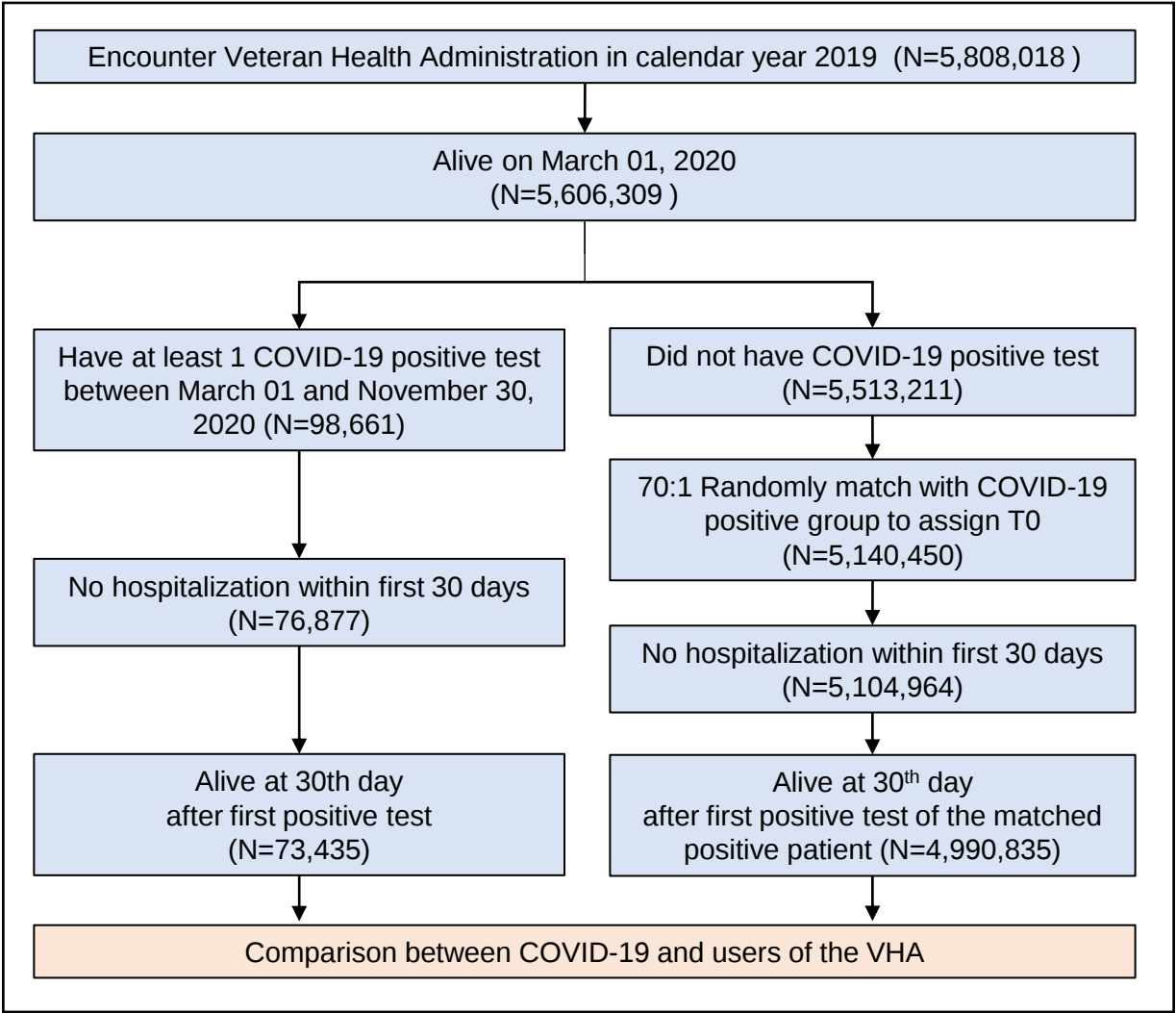

Supplementary information

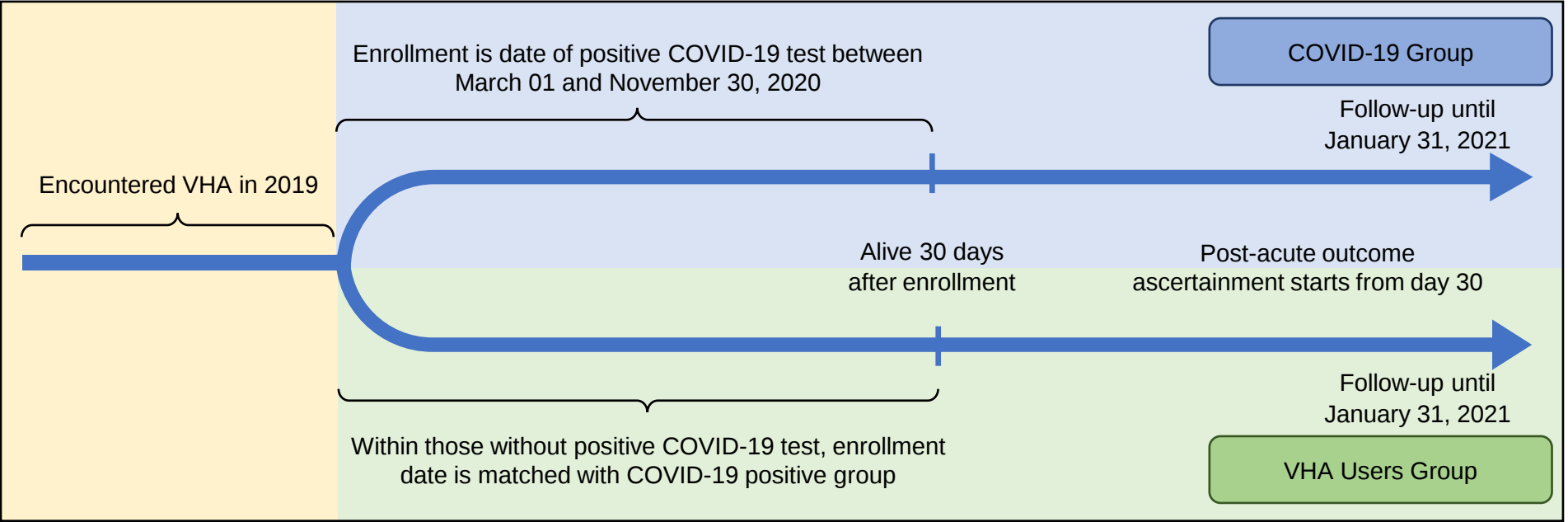
High-dimensional characterization of post-acute sequelae of COVID-19

In the format provided by the
authors and unedited

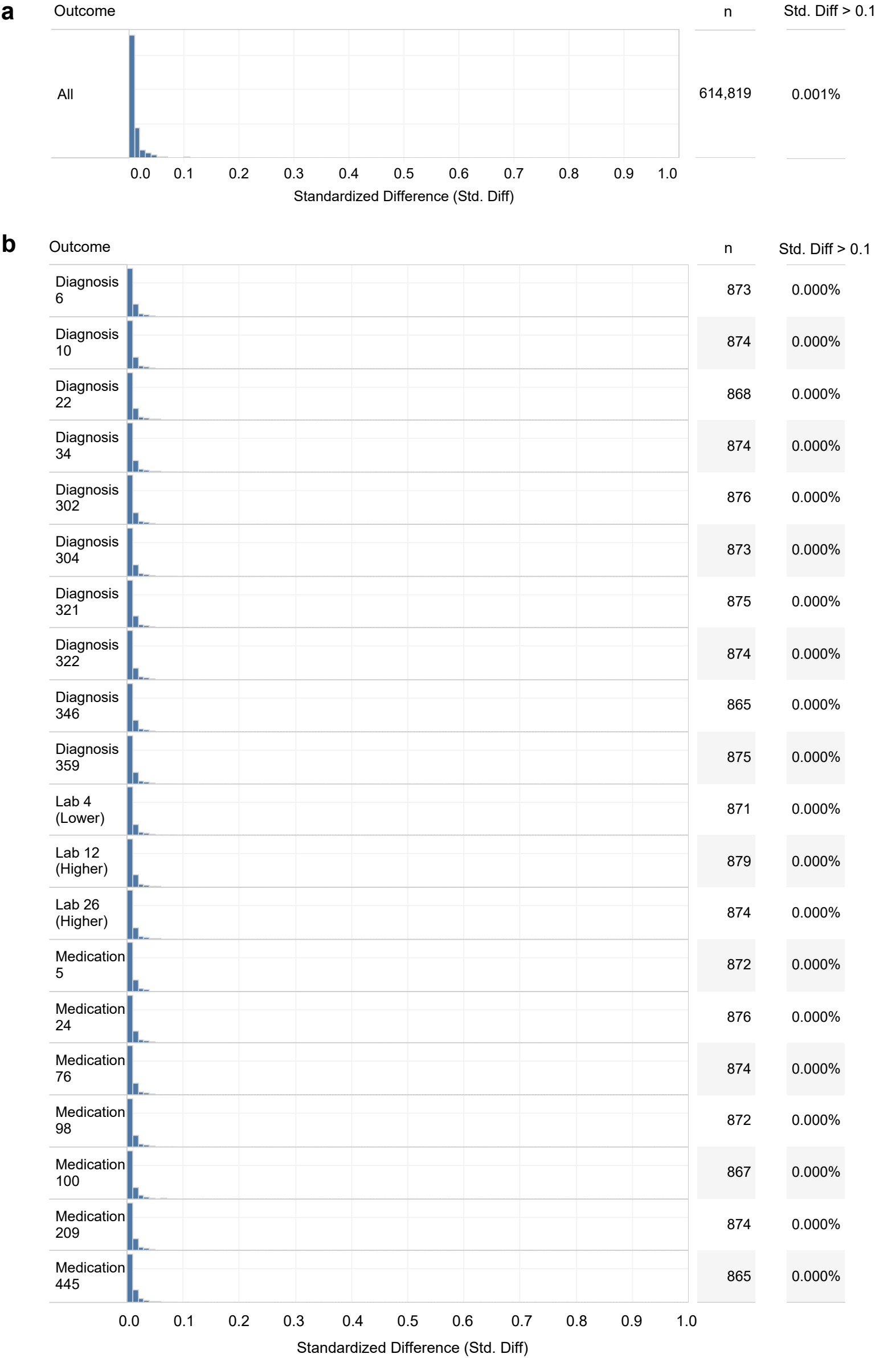
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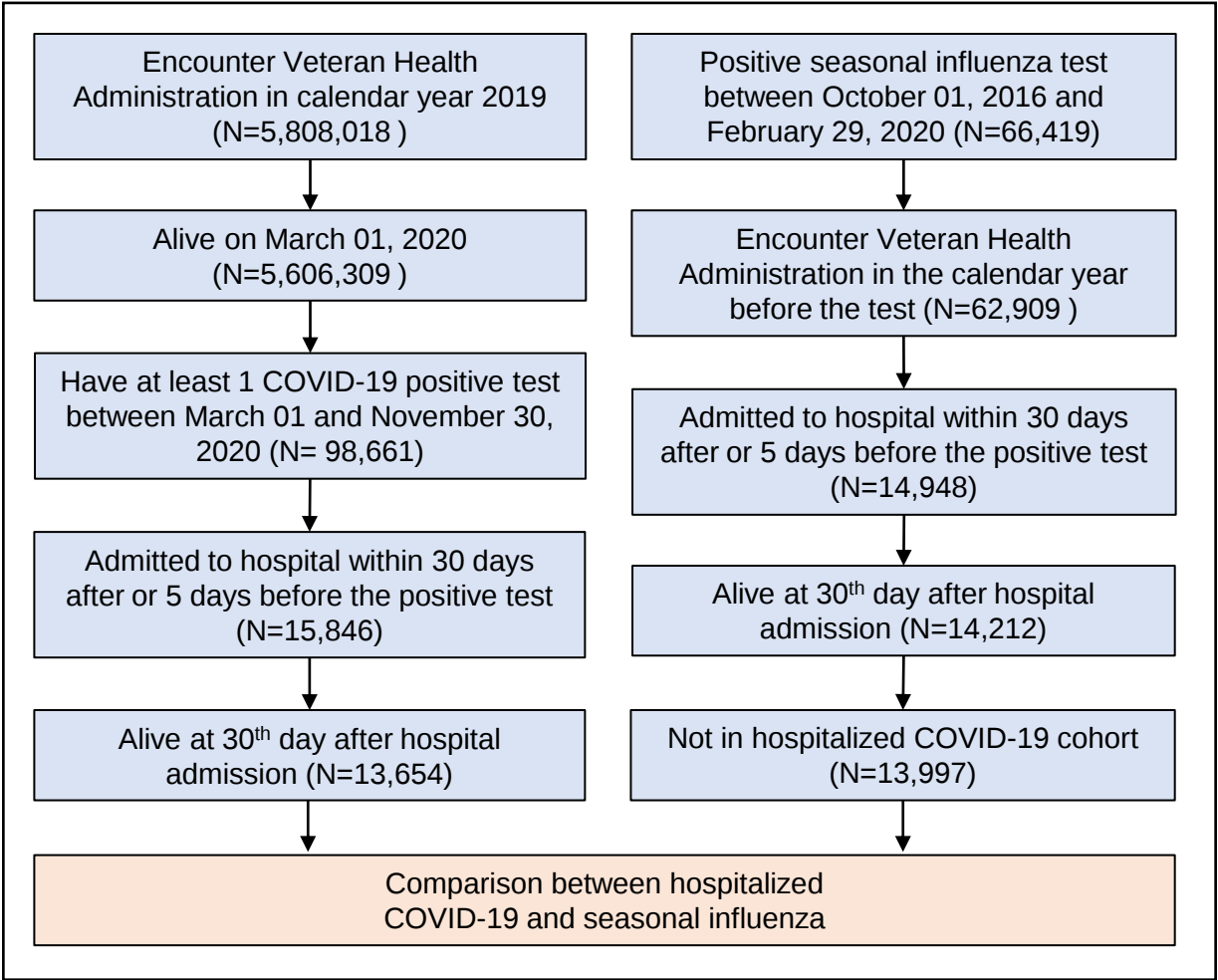
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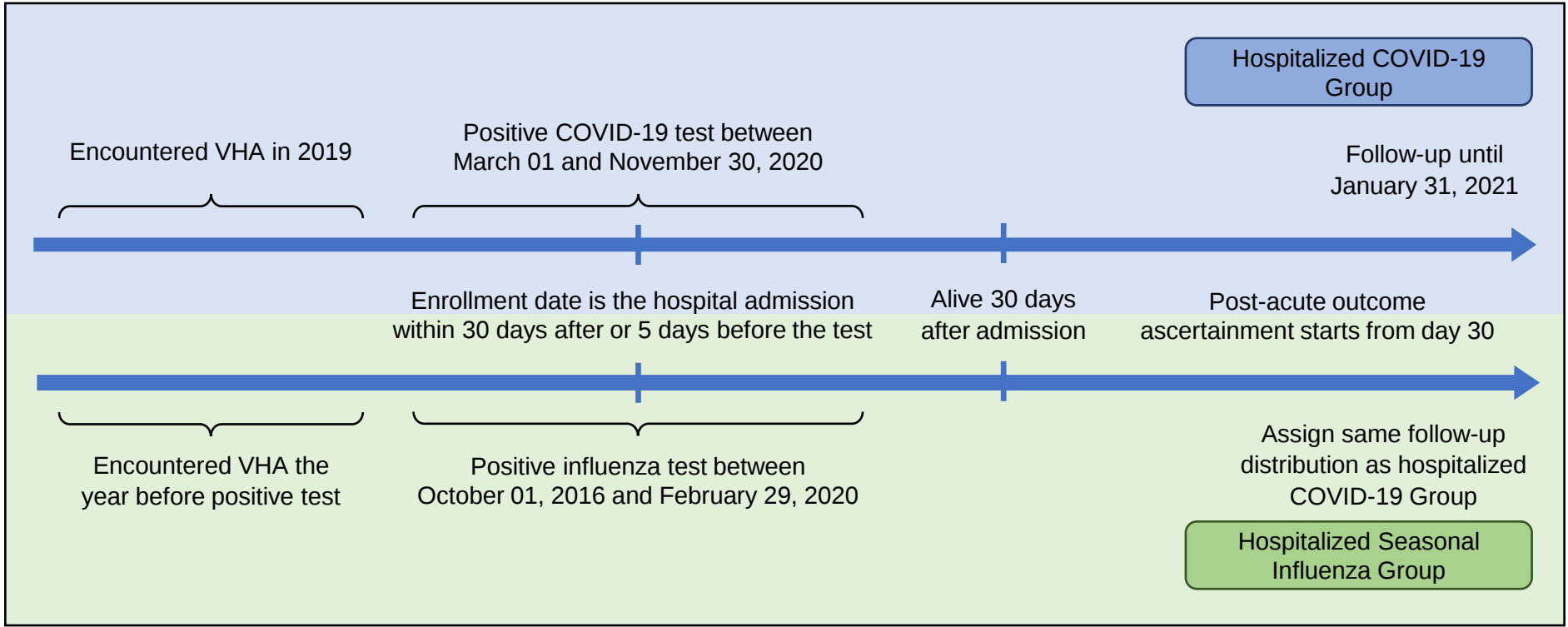
Supplementary Figure 1: Study design for COVID-19 vs. users of the Veteran Health Administration.



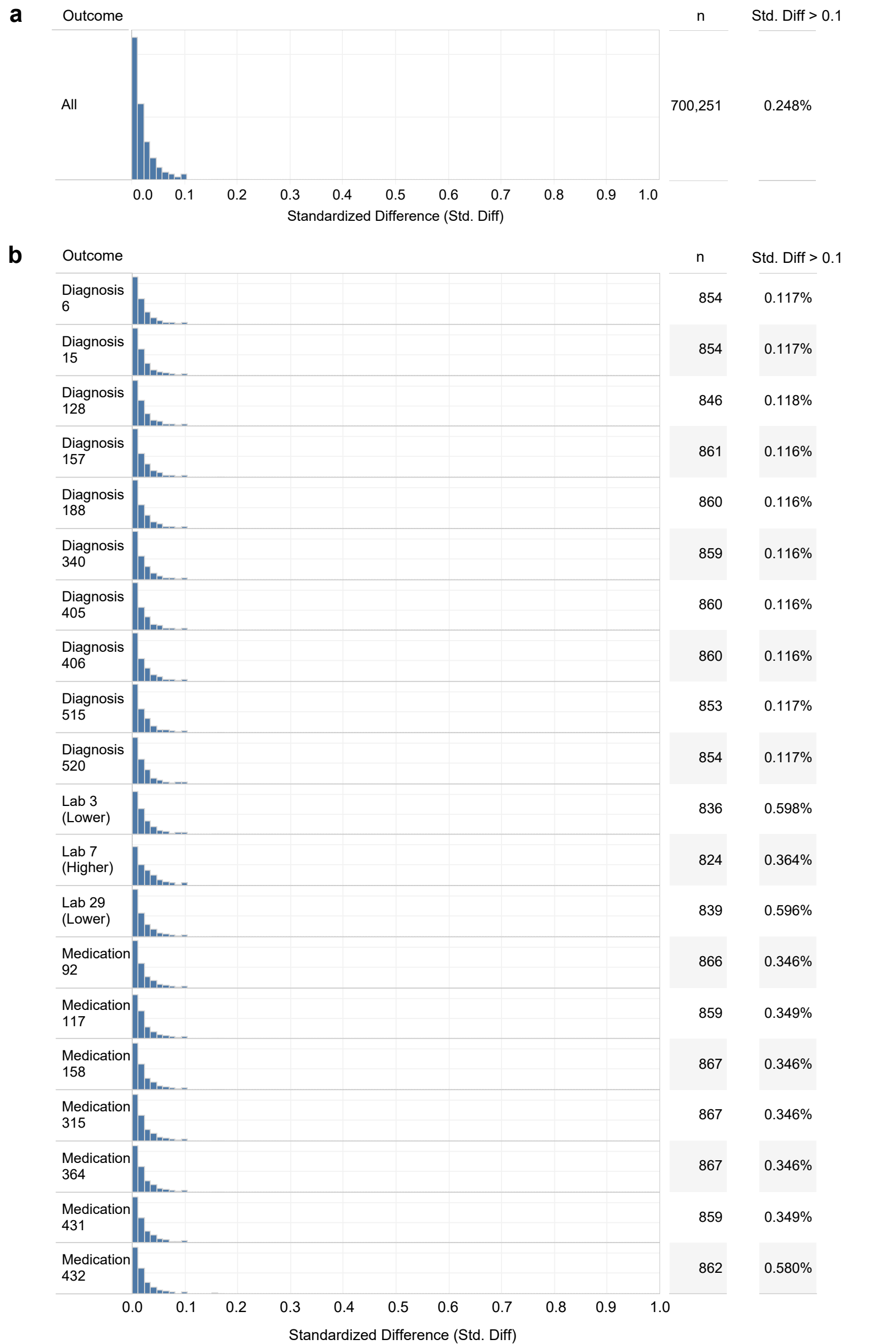
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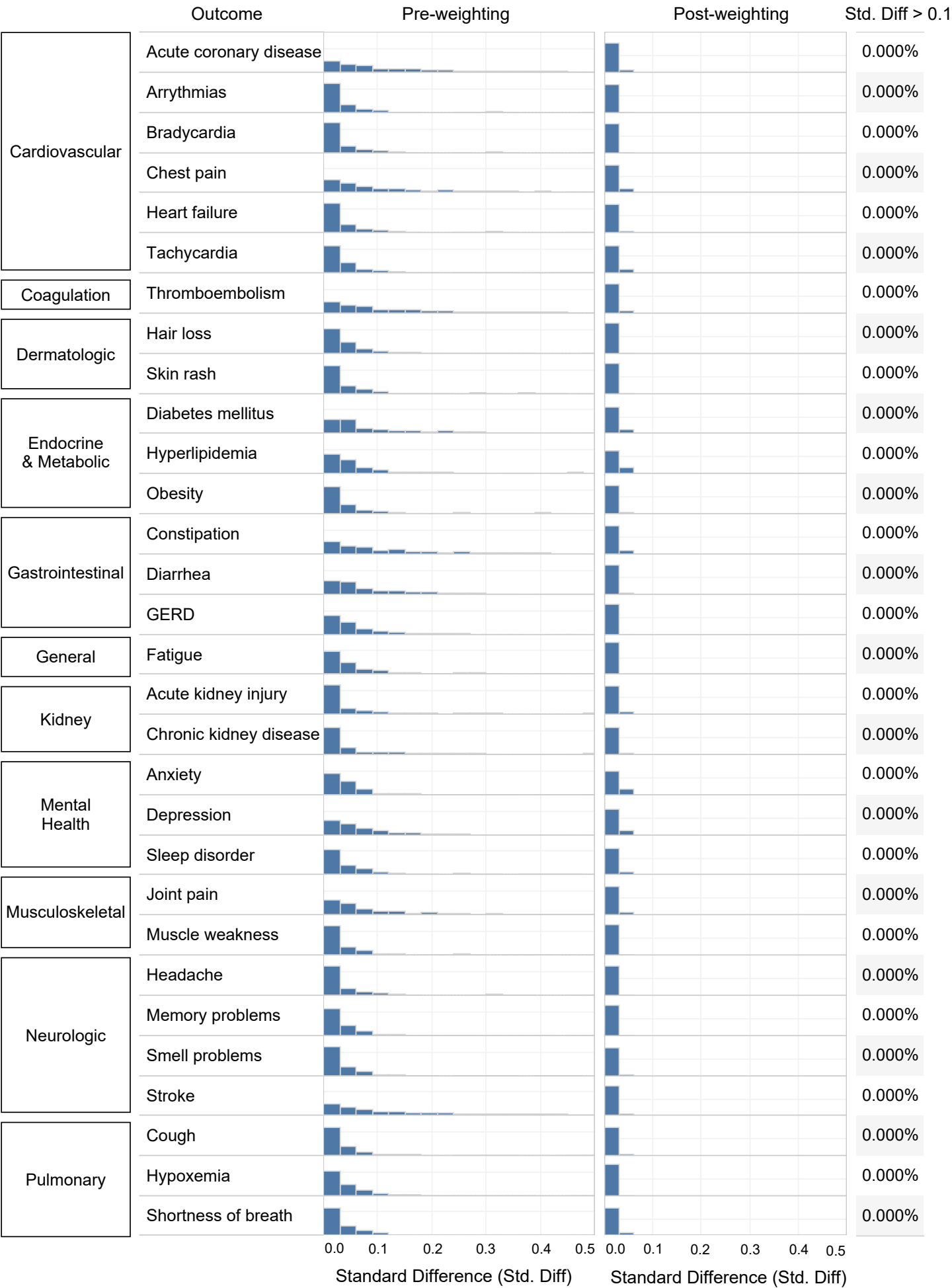
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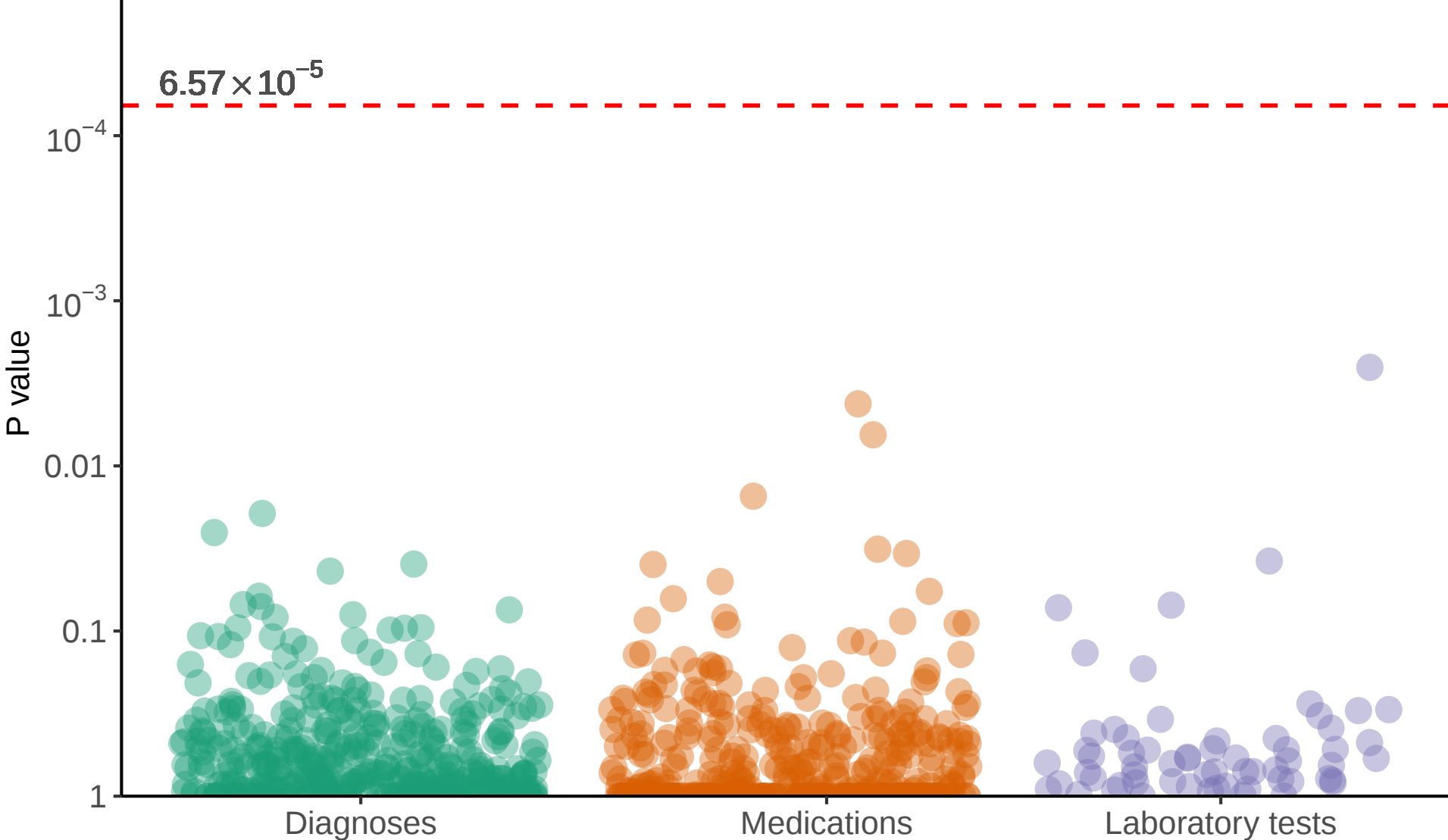
Supplementary Figure 3: Study design for hospitalized patients with COVID-19 vs. hospitalized patients with seasonal influenza



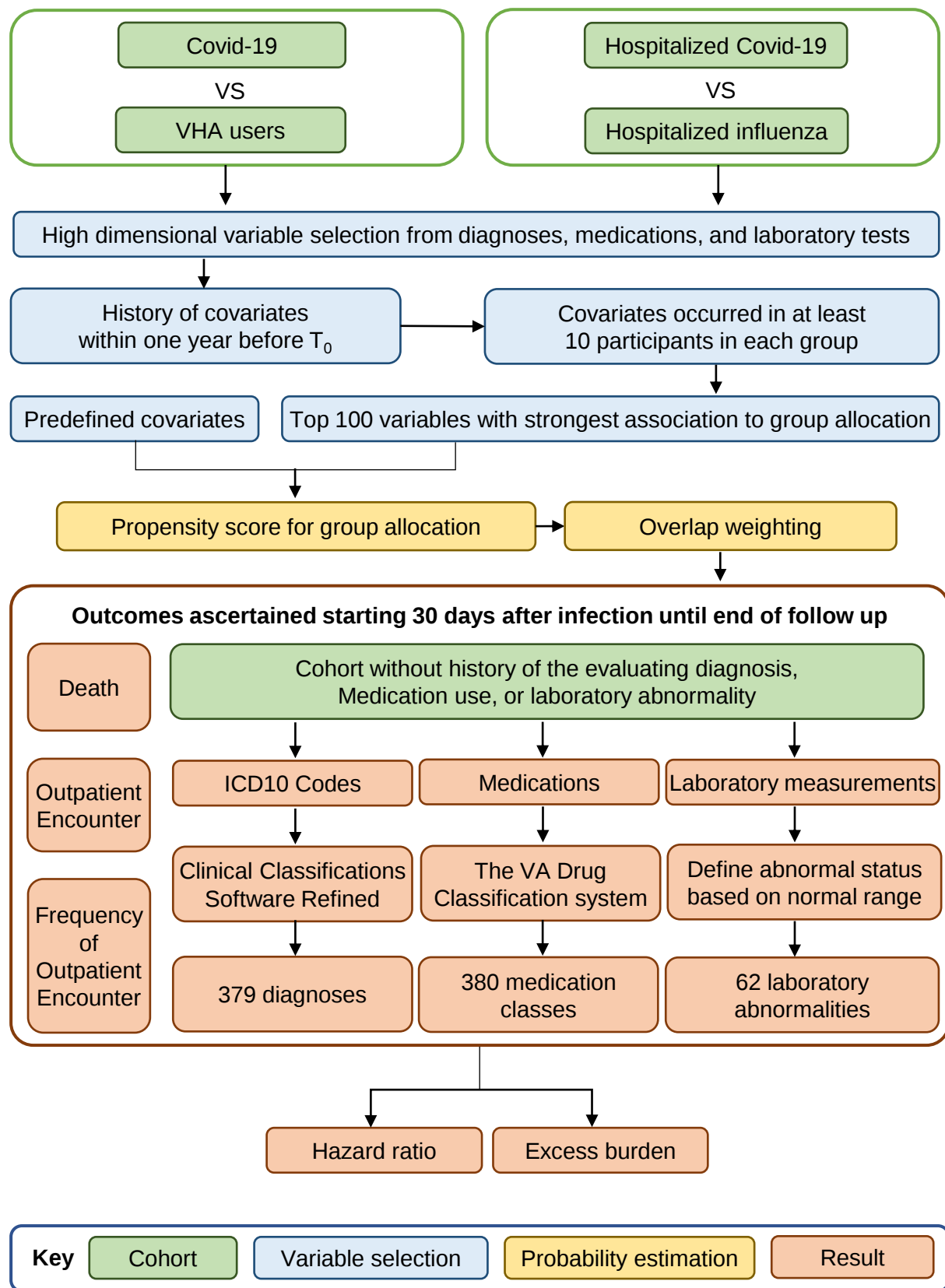
Supplementary Figure 4: Standardized differences in comparisons of hospitalized COVID-19 vs. hospitalized patients with seasonal influenza. (a) overall and (b) in 20 randomly selected outcomes. The histogram represents the distribution of the standardized differences after weighting in all predefined, algorithmically selected high dimensional variables, and non-selected high dimensional variables across all outcomes investigated. N is the number of total standardized differences included in the histogram (the sum total of all variables assessed across all outcomes assessed). The percentage of standardized differences greater than 0.1 is reported.



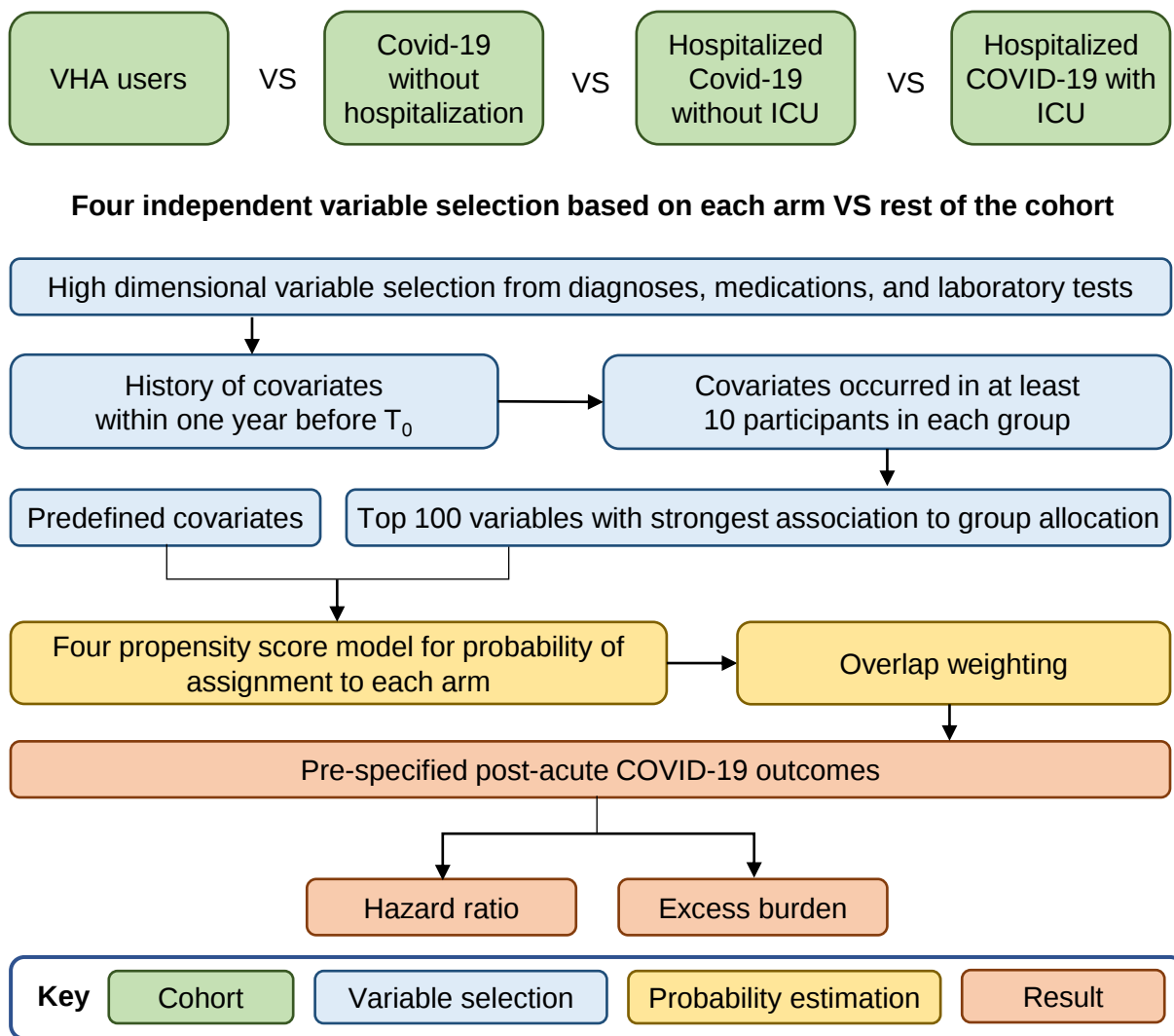
Supplementary Figure 5: Standardized differences before and after weighting for high resolution pre-specified outcomes in four mutually exclusive groups (users of the Veteran Health Administration, people with COVID-19, people hospitalized with COVID-19, and people admitted to intensive care for COVID-19). The histogram represents the distribution of all standardized differences for that outcome pre- and post- weighting in all predefined and algorithmically selected high dimensional variables. Standardized differences were calculated for all 6 pairwise comparisons of the four groups. The percentage of standardized differences greater than 0.1 is reported.



Supplementary Figure 6: Negative exposure controls. Negative exposure control was defined as exposure to influenza vaccine in even vs. odd months between October 1, 2017 and September 30, 2019. Each dot represents the P value for an association between the exposure to influenza vaccine in even vs. odd months and one of the 821 high dimensional clinical outcomes considered in this study (diagnoses, medications, and laboratory tests). Dots below the reference line indicate P value larger than 6.57×10^{-5} – the threshold of significance considered in this study.



Supplementary Figure 7: Flowchart of analytic approach for the high dimensional outcomes analyses



Supplementary Figure 8: Flowchart of analytic approach for the pre-specified outcomes analyses