique patients are tracked by ping receiving SNFs on our network?

Encounter Chain Tables

Summary: For some of the most reviewed or requested encounter sequences tables with proven SQL logic exist.

- Use tables to populate reporting tables for Spotlights
- Examples
  - Hos_inpatient_to_hos_inpatient_transitions.sql
  - Hospital_to_pac_transitions.sql
  - Snf_missed_care_opps.sql

Spotlights Tables

- Reporting Tables
  - Data for all customers – not just Spotlights customers
  - 2 years of data
  - No Patient Demographic Info
  - Example: reporting_multi_visit_patient.sql

- Periscope Tables
  - Data only for Spotlights Customers
  - 6 Months of Data
  - Includes Patient Demographic info
  - References reporting tables
  - Example: periscope_hs_multi_visit_patient.sql

Useful Links

- Ranking Data Table Importance
- Group Encounter View
- GitHub Link to Public Tables
- RS Table Logic Confluence Documentation
- Helpscout: Export Glossary of Terms

Practice Q - Northwestern Use Case

Summary: Northwestern Hospitals are interested in using PatientPing to track the volume of Northwestern Hospital Encounters that Involved FQHC Patients

- How many encounters took place at Northwestern Hospitals in the Past Year
  - Northwestern ID: 2272
  - Tables: encounters,groups
  - Tableau: Aggregate Text Value
- How many encounters at Northwestern Hospitals in the past year involved patients attributed to particular FQHCs
  - FQHC ids: 101723, 41723
  - Tables: encounters, encounter_attributed_groups, groups
  - Tableau: Aggregate Text Value
- Which FQHC had a larger volume of patient encounters attributed to them
  - Tables: encounters, encounter_attributed_groups, groups
  - Tableau: Bar Chart/Histogram
- Display Patient Name and DOB so Northwestern Users can find Patients in their EMR
  - Tables: patient_demographics
  - Keys: pd.patient_id
  - Tables w/ similar Logic (Plagiarism is Encouraged) - test
    - Spotlight Customer Facing Periscope Tables (ex)

Test Q's

- How many patients are actively attributed to Programs from more than one Owning Organization
  - Relevancy: Spotlights Only Includes Data for Patients attributed to a Program
- Who are PatientPing's top 10 Customers?
  - Depends on the Definition Try to Determine the Following
    - Largest Active Roster
    - Most Pings Generated
    - Most Pings Received in Past 12 Months
    - Most Pings Per Patient
- Which table(s) limit the Health System Readmission Rate Spotlight Report to 30 Day Readmissions
  - Provide Github Link(s):