

PROJECT DEVELOPMENT PHASE

SPRINT III

Date	17/11/2022
Team ID	PNT2022TMID44298
Project Name	Analytics for Hospital's Healthcare Data

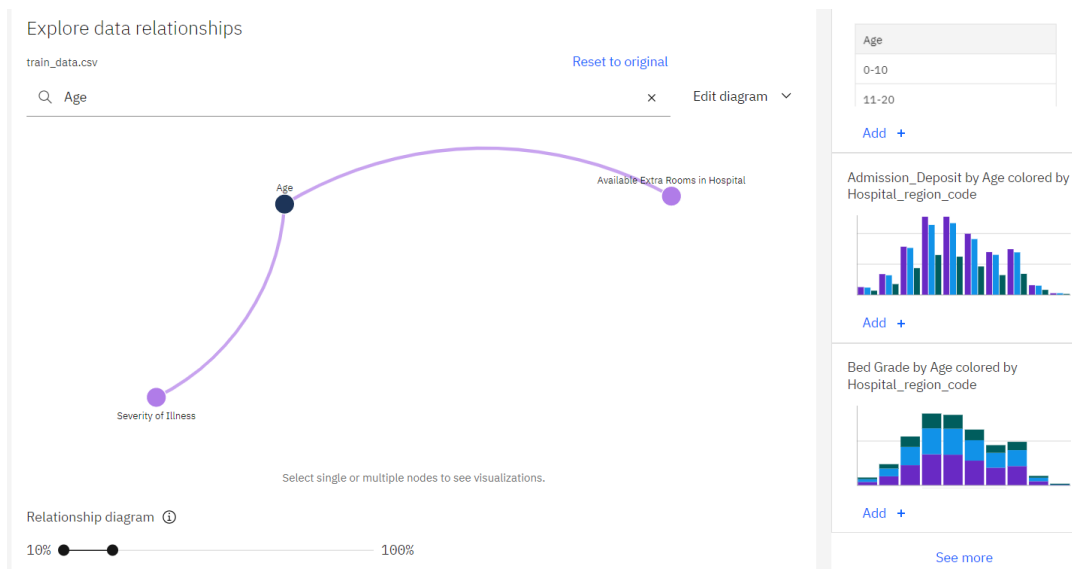
Cleaning, exploring data and creating model of Analytics for Hospital's Healthcare Data using Cognos Analytics

USN-4,5:

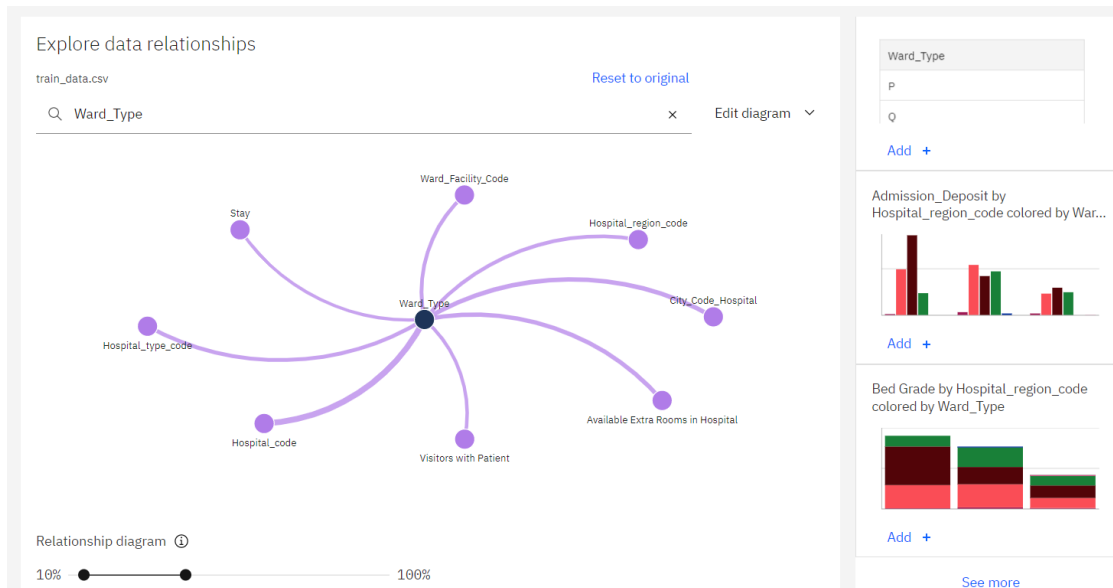
- As an analyst I can create a exploratory data analysis to identify the important factors of a patient's data set.
- As a Data analyst, I create a predicted model by also preparing story card with using explored data.
- Create a Data Exploration of the dataset of test_data.csv and train_data.csv file to IBM Cognos Analytics first.

Creating relationships:

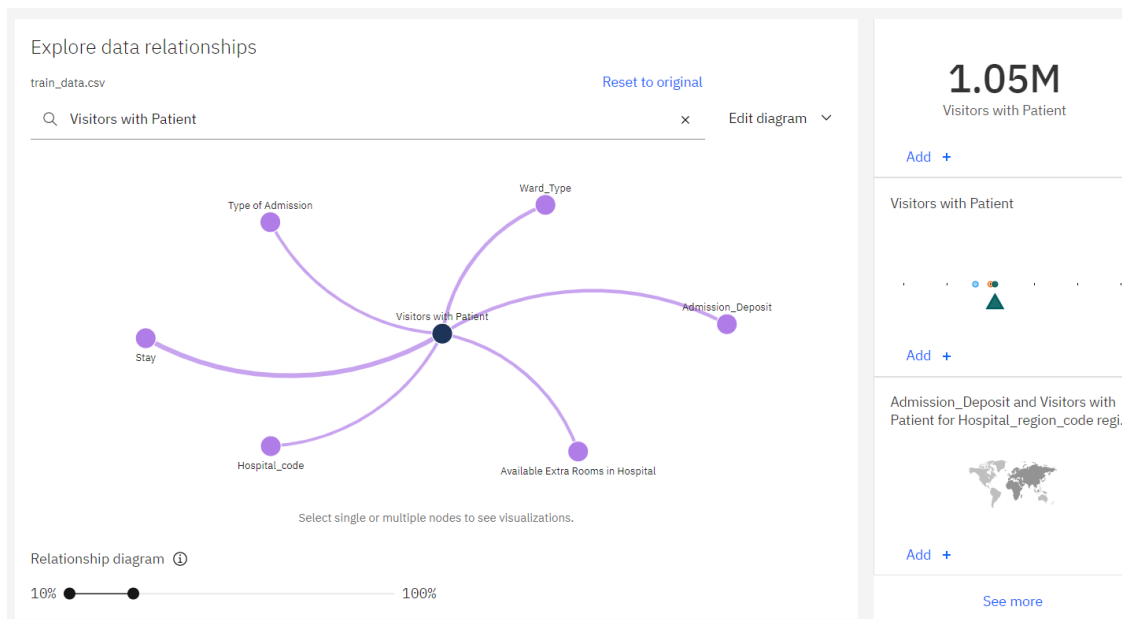
Age:



Ward_Type:

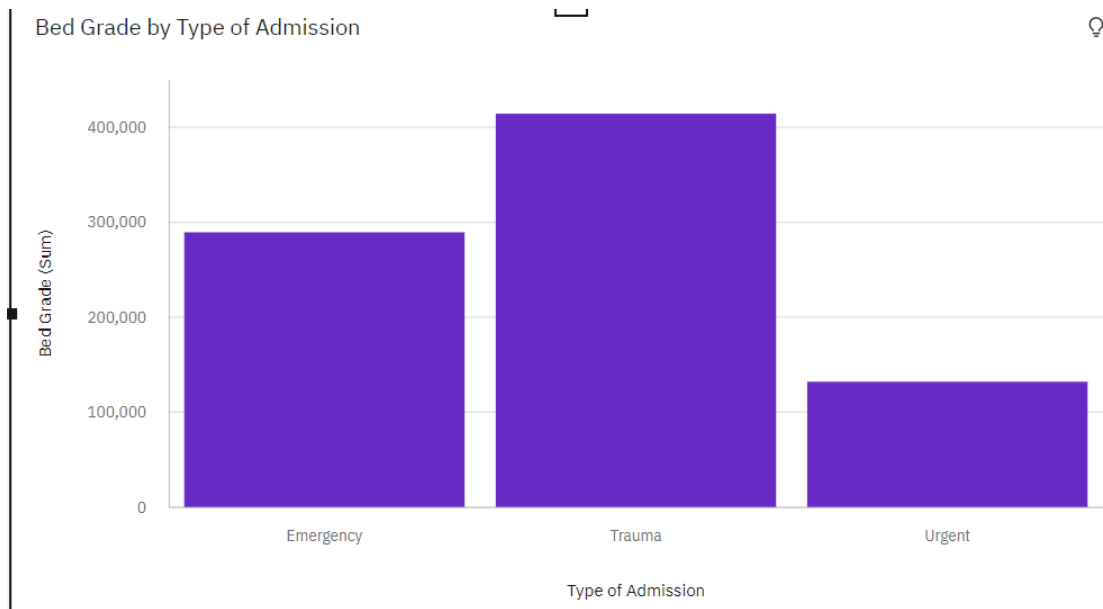


Visitors with patient:

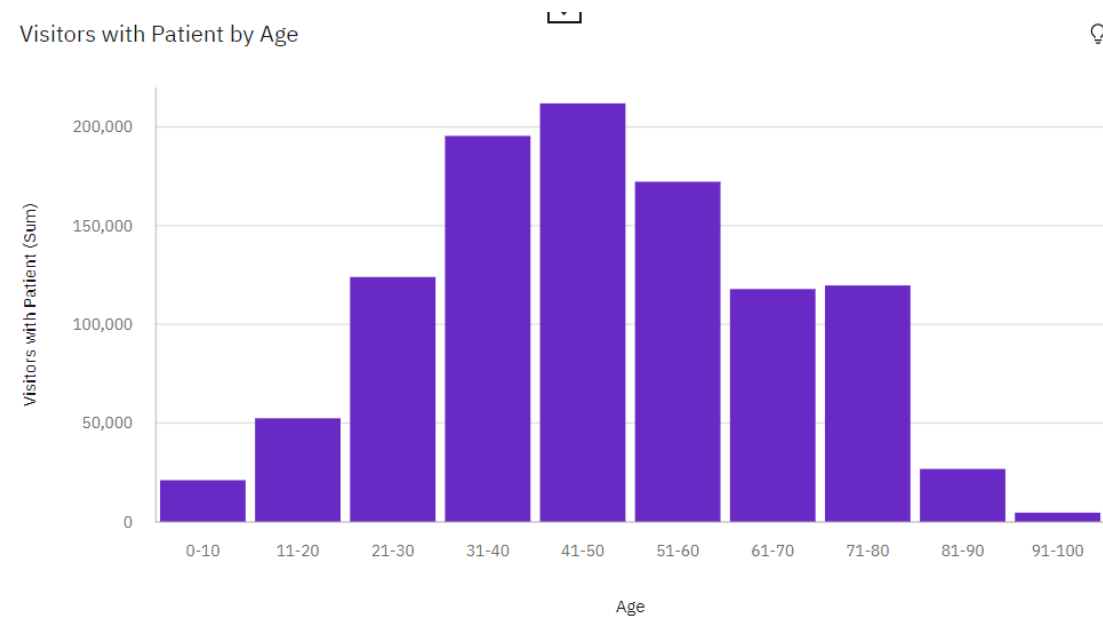


Use of assistant in IBM Cognos:

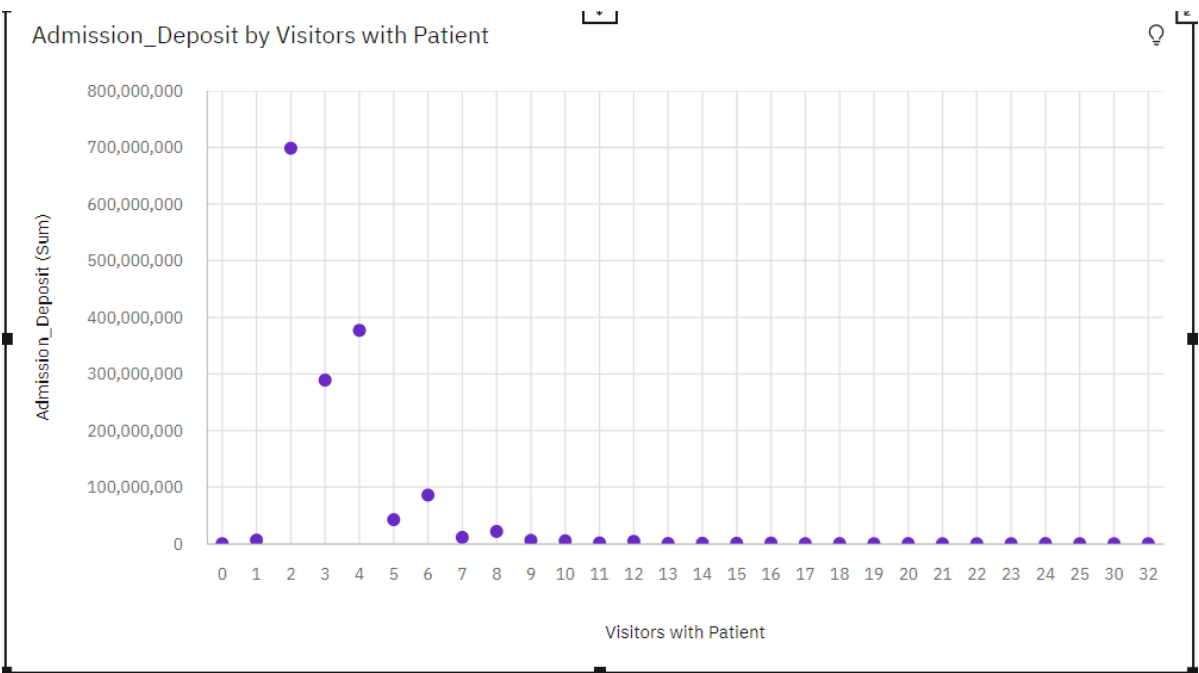
Bed grade by type of admission:



Visitors with Patient by Age:



Admission deposit by visitors with patient:



Maximum of Admission_Deposit:

Admission_Deposit

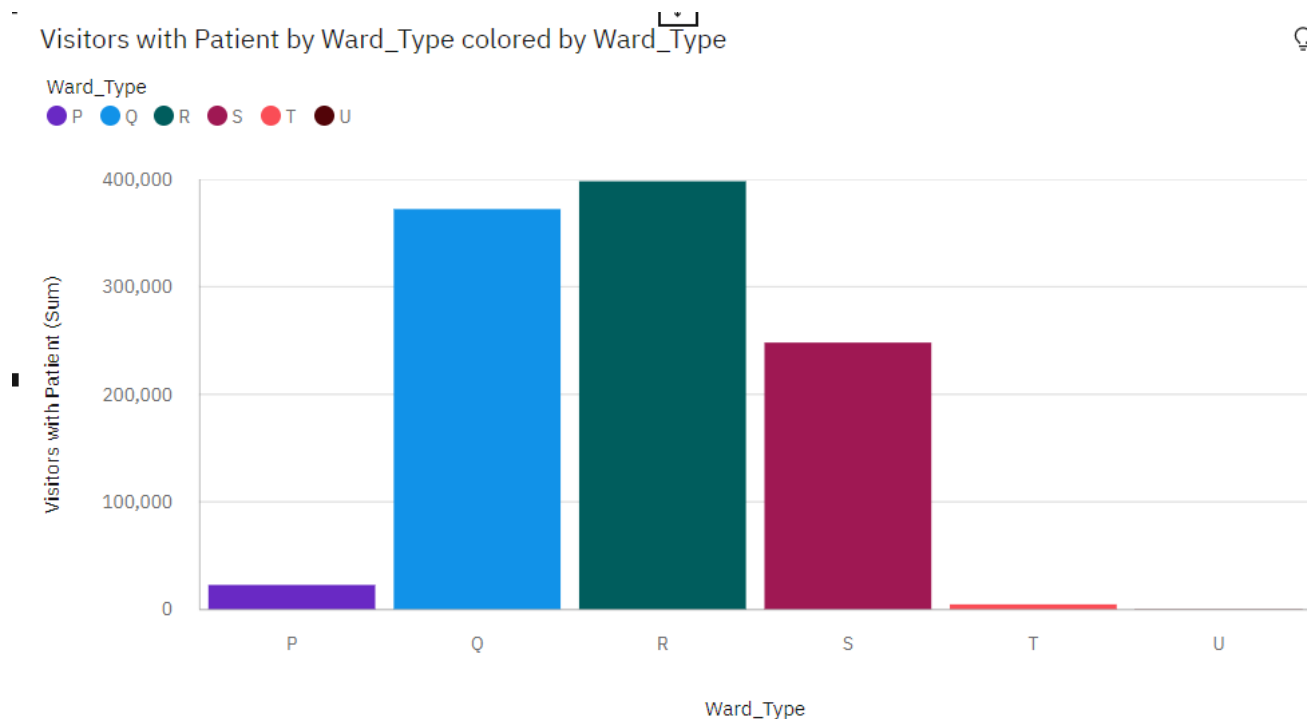
11K

Admission_Deposit

Create a Visualization type using test data.csv IBM Cognos Analytics:

Visitors with Patient by Ward_Type colored by Ward_Type:

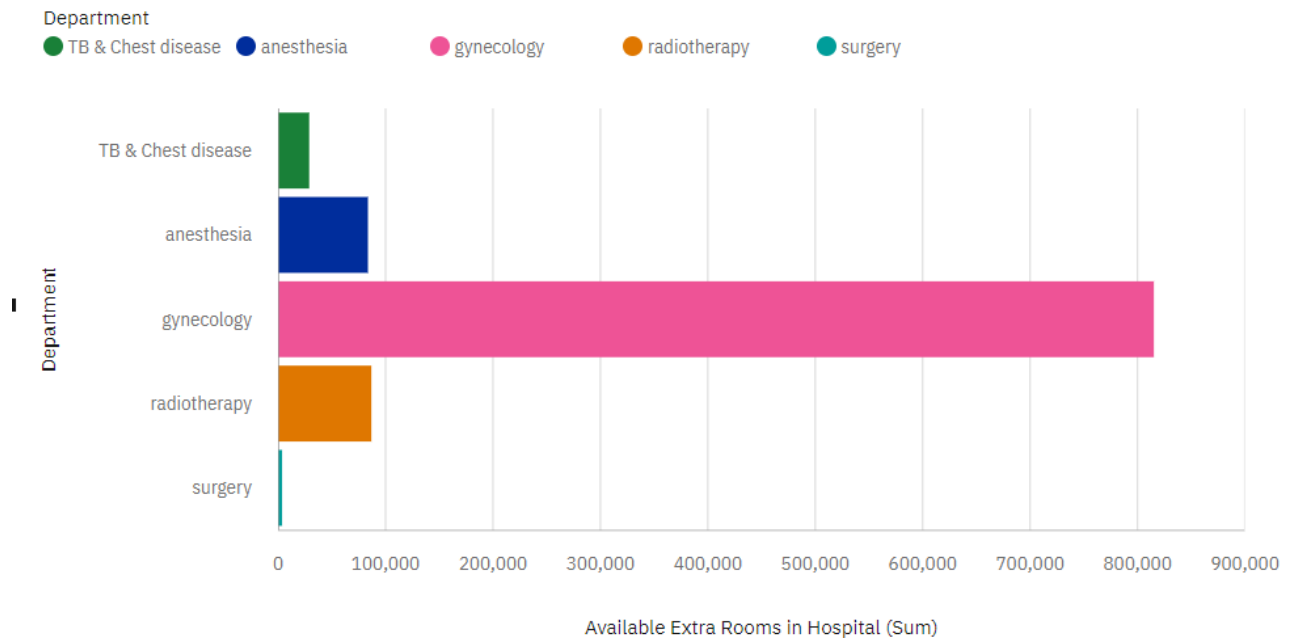
- Across all values of Ward_Type and Ward_Type, the sum of Visitors with Patient is over 450 thousand.
- For Visitors with Patient, the most significant values of Ward_Type are R, Q, and S, whose respective Visitors with Patient values add up to over 438 thousand, or 97.4 % of the total.
- The summed values of Visitors with Patient range from 8 to over 171 thousand.
- Visitors with Patient is unusually high when the combinations of Ward_Type and Ward_Type are R and R and Q and Q.
- Visitors with Patient is unusually high when Ward_Type is R and Q.



Available Extra Rooms in Hospital by Department colored by Department:

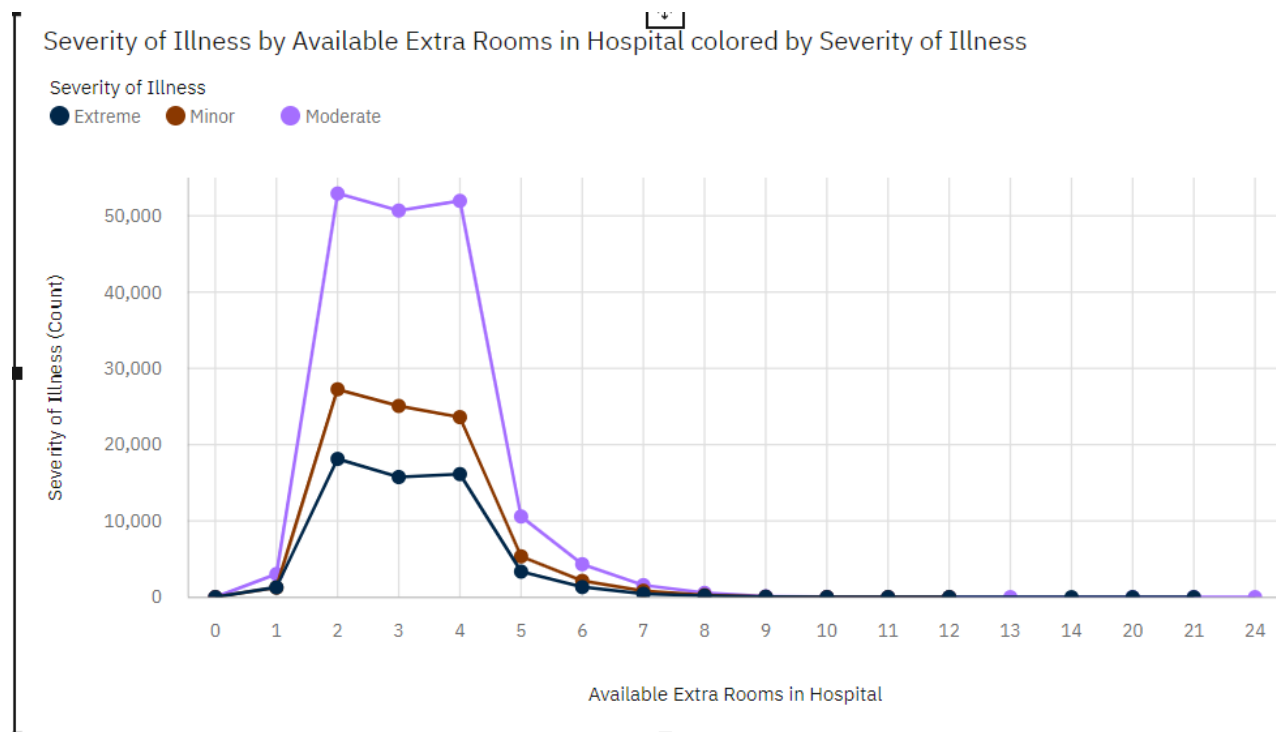
- The most common value of Department is gynecology, occurring over 107 thousand times, which is 78.2 % of the total.
- The total number of results for Available Extra Rooms in Hospital, across all departments, is over 137 thousand.

Available Extra Rooms in Hospital by Department colored by Department



Severity of Illness by Available Extra Rooms in Hospital colored by Severity of Illness:

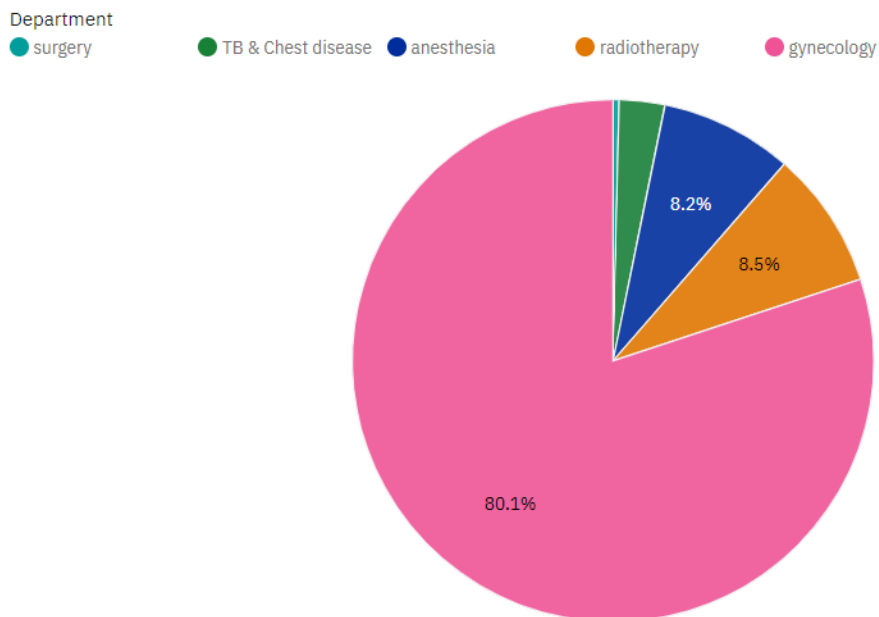
- The most common value of Severity of Illness is Moderate, occurring nearly 76 thousand times, which is 55.2 % of the total.
- The total number of results for Severity of Illness, across all available extra rooms in hospitals, is over 137 thousand.
- The most common values of Available Extra Rooms in Hospital are 2 (31.1 %), 4 (28.8 %), and 3 (28.6 %), together occurring over 121 thousand times, which is 88.5 % of the total.



Available extra rooms in hospital by department:

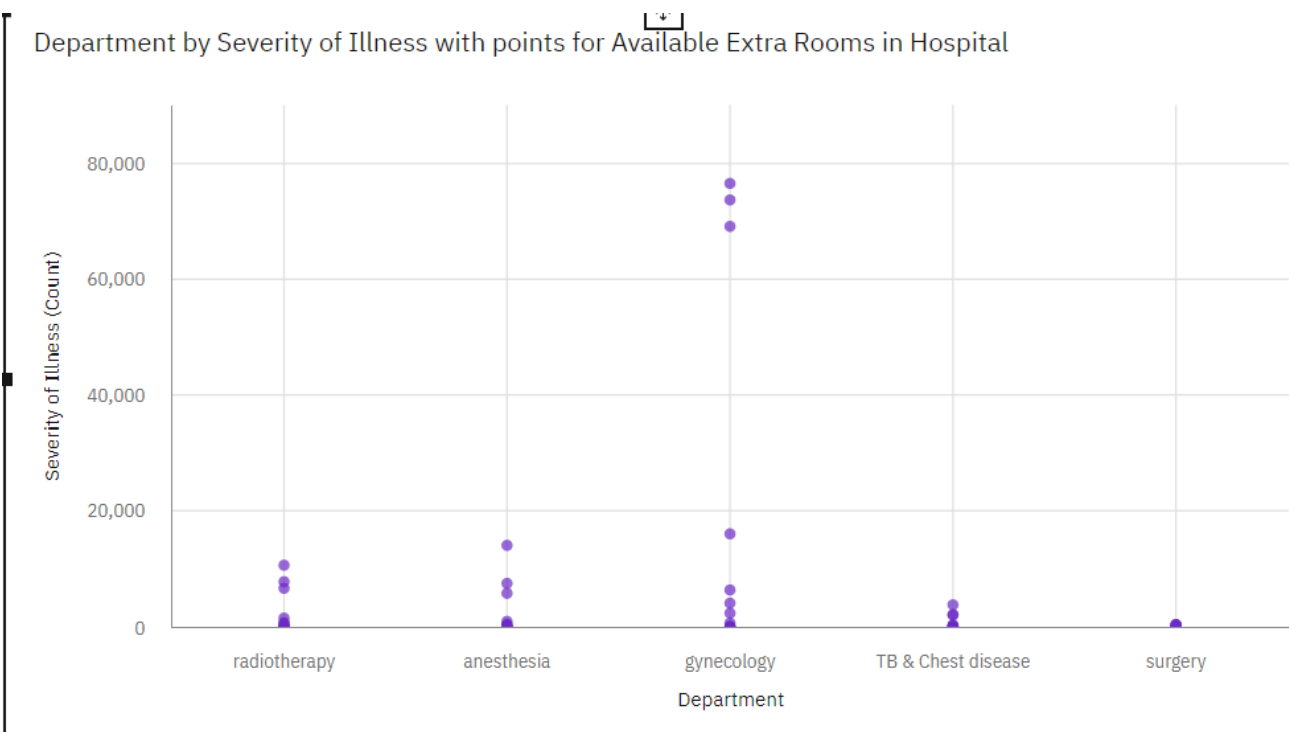
- The total number of results for Available Extra Rooms in Hospital, across all departments, is over 137 thousand.
- The most common value of Department is gynecology, occurring over 107 thousand times, which is 80.1 % of the total.
- The count is unusually high when Department is gynecology.

Available Extra Rooms in Hospital by Department



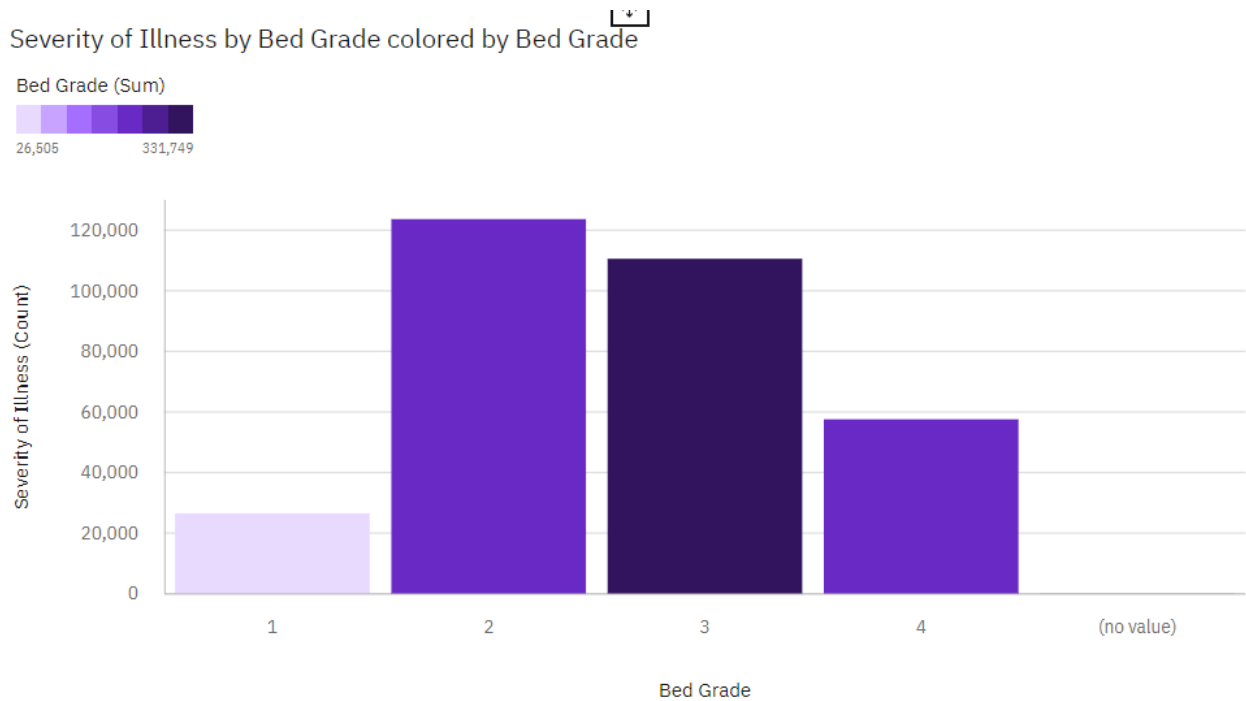
Department by Severity of Illness with points for Available Extra Rooms in Hospital:

- The total number of results for Severity of Illness is 137,057.
- The most common value of Department is gynecology, occurring over 107 thousand times, which is 78.2 % of the total.



Severity of Illness by Bed Grade colored by Bed Grade:

- The total number of results for Severity of Illness is 137,057.
- The most common values of Bed Grade are 2 (38.5 %) and 3 (35.3 %), together occurring over 101 thousand times, which is 73.8 % of the total

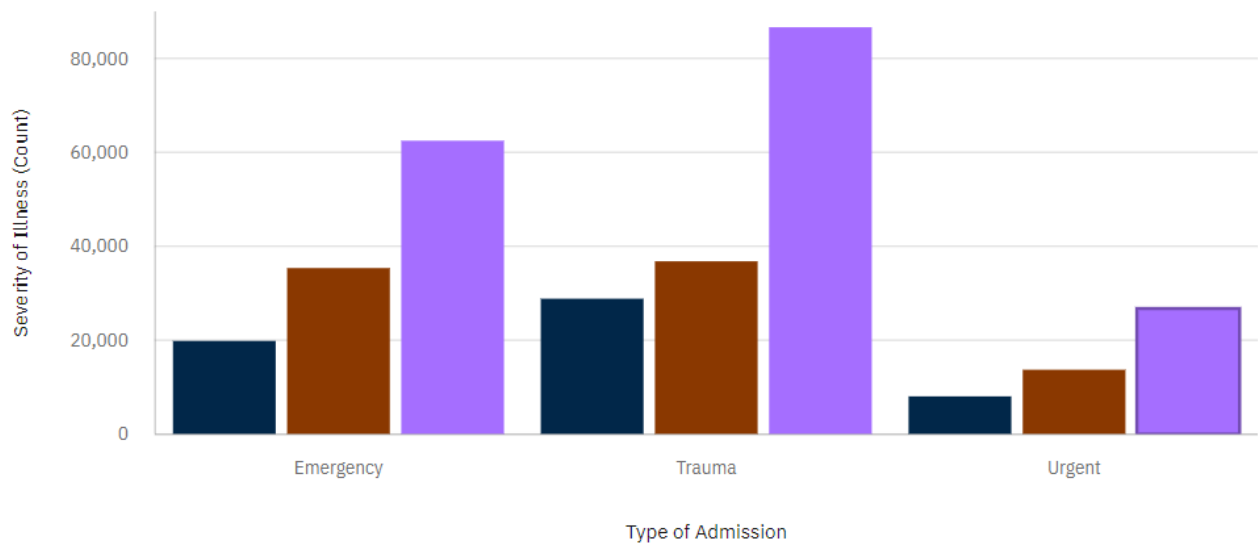


Severity of Illness by Type of Admission colored by Severity of Illness:

- The most common values of Type of Admission are Trauma (47.7 %) and Emergency (37 %), together occurring over 116 thousand times, which is 84.7 % of the total.
- The most common value of Severity of Illness is Moderate, occurring nearly 76 thousand times, which is 55.2 % of the total.
- The total number of results for Severity of Illness, across all type of admissions, is over 137 thousand.

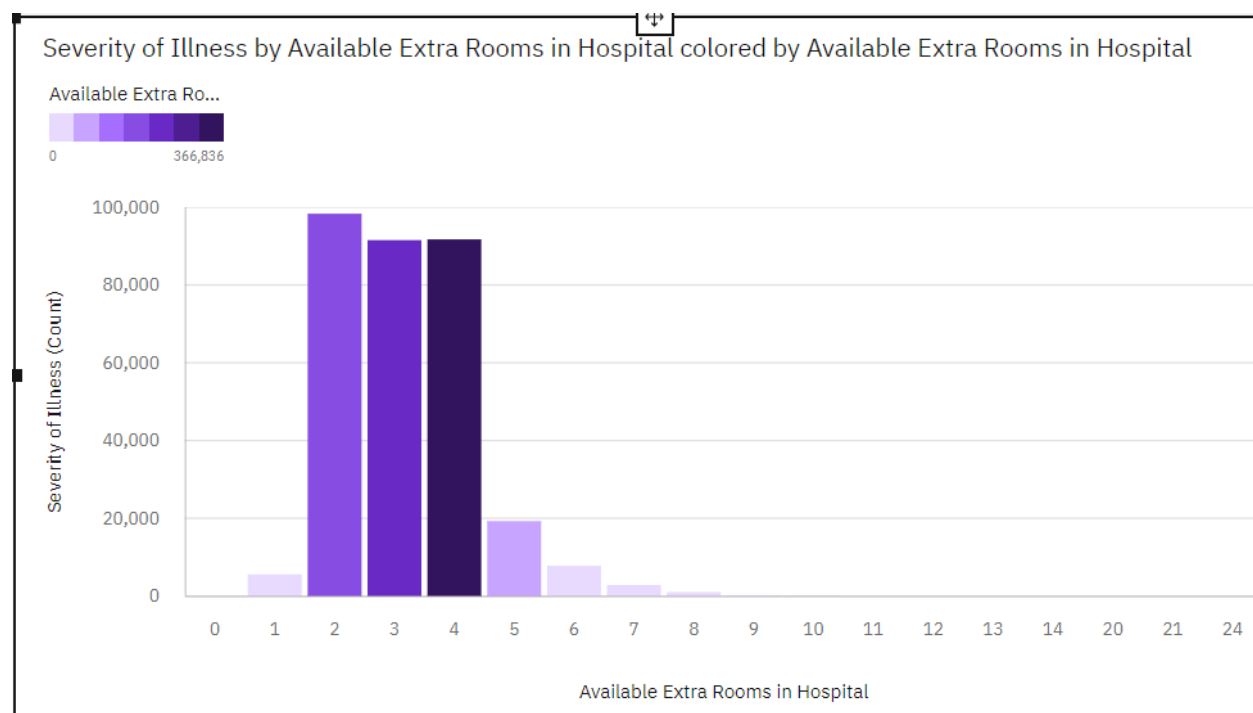
Severity of Illness by Type of Admission colored by Severity of Illness

Severity of Illness
● Extreme ● Minor ● Moderate



Severity of Illness by Available Extra Rooms in Hospital colored by Available Extra Rooms in Hospital:

- The total number of results for Severity of Illness is 137,057.
- The most common values of Available Extra Rooms in Hospital are 2 (31.1 %), 4 (28.8 %), and 3 (28.6 %), together occurring over 121 thousand times, which is 88.5 % of the total.



Available Extra Rooms in Hospital by Age colored by Age:

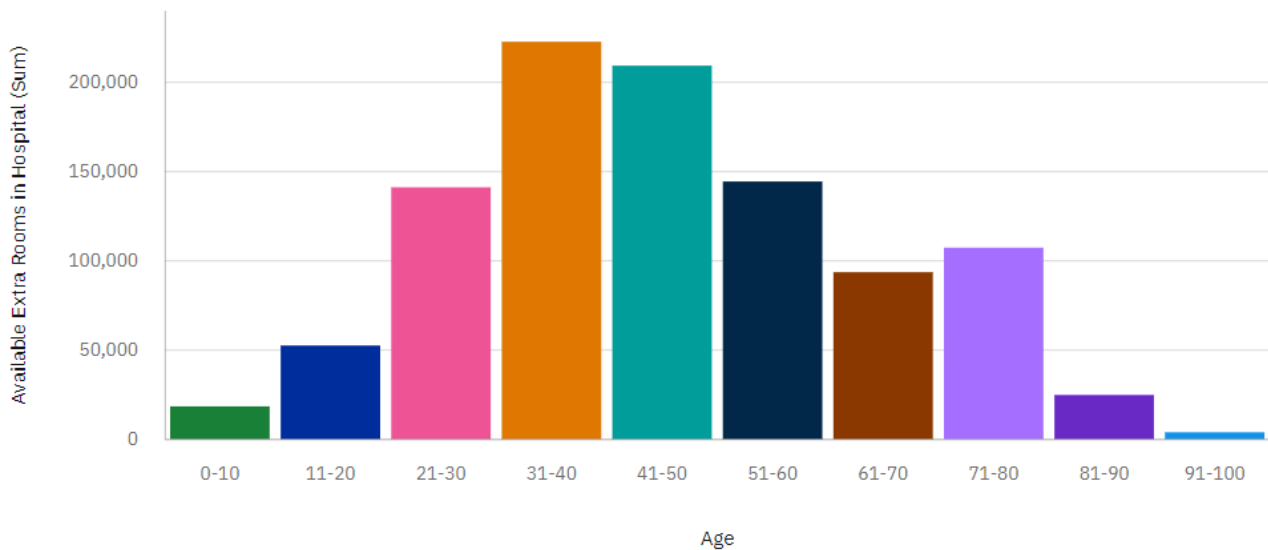
- For Available Extra Rooms in Hospital, the most significant values of Age are 31-40 and 41-50, whose respective Available Extra Rooms in Hospital values add up to over 432 thousand, or 42.4 % of the total.
- Available Extra Rooms in Hospital is most unusual when Age is 31-40, 41-50 and 91-100.
- Across all ages and ages, the sum of Available Extra Rooms in Hospital is over 1.0 million.
- Available Extra Rooms in Hospital is most unusual when the combinations of Age and Age are 31-40 and 31-40, 41-50 and 41- 50 and 91-100 and 91-100.

Available Extra Rooms in Hospital by Age colored by Age



Age

0-10 11-20 21-30 31-40 41-50 51-60 61-70 71-80 81-90 91-100



Bed Grade by Department colored by Department:

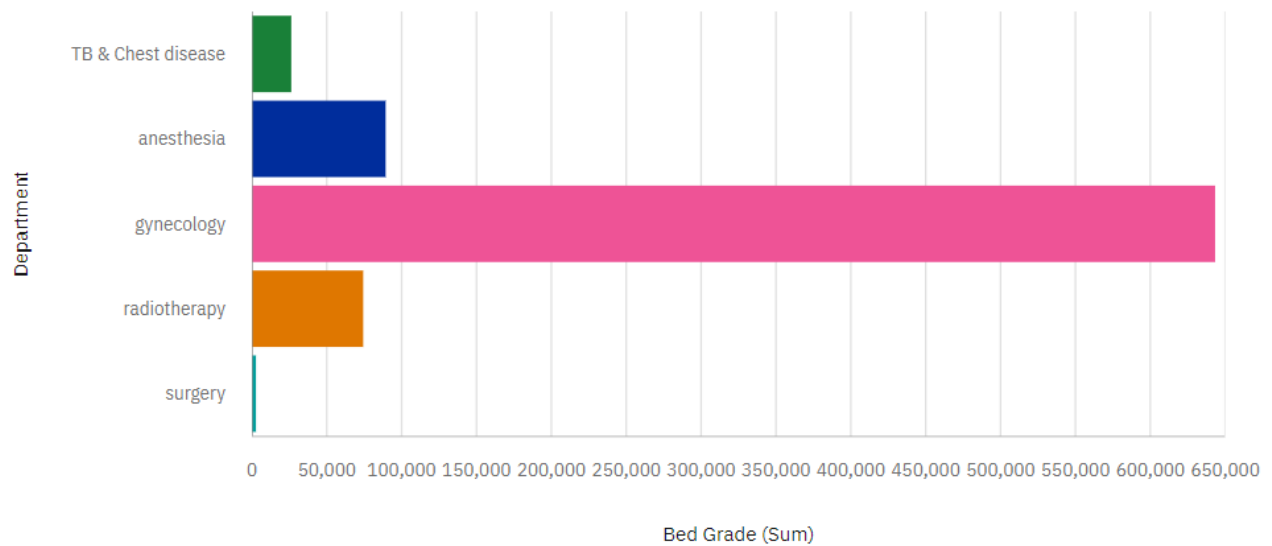
- The most common value of Department is gynecology, occurring over 249 thousand times, which is 78.3 % of the total.
- The total number of results for Bed Grade, across all departments, is over 318 thousand.

Bed Grade by Department colored by Department



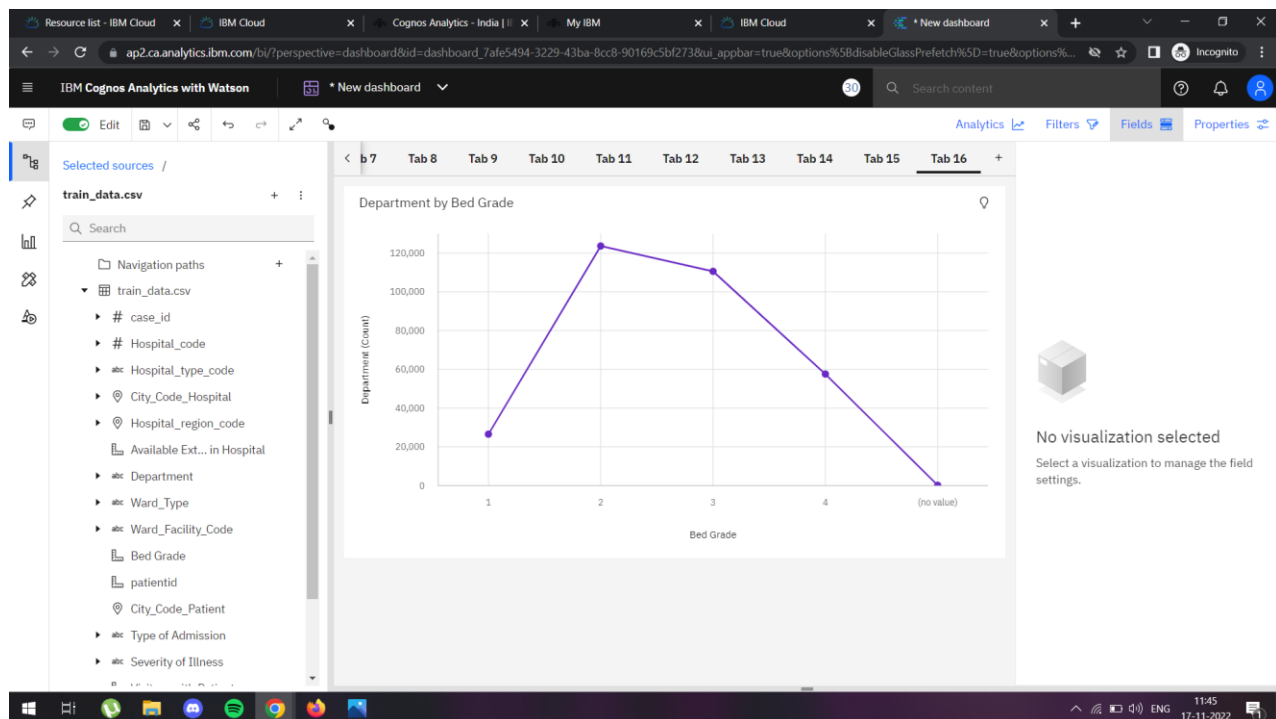
Department

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



Department by Bed Grade:

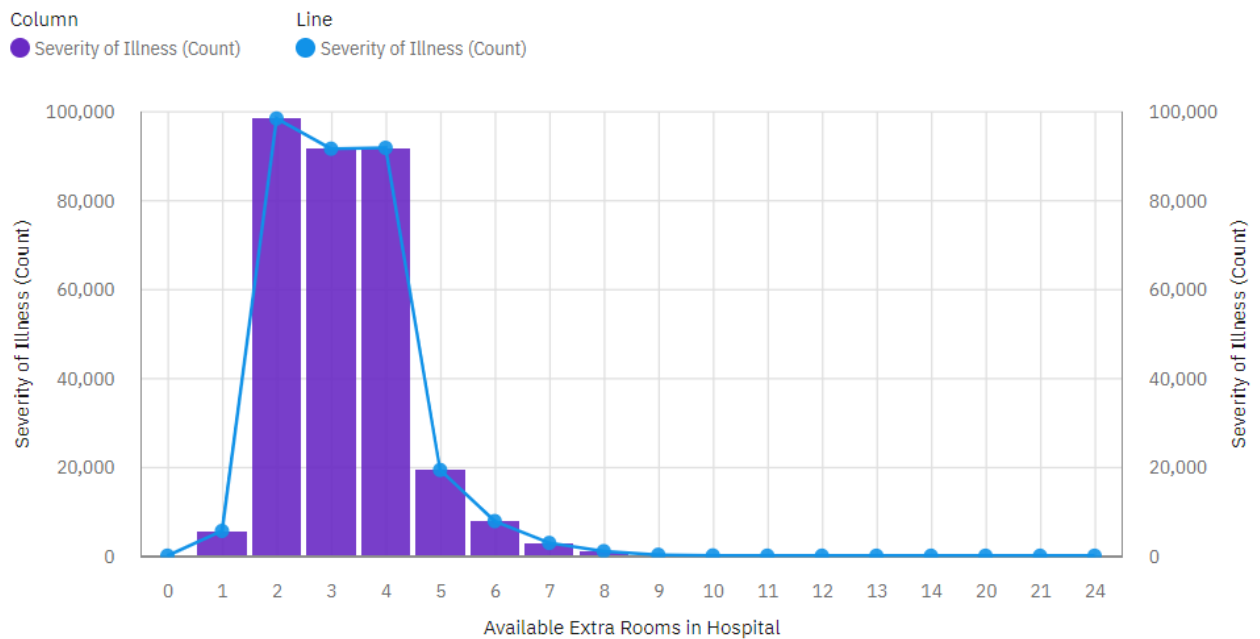
- The total number of results for Department, across all bed grades, is over 318 thousand.
- The most common values of Bed Grade are 2 (38.8 %) and 3 (34.7 %), together occurring over 234 thousand times, which is 73.6 % of the total.
- The counts are most unusual when the values of Bed Grade are (no value) and 2.



Severity of Illness and Severity of Illness by Available Extra Rooms in Hospital:

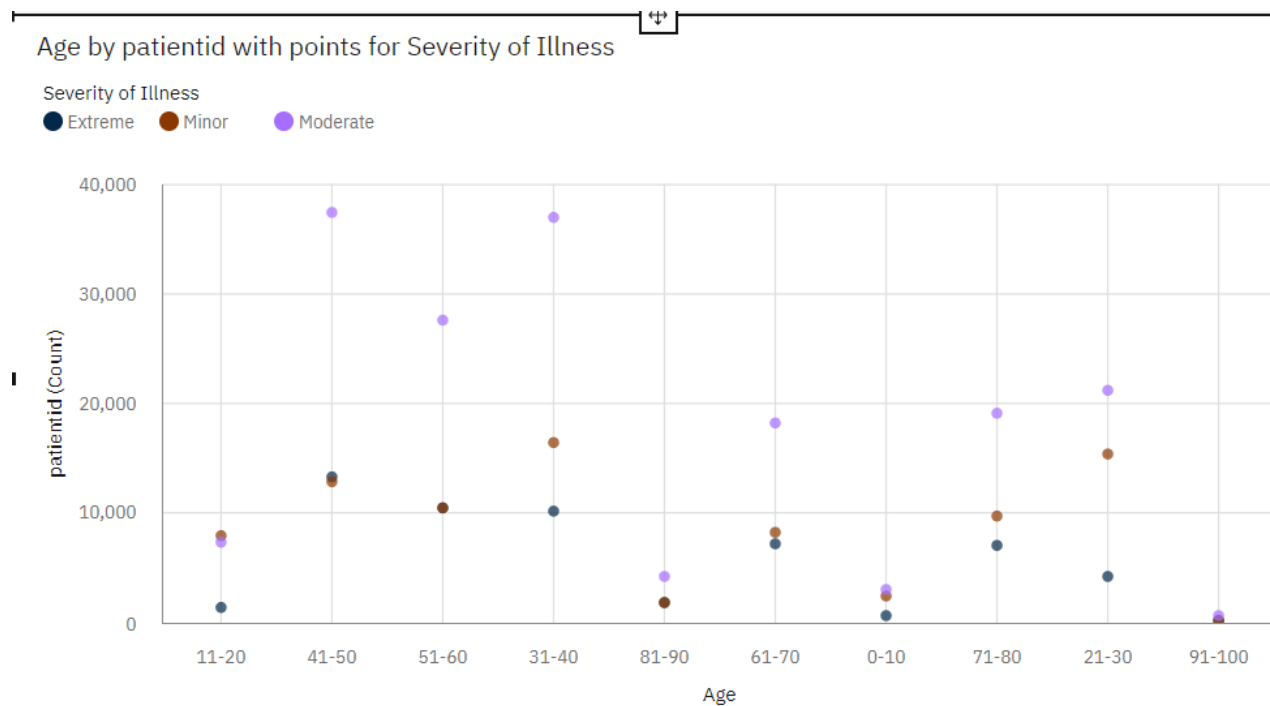
- The total number of results for Severity of Illness, across all available extra rooms in hospitals, is over 318 thousand.
- The most common values of Available Extra Rooms in Hospital are 2 (30.9 %), 4 (28.8 %), and 3 (28.7 %), together occurring nearly 282 thousand times, which is 88.4 % of the total.
- The total number of results for Severity of Illness, across all available extra rooms in hospitals, is over 318 thousand.
- The counts are unusually high when the values of Available Extra Rooms in Hospital are 2, 4 and 3.

Severity of Illness and Severity of Illness by Available Extra Rooms in Hospital



Age by patientid with points for Severity of Illness:

- The total number of results for patientid, across all ages, is over 318 thousand.
- The most common values of Age are 41-50 (20 %) and 31-40 (20 %), together occurring over 127 thousand times, which is 40 % of the total.
- The most common value of Severity of Illness is Moderate, occurring nearly 176 thousand times, which is 55.2 % of the total.



Available Extra Rooms in Hospital by Ward_Facility_Code colored by Ward_Facility_Code:

- The most common value of Ward_Facility_Code is F, occurring nearly 113 thousand times, which is 35.4 % of the total.
- The total number of results for Available Extra Rooms in Hospital, across all Ward_Facility_Code, is over 318 thousand.

