Keeping moms and babies in nutrition program

DataScienceSF

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CALIFORNIA WIC
WOMEN, INFANTS & CHILDREN
Families grow healthy with WIC

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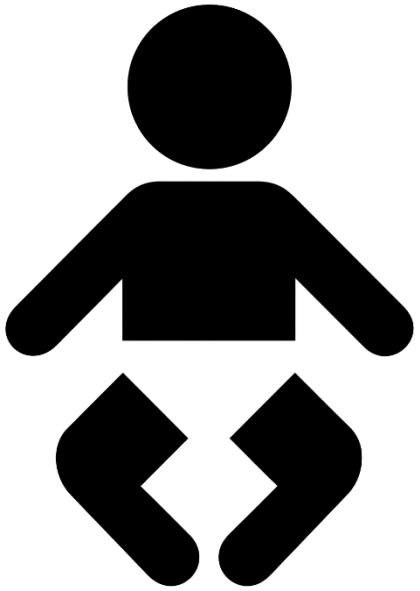
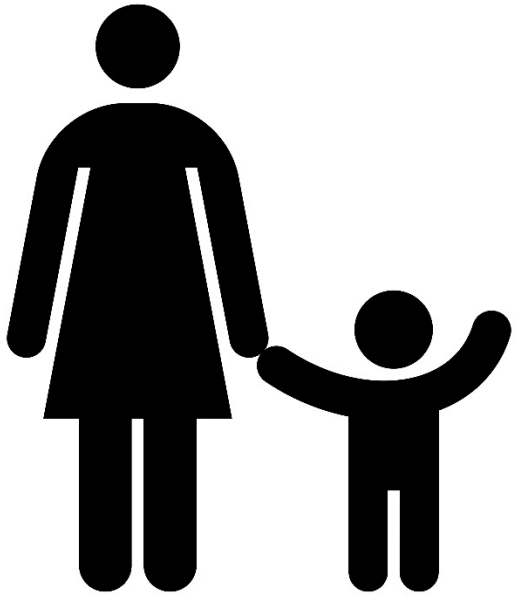
If you've ever been so hungry that you became "hangry", you understand the importance of nutrition

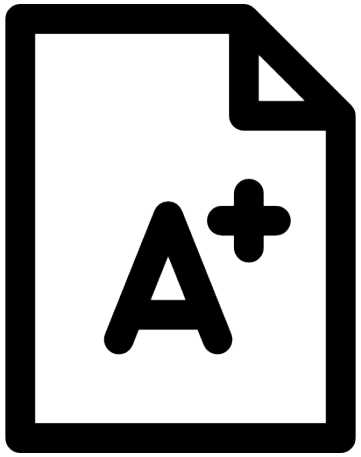
Which is why WIC provides nutritional assistance, education, and support and referrals to health care and community services to prenatal moms and their children thru age 5





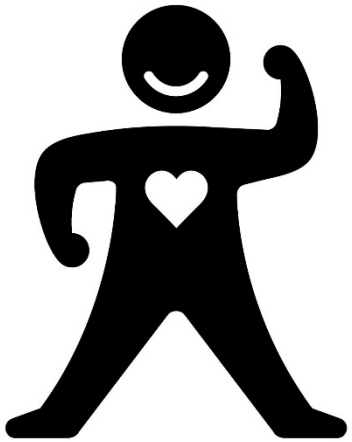
Because a healthy start is associated with many positive outcomes

School readiness



Better grades

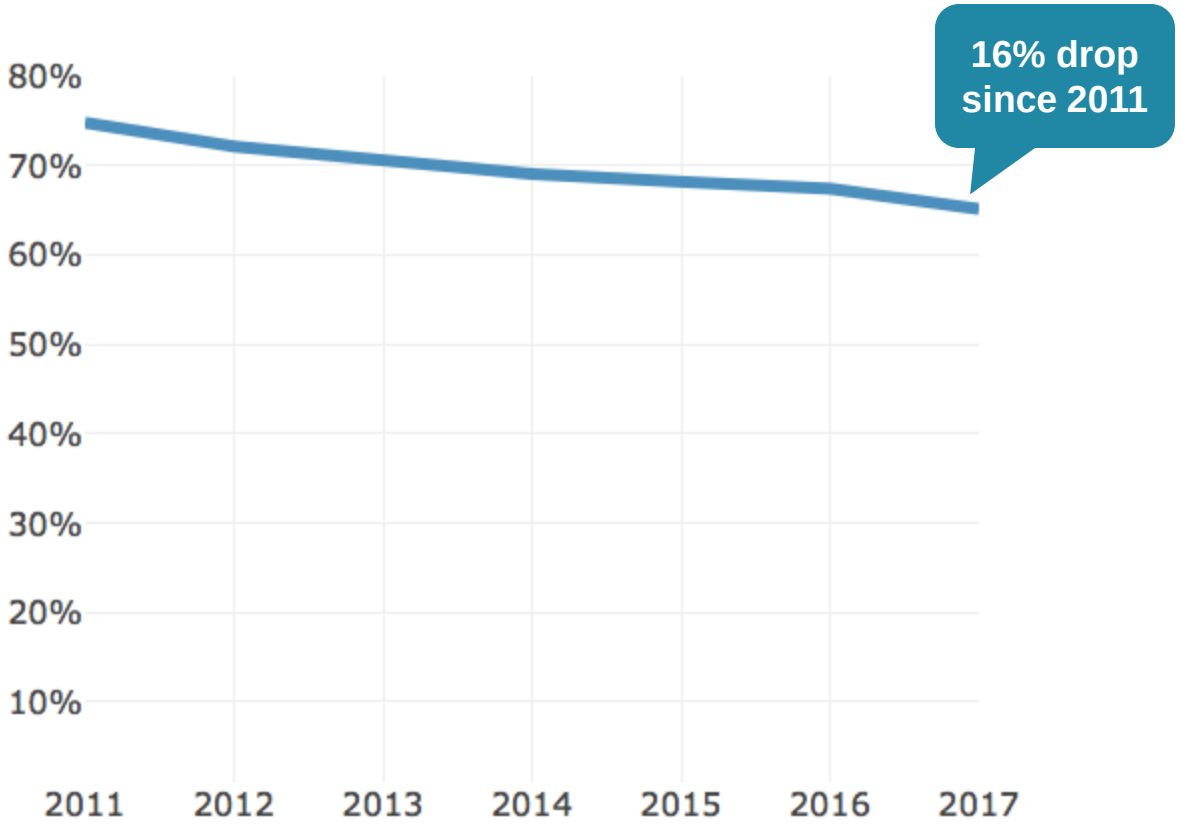
Socioeconomic benefits



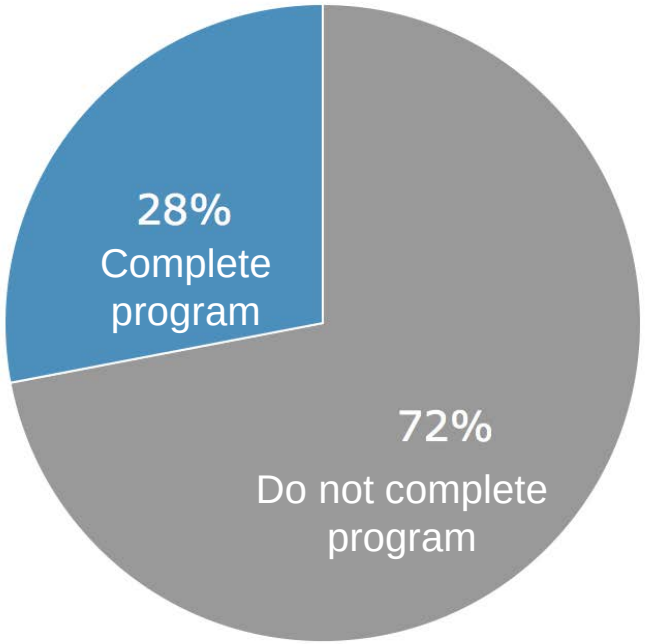
Lifelong health outcomes

But we've seen our retention rates dropping since 2011, only 28% of children staying in the program through age 5

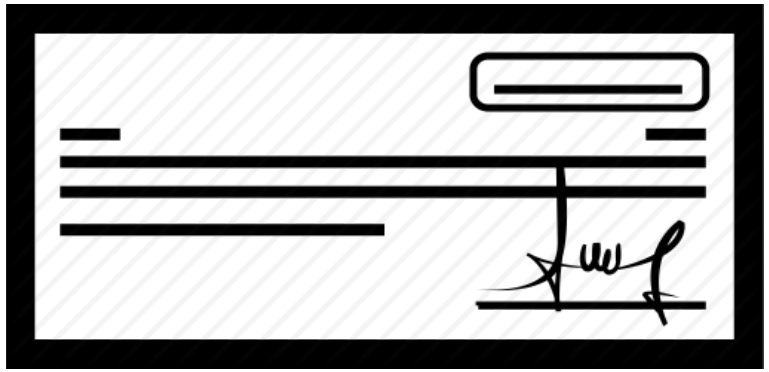
% still in program at 1 year of age (retention)



Completion status through age 5



We have some theories – the many federal rules can be burdensome and no one likes using paper checks



But could digging into our data help confirm our theories and identify more ideas for why retention is falling?

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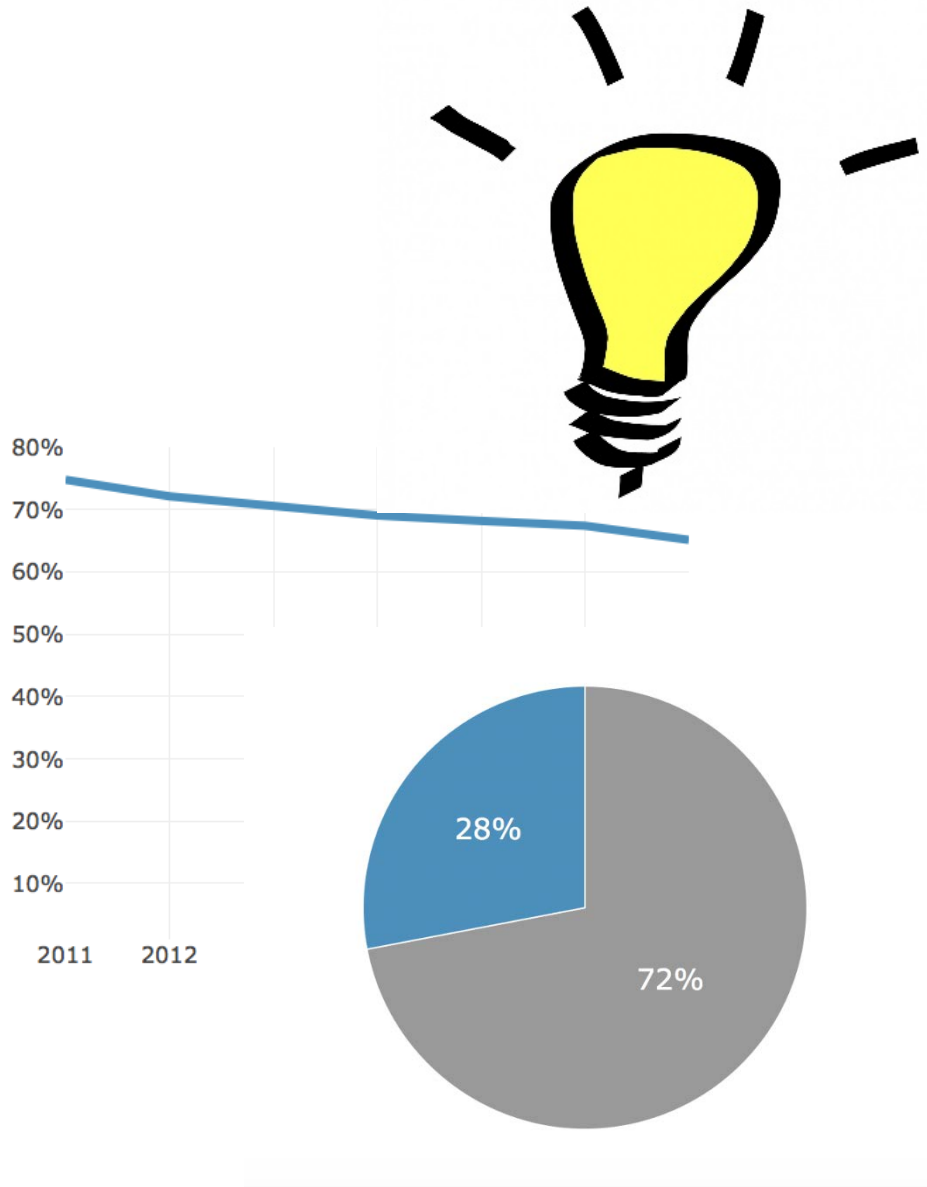

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From the start, we knew this would be a quantitative project and a qualitative project to fully understand the trends

Quantitative

Qualitative

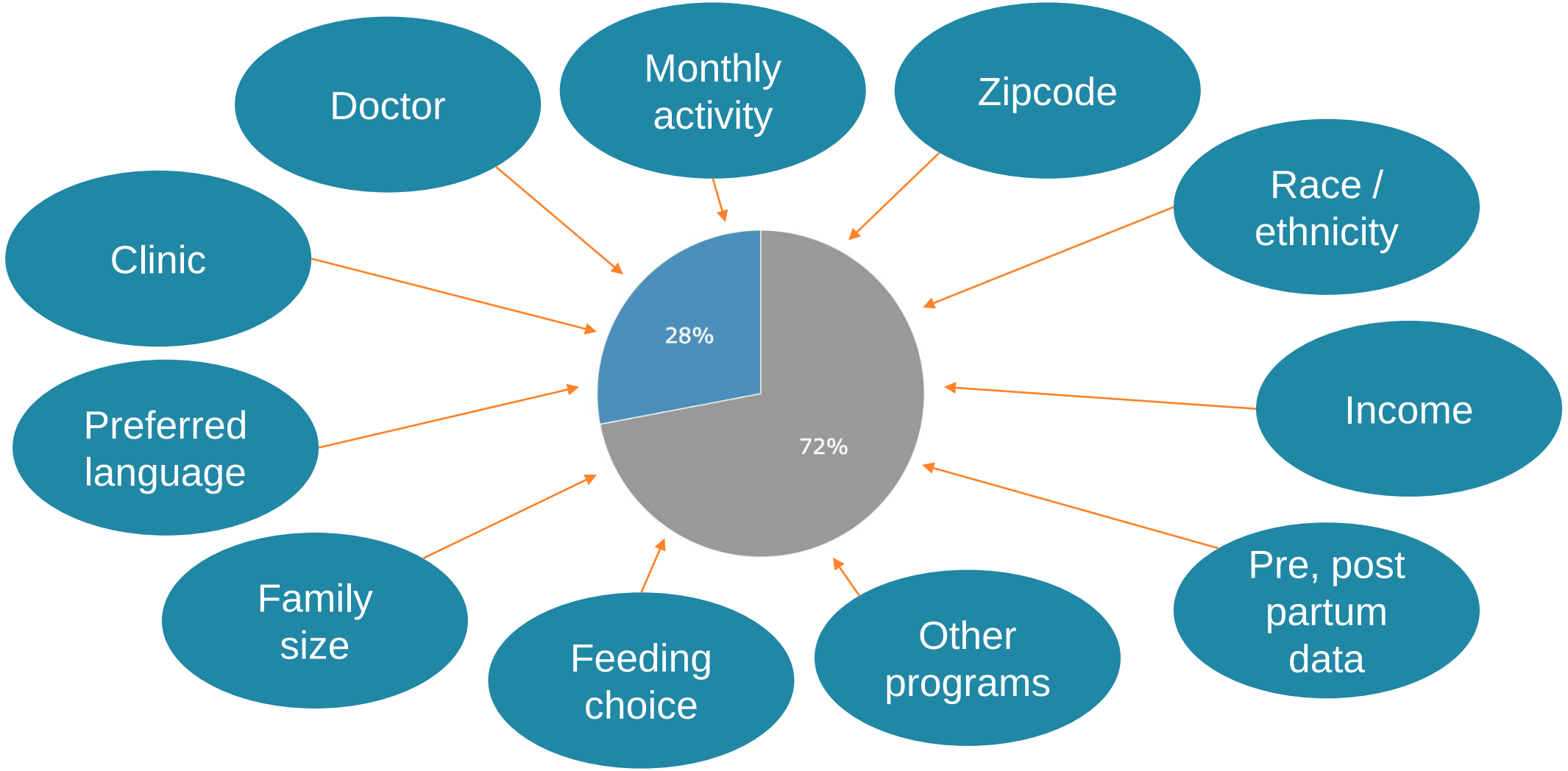
So we partnered with the Innovation Office's Civic Bridge program to bring in Google partners for the qualitative analysis

Quantitative

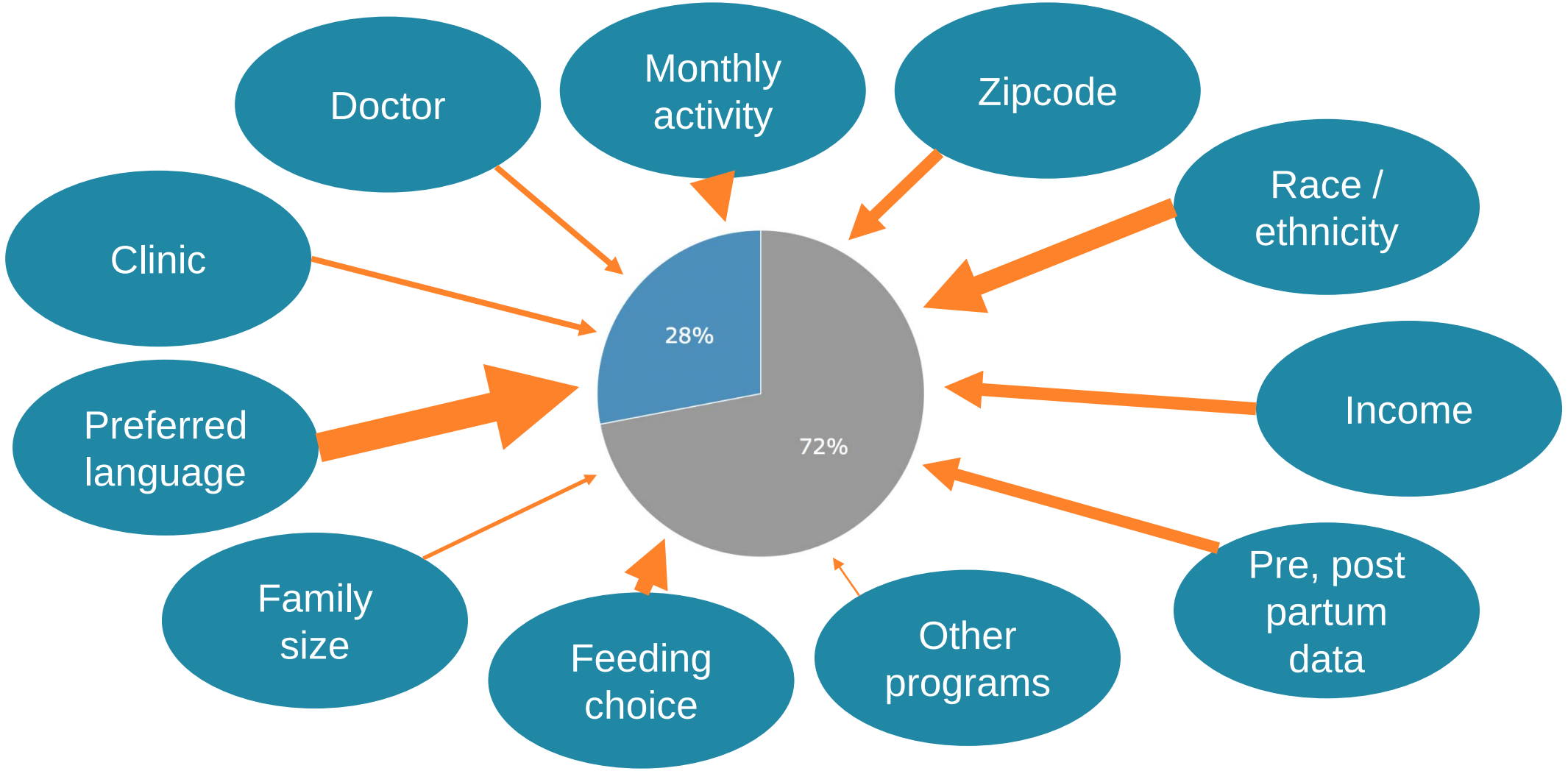
+

Qualitative

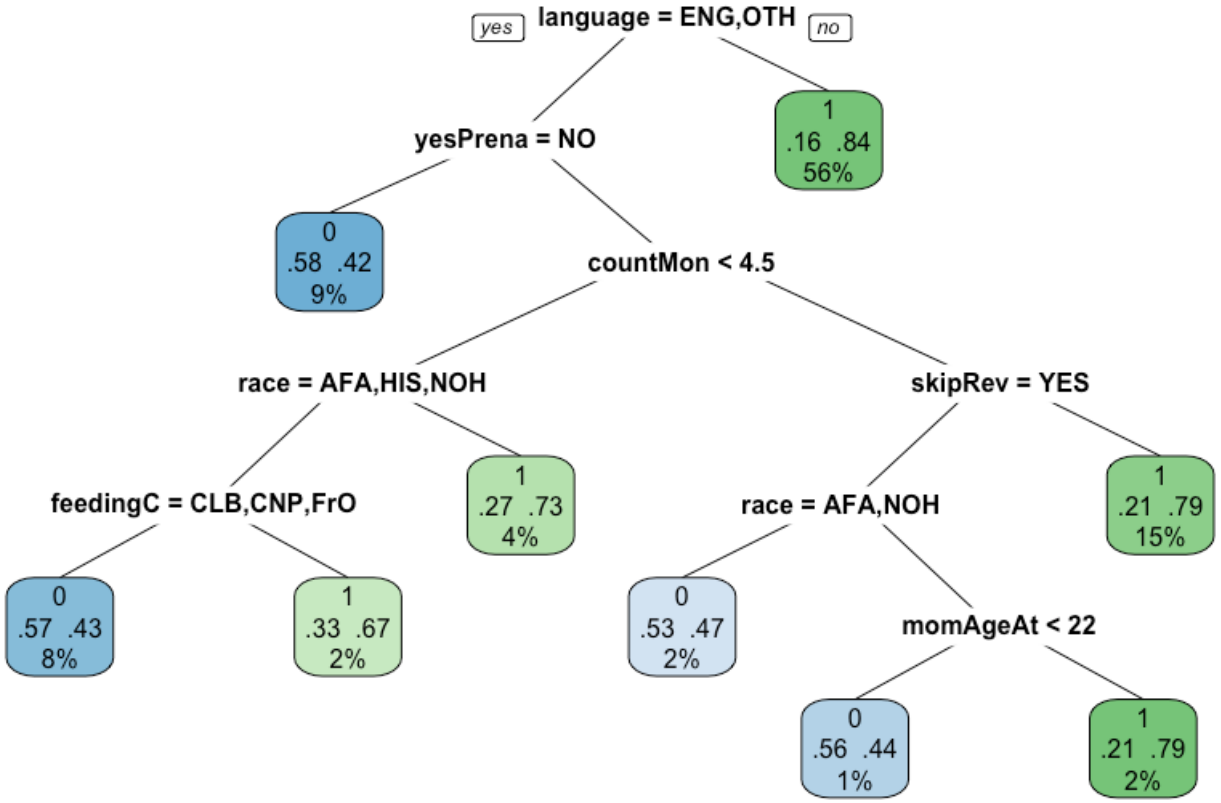
Many things may affect participation and retention



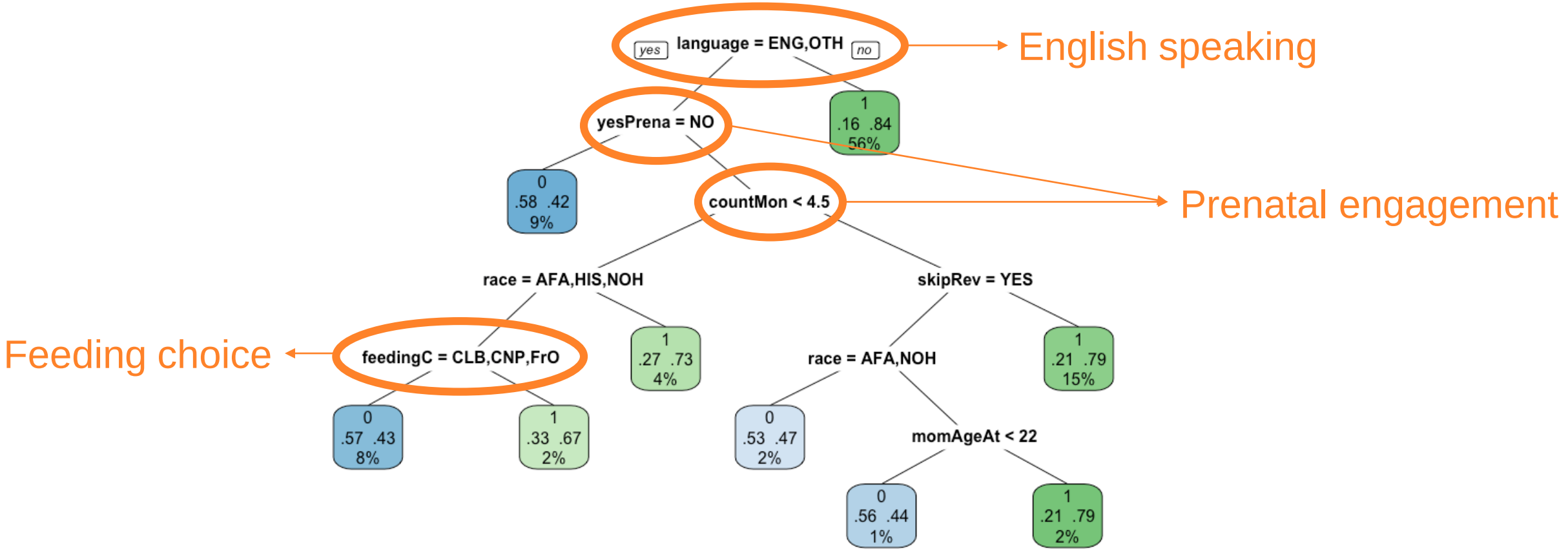
The goal of a predictive model is to look at all of these factors simultaneously to understand what are the strongest indicators of someone dropping out



Our tree model is able to predict with 83% accuracy who is most likely to drop out

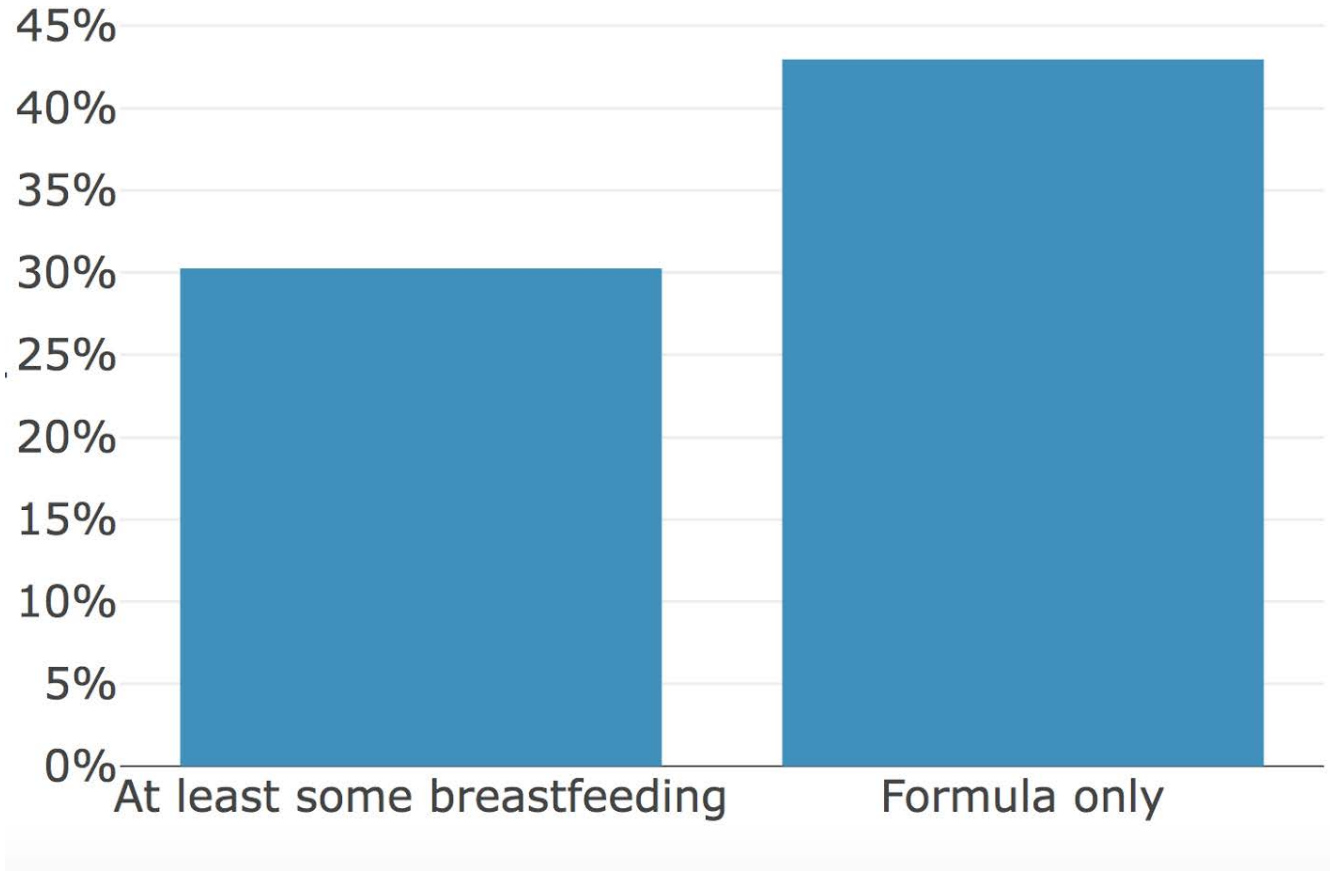


Three factors in the tree model were especially insightful to the WIC team: feeding choice, prenatal engagement, and English speaking

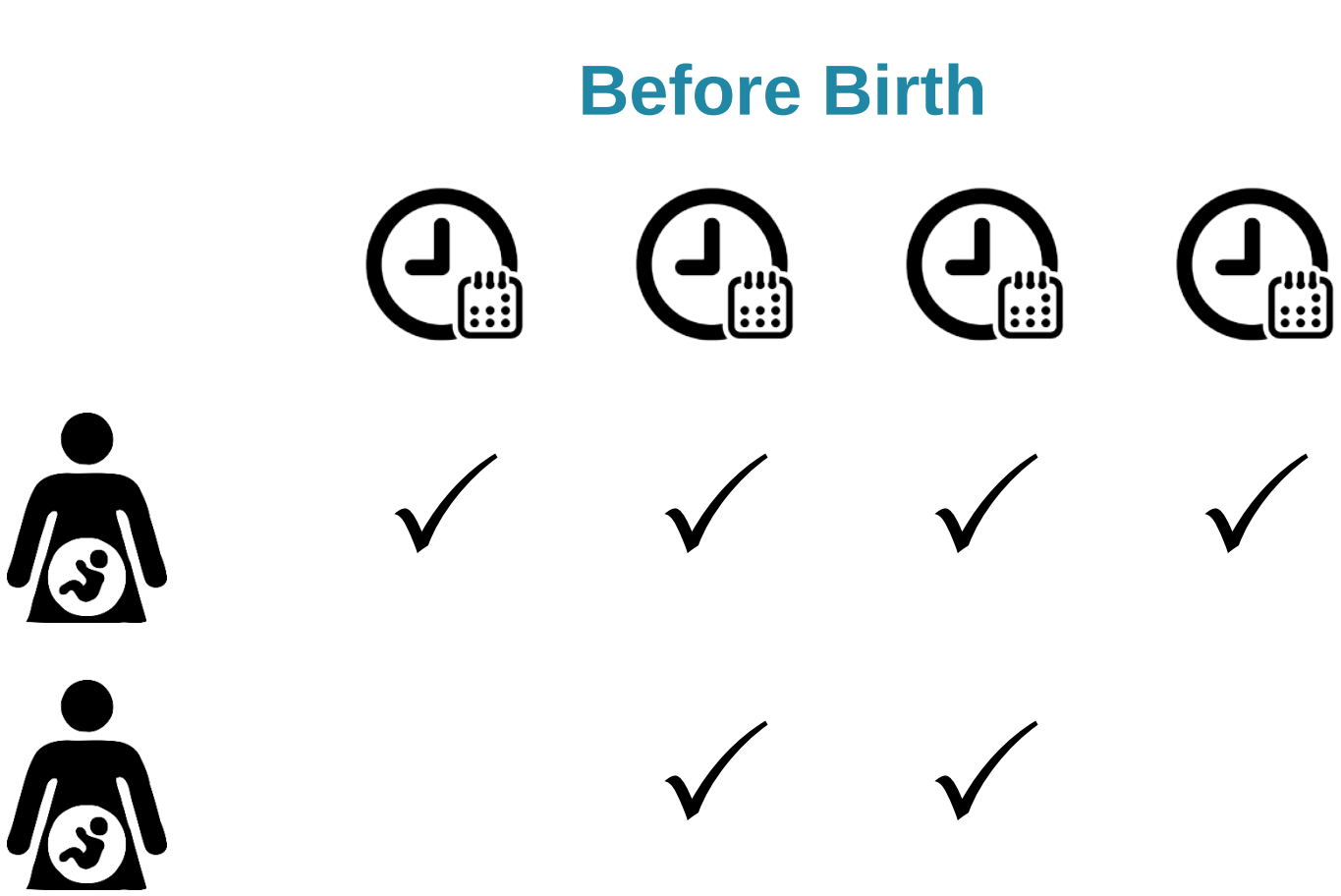


Key Finding: Babies who were exclusively formula fed are 50% more likely to drop out

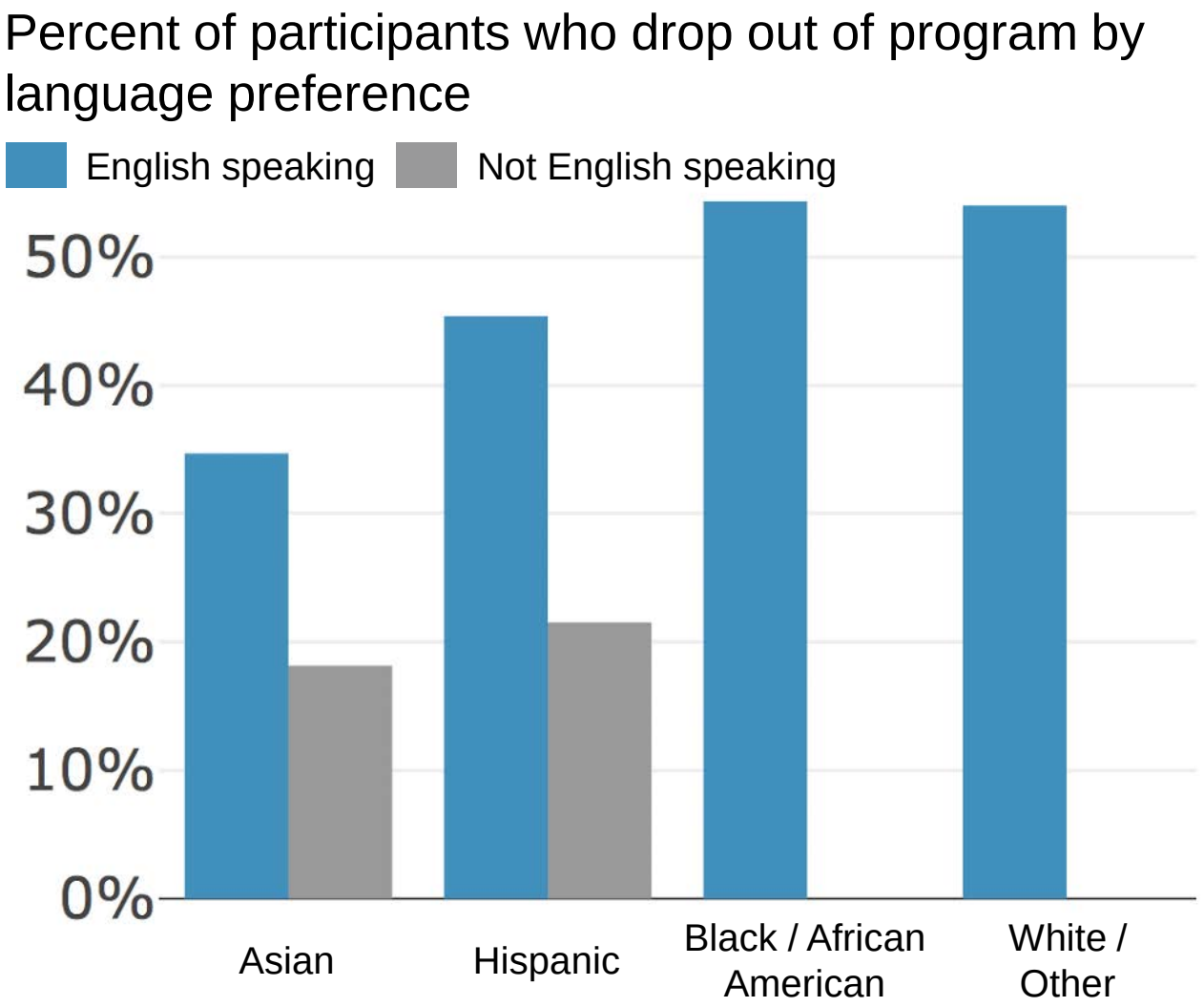
Percent of participants who drop out of program by feeding choice



Key Finding: High levels of prenatal engagement are associated with higher retention



Key Finding: English speakers are more likely to drop out regardless of their race/ethnicity



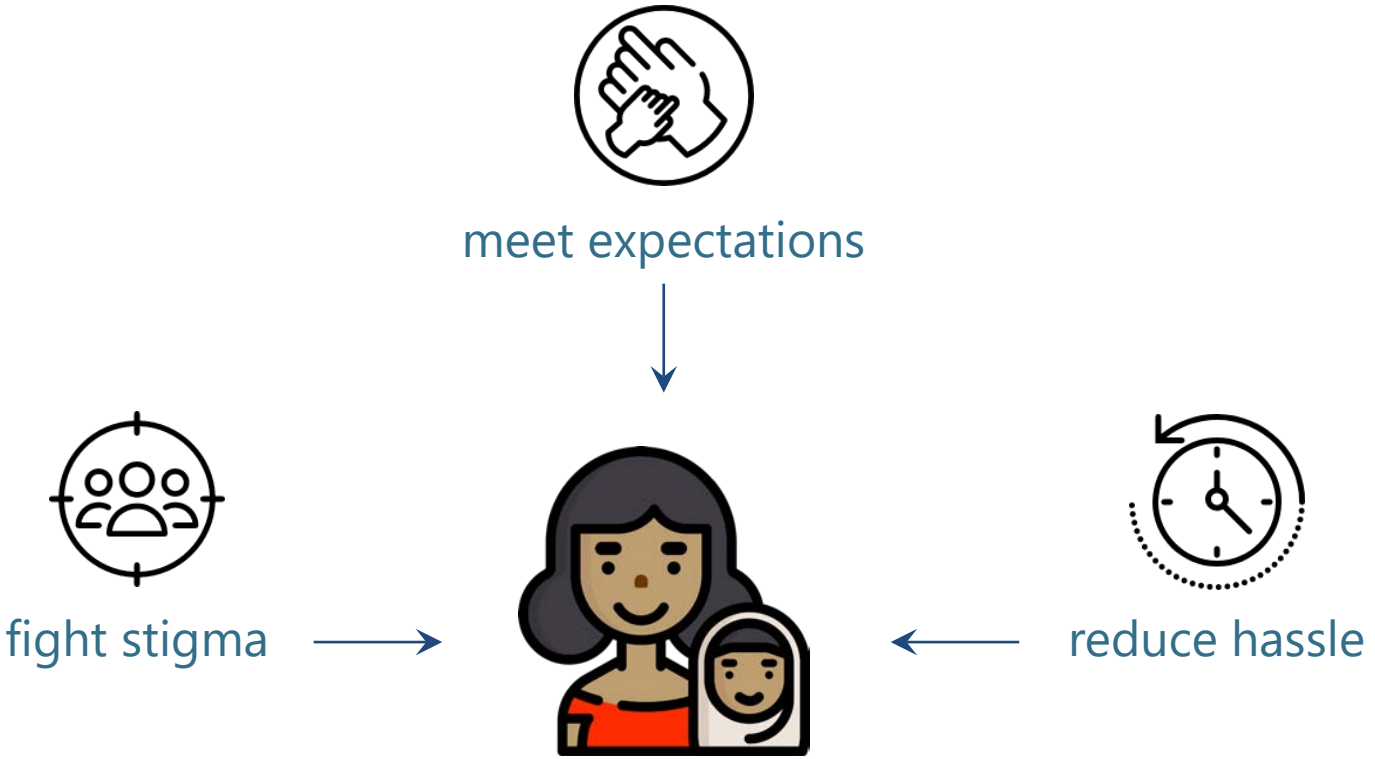
Service Change

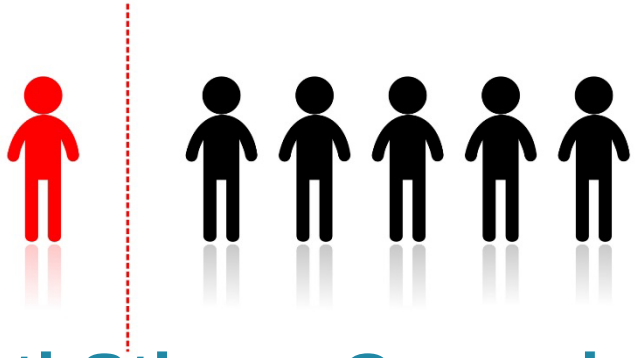
Qualitative Findings

Google

CIVIC BRIDGE

Hassles, stigma, and expectations gaps **are** the primary drivers of the drop in retention, particularly among English speakers. Addressing these key factors can improve retention.





Anti-Stigma Campaign

New Technology

Future Outreach Strategy

We are using the insights to:

1. Develop an anti-stigma campaign through clinic refresh
2. Integrate new technology to improve clinic flow and experience
3. Develop future physician and community outreach

& San Francisco Department of Public Health

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Data, for the love of the City

THANK YOU

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