

Introduction & Goals

- Vaccination is a safe and effective way to protect against SARS-CoV-2
- Two of the three authorized SARS-CoV-2 vaccines in the United States require two initial doses plus boosters, presenting logistical challenges
- Those with unstable housing face a multiplicity of barriers that amplify these challenges
- Our goal was to identify the greatest factors that affect completion of the SARS-CoV-2 vaccination course in Houston's unstable housing population

Methods

We utilized a vaccination database maintained by Healthcare for the Homeless – Houston (HHH) to determine the rates of partial and full SARS-CoV-2 vaccination among those with unstable housing in Houston (n=294). We then performed a retrospective medical chart review to identify a variety of medical and socioeconomic variables and performed ad-hoc statistical analyses to determine whether any of the investigated factors were associated with an increase in the likelihood of vaccination series completion.

Results

- The strongest predictor of complete vaccination was housing type, with those living in “permanent supportive housing” being nearly 10 times more likely to receive the second dose when compared to all other classes of homelessness
- Those with a Harris County Gold Card (sliding scale financial assistance for healthcare costs) were more likely to receive their second dose
- 30% of those with unstable housing missed their second dose
- Biological sex, race, ethnicity, influenza vaccination within the last two years, smoking status, alcohol use, drug use, unemployment, and mode of transportation to the clinic showed no association with partial vs. complete vaccination

Figure 1. Odds ratios for complete SARS-CoV-2 vaccination series by housing type and insurance status

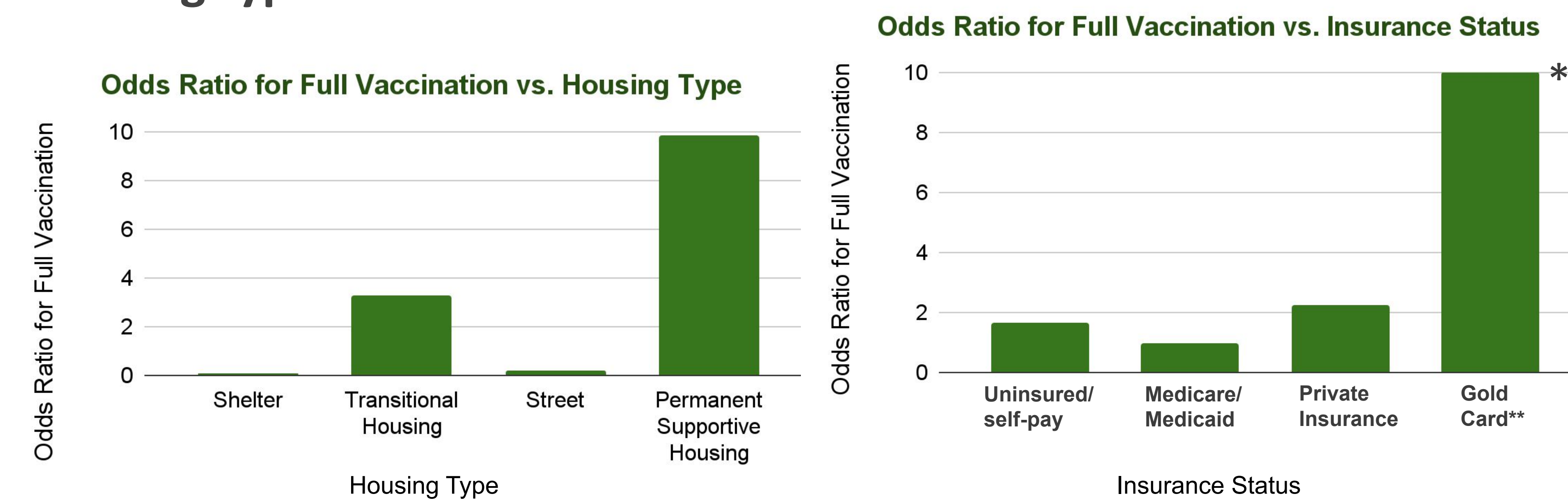


Figure 1. Those living in permanent supportive housing were nearly 10 times more likely to complete the vaccination series relative to the aggregate of all other housing types (OR = 9.844). All patients with a Harris County Gold Card (**sliding scale financial assistance for healthcare costs) completed with vaccination course (*OR = ∞).

Figure 2. Percentage of completed SARS-CoV-2 vaccination series for each housing type

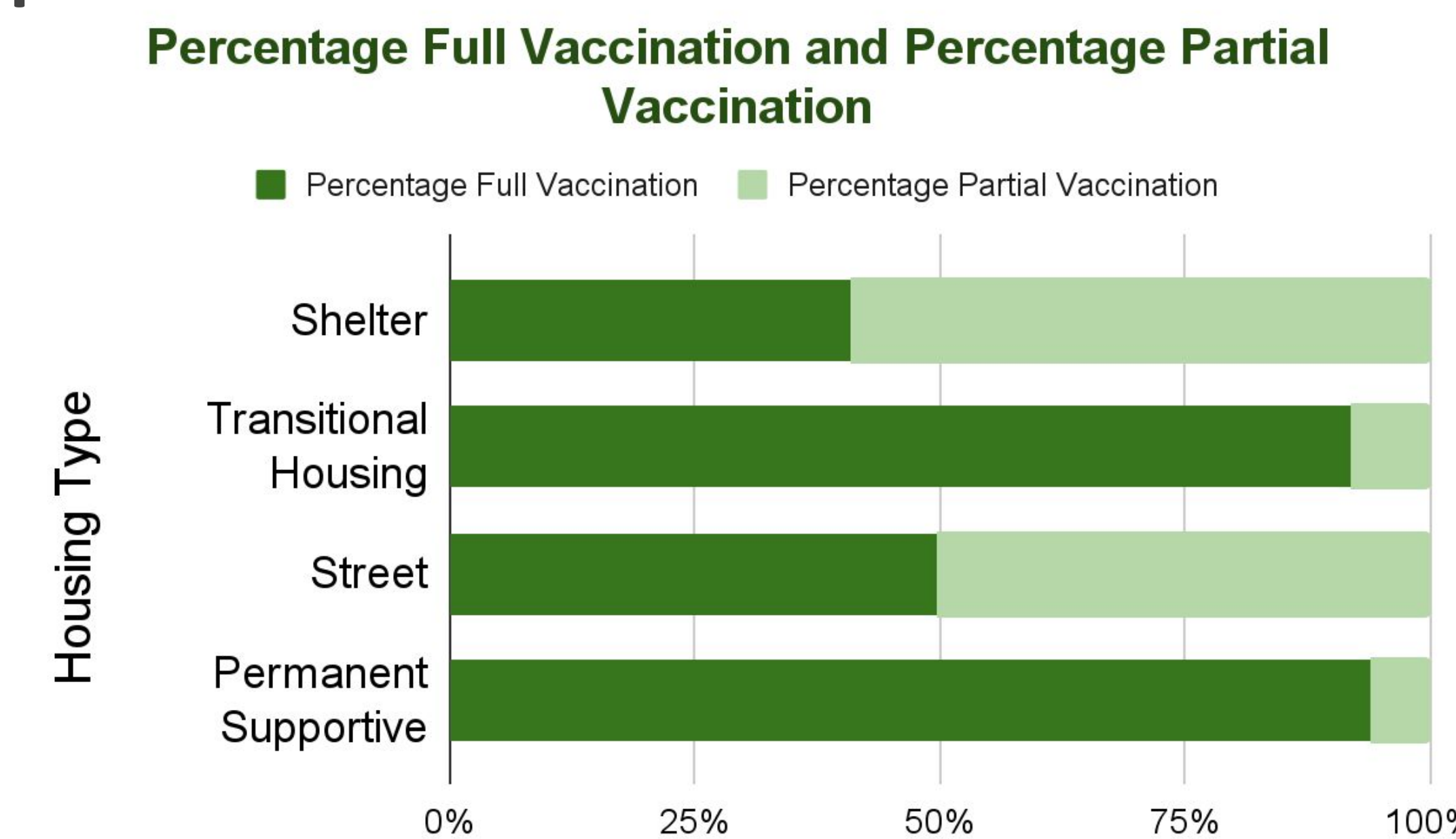


Figure 2. 94% of those living in permanent supportive housing and 92% of those living in transitional housing completed the vaccination series.

Figure 3. Factors associated with complete SARS-CoV-2 vaccination series

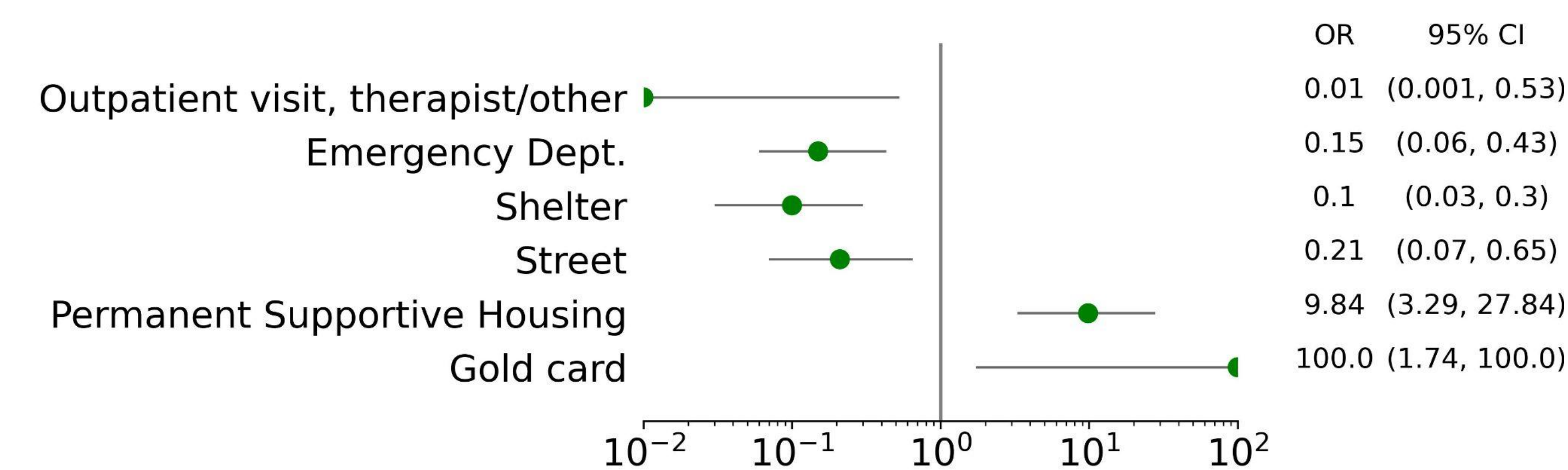


Figure 3. Those living in permanent supportive housing and those with a Harris County Gold Card have a statistically significant increase in their likelihood of complete vaccination. There is a negative association between the most recent medical encounter being an outpatient or ED visit and complete vaccination. There is a negative association between living on the street or in a shelter and complete vaccination.

Discussion & Conclusion

- Those with unstable housing in Houston are much more likely to miss the second dose of a two-dose SARS-CoV-2 vaccine when compared to the general U.S. population (30% vs 12%)
- A one-dose vaccine may be more appropriate for those with unstable housing, particularly for those who are younger in age, living in a shelter or on the streets, or have had their most recent medical encounter at an emergency room
- The majority (70%) of patients with unstable housing return for the second dose
- Partial vaccination still yields partial protection against Sars-CoV-2
- Physicians should work with their patients to determine their best option and providers should not hesitate to initiate a two-dose vaccine for individuals with unstable housing if it is available
- Access to housing and affordable health care may be associated with higher vaccination rates against Sars-CoV-2

Acknowledgements & References

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