**Data**

This analysis will be using the Washington State Health Workforce Survey Data provided by data.wa.gov. This data set includes practice characteristics, education, and demographics of healthcare providers. Understanding the qualifications and ethnographic background of healthcare providers allows the state government to more clearly describe who is giving care, what groups are being represented and highlight gaps in education, qualification or availability of caregivers.

https://data.wa.gov/Health/Washington-Health-Workforce-Survey-Data/cvrw-ujje/data

**Research design**

Which communities are underrepresented or have fewer professional qualifications in Washington State? People who receive care from providers of the same demographic can have better health outcomes and fewer barriers to communication. There are currently 80102 registered providers in the state, 34 different identified races and 74 different identified ethnicities. It is likely that there are significant differences in weeks worked, education, credentials, caseload and more between racial and ethnic groups. By grouping and analyzing the differences via A/B testing (or non-parametric tests if the data does not follow a normal distribution), the significance of these differences and confidence intervals of the differences can be generated.

**Audience**

There are numerous stakeholders for this analysis. Policy makers and local governments can use the demographic data to build programs to promote underrepresented groups entering the healthcare field. The public can use this information to better understand what care is available to them and who is providing it. Medical administration can use this information to see the breakdown of their workforce, and allocate resources towards underrepresented populations, and create programs and training specifically for groups that have fewer professional qualifications.