PROJECT DEVELOPMENT PHASE
SPRINT DELIVERY -2

Team ID	**PNT2022TMID21554**
Project Name	**Analytics for Hospital's Health-Care Data**

Sprint 1 • Collection of Data • Loading the data • Data Preparation and Visualization	Sprint2 • Exploration of Dataset • Visualization of Dataset
Sprint3 • Dashboard Creation • Prediction of Length of Stay	Sprint4 • Monitoring the Model/System Accuracy • Report Creation

Goal of this project:
The goal is to accurately predict the Length of Stay for each patient on case by case basis so that the Hospitals can use this information for optimal resource allocation and better functioning. The length of stay is divided into 11 different classes ranging from 0-10 days to more than 100 days.

Sprint Delivery 2:

Collection of Data: Hospital
Dataset Link:
https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhrT?usp=sharing

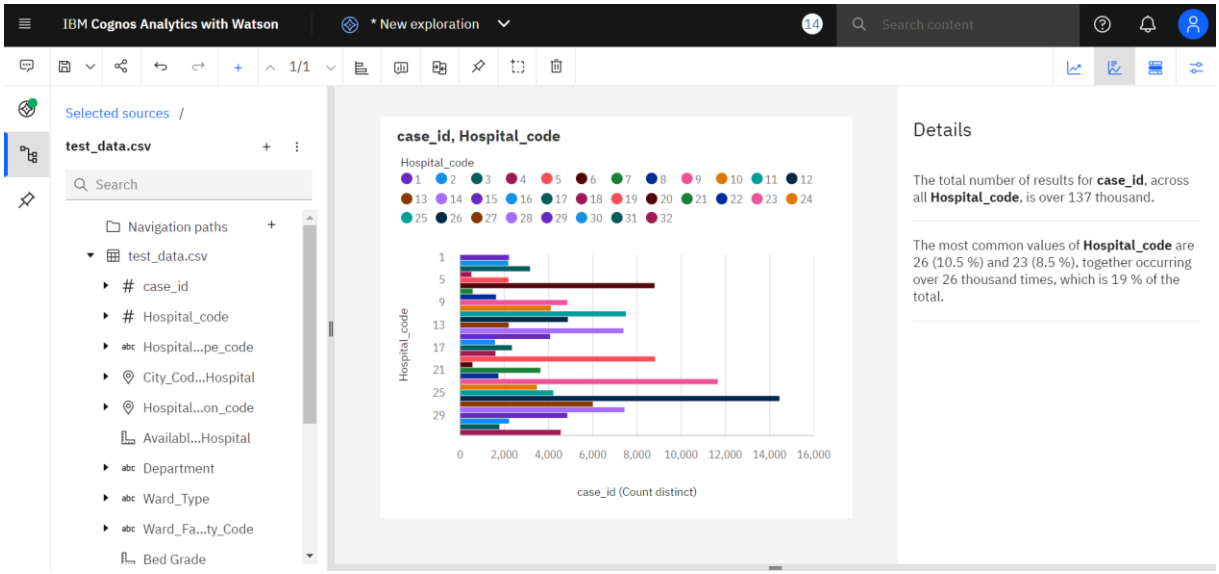
UNDERSTANDING THE DATASET:

This project is based on understanding the Hospital's Health Analytics dataset . The data is spread across 3 data files (csv) and one data dictionary enclosed.
1.Test_data.csv
2.Sample_sub.csv
3.Train_data_dictionary.csv
4.Train_data.csv

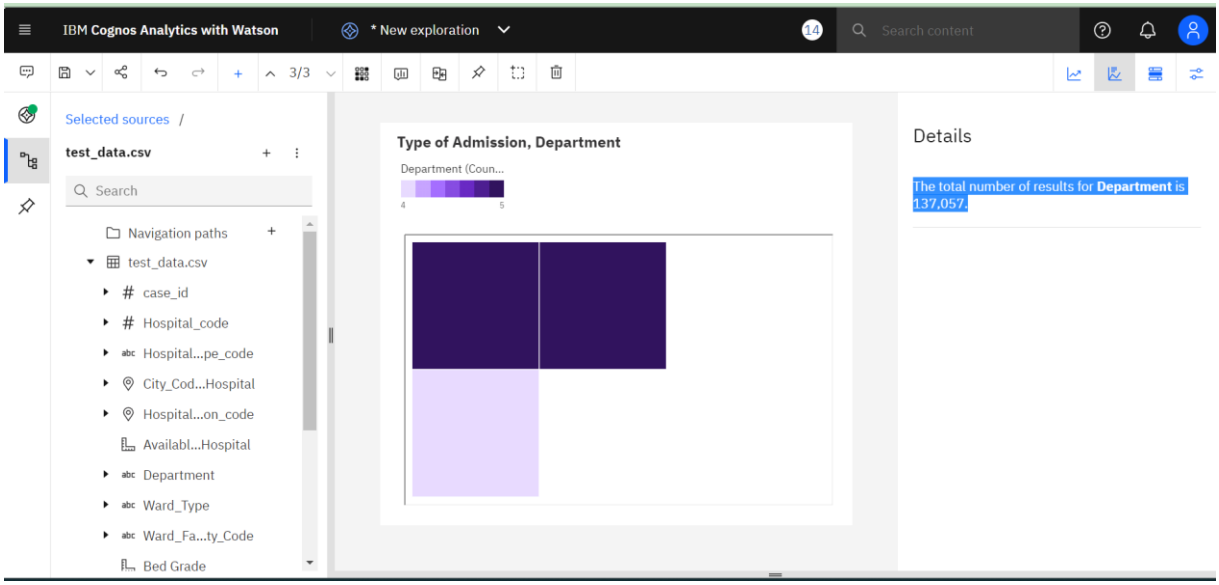
The primary data file we use is test_data.csv consist of 17 Columns with 137057 Rows.

Exploration of the Dataset Using IBM Cognos Analytics :

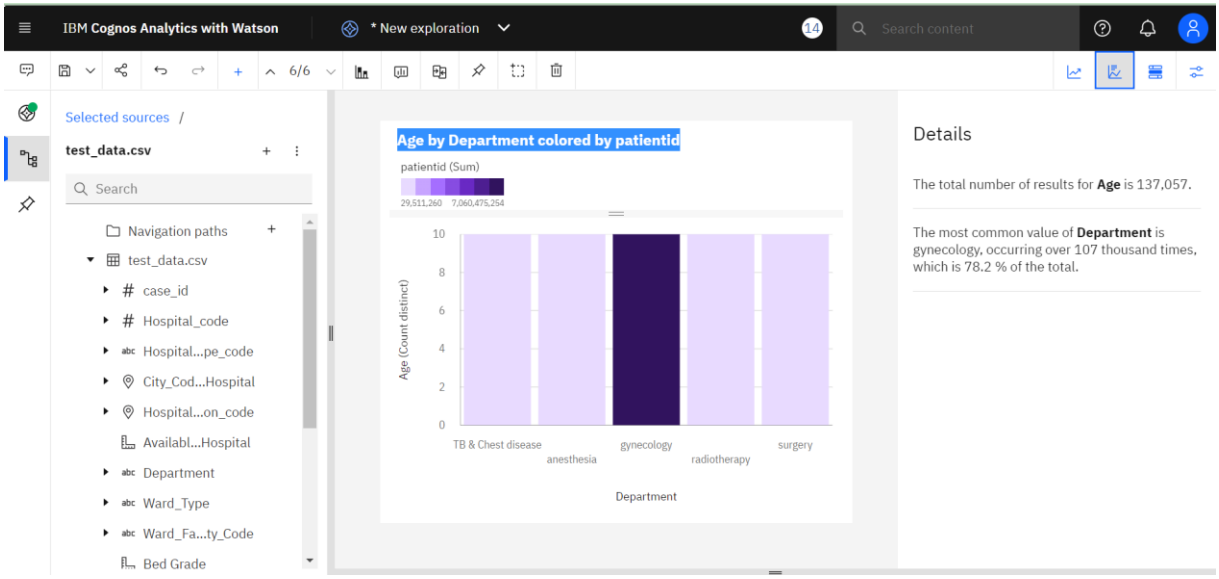
Case ID of each patient with Hospital Code:



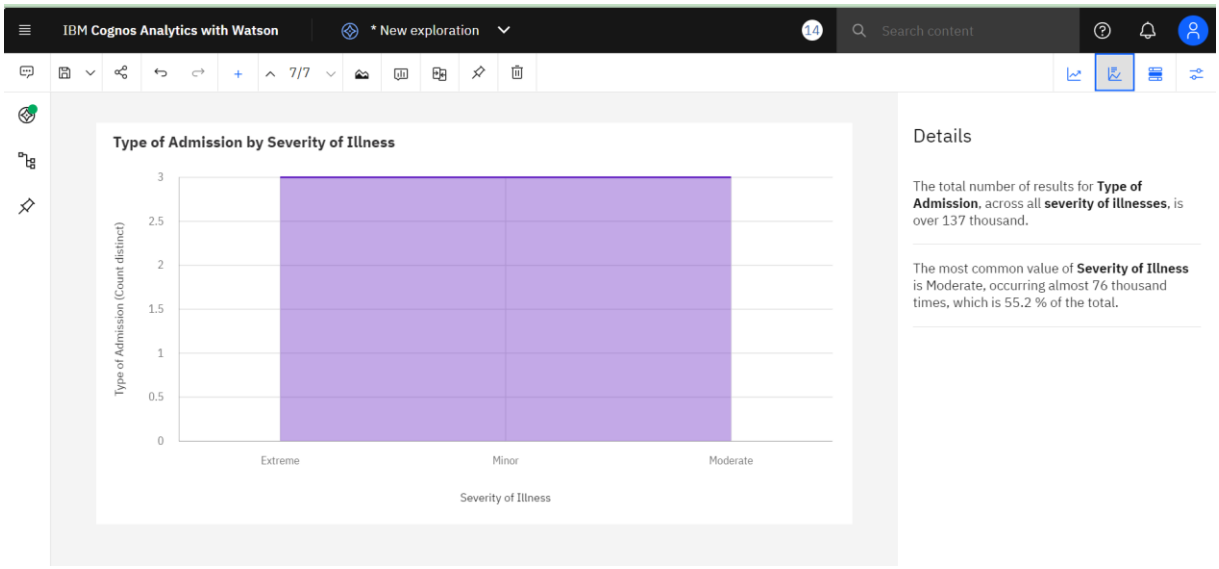
The total number of results for **Department** is 137,057.



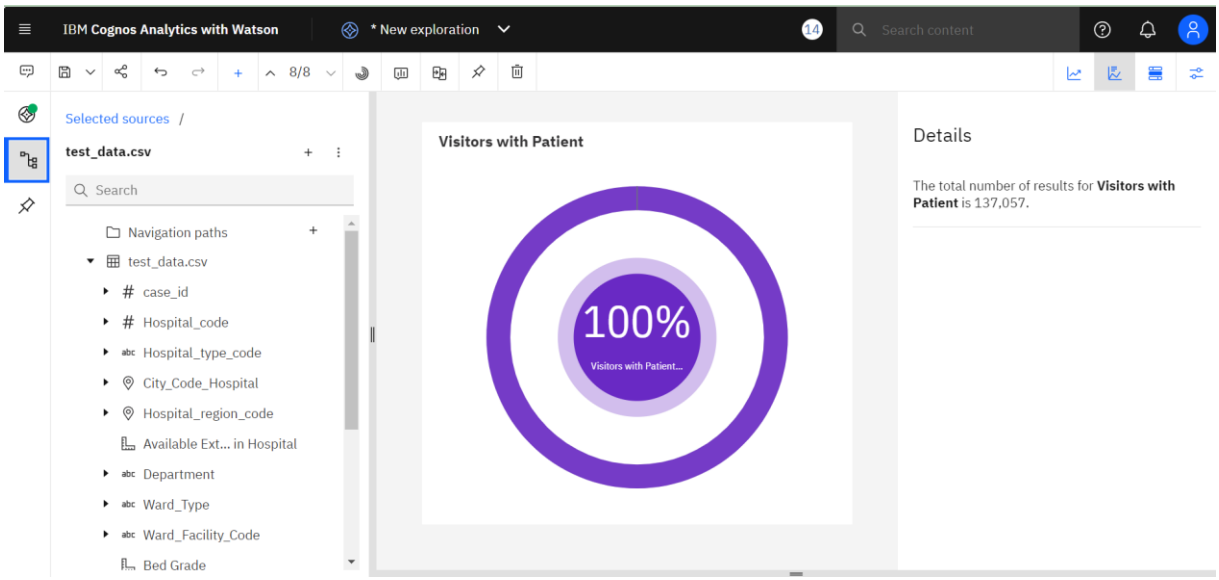
Age by Department colored by patientid



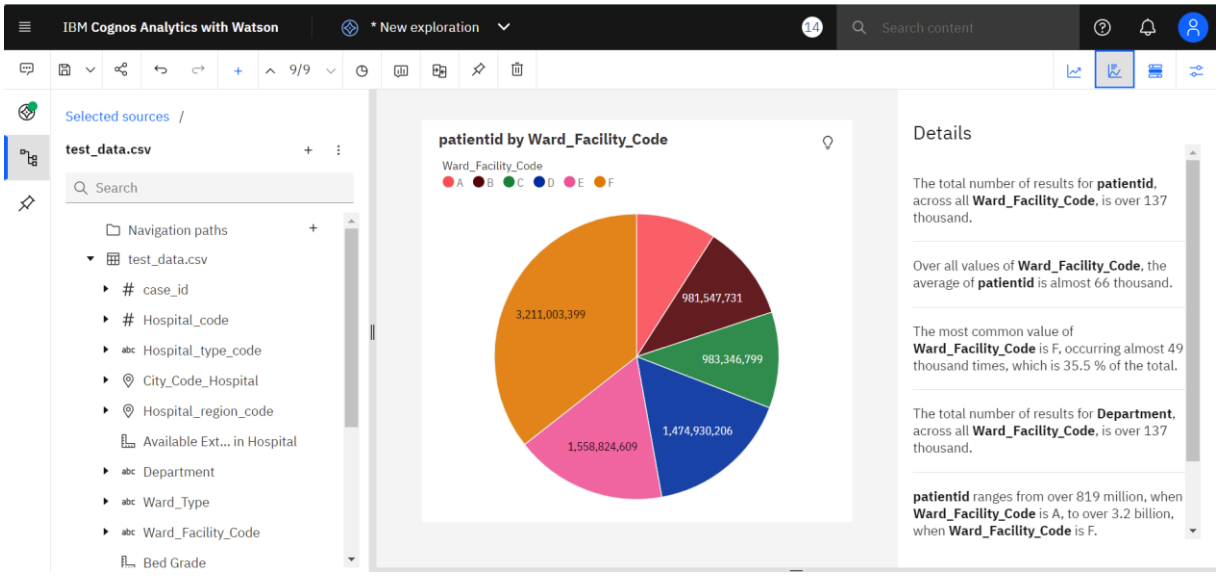
Type of Admission by Severity of Illness



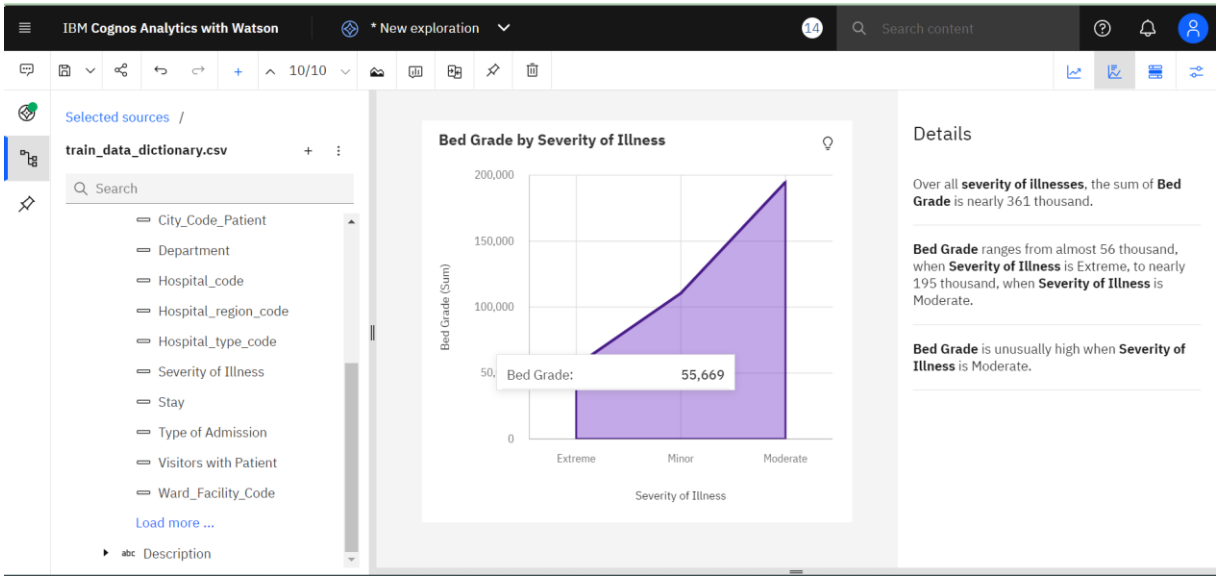
Visitors with Patient:



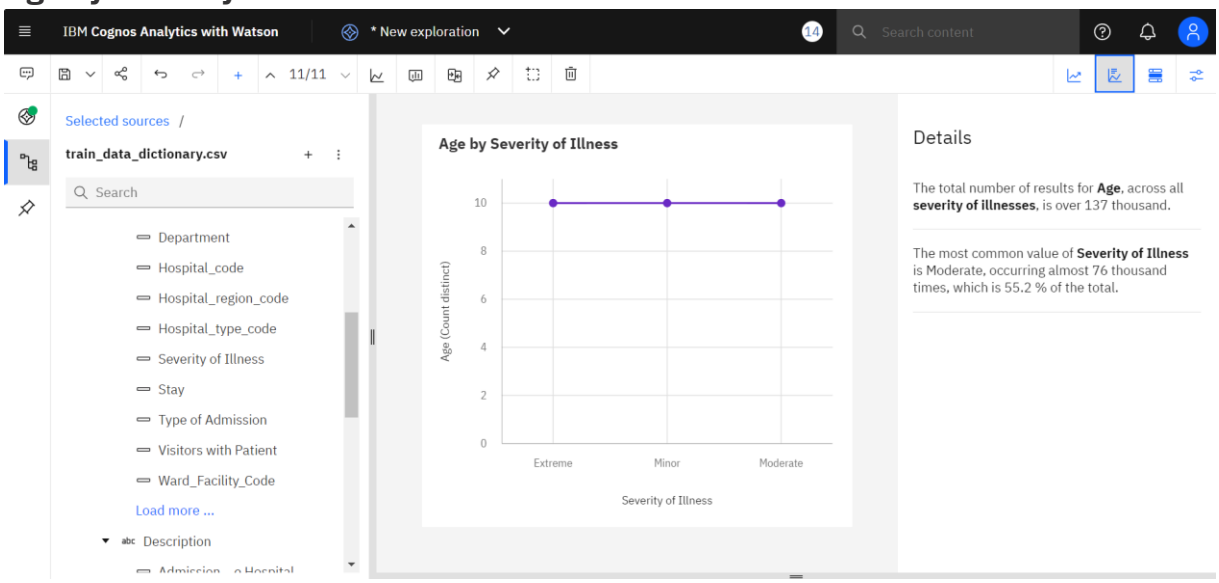
Patientid by Ward_Facility_Code



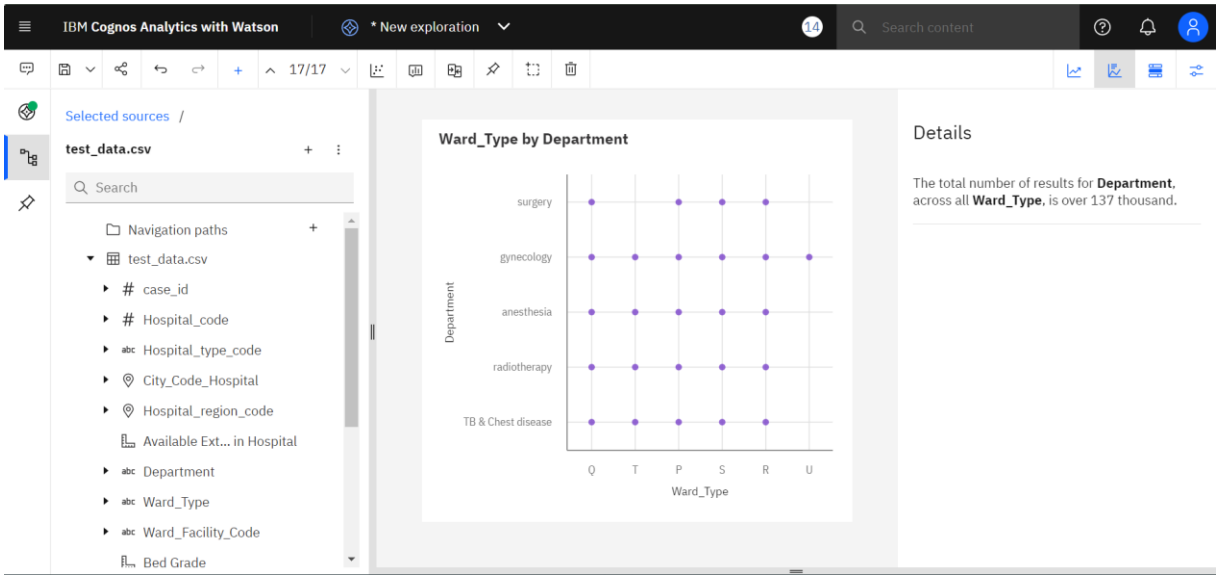
Availability of Beds by Severity of Illness:



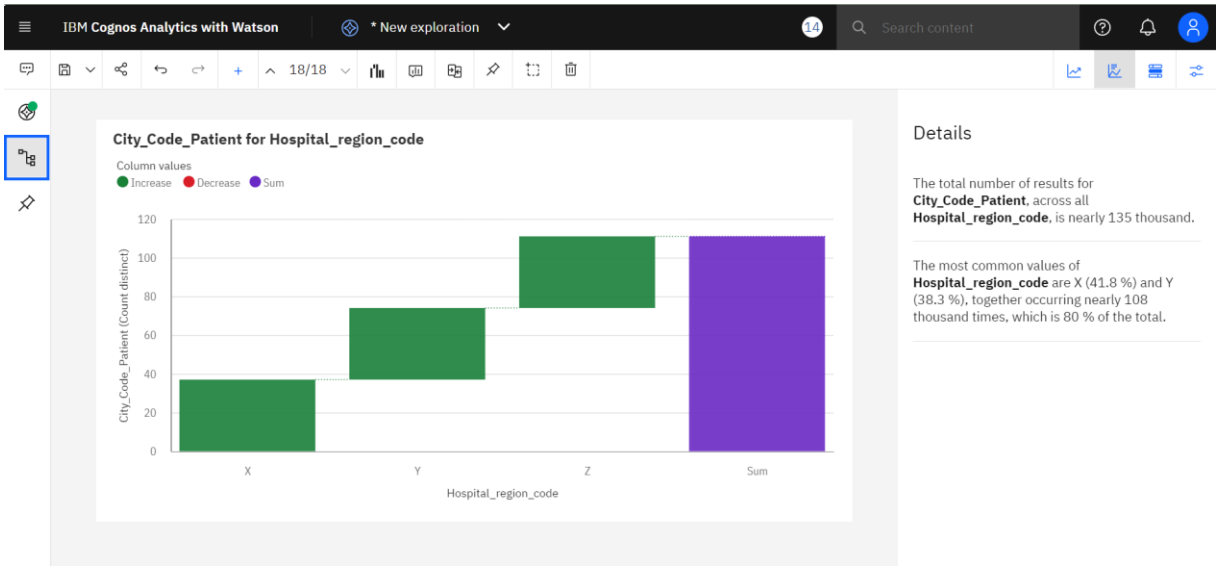
Age by Severity of Illness

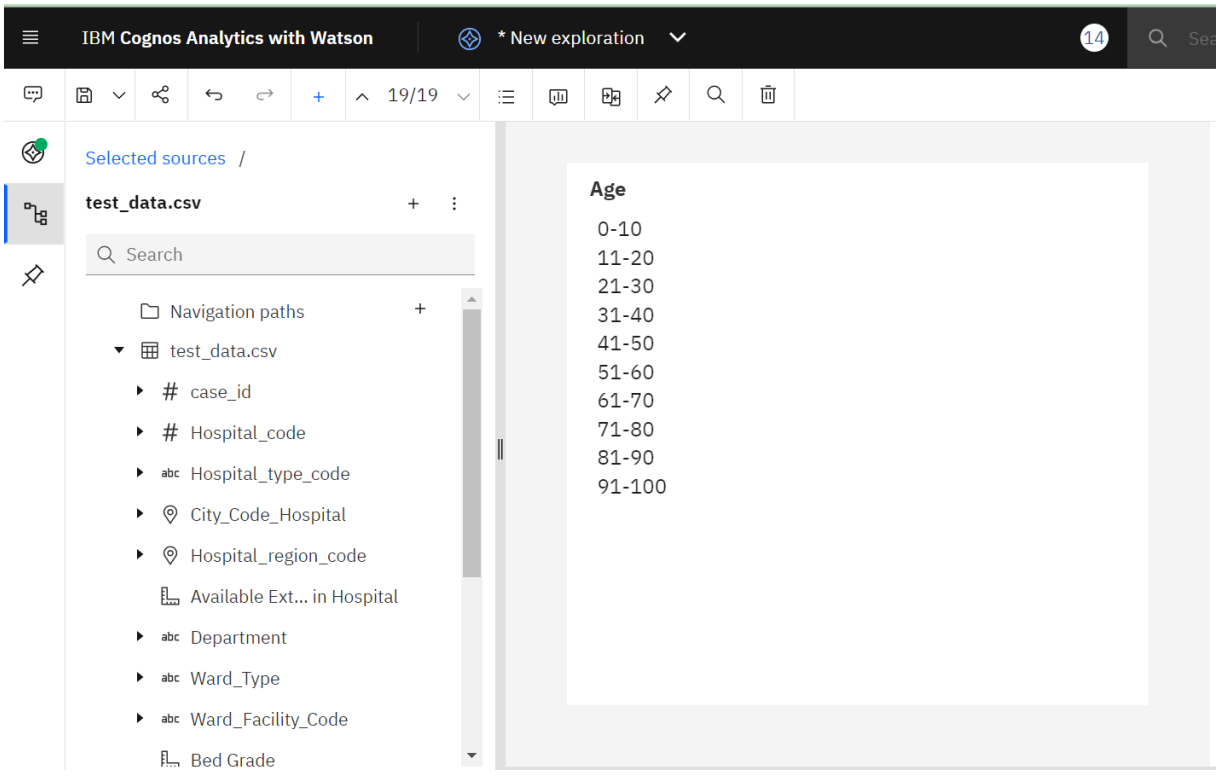


Ward_Type by Department

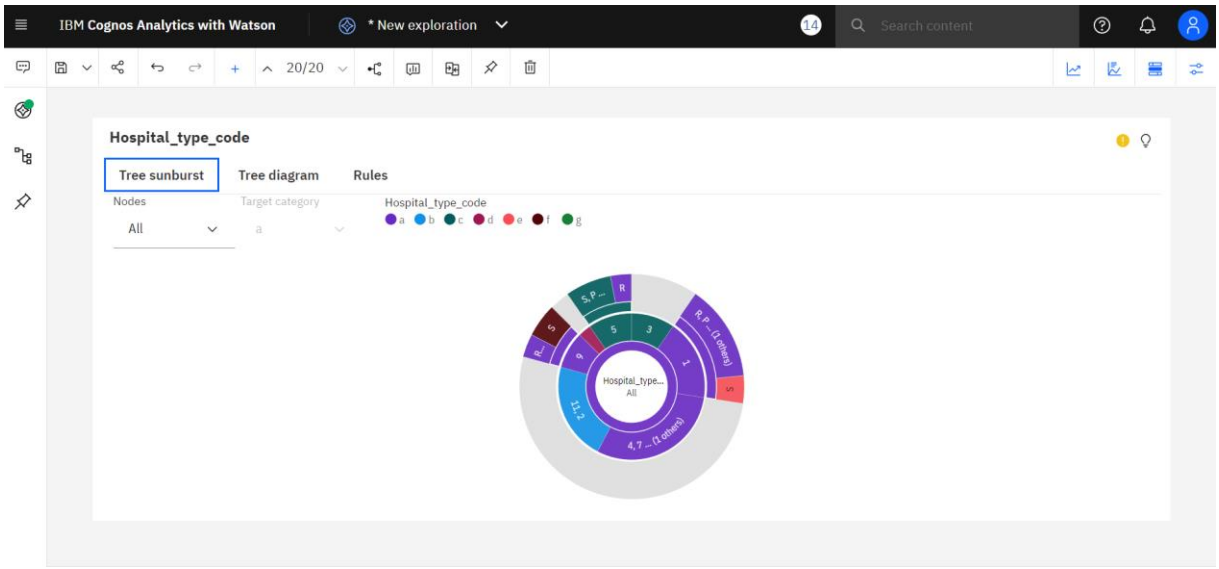


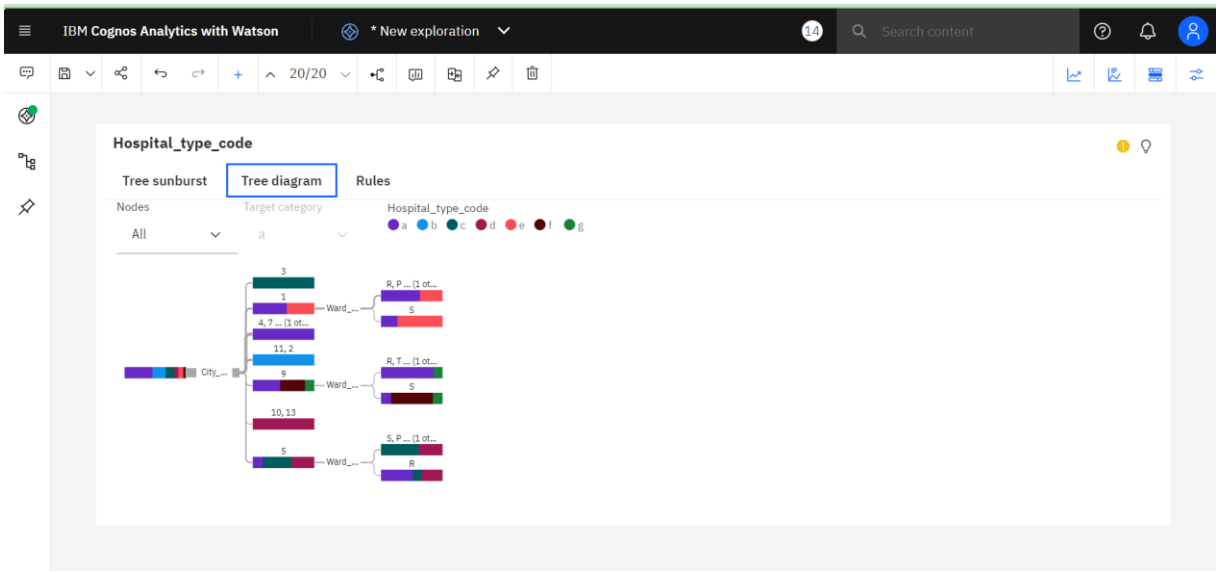
City_Code_Patient for Hospital_region_code





Decision Tree on Hospital type code

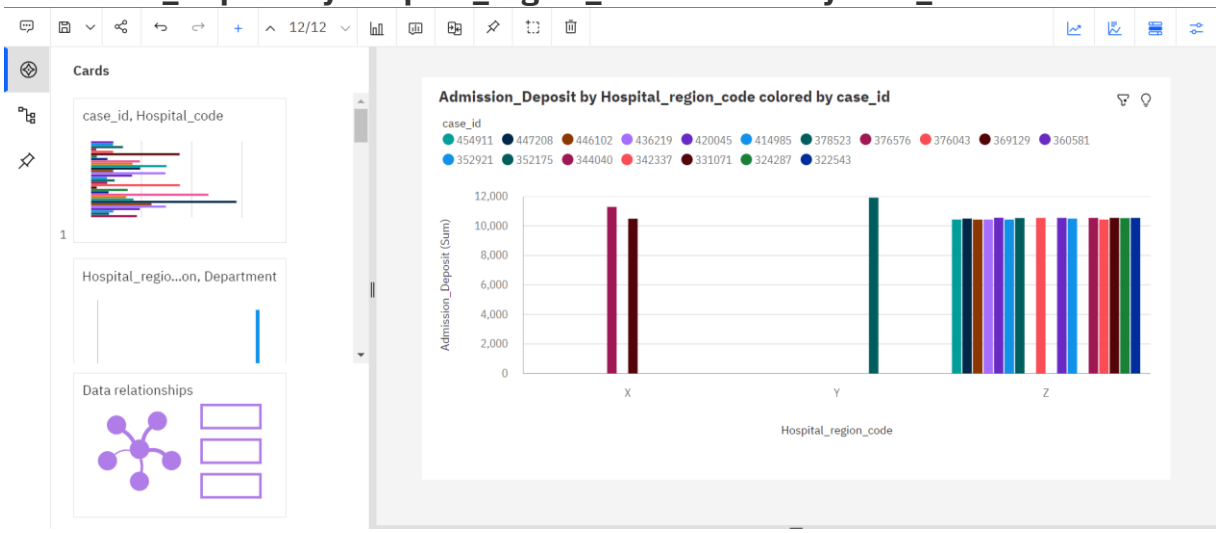




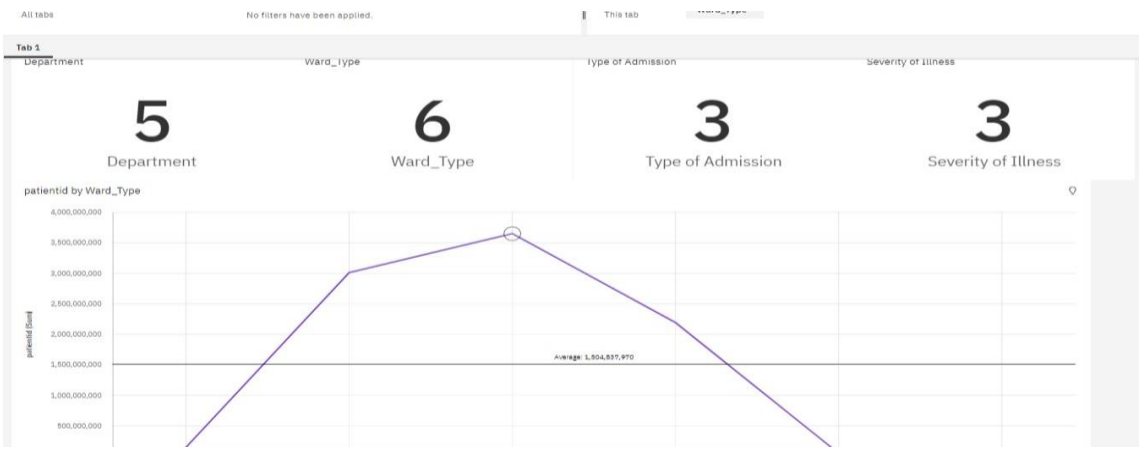
Data Visualizations:

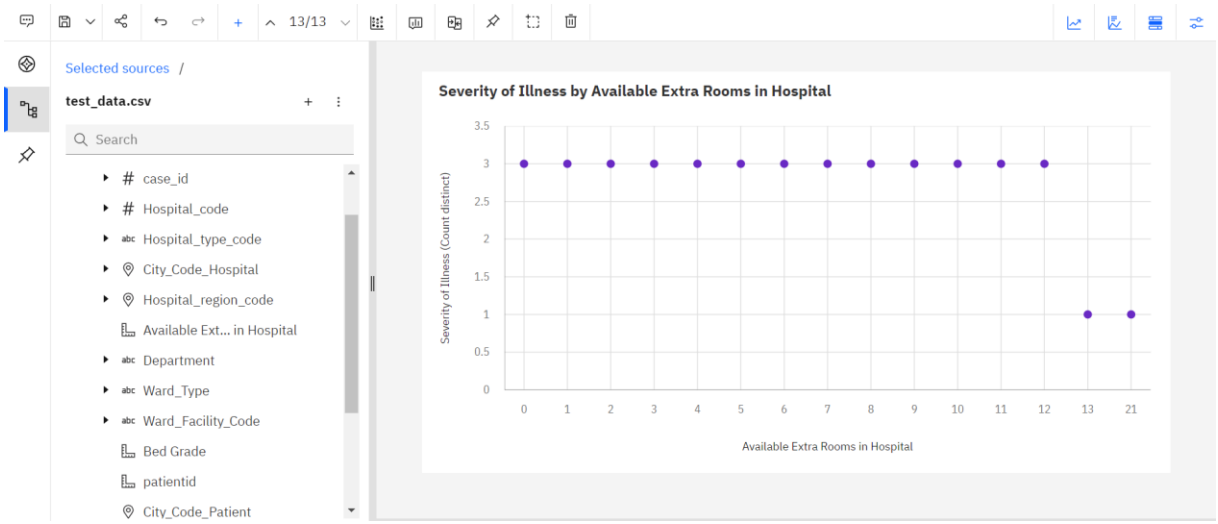
1. NUMBER OF PATIENTS BY WARD TYPE

Admission_Deposit by Hospital_region_code colored by case_id

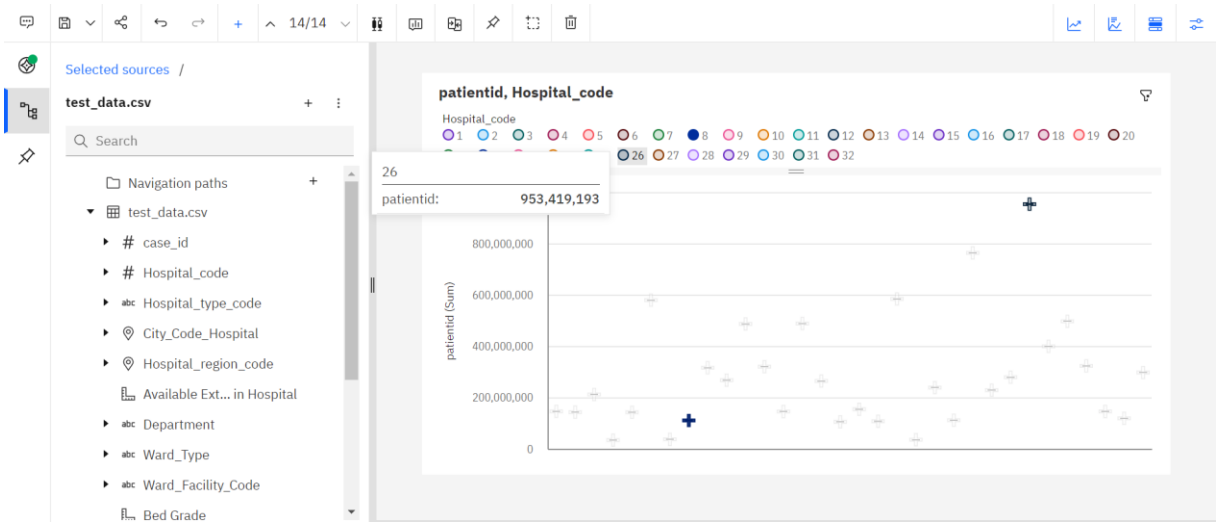


Severity of Illness by Available Extra Rooms in Hospital

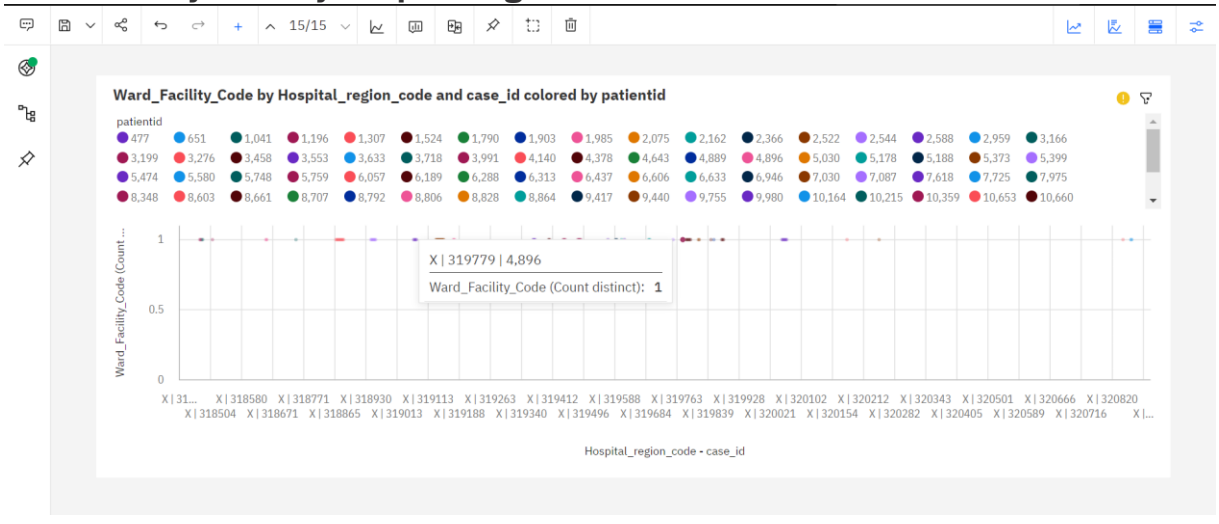




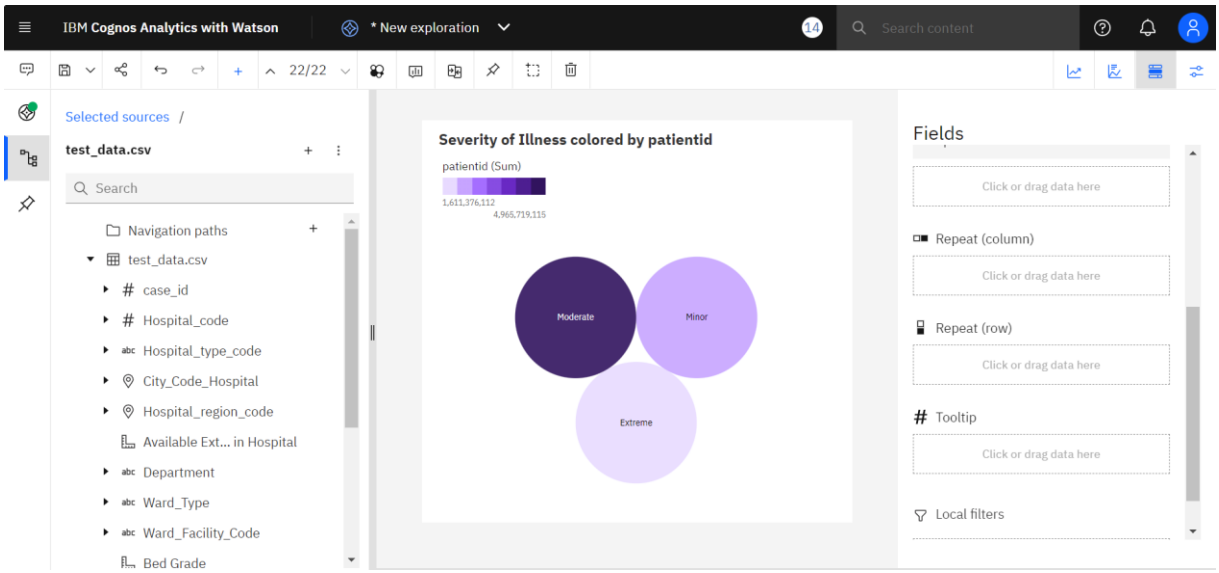
Patient ID with Hospital_Code



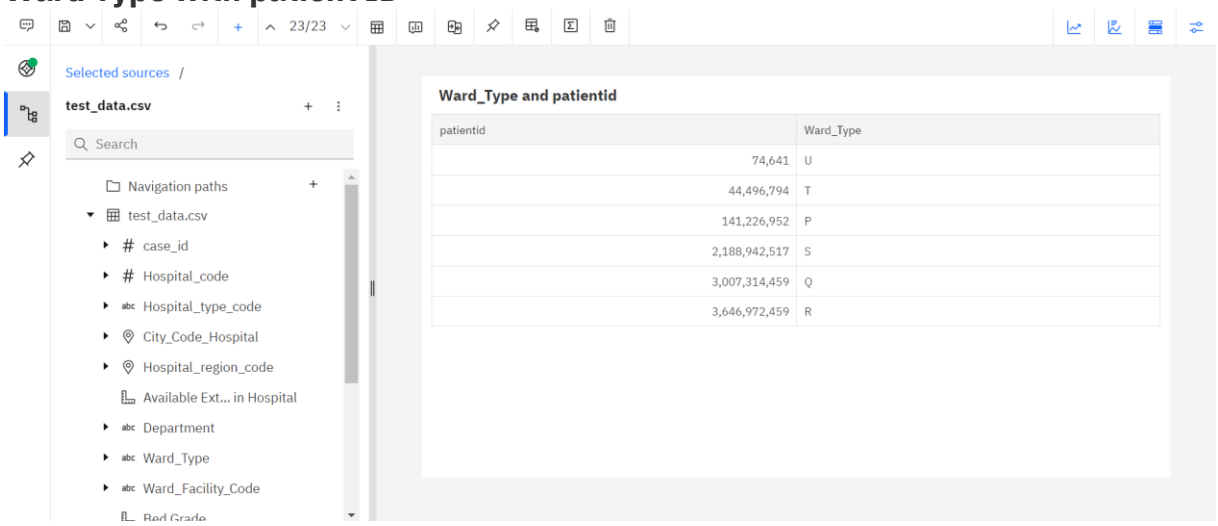
Ward Facility Code by Hospital region code



Severity of illness with patient ID:



Ward Type with patient ID

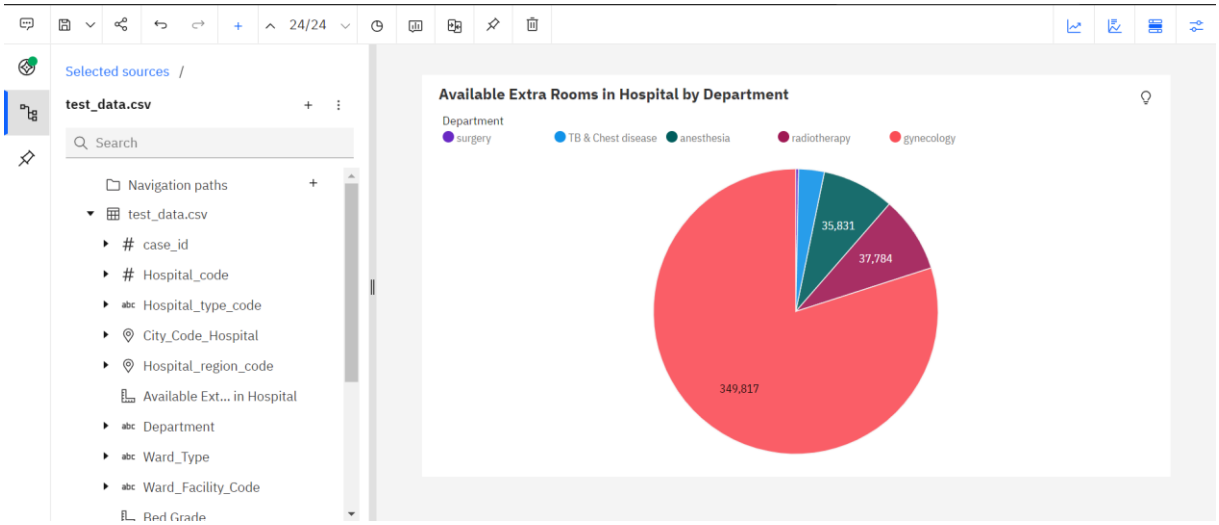


Available Extra Rooms in Hospital by Department

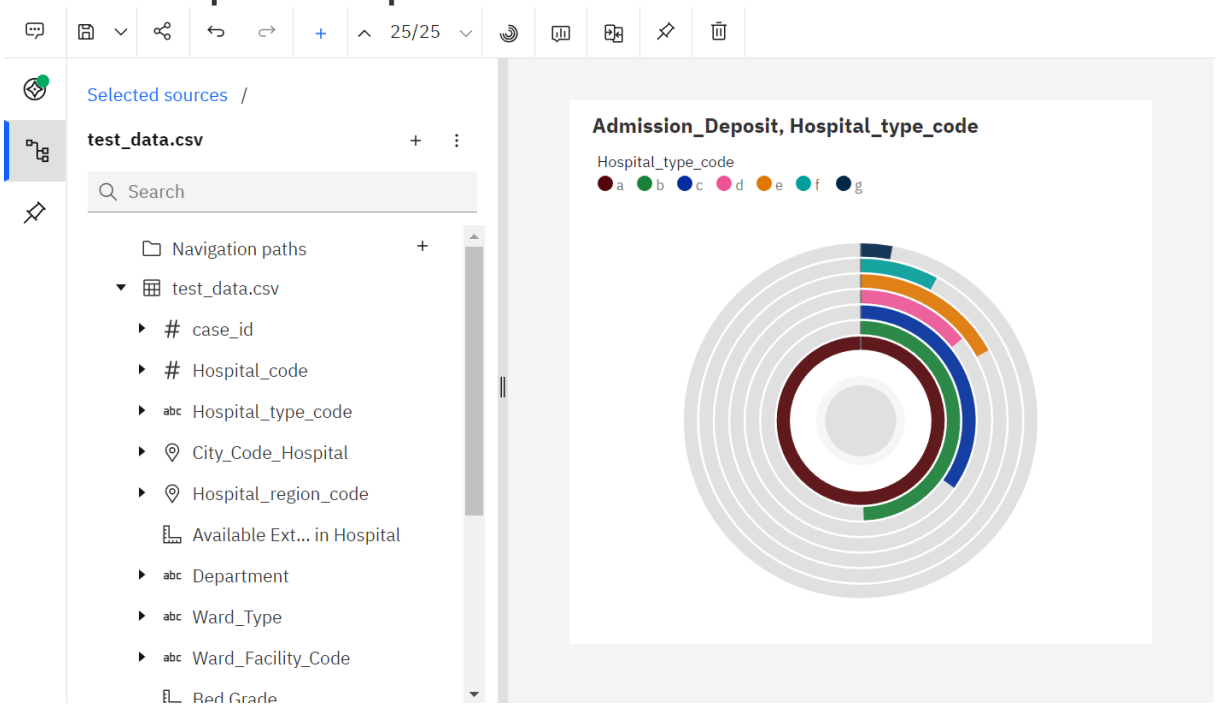
35,83137,784349,817

Department

- surgery
- TB & Chest disease
- anesthesia
- radiotherapy
- gynecology



Admission Deposit to Hospital



Link:

https://eu1.ca.analytics.ibm.com/bi/?perspective=explore&pathRef=.my_folders%2FSprint%2B2&subView=model000001844d35362c_00000004