



# PROJECT PRESENTATION

By Group 1

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# OBJECTIVE

AIM:- Our goal is to understand how COVID-19 affects people's hospitalization in different sets and type of people corresponding to Bronx county, New York state in the United States

we will have concluded how covid affected the

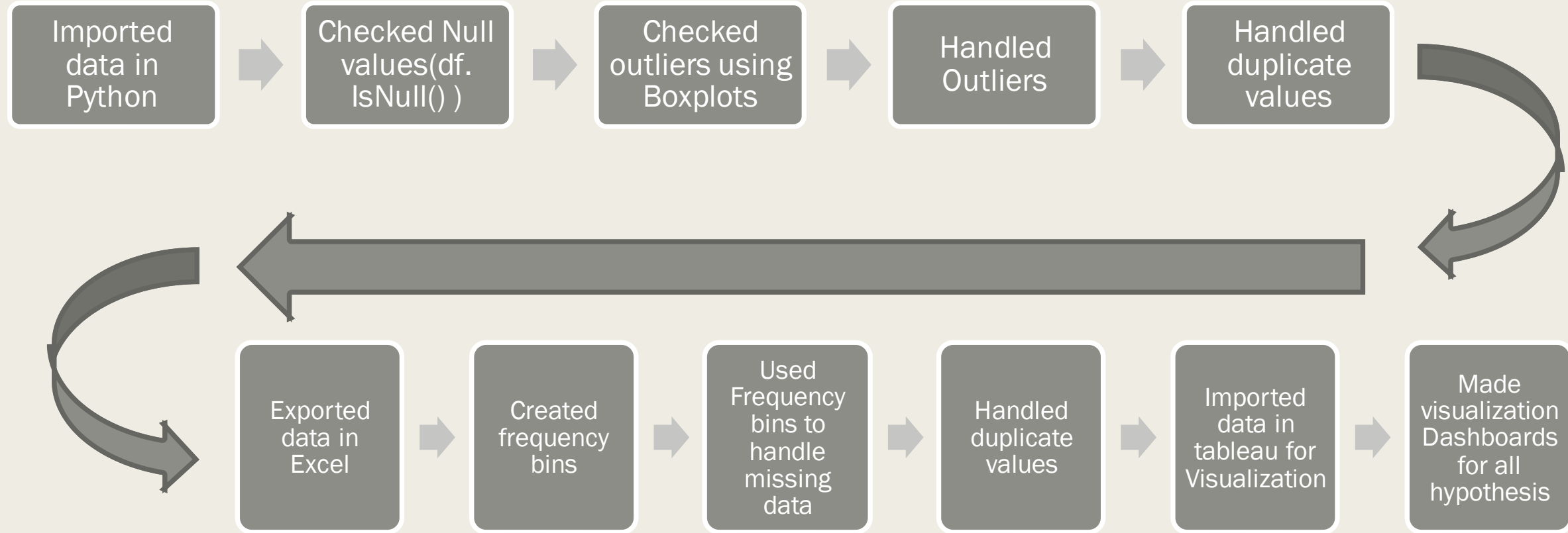
1. Hospitalized
2. Admitted
3. Discharged
4. Bed Availability per hospital facility

# Data Description

This dataset includes information at the reporting facility level on patients hospitalized, admitted, discharged and fatalities. It also includes information on staffed beds. Patient information collected as part of the HERDS Hospital Survey are lab-confirmed COVID-19 positive. Hospitalized means patients admitted as inpatients in either inpatient or observation beds and does not include patients that were treated and released from an Emergency Department.

Dataset Size	Data source	Number of Rows	Number of Columns
76 KB	<a href="https://health.data.ny.gov/Health/New-York-State-Statewide-COVID-19-Hospitalizations/jw46-jpb7/data">Phttps://health.data.ny.gov/Health/New-York-State-Statewide-COVID-19-Hospitalizations/jw46-jpb7/data</a>	7767	26

# Data Cleaning

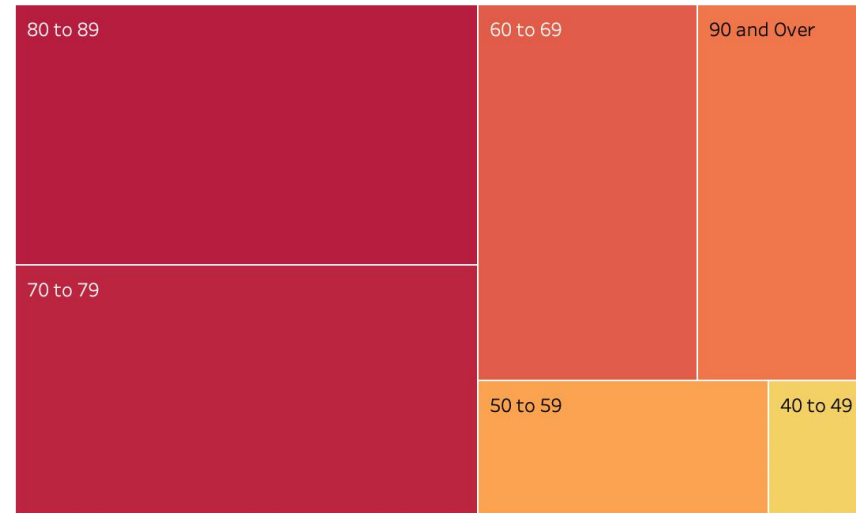


# HYPOTHESIS

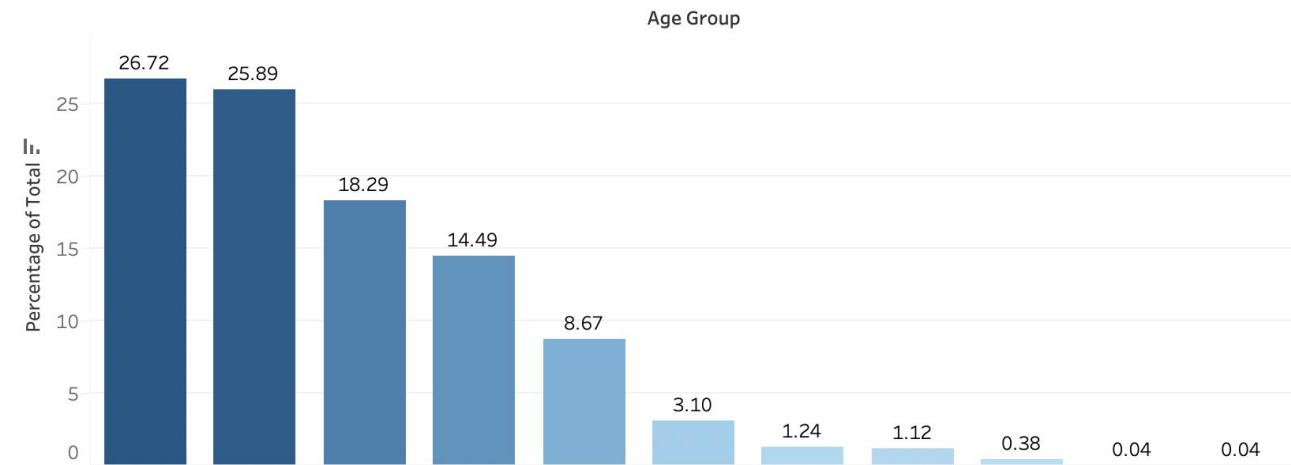
Whether the number of deaths in the age group 70-79 is higher than deaths in the age group more than 80 in Bronx county.

In general, older people were more susceptible to COVID-19 infection, caused by a defective immune response to infectious challenges. In addition, comorbid illnesses, malnutrition, drugs, and stress predispose the elderly to an increased risk of coronavirus by declining immune function.

Percentage of Deaths by Age Group

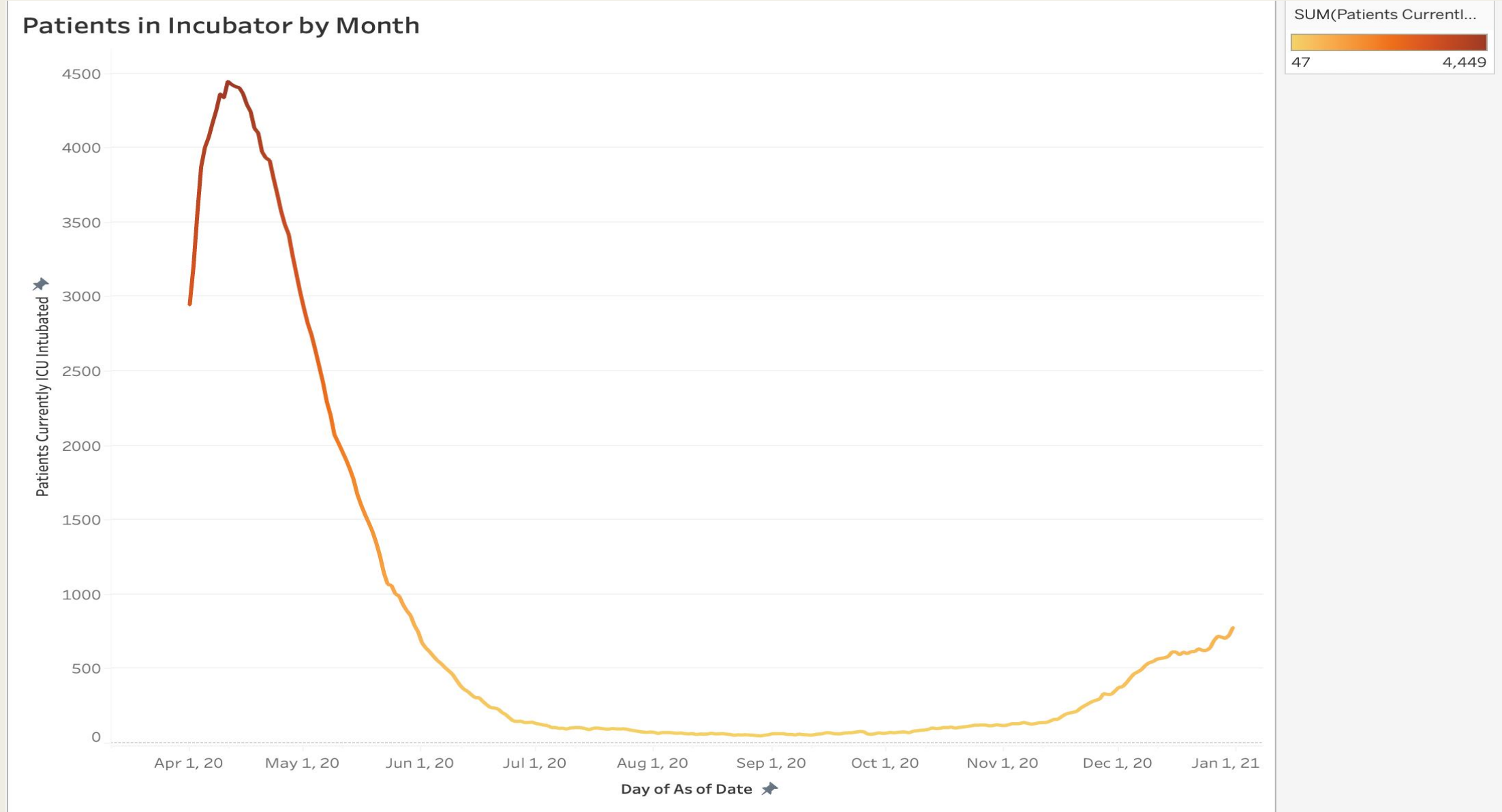


Percentage of Deaths by Age Group

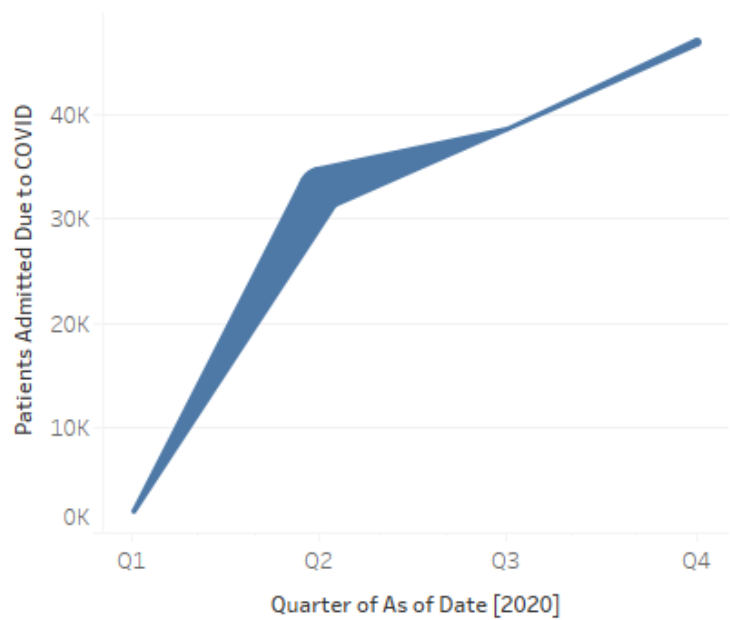


# HYPOTHESIS

Whether the number of patients accommodated in the incubator is more in Q2 2020 as compared to Q3/Q4 of 2020



Patients Admitted due to Covid



Patients Currently Hospitalized

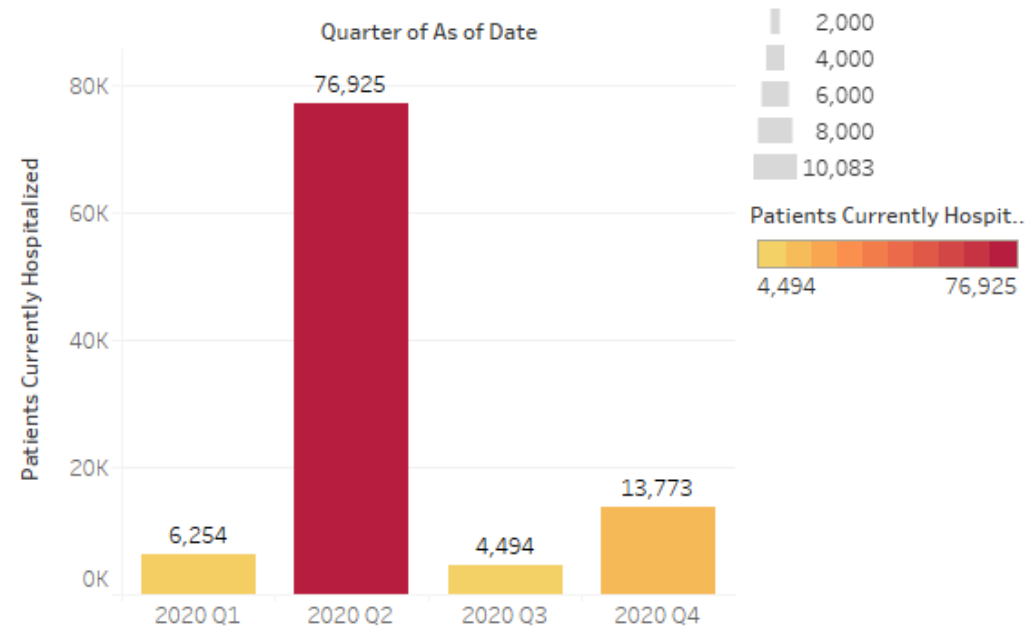
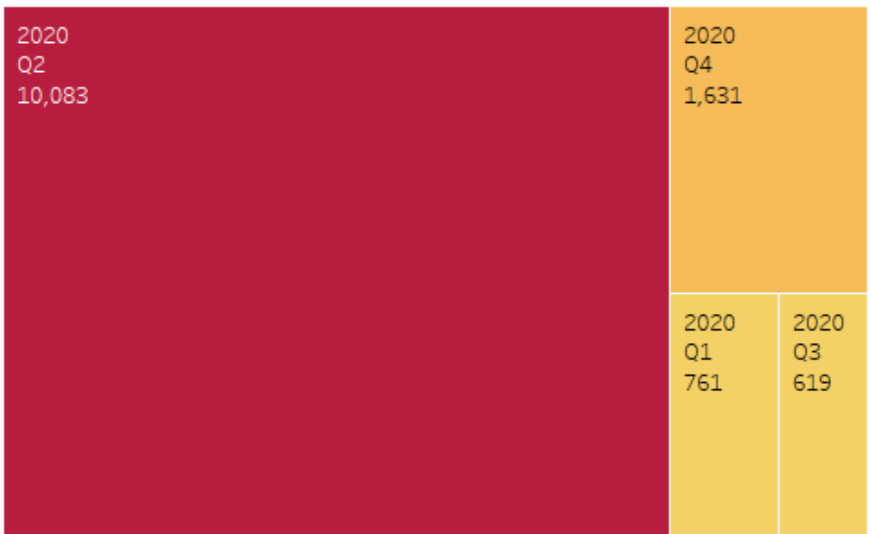
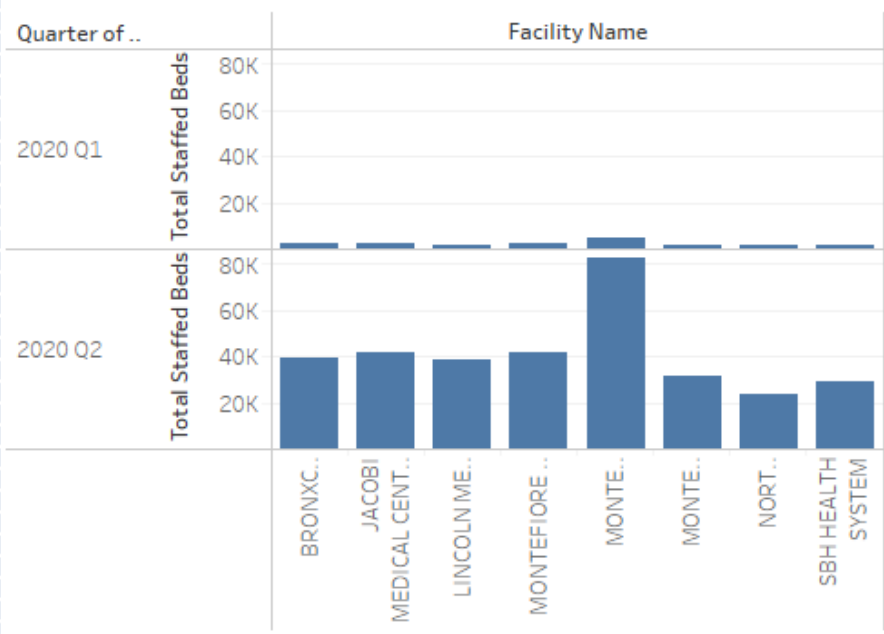


Chart Showing Total Out Patients and Patients Currently Hospitalized in respective Quarters

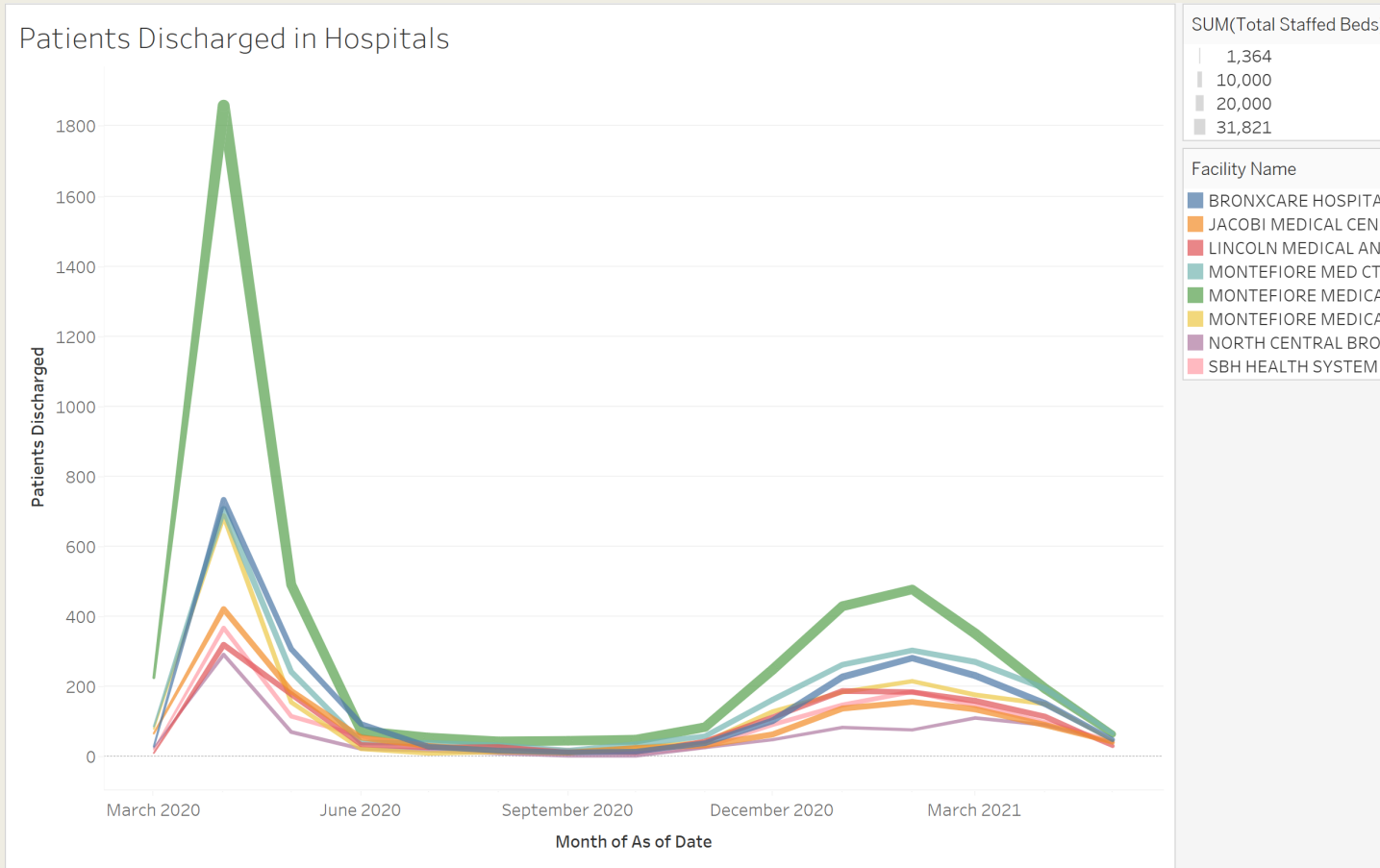


Comparison of Total Staffed Beds in Q1 and Q2



# HYPOTHESIS

Whether hospital facilities were unable to provide beds to all incoming patients because of a higher spread of covid cases in Q2 of 2020 as compared to Q3/Q4 2020

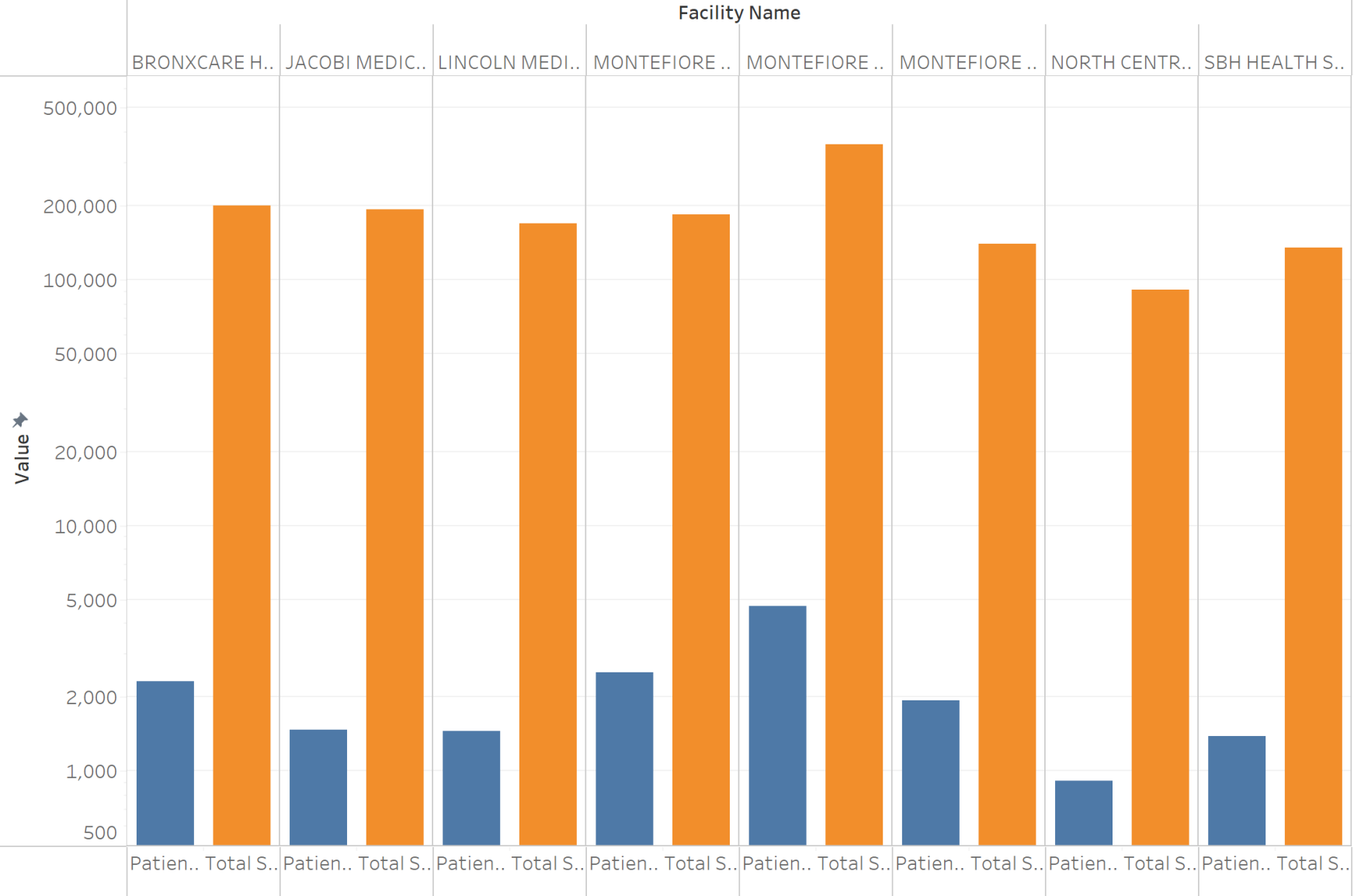


# HYPOTHESIS

Whether the number of patients discharged in Facilities with greater number of hospital beds is more because they have a higher number of staffed beds available as compared to facilities with a smaller number of staffed beds.



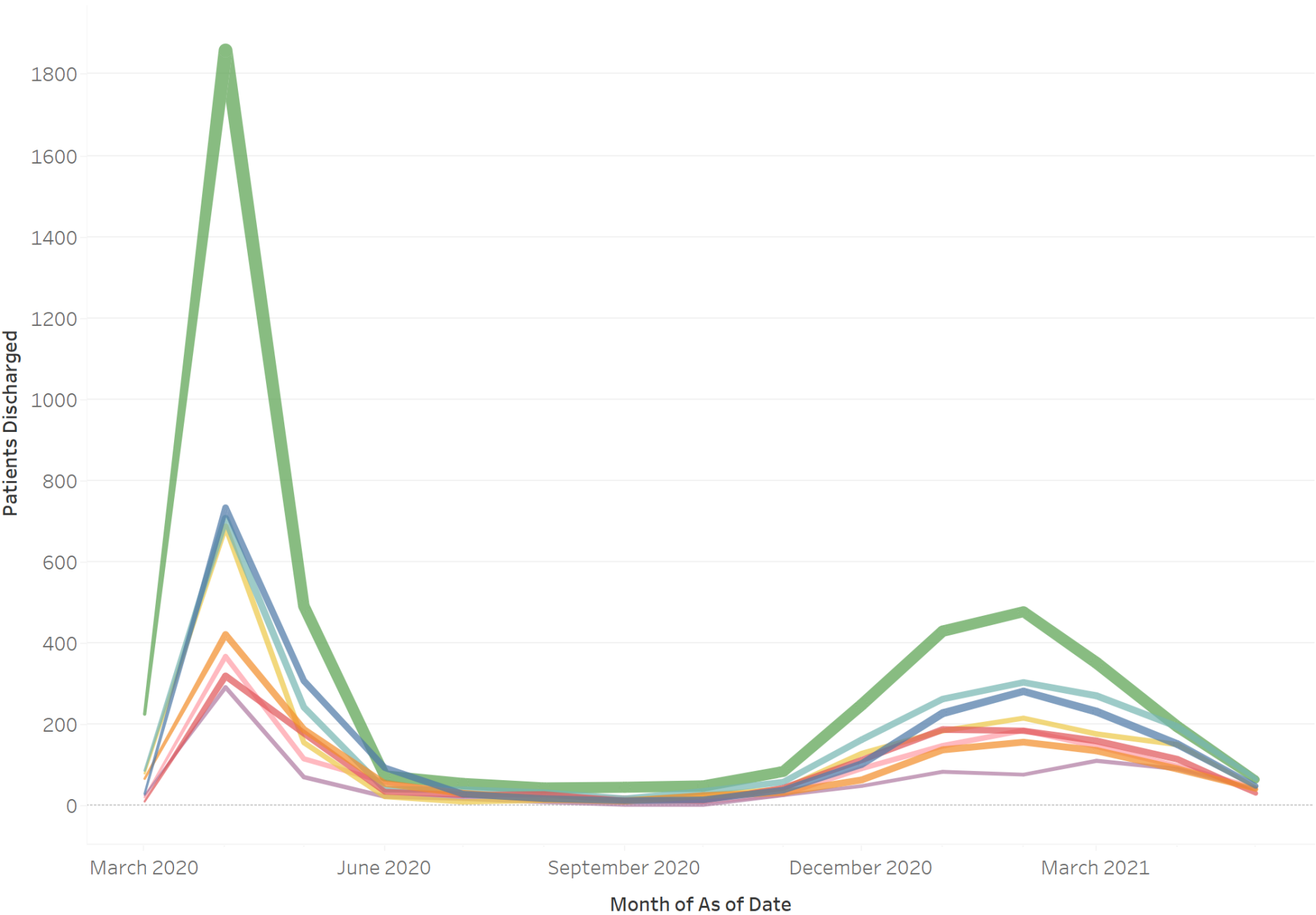
Staffed Beds vs Patients Discharged



Measure Names

- Patients Discharged
- Total Staffed Beds

# Patients Discharged in Hospitals



SUM(Total Staffed Beds)

- 1,364
- 10,000
- 20,000
- 31,821

Facility Name

- BRONXCARE HOSPITA..
- JACOBI MEDICAL CEN..
- LINCOLN MEDICAL AN..
- MONTEFIORE MED CT..
- MONTEFIORE MEDICA..
- MONTEFIORE MEDICA..
- NORTH CENTRAL BRO..
- SBH HEALTH SYSTEM

# Comparison of Newly Admitted Patients trend vs Patients Discharged and Total Staffed Beds

Facility ..

BRONX  
CARE HOSPITAL  
CENTER

Patients Discharged

Patients Newly Admitted

Measure Names

- Patients Discharged
- Patients Newly Admit..
- Total Staffed Beds

Total Staffed Beds

March 2020 June 2020 September 2020 December 2020 March 2021

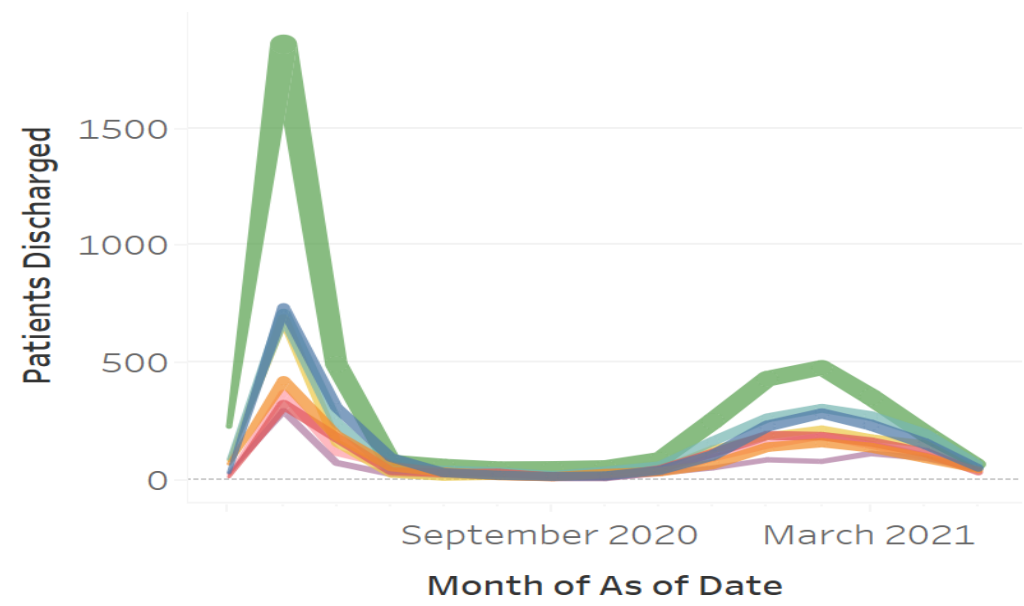
Month of As of Date

1,000  
100  
10  
0.1

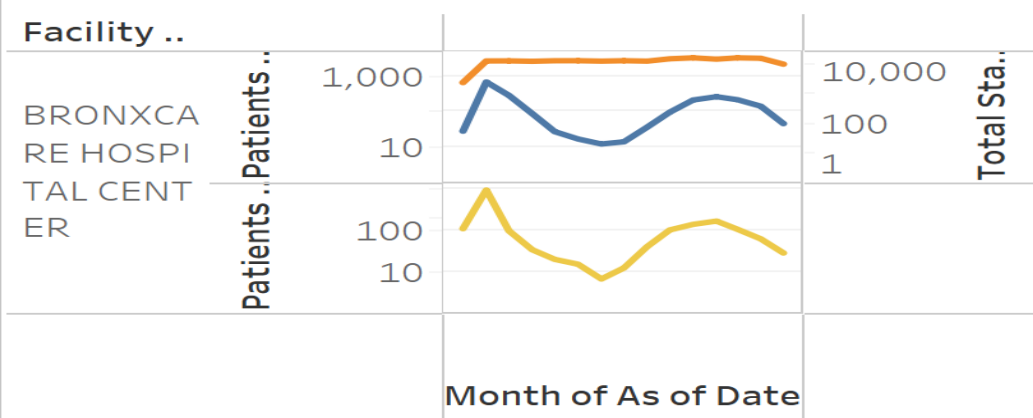
1,000  
100  
10  
1

10,000  
1,000  
100  
10  
1

# Patients Discharged in Hospitals



# Comparison of Newly Admitted Patients trend vs Patients Discharged and Total Staffed Beds



## Total Staffed Beds

- 1,364
- 10,000
- 20,000
- 31,821

## Facility Name

- BRONXCARE HO..
- JACOBI MEDICA..
- LINCOLN MEDIC..
- MONTEFIORE M..
- MONTEFIORE M..
- MONTEFIORE M..
- NORTH CENTRA..
- SBH HEALTH SY..

## Measure Names

- Patients Dischar..
- Total Staffed Be..

# Staffed Beds vs Patients Discharged

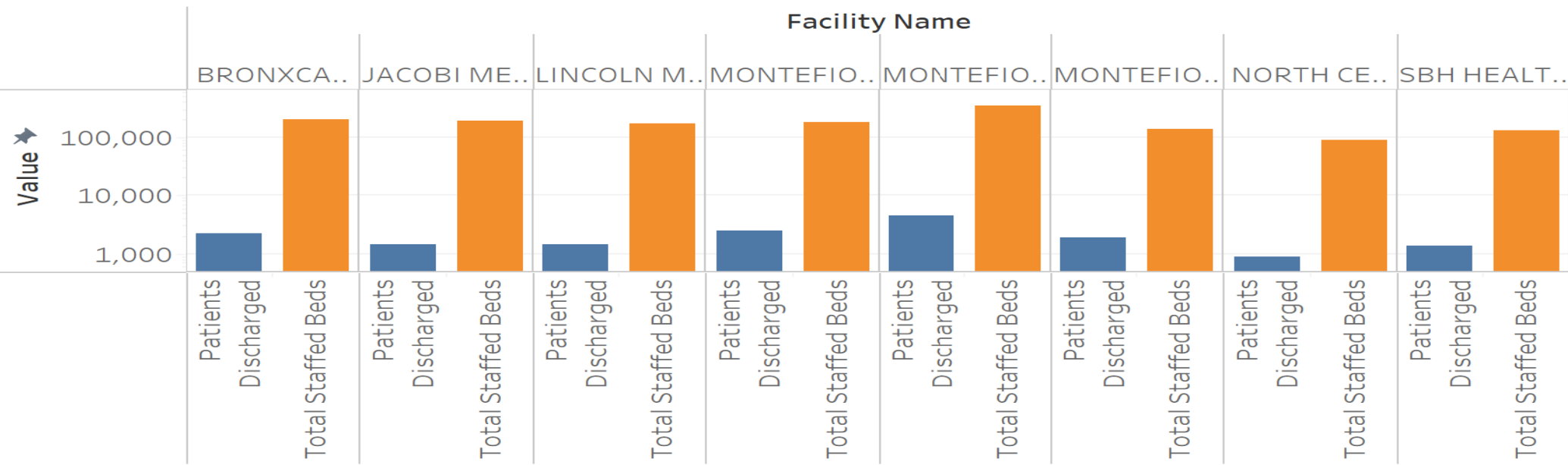
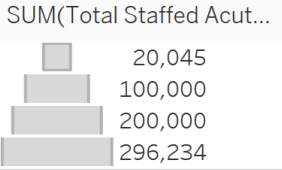
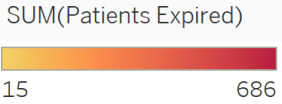


Chart depicting Total staffed acute care beds with the number of Patient Deaths

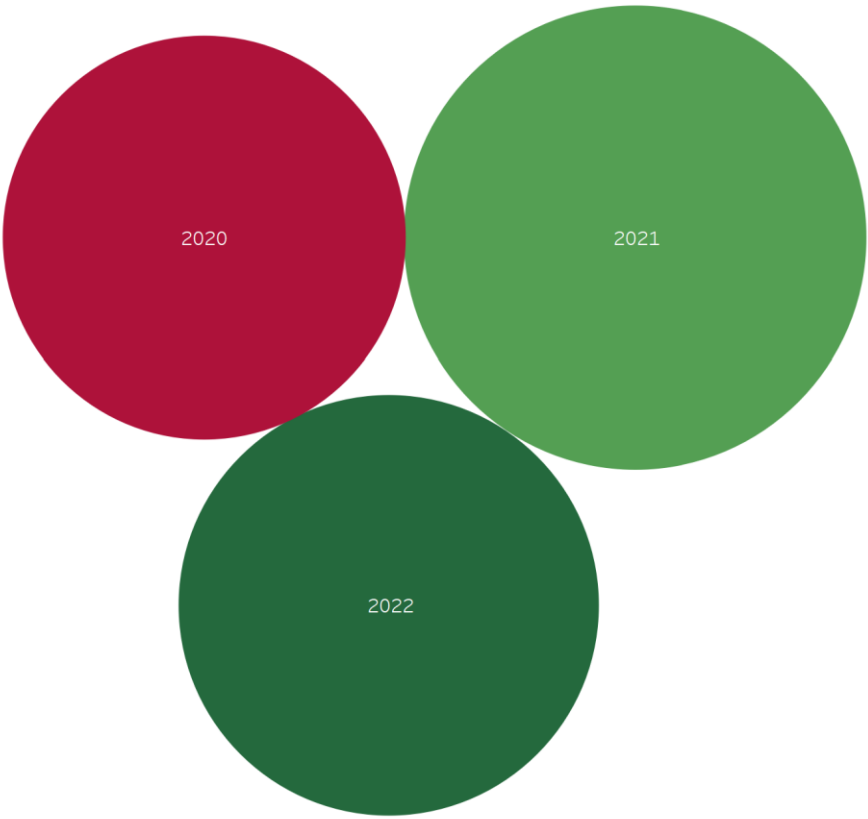
Facility Name	2020	As of Date 2021	2022
BRONXCARE HOSPITAL CENTER			
JACOBI MEDICAL CENTER			
LINCOLN MEDICAL AND MENTAL HEALTH CENTER			
MONTEFIORE MED CTR - JACK D WEILER HOSP OF A EINSTEIN COLLEG..			
MONTEFIORE MEDICAL CENTER - HENRY AND LUCY MOSES DIV			
MONTEFIORE MEDICAL CENTER - WAKEFIELD HOSPITAL			
NORTH CENTRAL BRONX HOSPITAL			
SBH HEALTH SYSTEM			



# HYPOTHESIS

Whether the number of patients expired in facilities with many staffed acute care beds is less because they have a greater number of beds as compared to facilities with a smaller number of total staffed acute care beds.

Chart Showing Patients Newly Admitted and Patients Expired over the years



Comparison of Total Staffed Acute Care Beds over the years

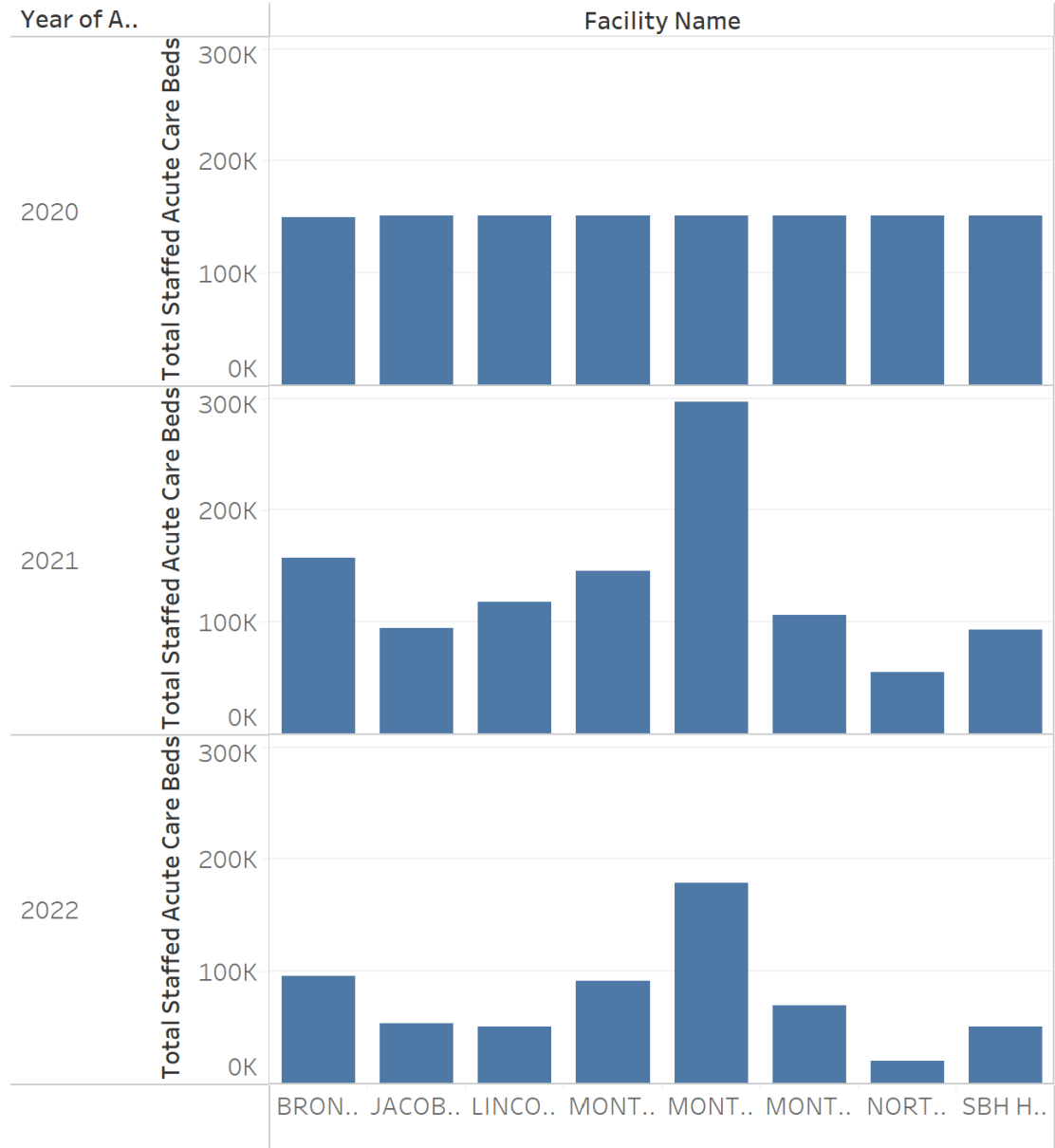


Chart depicting Total staffed acute care beds with the number of Patient Deaths

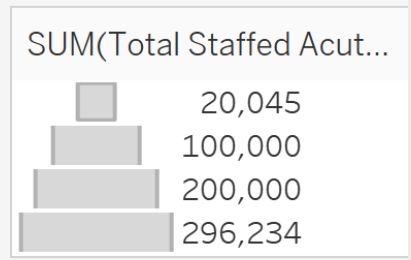
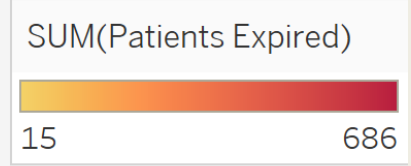
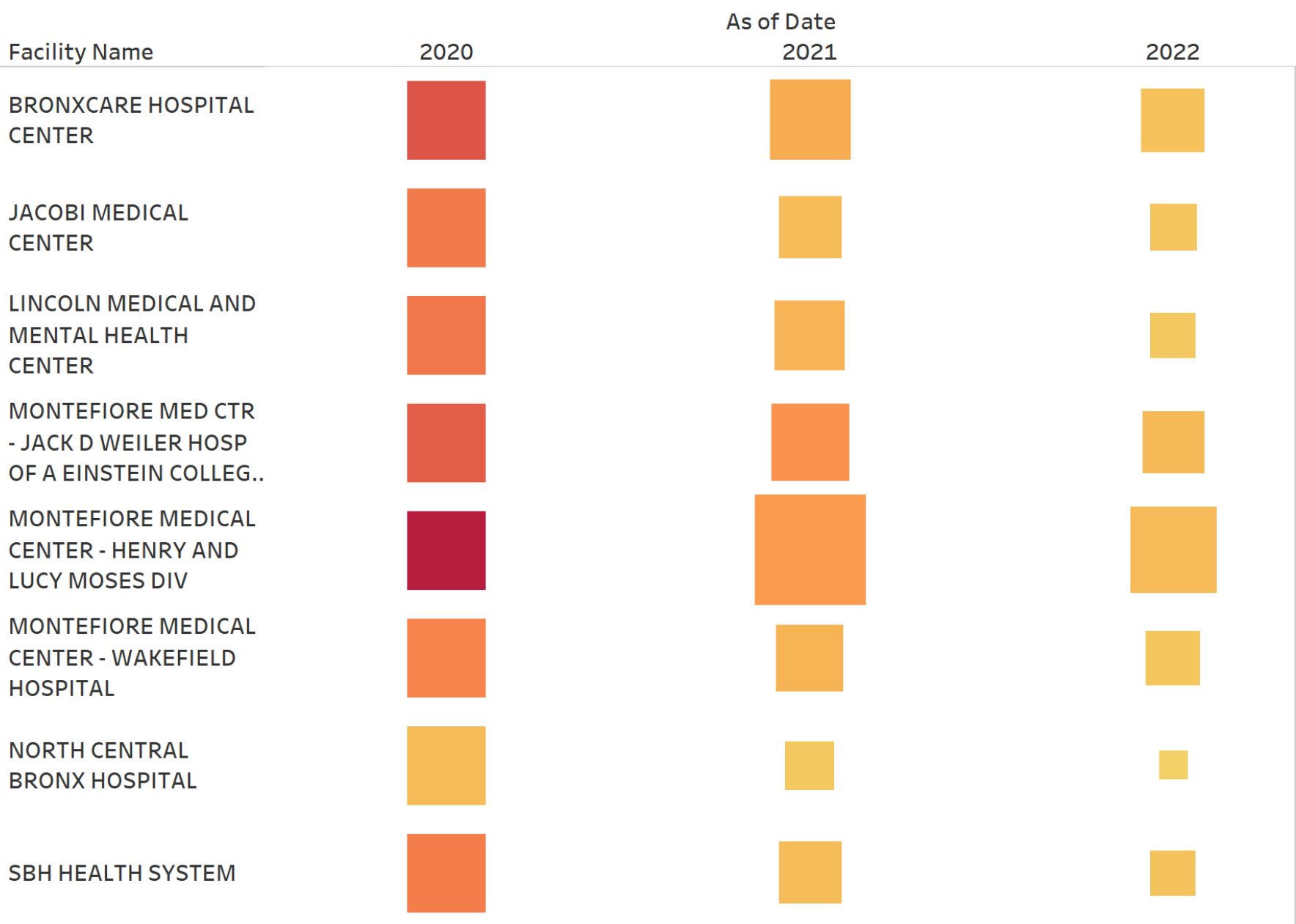
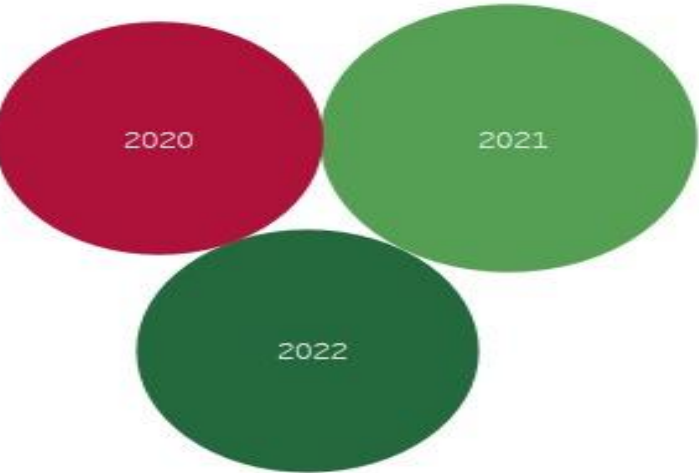


Chart Showing Patients Newly Admitted and Patients Expired over the years



Comparison of Total Staffed Acute Care Beds over the years

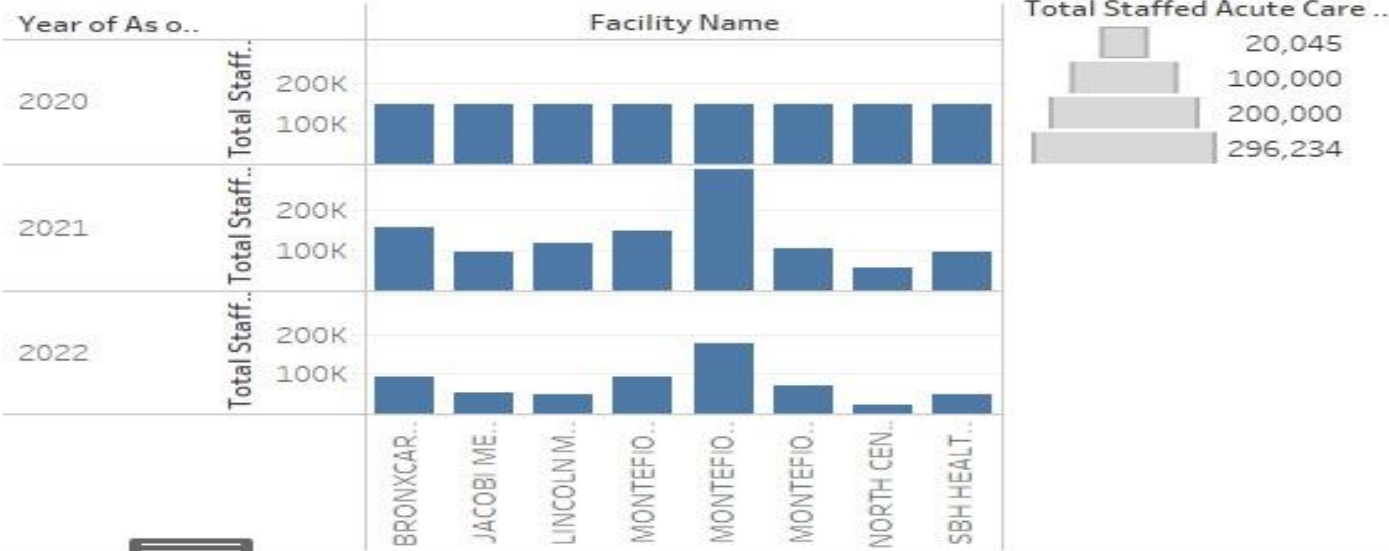
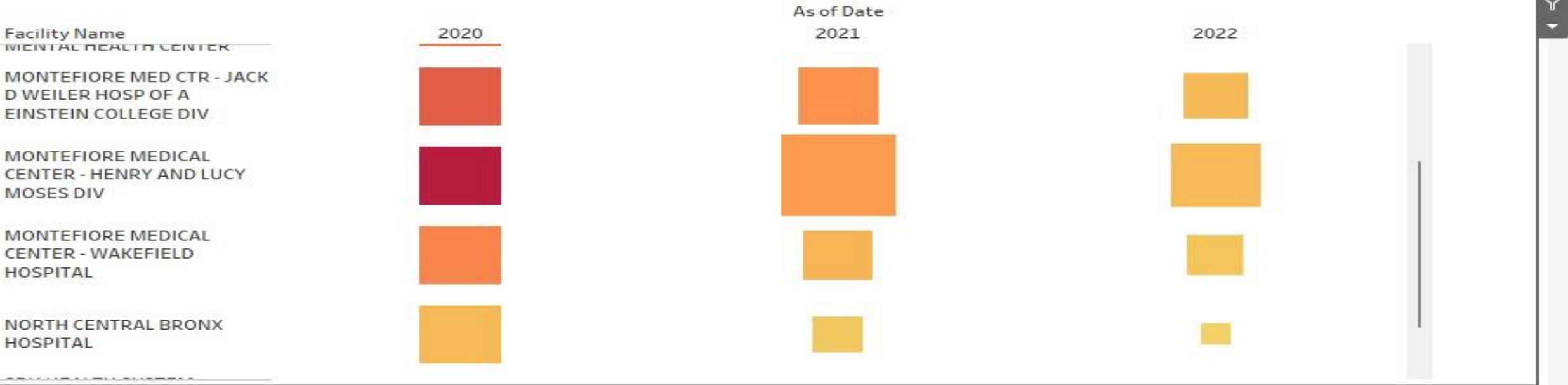


Chart depicting Total staffed acute care beds with the number of Patient Deaths





# CONCLUSION

COVID-19 has been adversely affecting the lives of billions of people, resulting in millions of deaths. The pandemic had serious consequences in almost every sector of the economy and society in the past two years. With the dataset, we have taken the hospital occupancy metrics and COVID metrics for all counties in New York. We studied the patterns and trends in hospitalization during COVID period. To sum up our insights, we conclude that the pandemic has had serious consequences in almost every sector of the economy including hospitals as they had to try to accommodate patients as much as they can but weren't able to because of the dynamic changes in the number of people being infected with COVID.

Any Questions?

**Thank You**