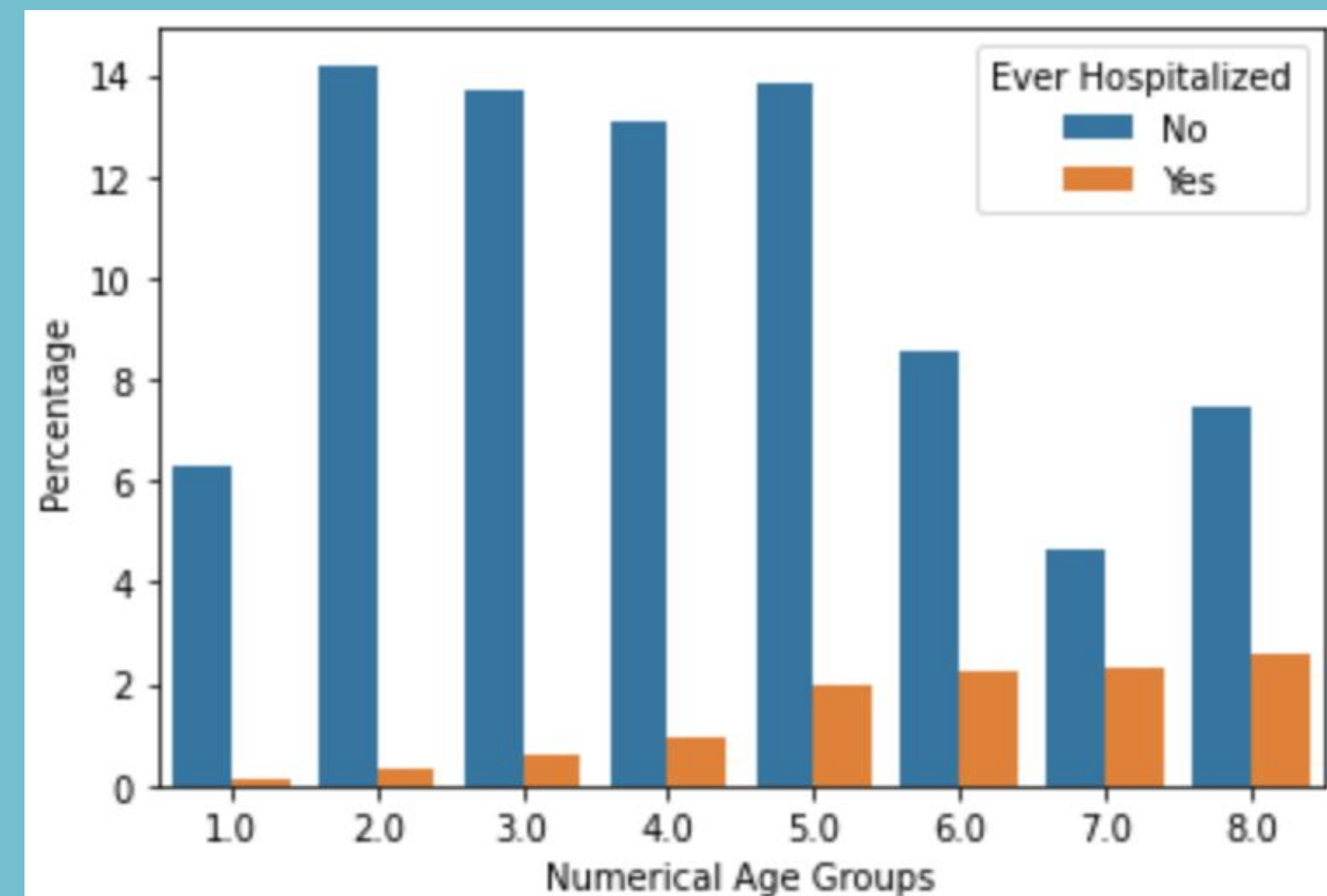


Toronto Covid-19 Cases Dataset Exploration

Background

- Dataset provided by Toronto Public Health in response to the Covid-19 pandemic
- Contains information for all cases managed by Toronto Public Health
- There are 18 descriptive values, including demographic, geographic, and severity information

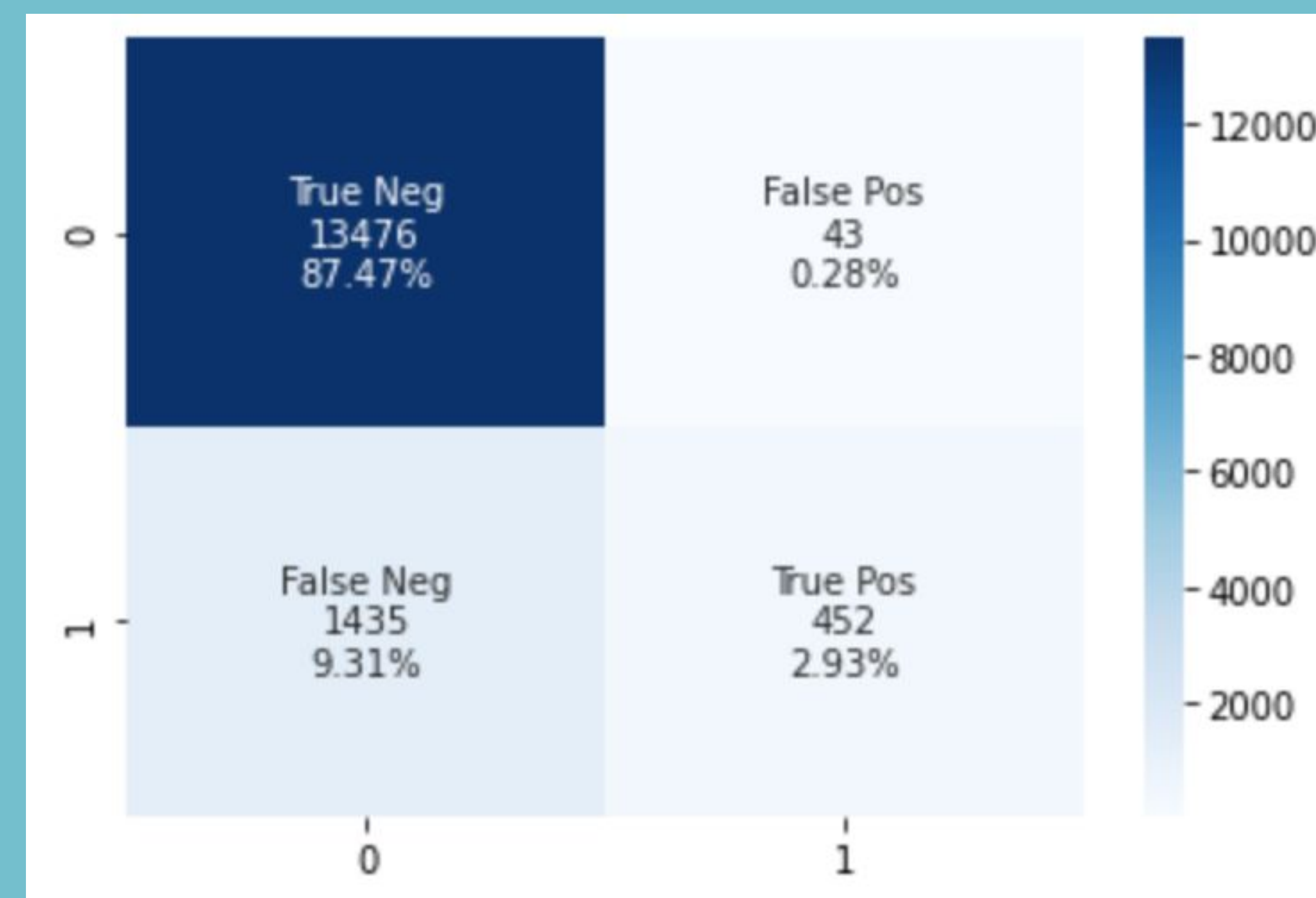


Basic Model

- Features plotted: Age Group, Age Group Percentage, and If Ever Hospitalized
- High correlation between all these features
- Older age groups had higher percentage of hospitalization (higher severity)
- Covid-19 cases are most prominent for mid age groups (without being hospitalized)

Prediction Model

- The tree model was found to have an accuracy score of 87% through the use of confusion matrix (true negatives, false negatives, true positives, and false positives)



Preview of Data

	Outbreak Associated	Age Group	Source of Infection	Classification	Episode Date	Reported Date	Client Gender	Outcome	Currently Hospitalized	Currently in ICU	Currently Intubated	Ever Hospitalized	Ever in ICU	Ever Intubated
0	1	5.0	Travel	CONFIRMED	2020-01-22	2020-01-23	FEMALE	RESOLVED	No	No	No	No	No	No
1	1	5.0	Travel	CONFIRMED	2020-01-21	2020-01-23	MALE	RESOLVED	No	No	No	Yes	No	No
2	1	2.0	Travel	CONFIRMED	2020-02-05	2020-02-21	FEMALE	RESOLVED	No	No	No	No	No	No
3	1	6.0	Travel	CONFIRMED	2020-02-16	2020-02-25	FEMALE	RESOLVED	No	No	No	No	No	No
4	1	6.0	Travel	CONFIRMED	2020-02-20	2020-02-26	MALE	RESOLVED	No	No	No	No	No	No
...
15427	1	2.0	Close contact	CONFIRMED	2020-05-11	2020-05-11	MALE	RESOLVED	No	No	No	No	No	No
15428	1	4.0	Travel	CONFIRMED	2020-07-25	2020-08-02	MALE	ACTIVE	No	No	No	No	No	No
15429	1	4.0	Unknown/Missing	PROBABLE	2020-07-31	2020-07-31	FEMALE	ACTIVE	No	No	No	No	No	No
15430	1	4.0	Institutional	PROBABLE	2020-07-30	2020-07-30	FEMALE	ACTIVE	No	No	No	No	No	No
15431	1	8.0	Healthcare	CONFIRMED	2020-07-19	2020-07-29	MALE	ACTIVE	Yes	No	No	Yes	No	No

15406 rows × 14 columns

Source Code:

<https://colab.research.google.com/drive/186WCWCwdW8CtCDfoWAPYwMqbhYTvIJDf?usp=sharing>