

# Population data methods to understanding mechanisms of inadequate prenatal care usage among Asian American women in AZ vs. CA



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## ABSTRACT

**BACKGROUND:** Access to prenatal care is vital to ensuring the health of the mother and baby during pregnancy. Asian American mothers have historically been understudied in discourse around access to prenatal care outcomes and need to be included in order to continue decreasing racial disparities in prenatal care access.

**METHODS:** We used 2018-2020 restricted natality datasets from the NCHS, constructed the APCUI measure for the dataset to derive our dependent variables, and use logistic regression models to elucidate the sociodemographic effects for inadequate initiation of prenatal care and inadequate adherence to prenatal care appointments among Asian American mothers in CA and AZ.

**RESULTS:** Different mechanisms exist not only between states, but also influence the underlying reasons for not accessing prenatal care.

**CONCLUSION:** Development of state-based and culturally competent policies are necessary to mitigate the racial disparities in access to prenatal care among Asian American mothers.

## INTRODUCTION & BACKGROUND

- Access to adequate prenatal care is essential for identifying potential risk factors associated with pregnancy complications for mothers<sup>1</sup> and act as key determinants in the health across a baby's lifespan.<sup>2</sup>
- Asian Americans are not only the fastest growing ethnic population in the US,<sup>3</sup> but also experience rapid population growth in emerging destinations (e.g. Arizona) as a result of geographic diversification.<sup>3</sup>
- Historically, discourse around access to prenatal care has focused on the Black-White binary.<sup>4</sup> However, the heterogeneity of the Asian American population coupled with the influence of the "Model Minority" myth puts this form of discourse into question.
- Greater inclusion of Asian Americans in such discourse is essential to decreasing racial prenatal health inequity for all women.
- Policies aimed at increasing access need to be constructed in an intersectional manner in order to take into account the wide variety of experiences faced by Asian American mothers.

## RESEARCH QUESTIONS OF INTEREST

- What are the mechanisms of inadequate prenatal care utilization for Asian American women in California and in Arizona?
- How do Asian American women's individual-level predictors of inadequate prenatal care utilization differ by state?

## METHODS

- Analyses used the 2018-2020 restricted natality datasets retrieved from the National Center for Health Statistics (NCHS).
- Outcome: Kotelchuck Adequacy of Prenatal Care Utilization Index (APCUI)<sup>5</sup> was calculated using 2 mechanisms: *inadequacy of initiation of prenatal care (timing)* and *inadequacy of adherence to prenatal care (received services)*.
- Two logistic regression models were created to compare influence of factors for inadequate prenatal care among Asian American women in AZ, compared to those in CA
- All data processing and analyses done using R Version 4.1.3 and STATA 17

## RESULTS

Figure 1. Prevalence of Types of Inadequate Prenatal Care among Asian American Women in Arizona and California, 2018-2020 (in Percentages)

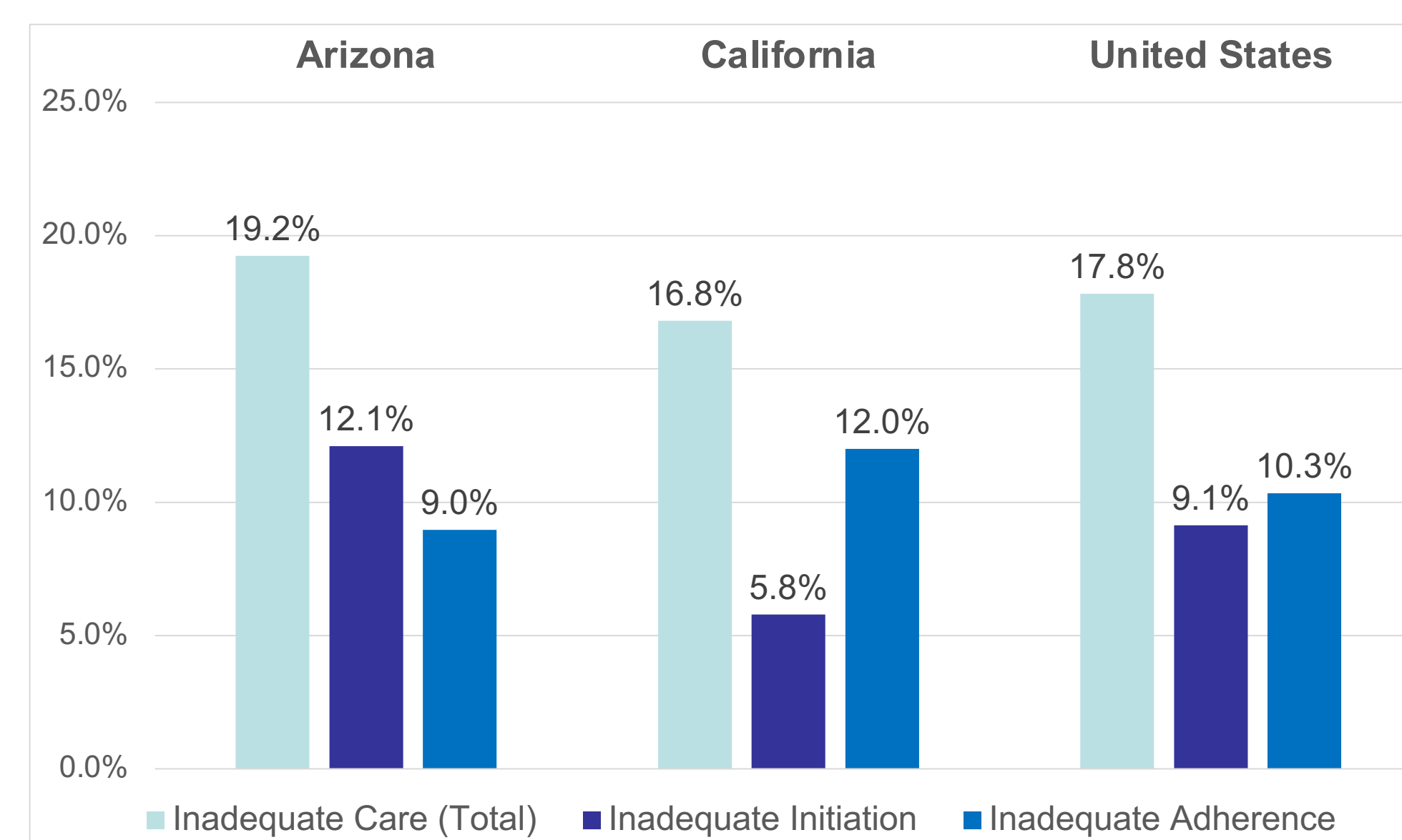
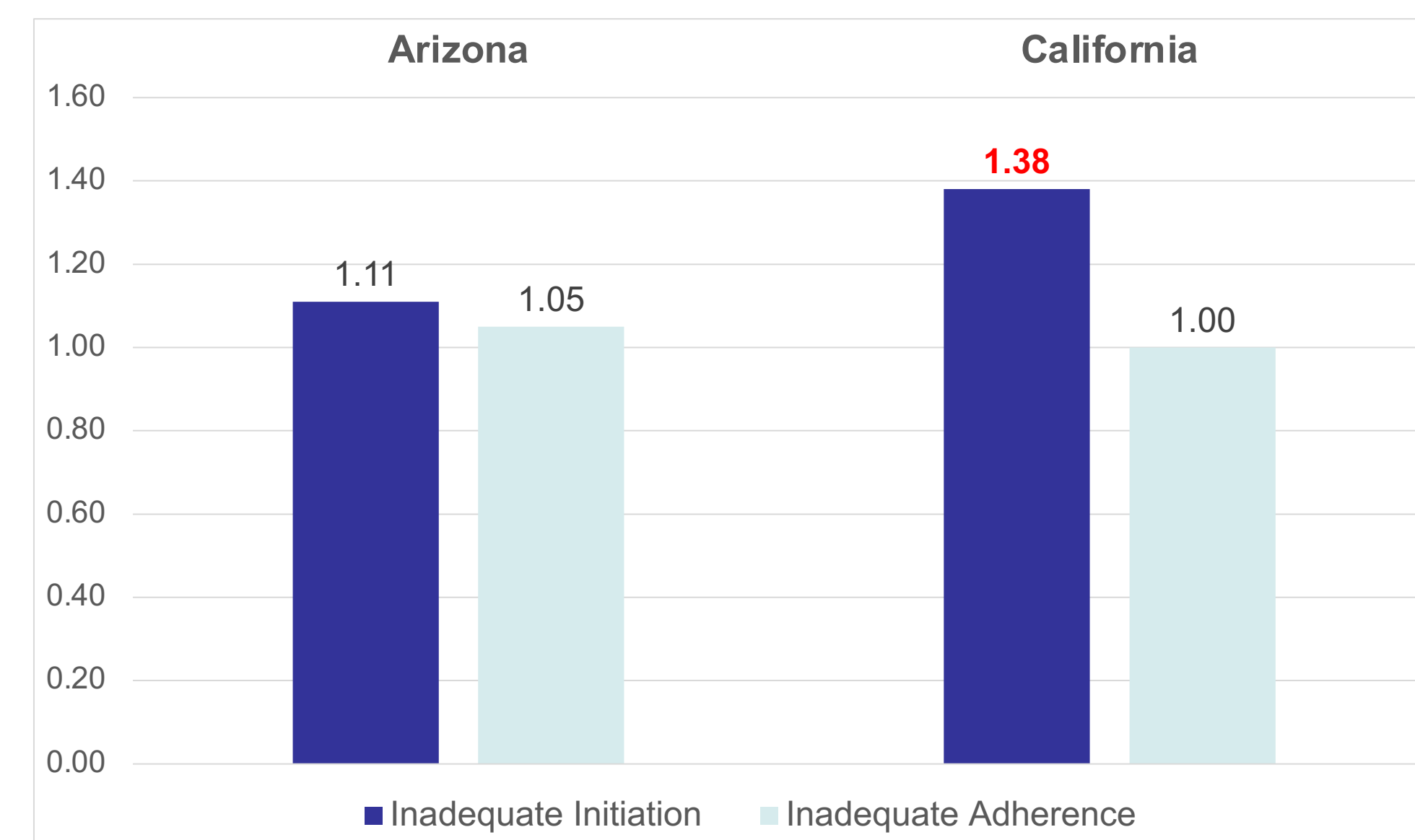
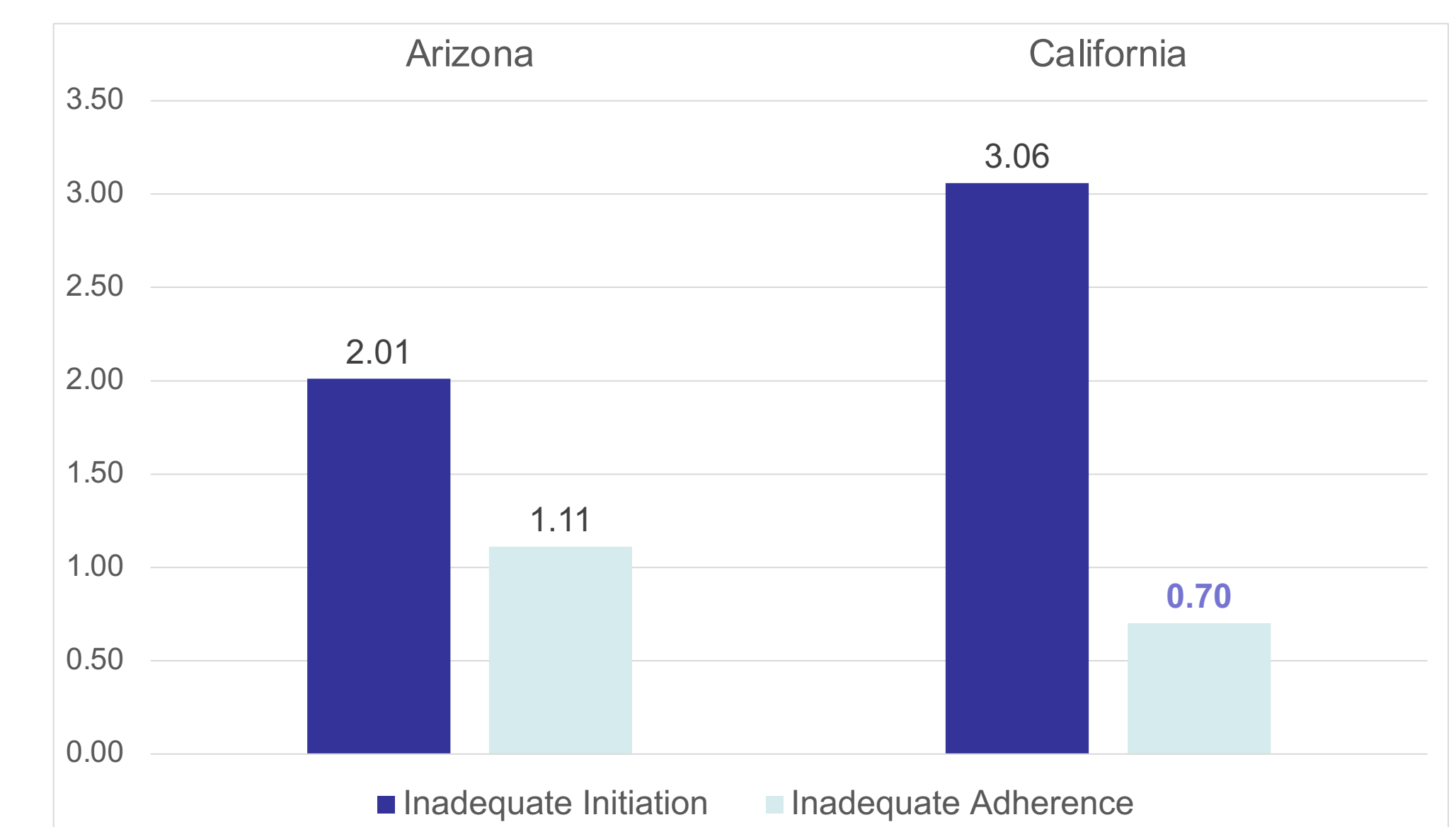


Figure 2. State-Specific Risk Factor for Inadequate Prenatal Care Utilization: Foreign Born Status (Odds Ratios)



## RESULTS (CONT.)

Figure 3. State-Specific Protective Factor for Inadequate Prenatal Care Utilization: Medicaid (Odds Ratios)



## DISCUSSION

- Analysis revealed that different sociodemographic factors affect not only differences in prenatal care access between states, but differences in why Asian American mothers may not have access to prenatal care.
- AZ-based mothers experience a higher prevalence of inadequate initiation of prenatal care, which may be attributed to systemic barriers that affect Asian American women from accessing such care.
- CA-based mothers experience a higher prevalence of inadequate adherence to prenatal care appointments, which could be attributed to barriers in navigating the healthcare system.
- Medicaid coverage is the biggest protective factor against inadequate adherence, although policies need to go beyond ensuring coverage to ensure that Asian American mothers initiate prenatal care.

## CONCLUSIONS, IMPLICATIONS & FUTURE DIRECTIONS

- Unique health needs among Asian American mothers need to be taken into consideration in order to mitigate the disparity in prenatal care access.
- Health promotion to reduce inadequate prenatal care utilization requires state specific strategies that center intersectionality.
- For CA, the policy must prioritize increasing prenatal care adherence.
- For AZ, the policy must prioritize increasing prenatal care initiation.
- Policy recommendations will be communicated to APCA in order to facilitate policy development and other advocacy needs for Asian American mothers in AZ.

**Acknowledgements:** Thank you, Dr. Aggie Yellow Horse, for your incredible work, help and mentorship throughout the entirety of this project. Thank you, Dr. Daniel Parker, for your mentorship and feedback on this project. Thank you, MPH cohort, for the emotional support and memes throughout the duration of the program.

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