

Data Analysis of COVID VACCINE DISTRIBUTION IN BANGALORE

A case study on analysis of COVID Vaccine distribution in Koramangala Municipality, Bangalore from a Telegram Notification history

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Scenario

Analysis of COVID Vaccine distribution in Hospitals in Koramangala municipality, Bangalore between May 1st to May 15th from a Telegram notification history

Approach

Indian govt mandated vaccine slots booking for adults aged below 45 through a website called www.under45.in.

One has to register their mobile and select the city and municipality and they will be directed to a Telegram notification group. There you will be getting daily updates of slots and vaccine availability in your area

Collect the Data:

I have exported the group notification history and saved it as JSON file. The file looks like this.

Exploratory Data Analysis:

I have performed extensive data analysis that includes data cleaning, data analysis and visualization using Python on Jupyter Notebooks. I have loaded pandas, regular expressions, seaborn and matplotlib libraries for analysis. I have loaded the cleaned data onto Power BI to perform Data Visualizations and present my end report.

Total Vax Slots

33.282K

Covishield Vax Slots

3647

Covaxin Slots

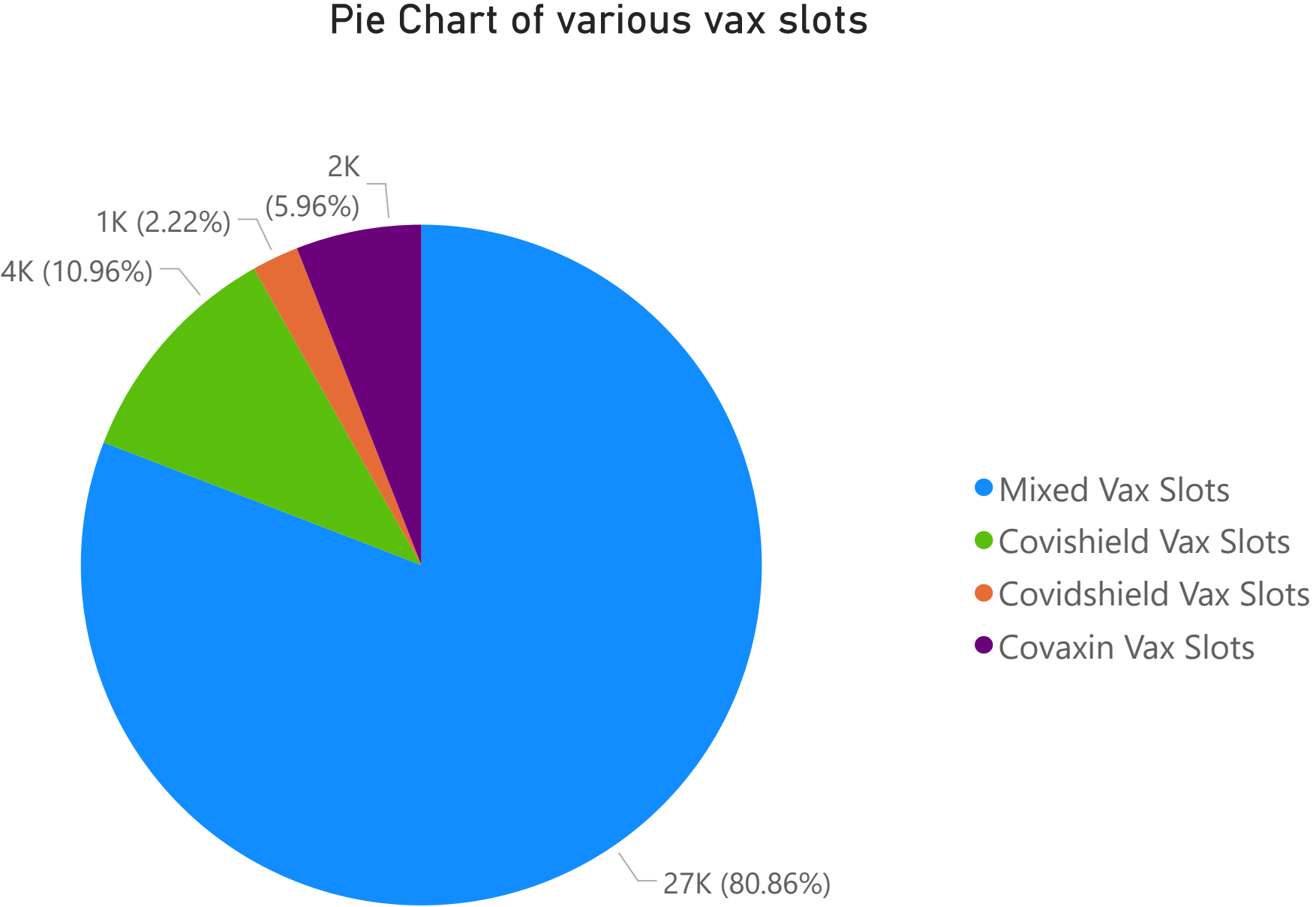
1982

Covidshield Vax Slots

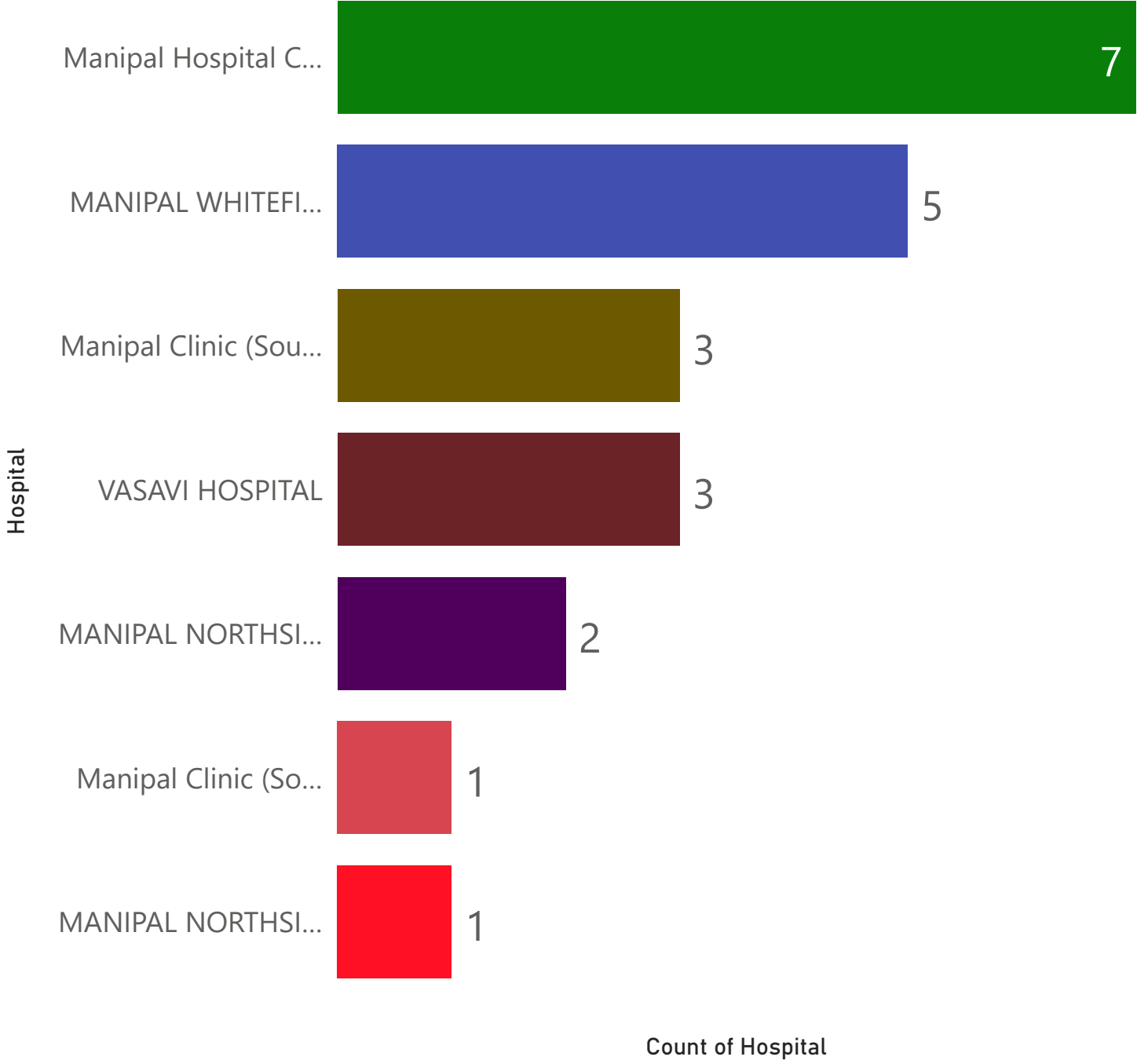
740

Mixed Vax Slots

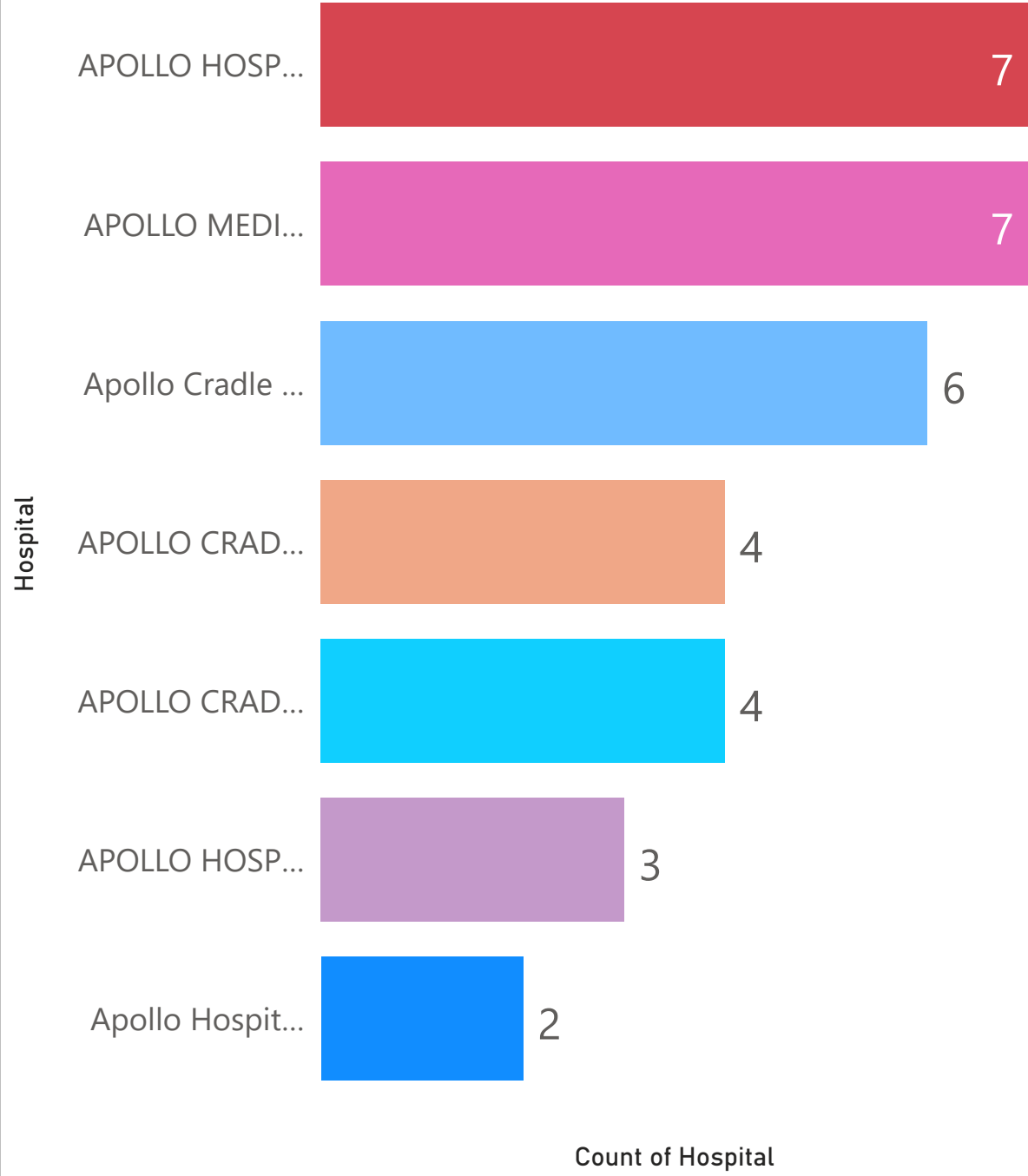
26.913K



Availability of Hospital - Covaxin



Availability of Hospital - Covishield



Mixed Vax - Hospital & Slots info

Hospital	Slots
Apollo Hospital-JAYANAGAR	3042
BGS GLENEAGLES GLOBAL HOSPITAL	2339
Victoria Hospital 18	1756
K C GH Nurshing School 18	1686
KAVYA HOSPITAL	1512
Bowring Hospital Covishield 18	1296
C V Raman GH 18	1286
APOLLO HOSPITAL SHESHADRIPURAM	1100
NIMHANS Hospitals	1050
DCHC Leprosy Hospital	900
ESIC MC And Hospital	900
Manipal Hospital Covaxin	851
Anekal TH	806
General Hospital K R Puram	806
Yelahanka TH	800
Jayanagar General Hospital	721
TH Nelamangala	718
Doddaballapura TH	616
Manipal Clinic	600
Jayanagar General Hospital 18	562
Total	26913

Covishield - Hospital & Slots info

Hospital	Slots
APOLLO HOSPITAL SHESHADRIPURAM (West)	848
Apollo Cradle P3 (Mahadevapura)	759
APOLLO MEDICAL CENTER P3 (Mahadevapura)	586
APOLLO HOSPITAL 1 (Bommanahalli)	441
APOLLO CRADLE HOSPITAL (South)	381
APOLLO CRADLE	336
Apollo Hospital-JAYANAGAR (South)	296
Total	3647

Covaxin - Hospital & Slots info

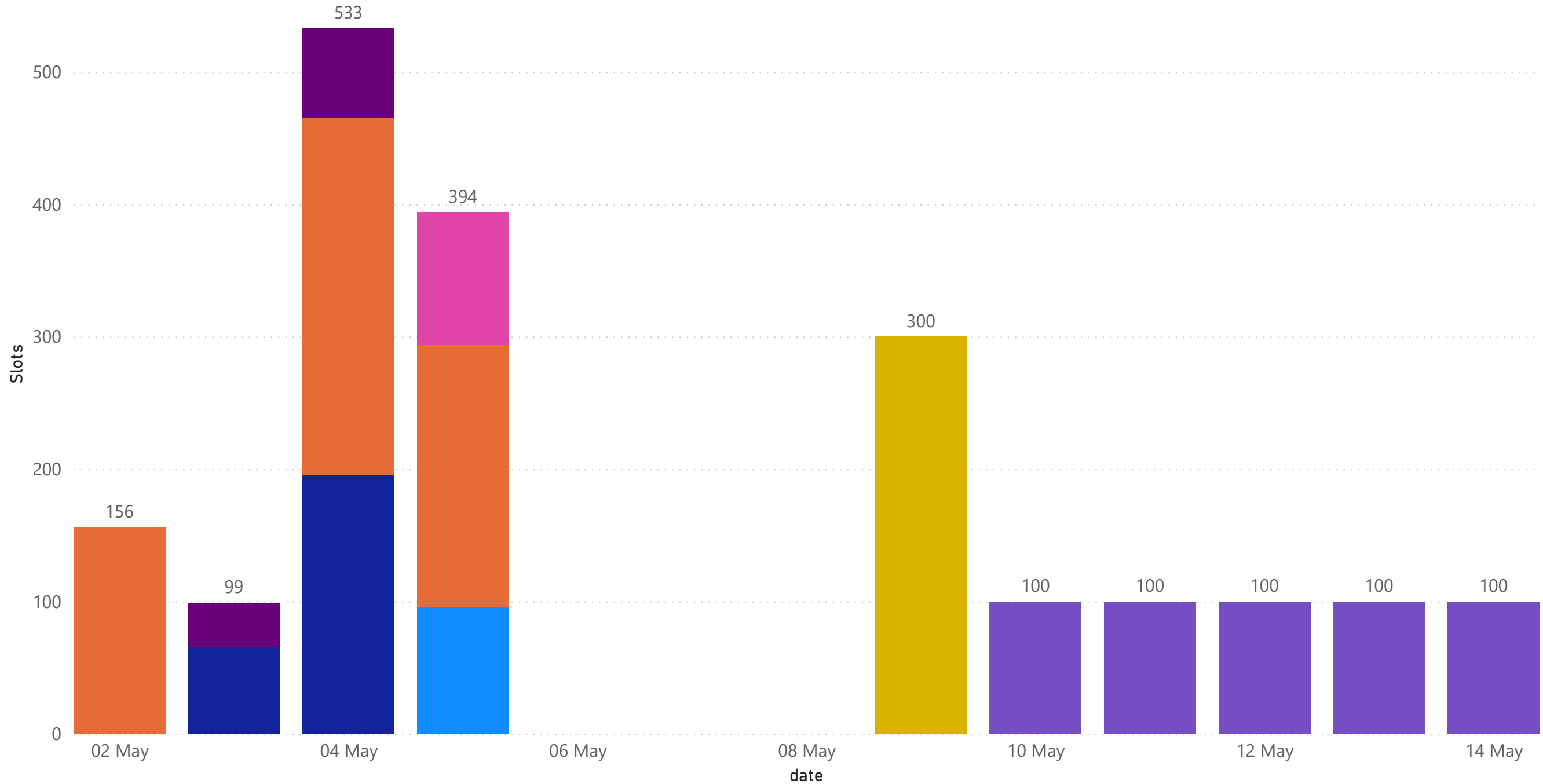
Hospital	Slots
Manipal Hospital Covaxin (East)	623
MANIPAL WHITEFIELD	500
VASAVI HOSPITAL	300
Manipal Clinic (South)	262
MANIPAL NORTHSIDE (West)	101
MANIPAL NORTHSIDE CANARA UNIO (West)	100
Manipal Clinic (South)	96
Total	1982

Covidshield - Hospital & Slots info

Hospital	Slots
Devanahalli TH	740
Total	740

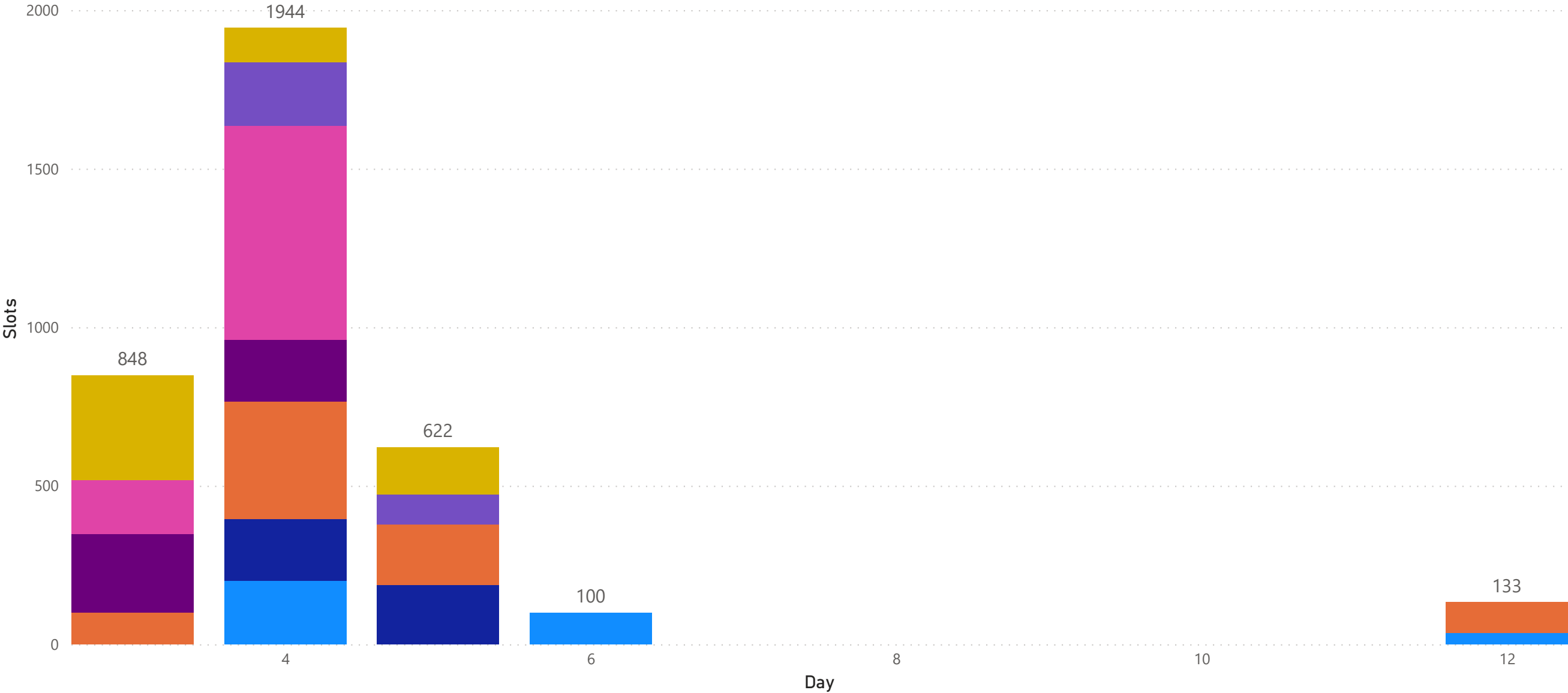
Covaxin - Slots by Day and Hospital

Hospital ● Manipal Clinic (South) ● Manipal Clinic (South) ● Manipal Hospital Covaxin (East) ● MANIPAL NORTHSIDE (West) ● MANIPAL NORTHSIDE CANARA UNI... ● MANIPAL WHITEFIELD ● VASAVI HOSPITAL

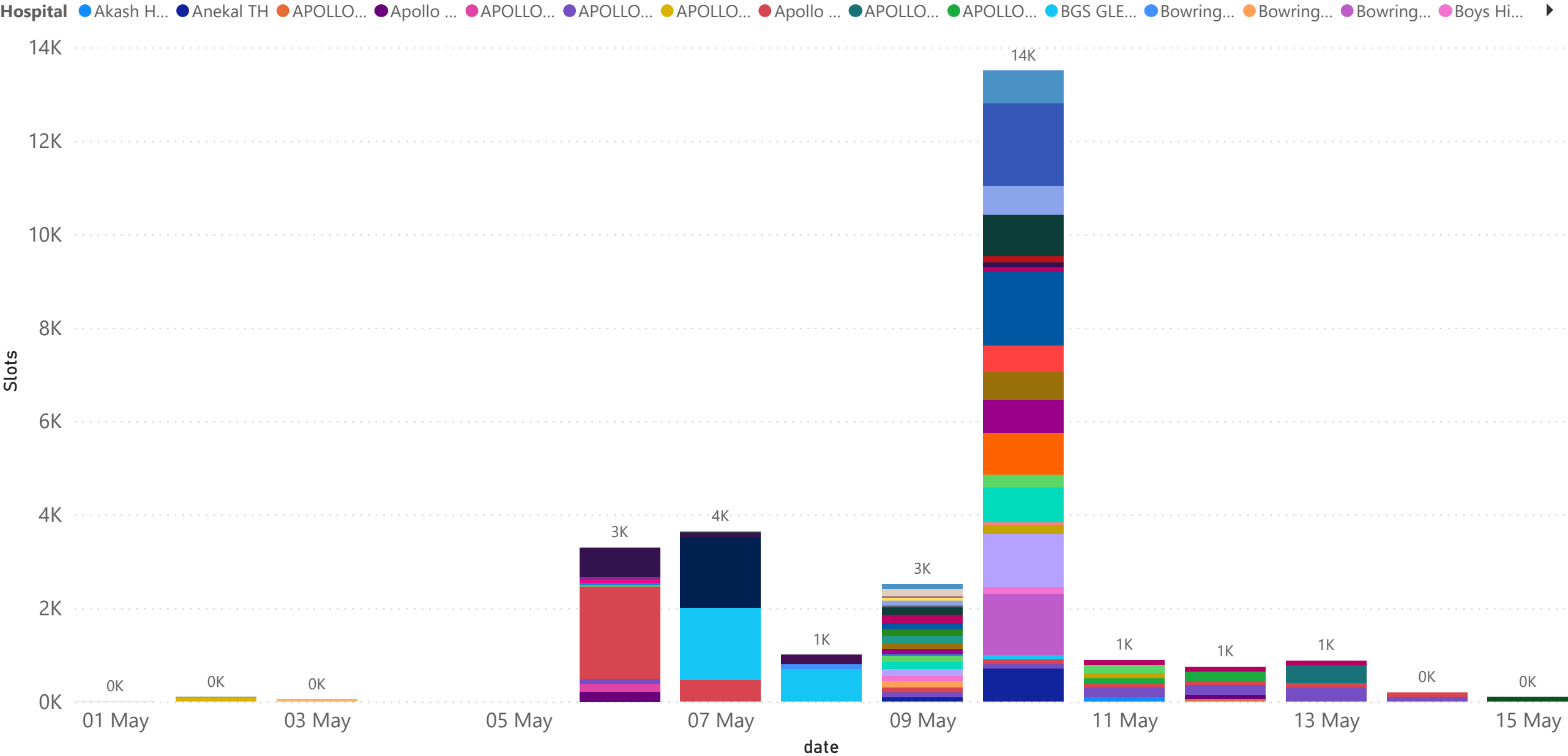


Covishield - Slots by Day and Hospital

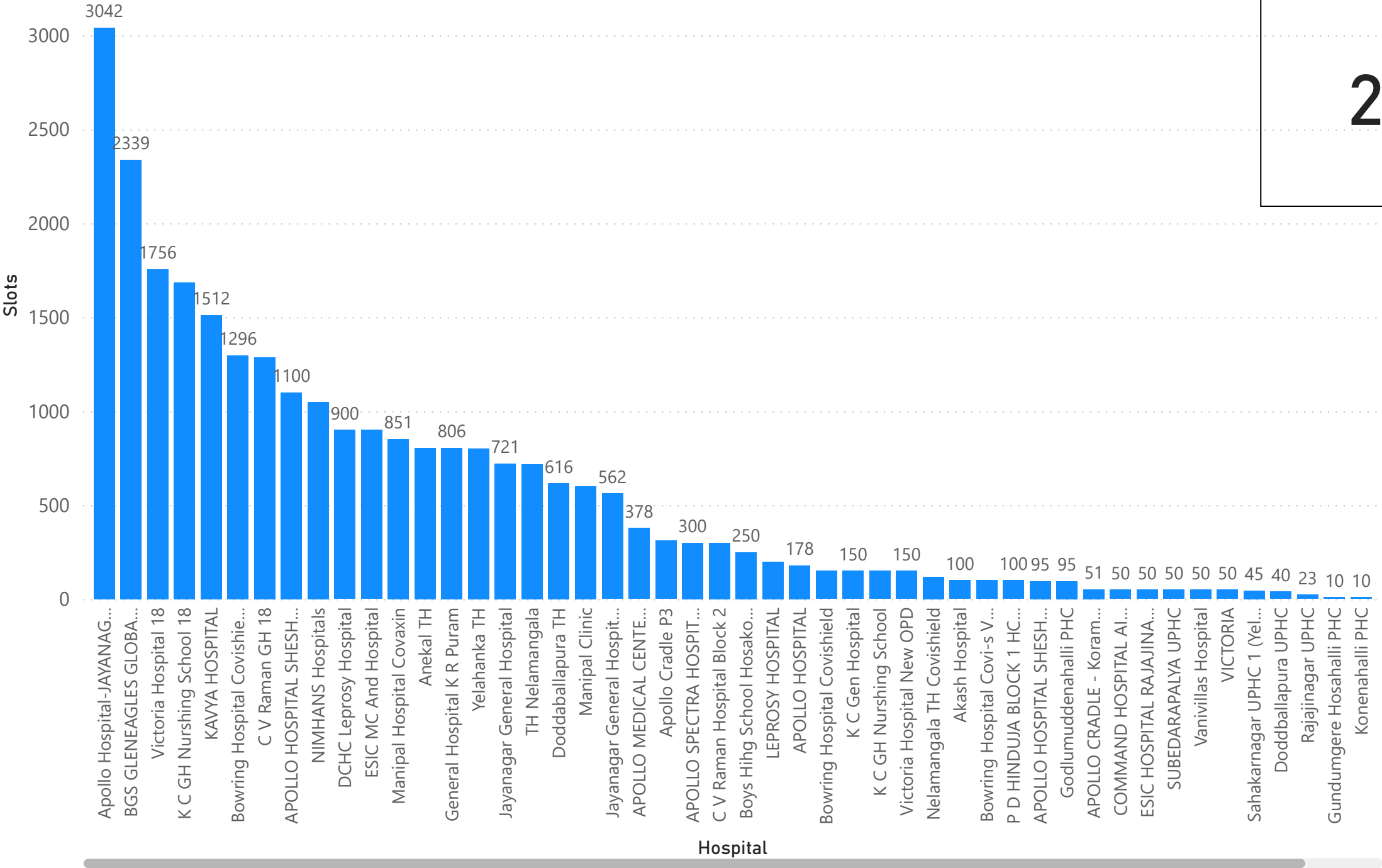
Hospital ● APOLLO CRADLE ● APOLLO CRADLE HOSPITAL (So... ● Apollo Cradle P3 (Mahadeva... ● APOLLO HOSPITAL 1 (Bo... ● APOLLO HOSPITAL S... ● Apollo Hospital-JAY... ● APOLLO MEDICAL ...



Mixed Vax - Slots by Day and Hospital



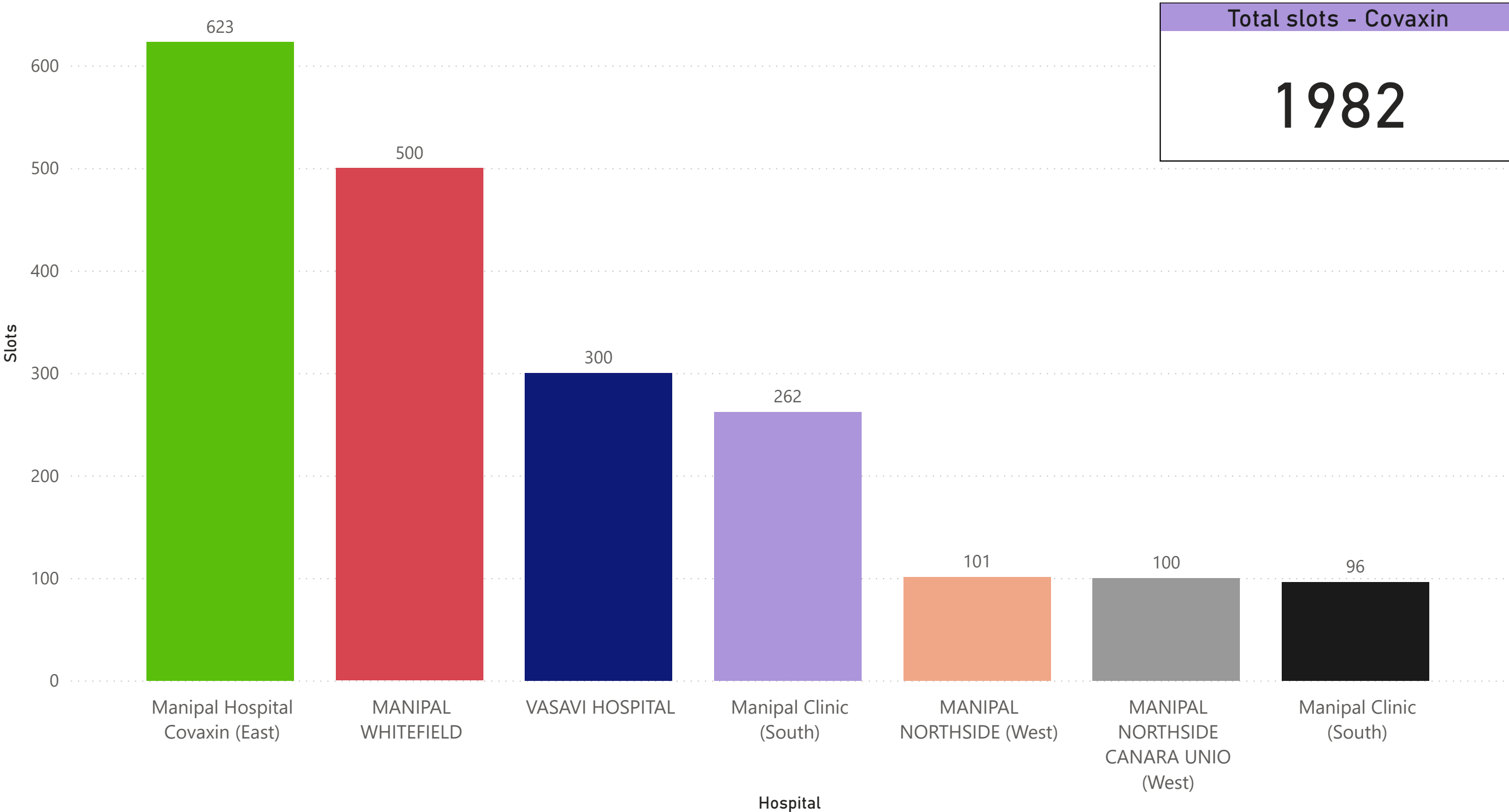
Mixed Vax - Slots by Hospital



Total slots - Mixed Vax

26.913K

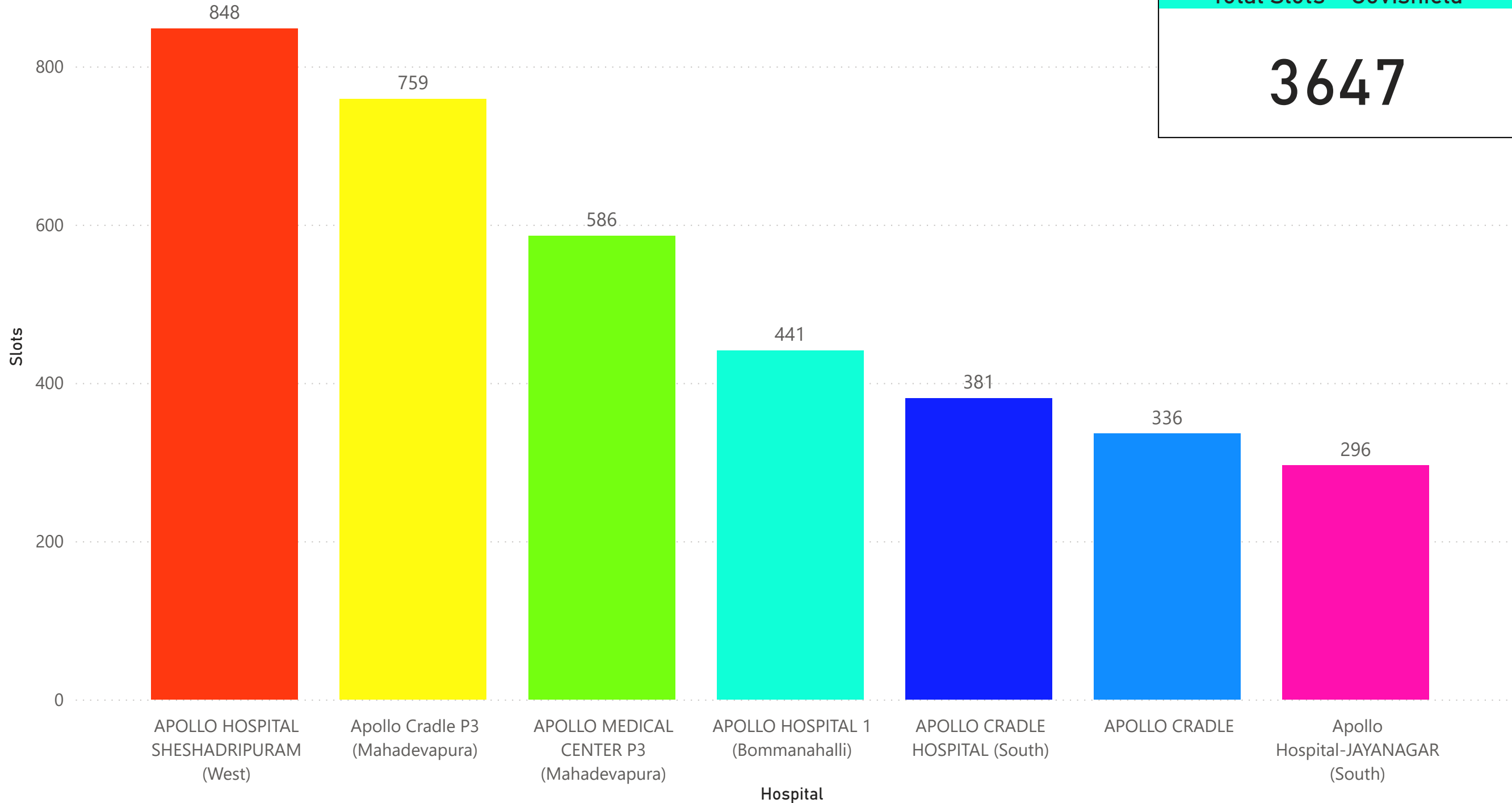
Covaxin - Slots by Hospital



Covishield - Slots by Hospital

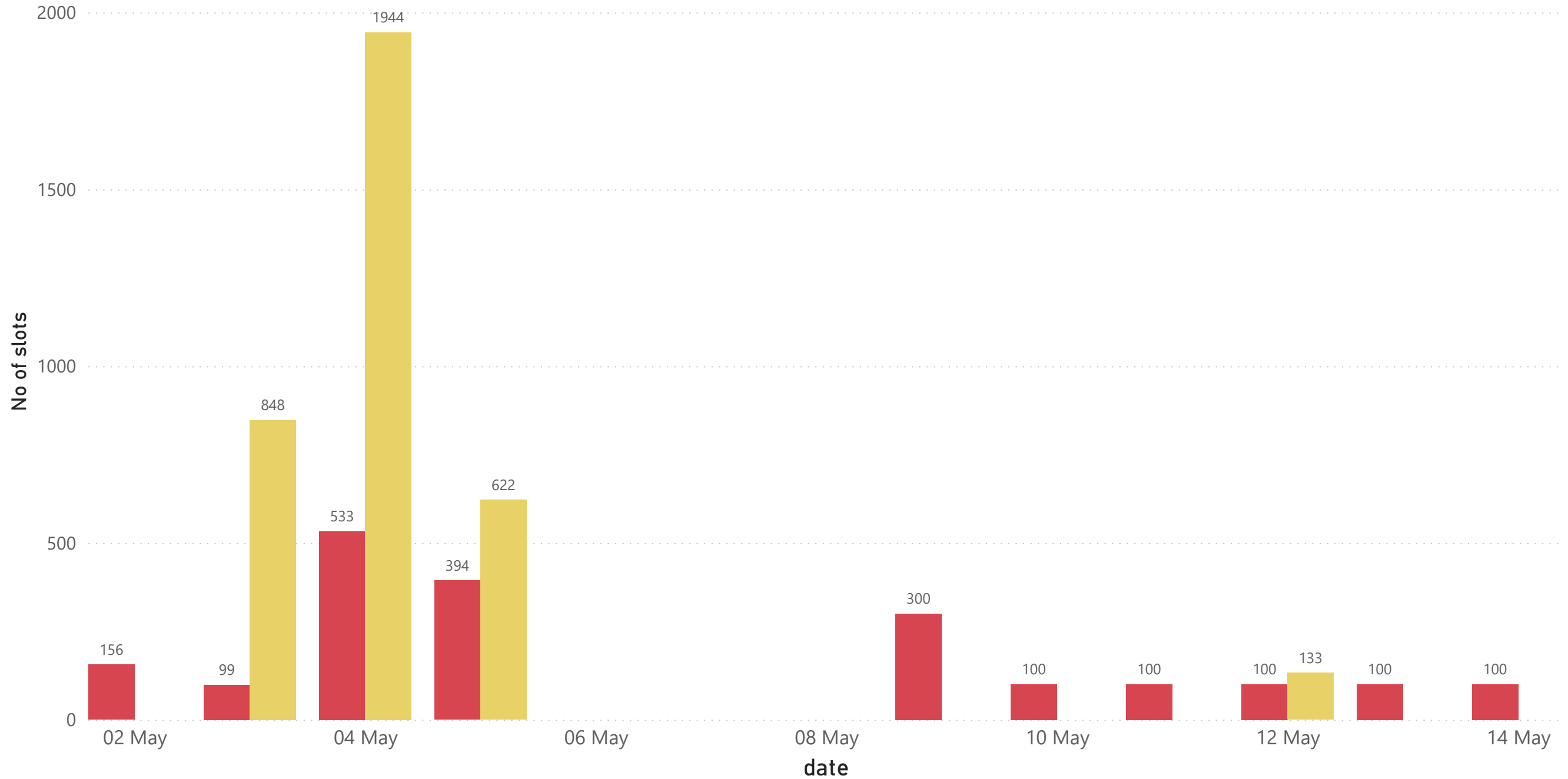
Total Slots - Covishield

3647

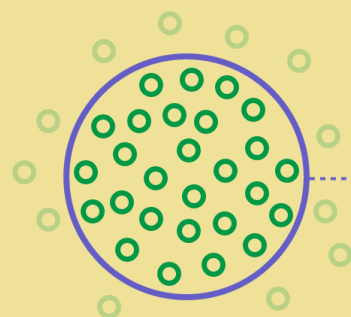


Comparison of Covaxin and Covishield slots availability by date

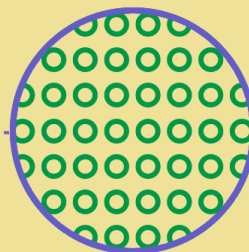
● Covaxin - Slots ● Covishield - Slots



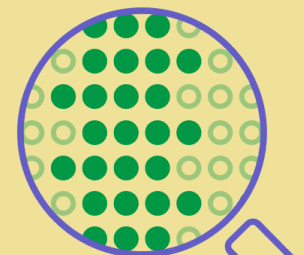
INSIGHTS



DATA



ANALYTICS



INSIGHTS

Insights:

1. There are a total of 33282 vaccine slots became available between May 1st to May 15th in Koramangala Municipality, Bangalore
2. Out of which there are 3647 Covishield slots, 1982 Covaxin slots, 740 Covidshield slots and 26913 (mixed vax) slots that reveal no name of the vaccine beforehand to the public.
3. Covaxin is exclusively given in Manipal group of hospitals
4. Covishield is exclusively given in Apollo group of hospitals.
5. Highest number of Covishield slots (848) were given at APOLLO Hospital Sheshadripuram (West)

6. Highest number of Covaxin slots (623) were given at Manipal Hospital (East)
7. The availability of both the vaccines is highest on May 4th with Covaxin at 533 slots across 3 hospitals and Covishield at 1944 slots across 7 hospitals.
8. Both the vaccines are not available between 6th, 7th and 8th of May, and also since then they are on decline.
9. Covishield isn't available since 5th May and later became available only on 12th May with a meagre 133 slots
10. Though in few hundred slots, Covaxin became available after 8th May

“Thank You”

