

WHAATtheAHEC? Structural Racism, Early Career Pathways, And Physician Workforce Production

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Background

Studies have shown that racist policies such as redlining and Jim Crow laws contribute to poor health for racial minorities in the United States. As a result, Black Americans have the lowest life expectancy of any racial group in the US and Black mothers and babies experience disproportionately high rates of maternal and infant outcomes regardless of income level.

To fully understand how structural racism impacts health outcomes, it is important to start with how structural racism impacts the workforce that is delivering healthcare.

Objective

This research explores the impact of structural racism on physician production. Additional aims include creating mapping tools to visualize the relationship between structural racism, physician production, and other relevant factors.

Methods

Data: NCHS Natality Detail for years 1970-1989; 2023 AMA Masterfile geocoded physicians born 1970 through 1989; County Business Patterns, 1970-1989; Decennial Census 1970, 1980, 19990, 2000, ACS, 2010, 2020.

Outcome Measure: *Physician Production* - # of physicians born in a county expressed as a rate of all live births;
Independent Variables: *Spatial Social Polarization* – defined as Black/White Income Index of Concentration of the Extremes (ICE) – which is the proportion of white high-income people relative to low-income Black people.

Residential Segregation (Dissimilarity Index, Isolation Index, Exposure Index); *Social Deprivation Index* (SDI, composite measure of income, education, housing, employment); *early childhood development assets* (museums, libraries, universities)

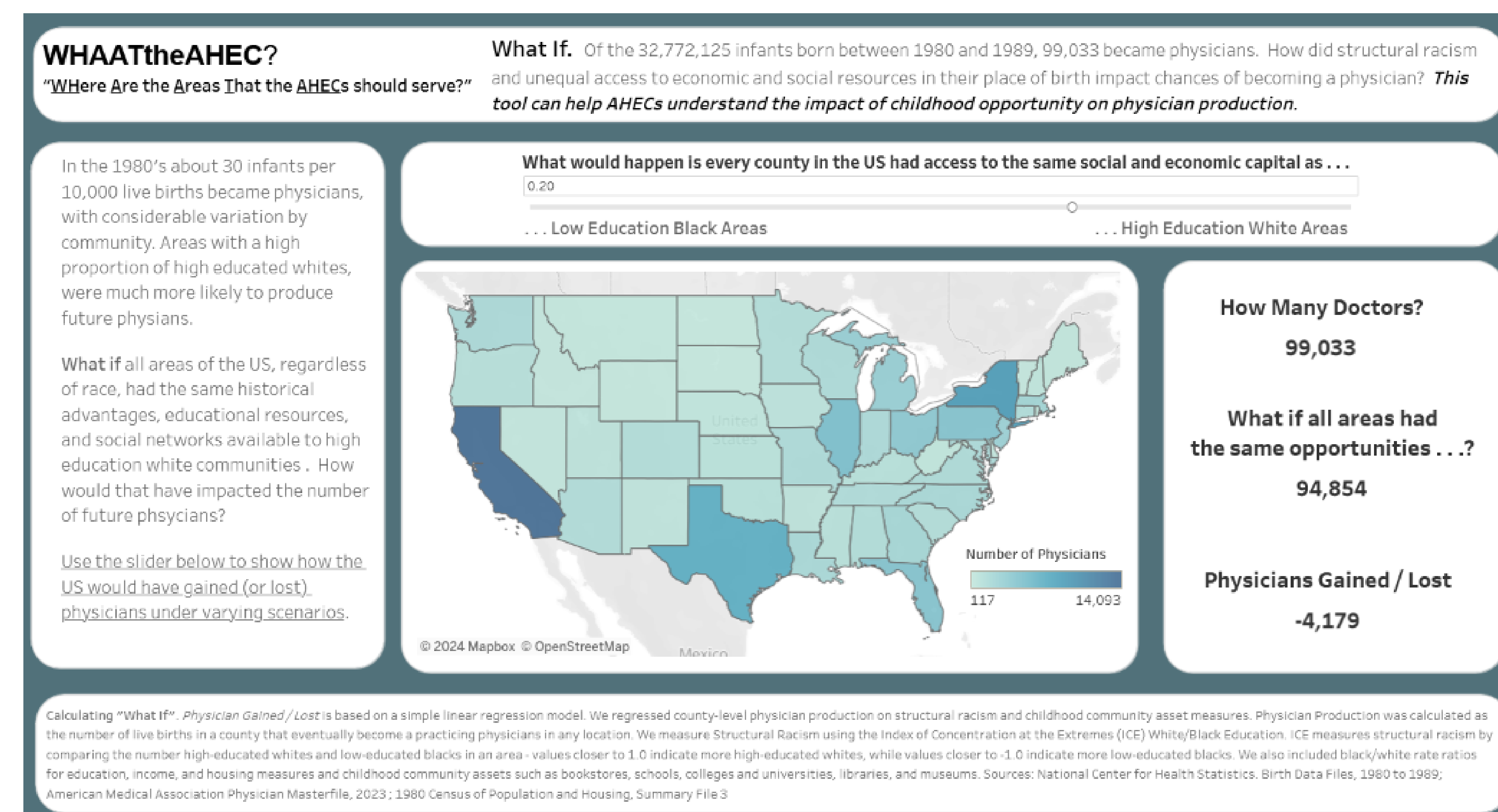
Analysis: Ordinary Least Squares (OLS) Regression (SAS)

Key Findings

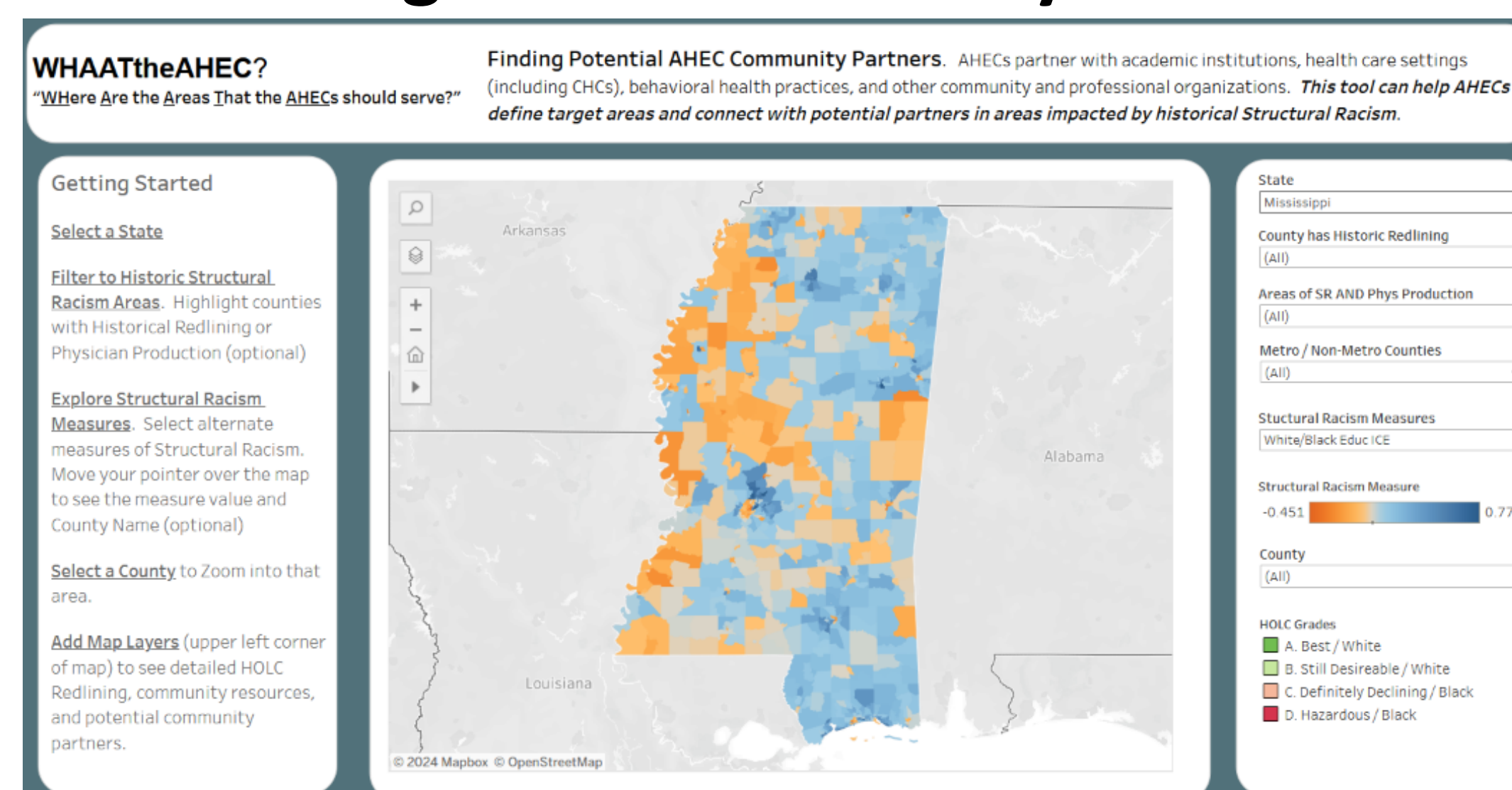
Counties with higher rates of structural racism have lower rates of physician production.

This research was used to create series of data visualization tools for targeted efforts for health care workforce pathway programs by Area Health Education Centers [AHECs]

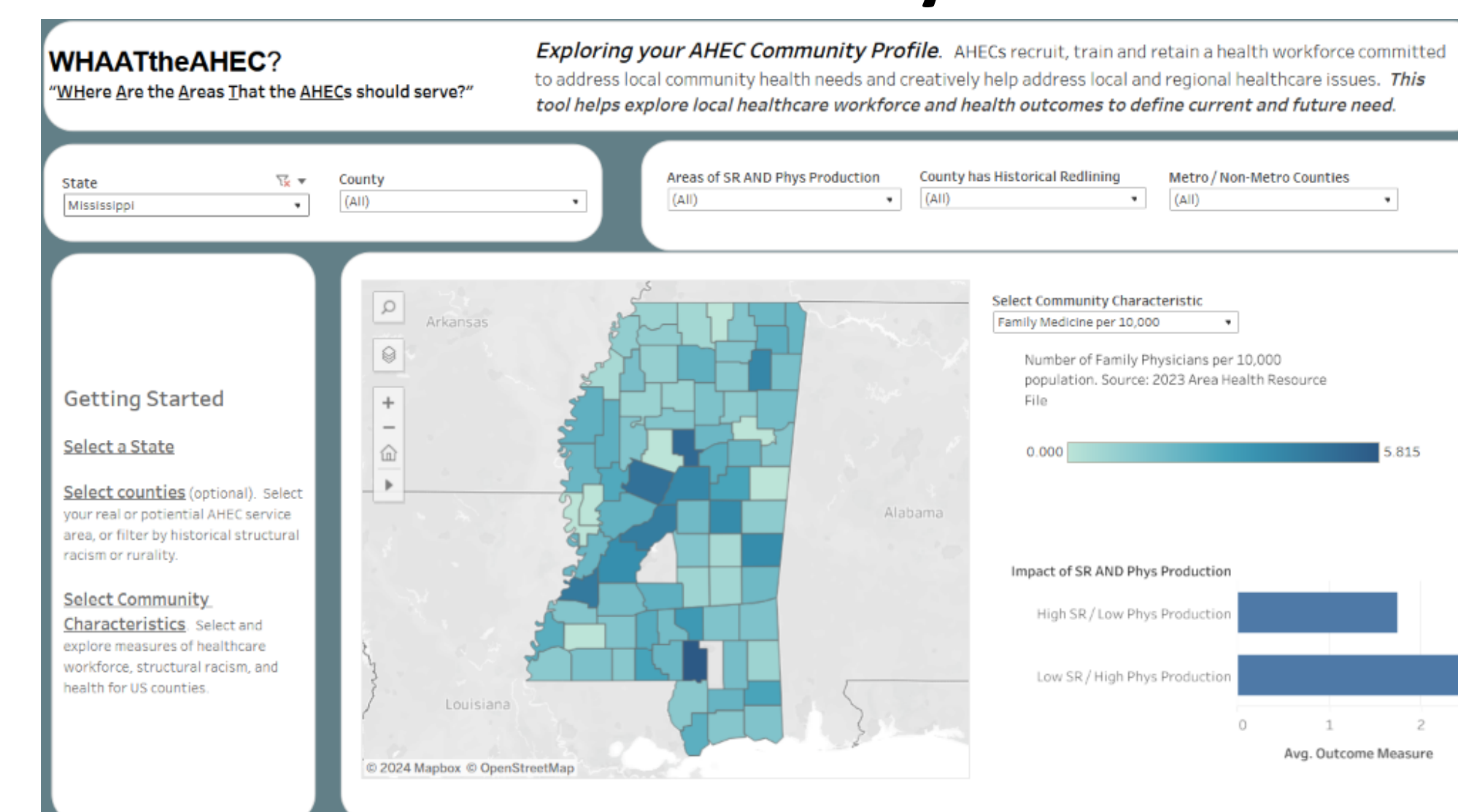
What if? Exploring the Impact of Structural Racism on Physician Production



Finding AHEC Community Partners



AHEC Community Profile



Results

Counties with higher levels of historic structural racism, measured by spatial social polarization, residential segregation, and social deprivation, have a lower Physician Production rate.

There are clear geographic patterns for physician production and structural racism

Conclusions

Findings may inform pathway initiatives to grow physician the primary care physician workforce, including work by state and regional AHEC programs.

The results of this research were used to create a series of data visualization tools, including (1) a tool for assisting pathway programs (e.g., AHECs) identify highest-need areas for program recruitment; (2) a tool for exploring AHEC service area community profiles; and (3) a tool for examining the impact of structural racism on physician production for each State.

Limitations

Challenges and limitations working with historical census Issues with AMA data for physician birth location County level may not be most appropriate for measures of structural racism

Funding

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Links to WHAATtheAHEC Mapping Tools



What if



Partners



Profile