

Review of COVID-19 Patient Demographics at LVHN Hospitals

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Review of COVID-19 Patient Demographics at LVHN Hospitals

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Introduction and Objectives

- Understanding the population of infected and hospitalized with COVID is essential to assuring access, clinical services and infection prevention strategies.
- Minority groups are at risk not because of biological differences in race but due to differences in social determinants of health
- The goal of this project was to:
 - Review and describe COVID patient demographics
 - Determine how patient demographic information was used in population-based pandemic responses

Methods

- Retrospective review of hospitalized COVID patient demographics (N=15309 cases) between 3/2/20 and 6/2/21; stratify cases by age, race/ethnicity, language preference and hospital site (Cedar Crest, Muhlenberg, Schuylkill, Hazelton, and Pocono).
- Demographic data collected from LVHN Analytics Portal: COVID Confirmed Patient Registry
- Review of patient demographics by ICU admission, and ventilator use and mortality.
- Interviewed Timothy Friel, MD (Clinical Leader of COVID Command Center) and Matthew McCambridge, MD (Chief Quality and Patient Safety Officer)

Results

- Whites had a higher percentage of older patients while other races had a higher percentage of younger patients. (Figure 5)
- 17% of admitted patients speak a language other than English. Public communication provided in English and Spanish. (Figure 3)
- Hazelton: about half of COVID admissions were Hispanic and Latino (H/L) patients and the other half were non H/L which reflects the community served by this hospital (Figure 4)
- Limitations: Data in analytics portal had slight differences in values day to day; Patient race, ethnicity and language data are missing for up to 4.6% of patients; Some patients may feel uncomfortable sharing racial data.

Results continued

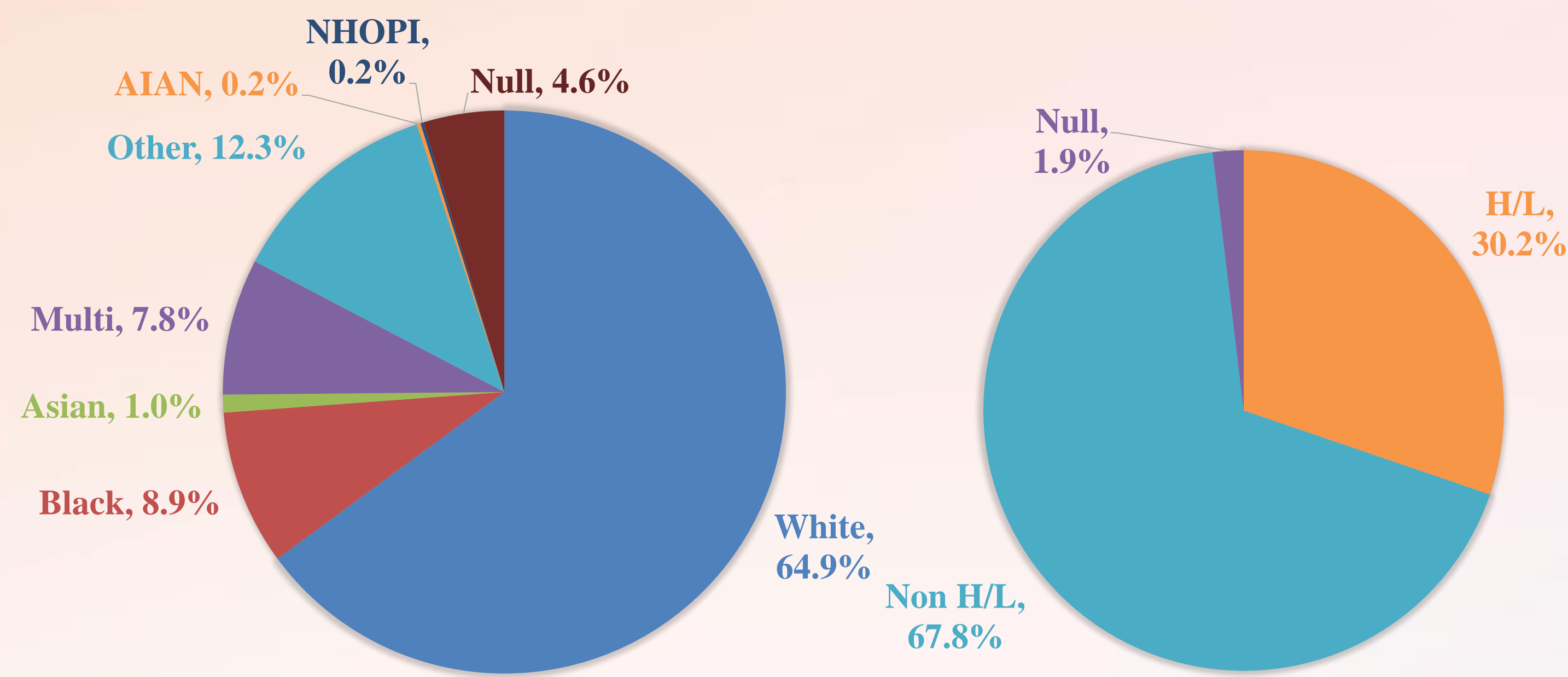


Figure 1. All COVID admissions at LVHN racial breakdown

Figure 2. All COVID admissions at LVHN ethnicity breakdown

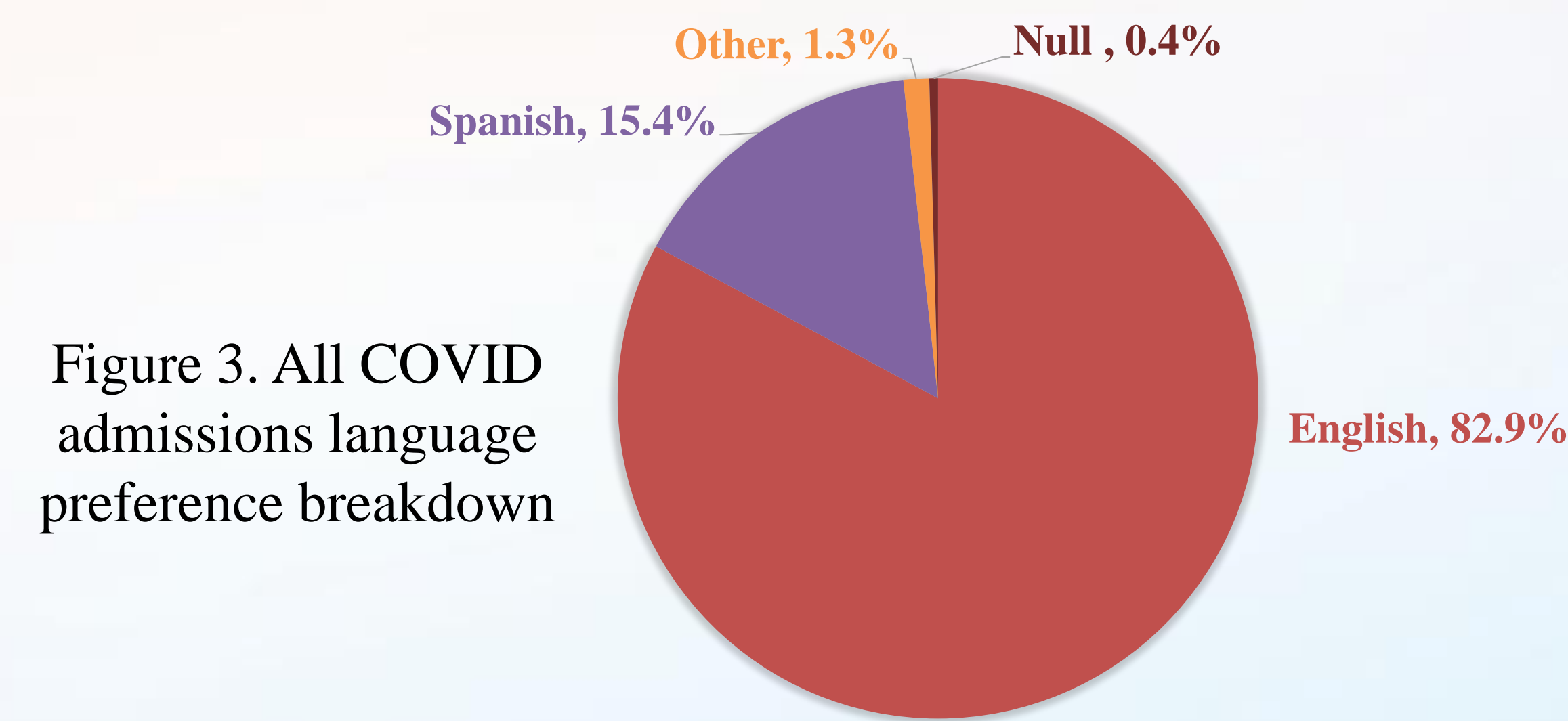


Figure 3. All COVID admissions language preference breakdown

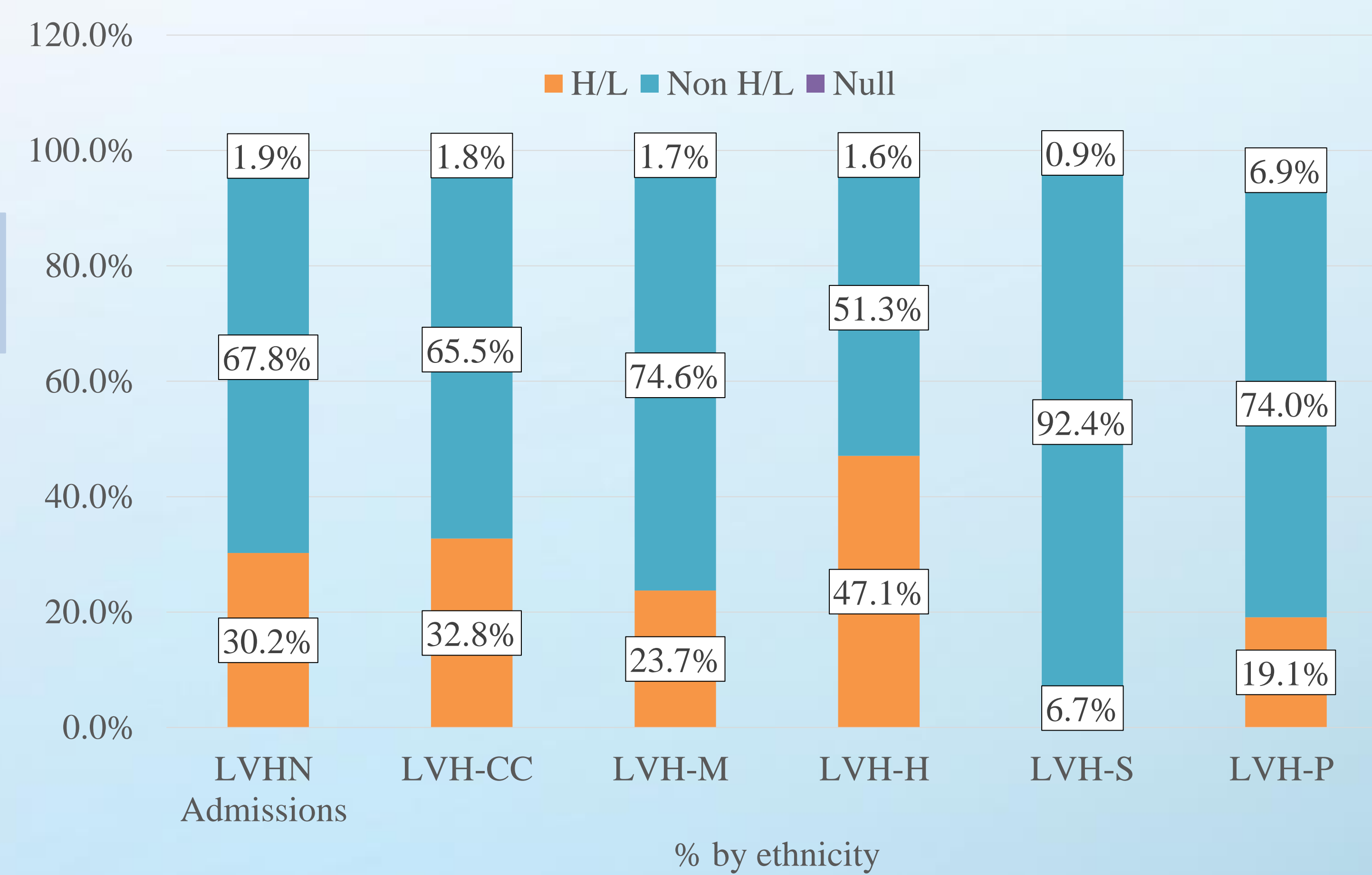


Figure 4. Ethnicity composition of each LVHN location

Results continued

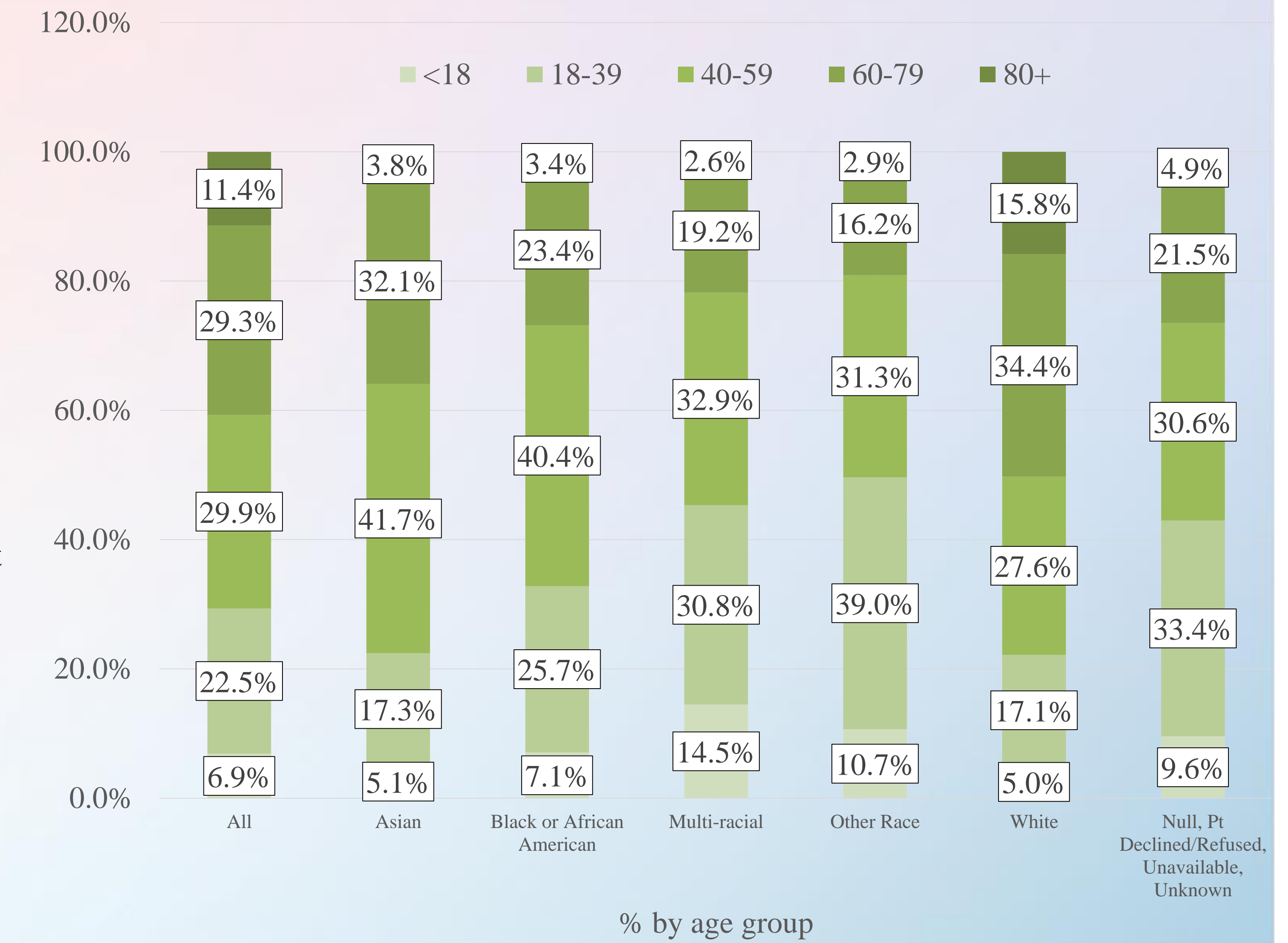


Figure 5. Age composition of races for COVID admissions at LVHN

Conclusions and Future Directions

- Important to track patient demographic information for the pandemic as it informed clinical and prevention strategies
- Age was a strong predictor on COVID patient outcomes.
- Differences in social determinants of health can account for those differences seen in COVID cases and outcomes, not solely race.
- Continue analysis of this data by site and time period to further understanding of the pandemic and its impact.
- Continue to analyze patient race, ethnicity and language data for other conditions (eg childhood immunization rates) to ensure quality and equitable care.

References and Acknowledgments:

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