

# Medicaid-WIC Population Associated Pregnancy Outcomes and Complications by Race

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## Background

- Women, Infants, and Children (WIC) program significantly improved overall health outcomes in eligible participants.<sup>1</sup>
- Certain pregnancy complications (preterm birth and gestational diabetes) had inconsistent results in the health outcomes of pregnant mothers by racial groups.<sup>2</sup>

## Study Aim

- Examine whether there are racial differences in WIC participation and pregnancy outcomes association among Medicaid-eligible mothers in California

## Methods

- **Participants and Procedures:** Retrospective cohort study using the California Office of Statewide Health Planning and Development (OSHPD) Linked Birth File (2007-2012) to identify Medicaid-eligible mothers in California participating in the WIC program (n=1,257,063). The International Classification of Disease Clinical Modification, 9<sup>th</sup> Revision (ICD-9) is used to identify preterm birth and gestational diabetes.
- **Measures:** WIC participation (IV), pregnancy outcomes (DV)
- **Data Analysis:** unadjusted crude analysis of DV

## Results

### Medicaid-WIC Participants by Race

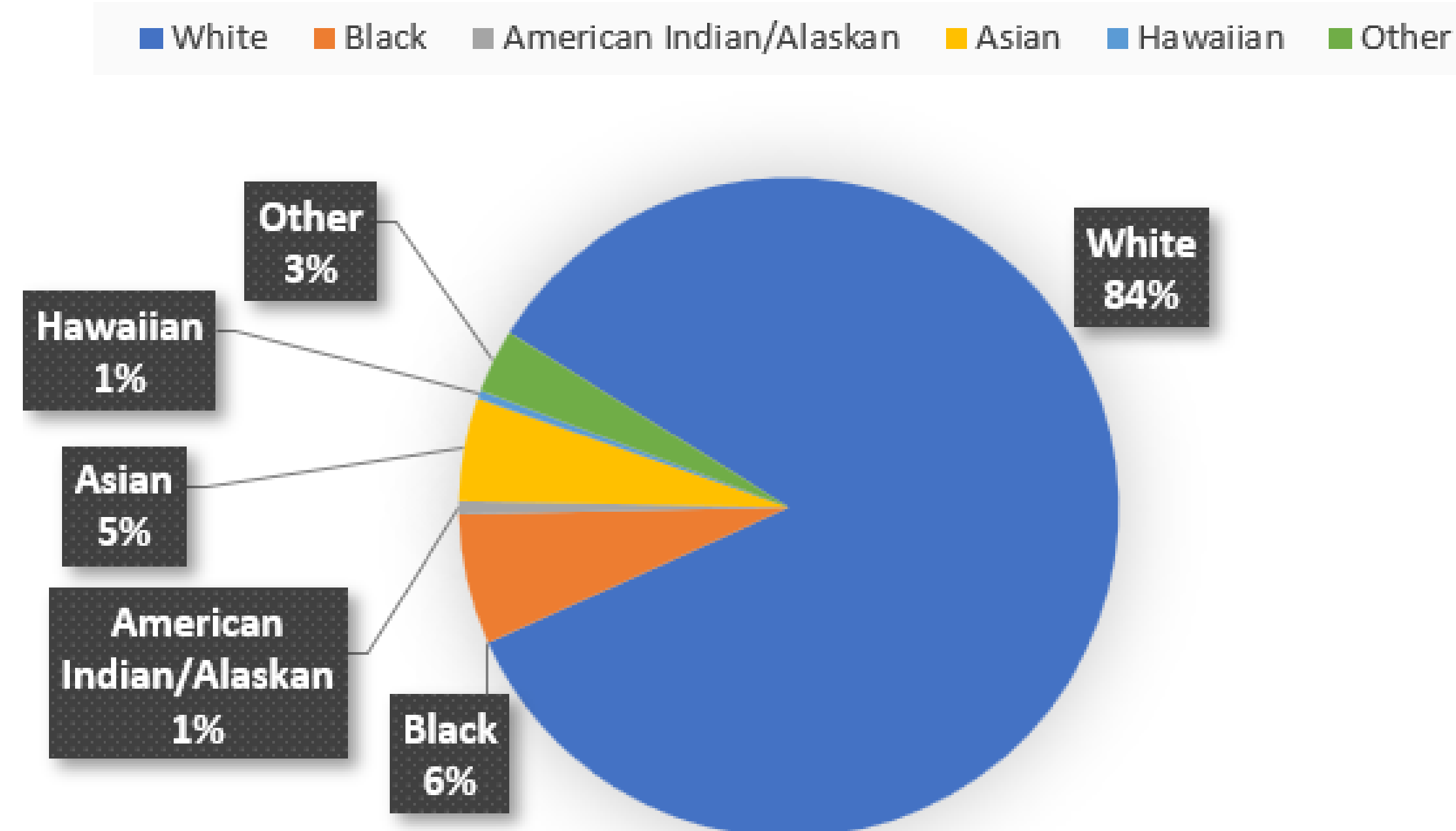


Table 1: Preterm birth Odds Ratio (OR) between WIC and non-WIC mothers

Race	Preterm birth	Lower CI	Upper CI
White	<b>0.78</b>	<b>0.76</b>	<b>0.79</b>
Black	<b>0.69</b>	<b>0.66</b>	<b>0.72</b>
American Indian/Alaskan Natives	<b>0.67</b>	<b>0.56</b>	<b>0.79</b>
Asian	<b>0.81</b>	<b>0.77</b>	<b>0.85</b>
Hawaiian	<b>0.76</b>	<b>0.64</b>	<b>0.91</b>
Other	<b>0.67</b>	<b>0.59</b>	<b>0.75</b>
Two or more	<b>0.74</b>	<b>0.68</b>	<b>0.80</b>
Unknown	<b>0.78</b>	<b>0.70</b>	<b>0.87</b>

Table 2: Gestational Diabetes Odds Ratio (OR) between WIC and non-WIC mothers

Race	Gestational diabetes	Lower CI	Upper CI
White	<b>1.33</b>	<b>1.25</b>	<b>1.42</b>
Black	<b>1.25</b>	<b>1.04</b>	<b>1.51</b>
American Indian/Alaskan Natives	1.38	0.83	2.29
Asian	<b>1.44</b>	<b>1.16</b>	<b>1.79</b>
Hawaiian	1.31	0.85	2.01
Other	0.72	0.51	1.02
Two or more	0.89	0.68	1.16
Unknown	<b>1.48</b>	<b>1.01</b>	<b>2.17</b>

\*\* Bold are statistically significant \*\* Data for non-WIC mothers are not shown

## Discussion

- Participating in WIC does not have the same outcomes for everyone.
- Medicaid-WIC participation is a consistent protective factor against preterm birth regardless of race.
- Medicaid-WIC participants showed a higher risk of gestational diabetes by the odds ratio trends.
- Factors related to genetics, culture, and environment from the White, Black, and Asian group might play a part in the inconsistency in gestational diabetes.

### Lesson Learned:

- Understanding the meaning of data gives value to the data itself.

## Limitations

- Data collected from OSHPD (2007-2012) are not current and may not be accurate anymore.
- Some mothers with pregnancy complications may not be eligible for the WIC program.
- Self-reported data from Medicaid-WIC participants can be inaccurate.
- Data provided only looks at race, not ethnicity. Latinas are likely within the White or Black race.
- Further study is needed to identify the cause for the discrepancies in trends from different pregnancy complications.

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