



Louisiana

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Addressing Health Barriers Using Social Determinants of Health Data

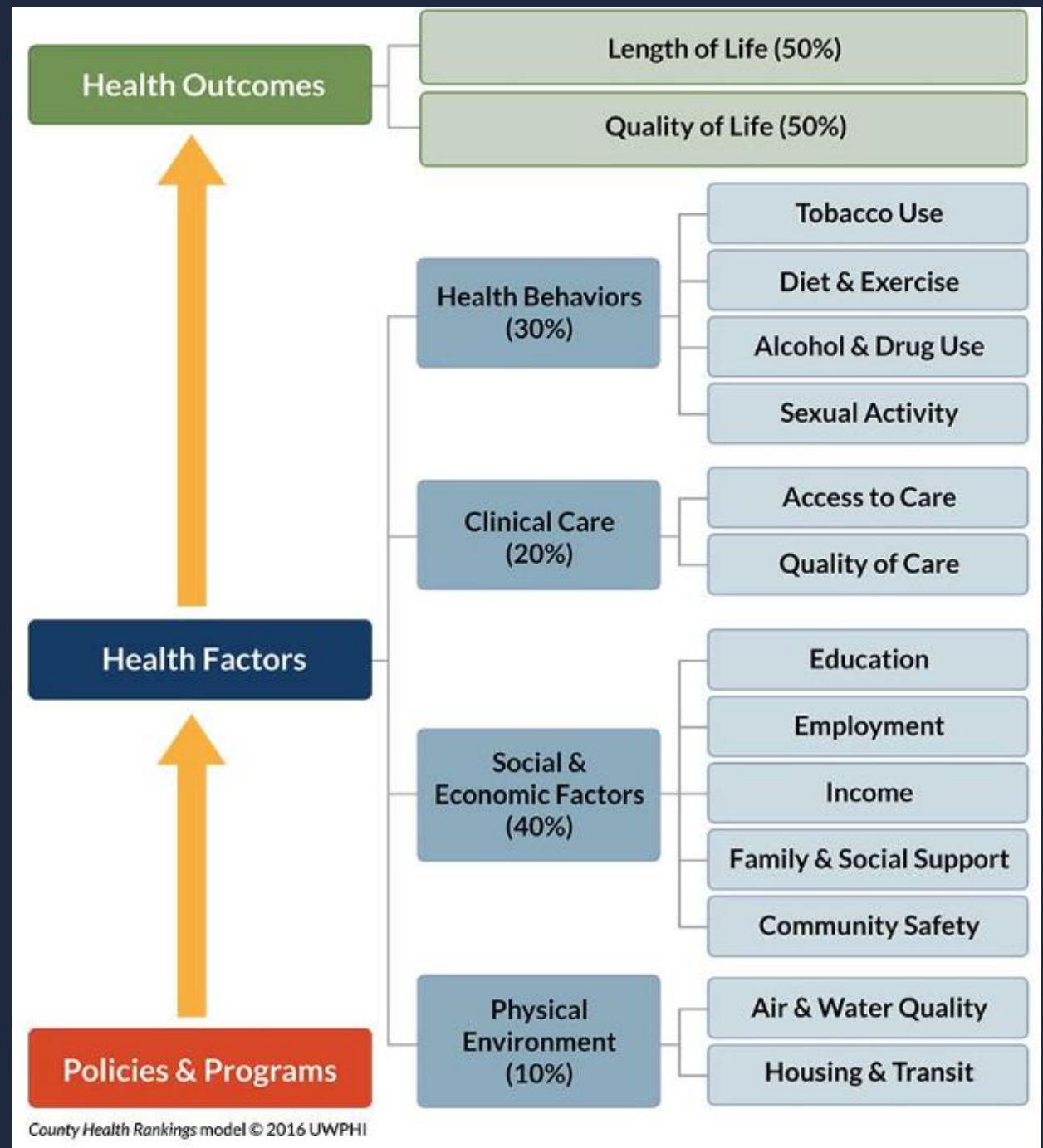
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Social and Economic factors account for nearly 40% of health outcomes

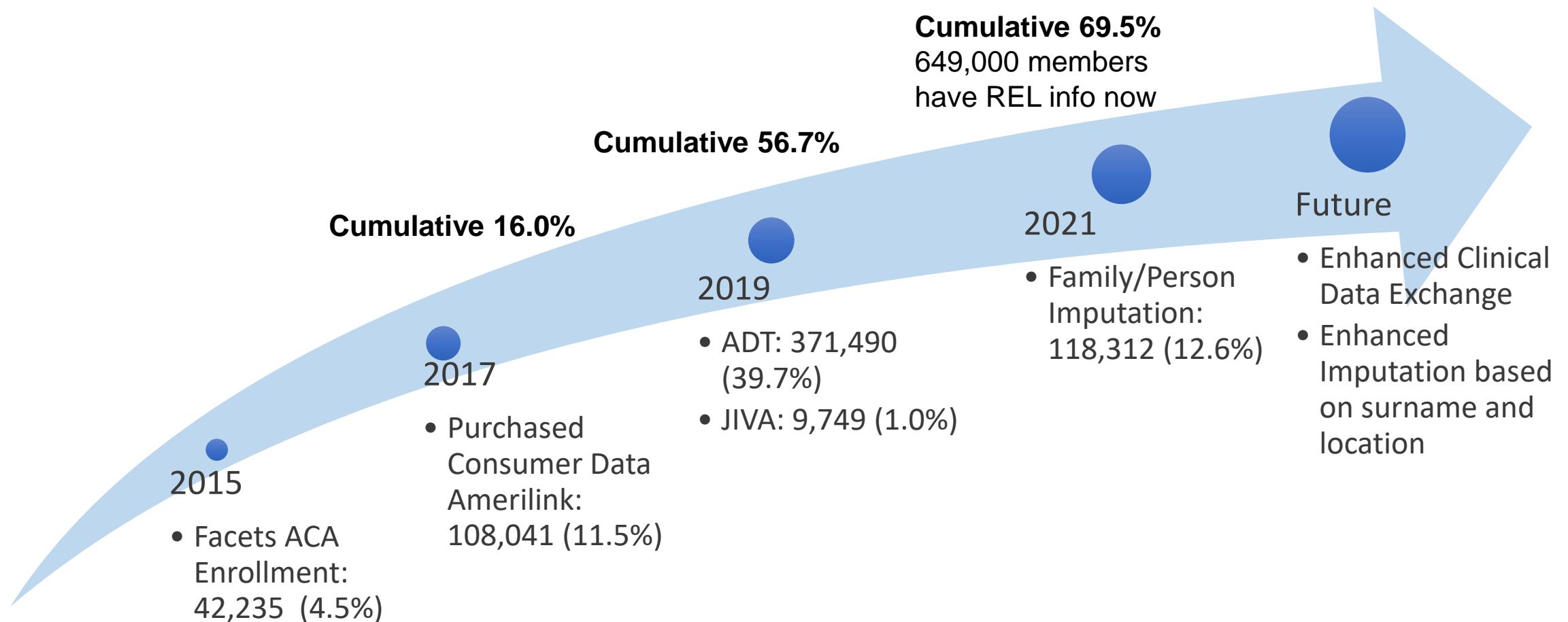
Health Behaviors account for 30% of health outcomes

Fewer than 20% of health outcomes are directly determined by **Clinical Care**



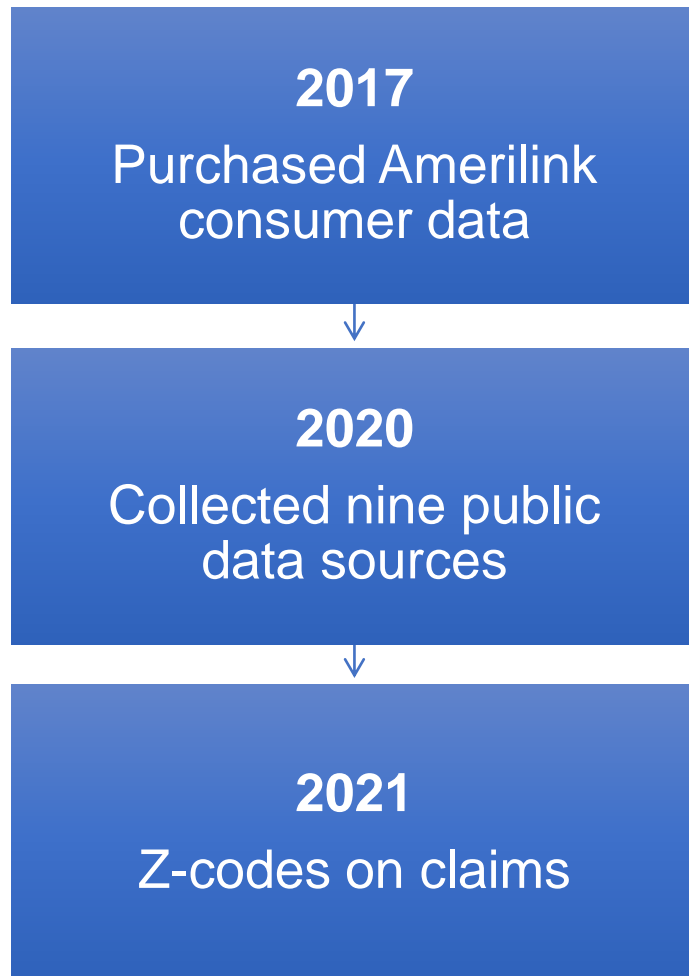
Race/ Ethnicity Data

Best in Class: Achieved more than 69% completion over the years



Social Determinants of Health (SDOH) Data

Collected, organized and cleaned 1,139 variables in various geo sizes, ready to use



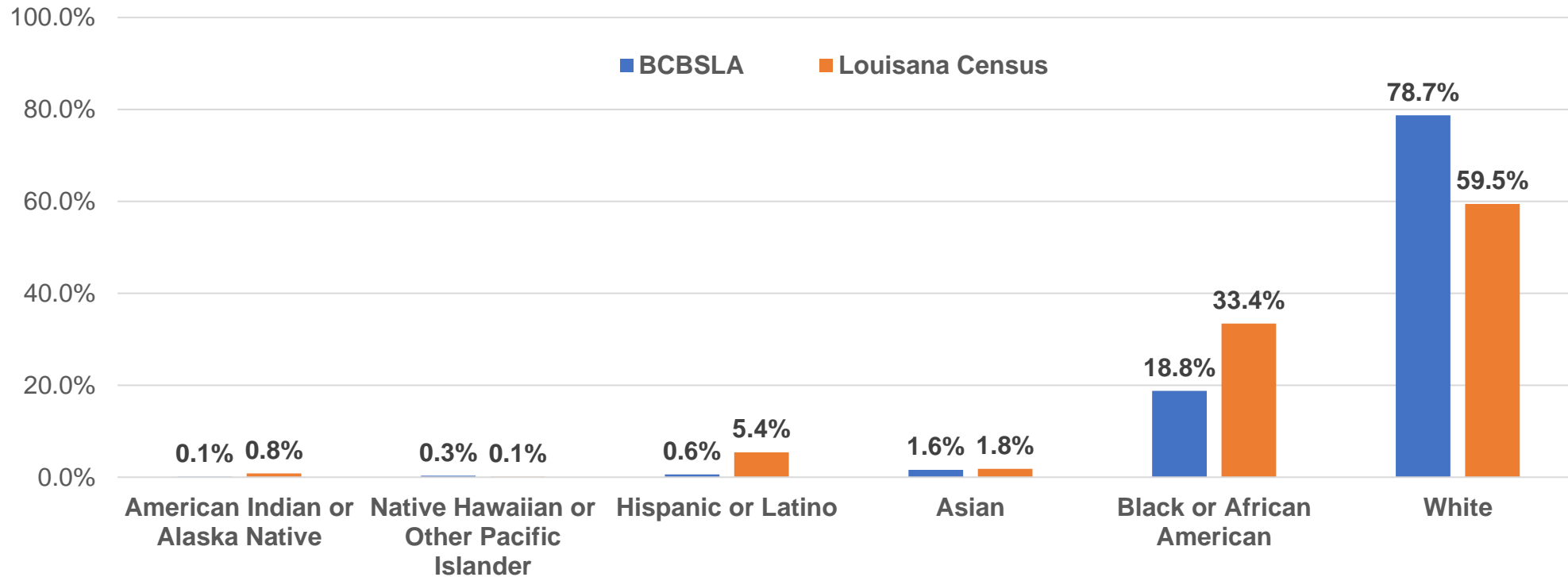
The largest aggregation of Louisiana SDOH data by far

Strength with REL and SDOH Together



Now well-positioned to understand and address health modalities and disparities in our population

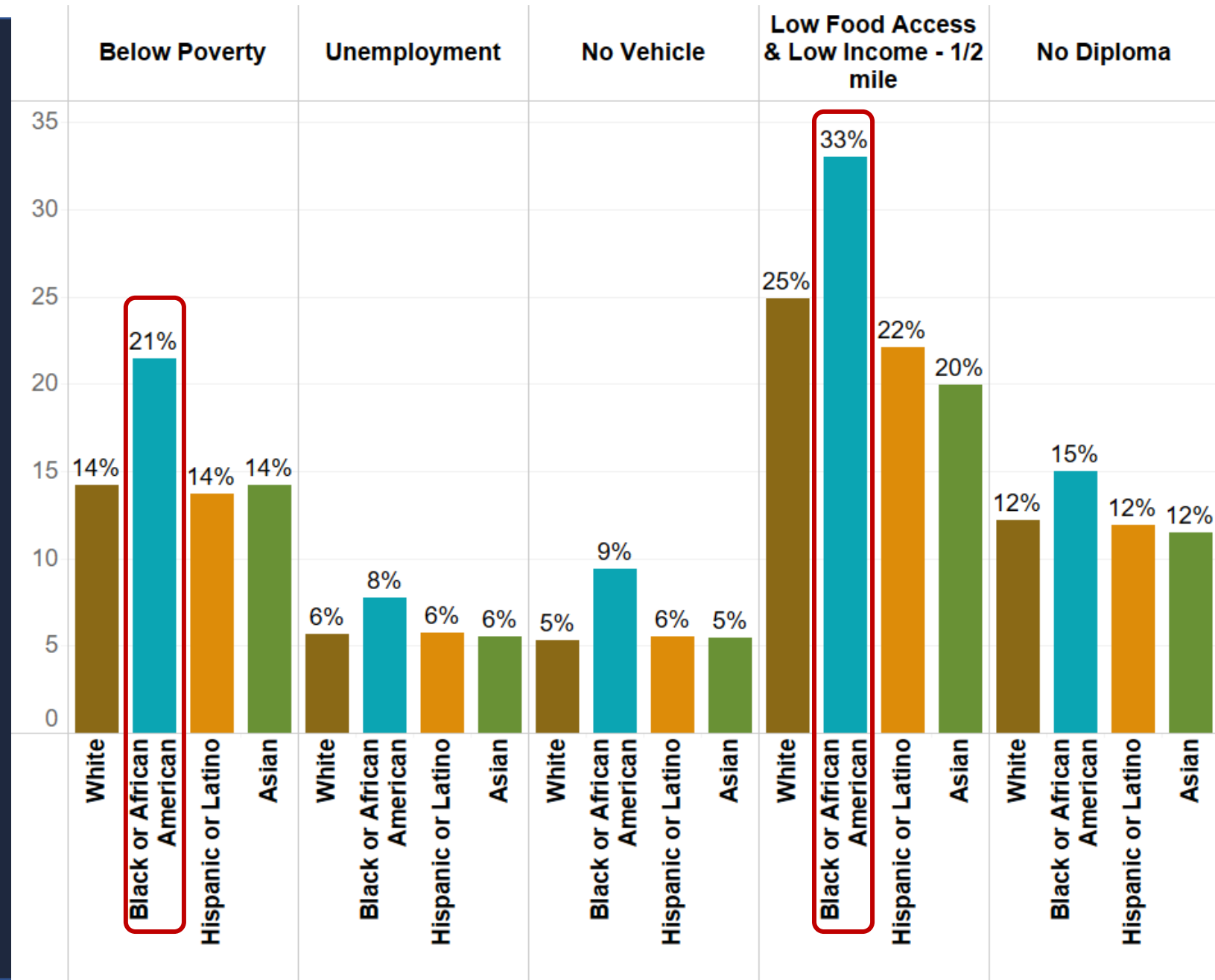
Race Distribution within Blue Cross Membership



- The racial and ethnic distribution of Blue Cross membership is dissimilar to Louisiana’s overall distribution
- Blue Cross membership has lower representation of Black/African American populations and Hispanic/Latino populations when compared to Louisiana’s census

SDOH by Race at Blue Cross

Within membership, Black/African American populations tend to live in areas with economic, transportation and food access challenges



Condition Prevalence by Race at Blue Cross

Black/African American population

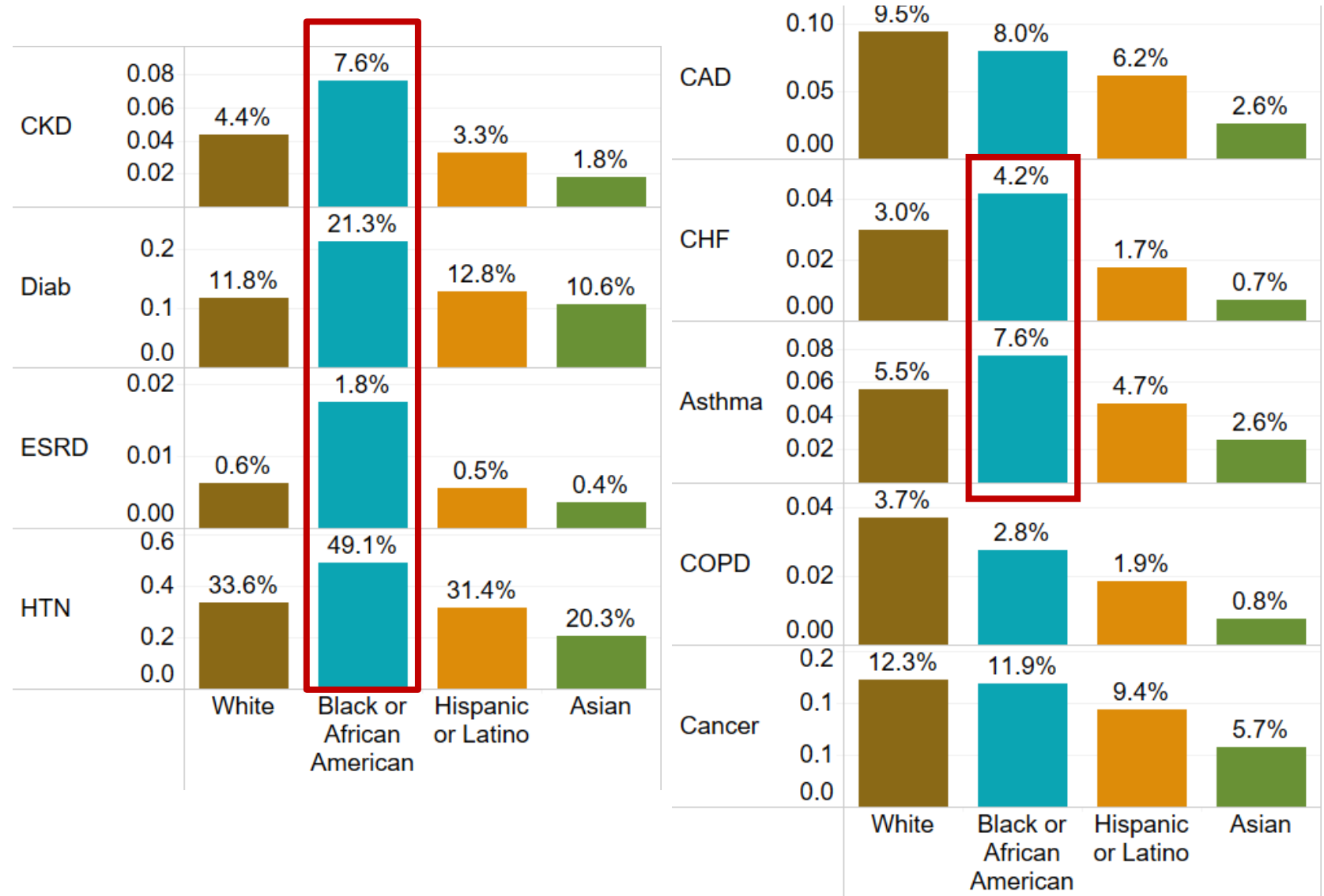
- Significantly higher prevalence in diabetes (Diab), hypertension (HTN), kidney diseases (CKD, ESRD)

White population

- Higher prevalence in coronary artery disease (CAD), COPD and cancer

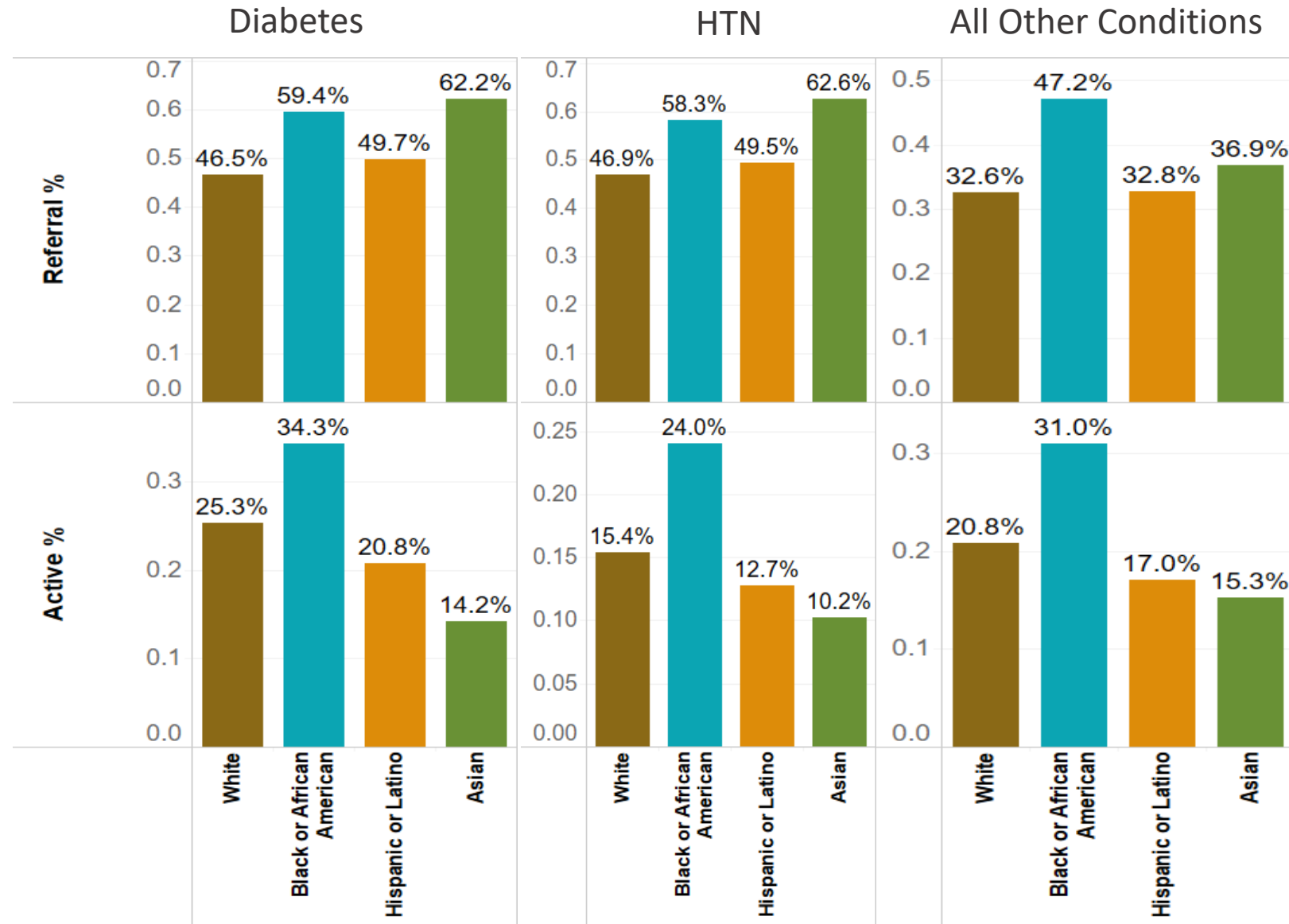
Hispanic/Latino and Asian populations

- Lower chronic condition prevalence, except for diabetes



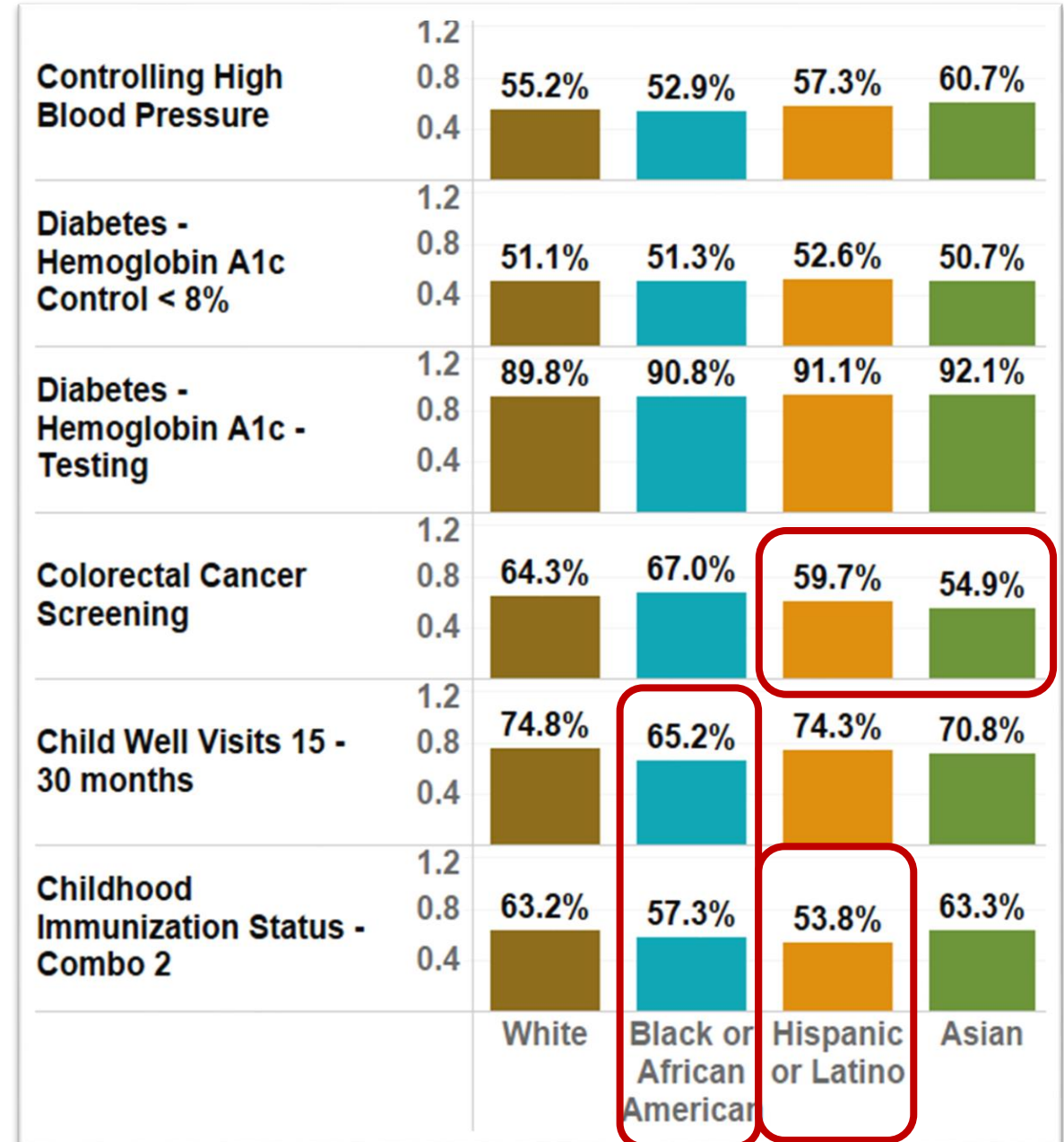
Care Management Engagement by Race at Blue Cross

- Black/African American and Asian populations are being referred to Care Management at a higher rate than White and Hispanic/Latino populations
- Engagement among Black/African American population is very high
- However, engagement is low among Hispanic/Latino and Asian populations



HEDIS Measures by Race at Blue Cross

- Despite aforementioned economic disparities, White and Black/African American populations are comparable in blood pressure and A1c measures
- However, Hispanic/Latino and Asian populations are significantly lower in colorectal cancer screenings
- Childhood immunization and well visits are lower in Black/African American populations
- Childhood immunization are lower in Hispanic/Latino populations

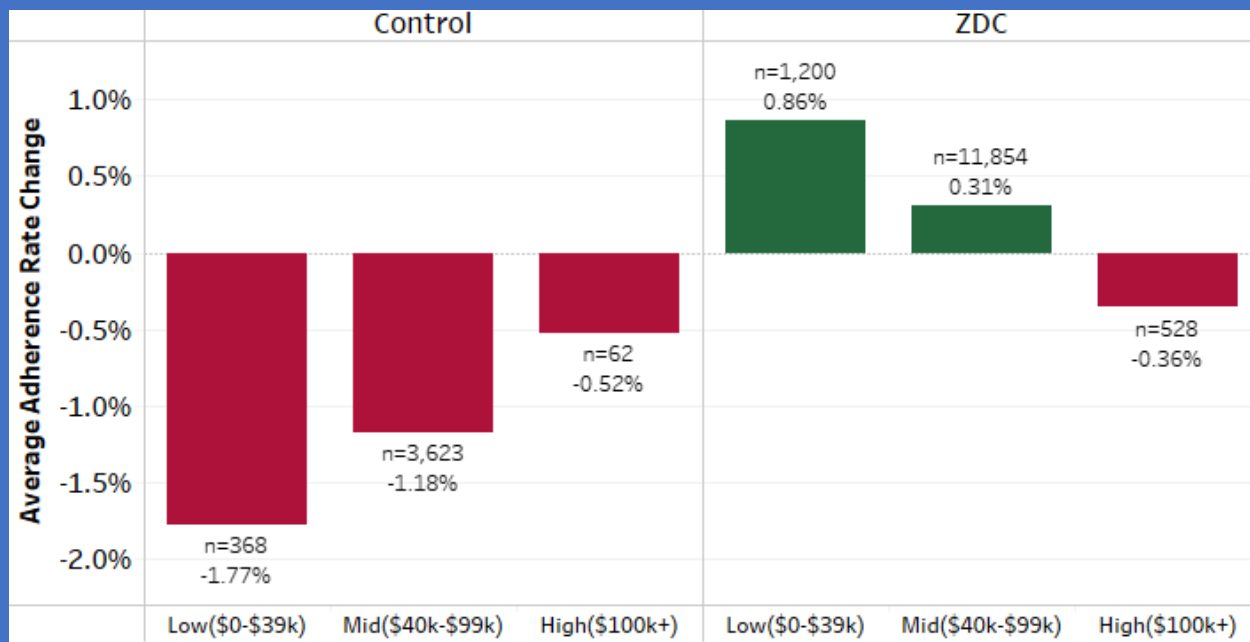


SDOH and REL in Action

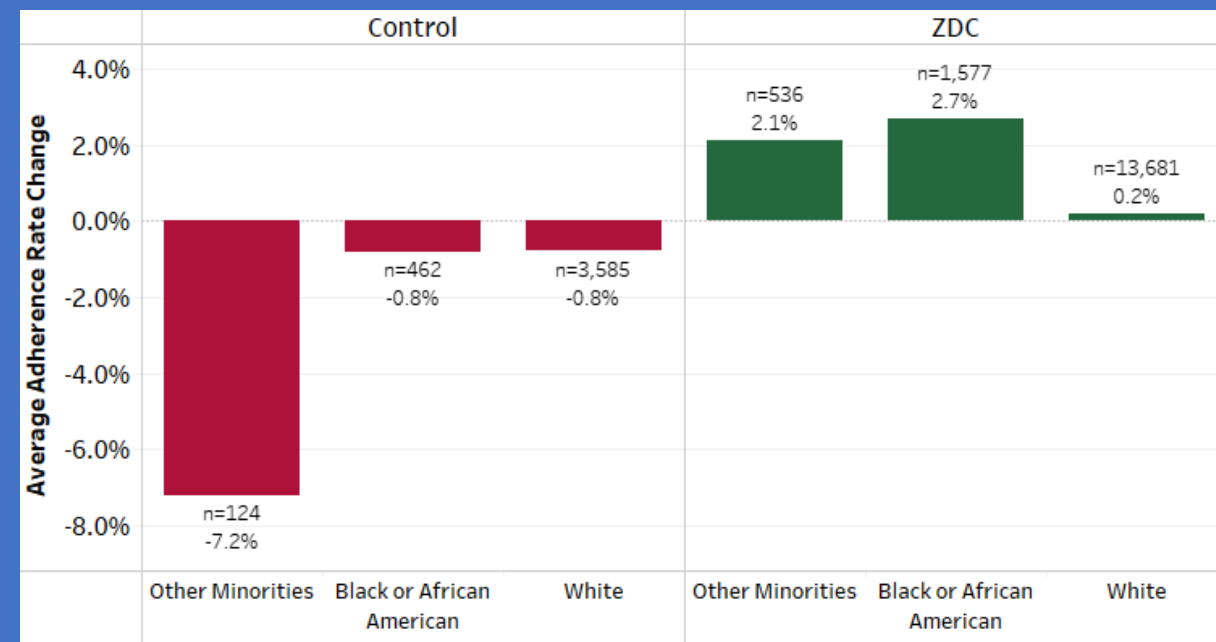
\$0 Drug Copay (ZDC) Program

- Removed income-based barriers, which improved compliance among low- and mid-income populations
- Greatly benefited Black/African American, Hispanic/Latino and Asian populations

Medication Adherence by Income Levels

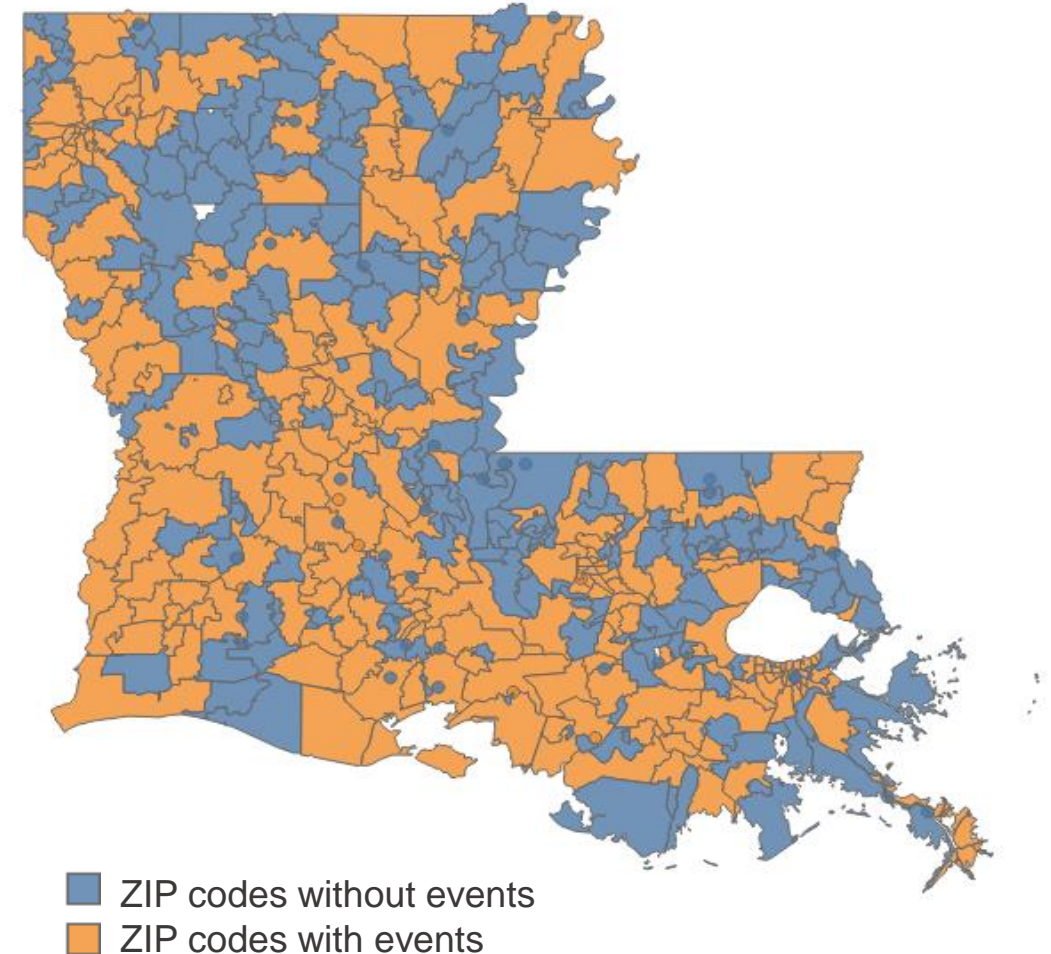


Medication Adherence by Race/Ethnicity



Effectiveness of COVID-19 Vaccine Campaigns

- 851 events covered April 9-July 10, 2021
 - 239 (47%) ZIP code areas out of 509 in Louisiana
 - 3.7 million (81%) people out of 4.6 million population in state
- Data source (Louisiana Department of Health provided)
 - Member-level vaccination data (refreshed bi-weekly)
 - Community event details at ZIP code level



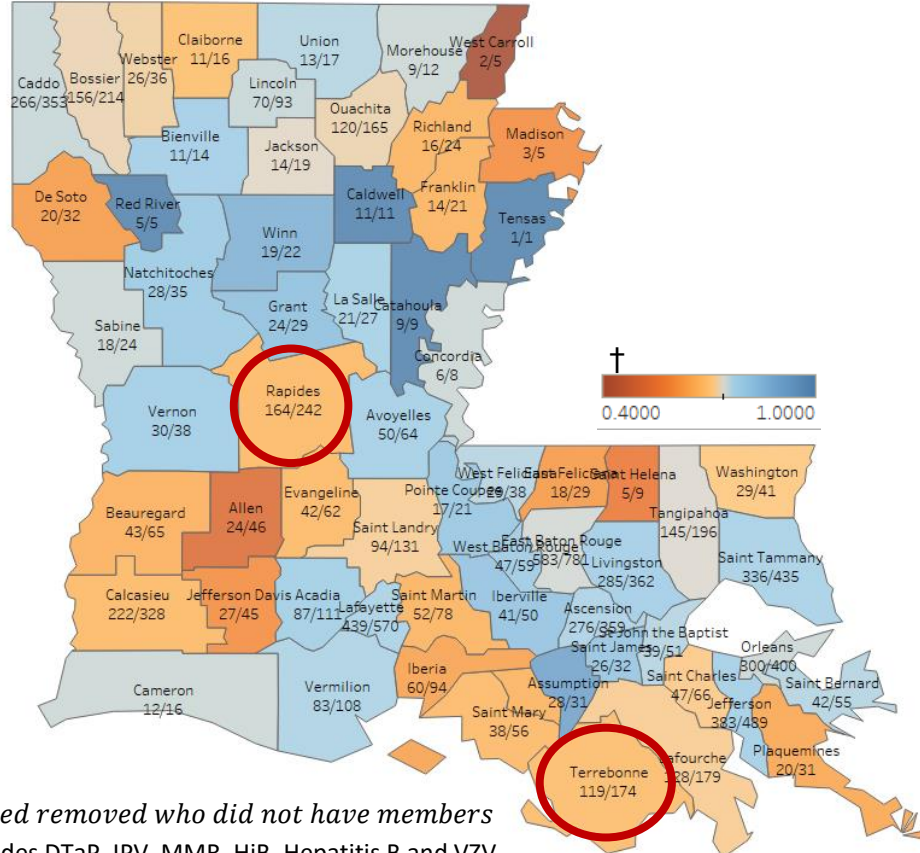
Events Push for Higher Increase in Vaccination Rate

Socioeconomic Status (SES) Group	No Events (167 Zip Codes)				Having Events (224 Zip Codes)				Difference In Difference	Event Counts	
	Population Size	Vaccination Rate 04/01	Vaccination Rate 07/10	Vaccination Rate Diff	Population Size	Vaccination Rate 04/01	Vaccination Rate 07/10	Vaccination Rate Diff			
Good SES	[0.05,0.15)	94,020	30.34%	39.24%	8.90%	213,376	35.68%	47.09%	11.41%	2.51%	24
	[0.15,0.25)	65,946	24.63%	33.55%	8.92%	279,295	31.89%	42.61%	10.72%	1.80%	28
	[0.25,0.35)	187,368	25.71%	34.45%	8.75%	520,133	29.74%	40.00%	10.25%	1.50%	75
	[0.35,0.45)	116,689	22.74%	30.51%	7.77%	597,525	23.80%	32.39%	8.58%	0.82%	130
	[0.45,0.55)	149,436	22.55%	29.99%	7.43%	842,408	23.47%	32.50%	9.04%	1.60%	196
	[0.55,0.65)	136,963	21.91%	28.80%	6.89%	613,874	24.99%	33.87%	8.89%	1.99%	150
	[0.65,0.75)	60,987	22.94%	29.78%	6.84%	406,264	21.52%	29.83%	8.31%	1.47%	103
Poor SES	[0.75,0.85)	25,717	21.45%	29.45%	8.00%	191,771	24.91%	34.74%	9.84%	1.84%	69
	[0.85,1)	4,561	28.27%	33.56%	5.29%	76,494	21.40%	30.12%	8.72%	3.43%	23
Grand Total	841,687	23.40%	31.04%	7.64%	3,741,140	25.03%	34.17%	9.14%	1.50%	798	

- Vaccination rates in areas with event increased 1.50% compared to areas without events
- Larger effects are observed in better (SES≤0.15) and worse (SES≥0.85) socioeconomic status areas
- Within areas with event, better SES areas had relatively higher vaccination rate, as of July 10

Parish Childhood Immunization Rate – CIS Combo 2

- Overall, state Childhood Immunization Status (CIS) Combo 2* rate is 74.28%
- 28 parishes are below the state rate
- Maximum rate is 100% and lowest rate is 40% (West Carroll)



Parishes with lowest immunization rate and denominator greater than 100

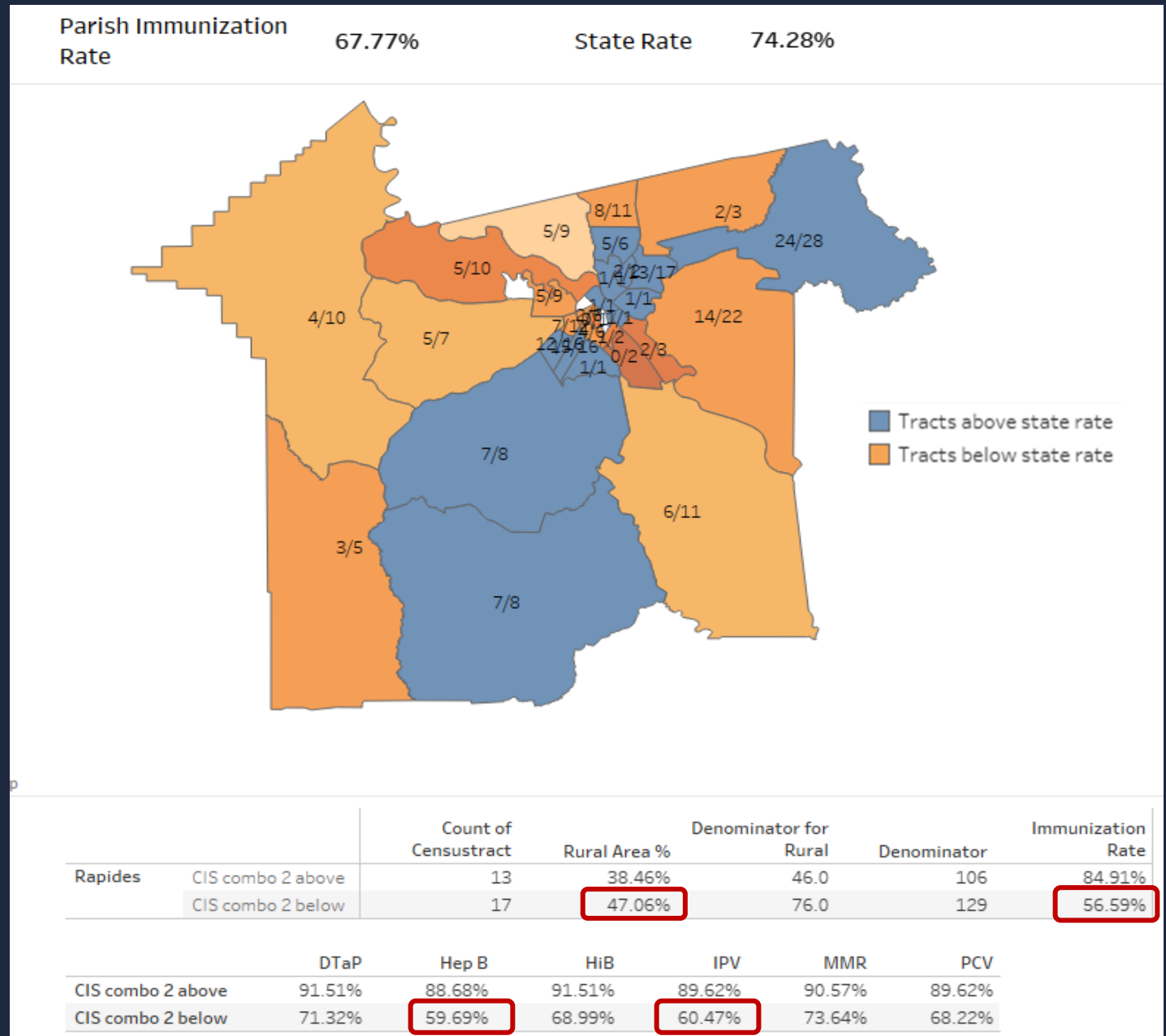
Parish	Denominator	CIS Combo 2 Immunization rate
Tangipahoa	196	73.98%
Bossier	214	72.90%
Ouachita	165	72.73%
St. Landry	131	71.76%
Lafourche	179	71.51%
Terrebonne	174	68.39%
Rapides	242	67.77%
Calcasieu	328	67.68%

† certain parishes removed who did not have members

*CIS Combo 2 includes DTaP, IPV, MMR, HiB, Hepatitis B and VZV

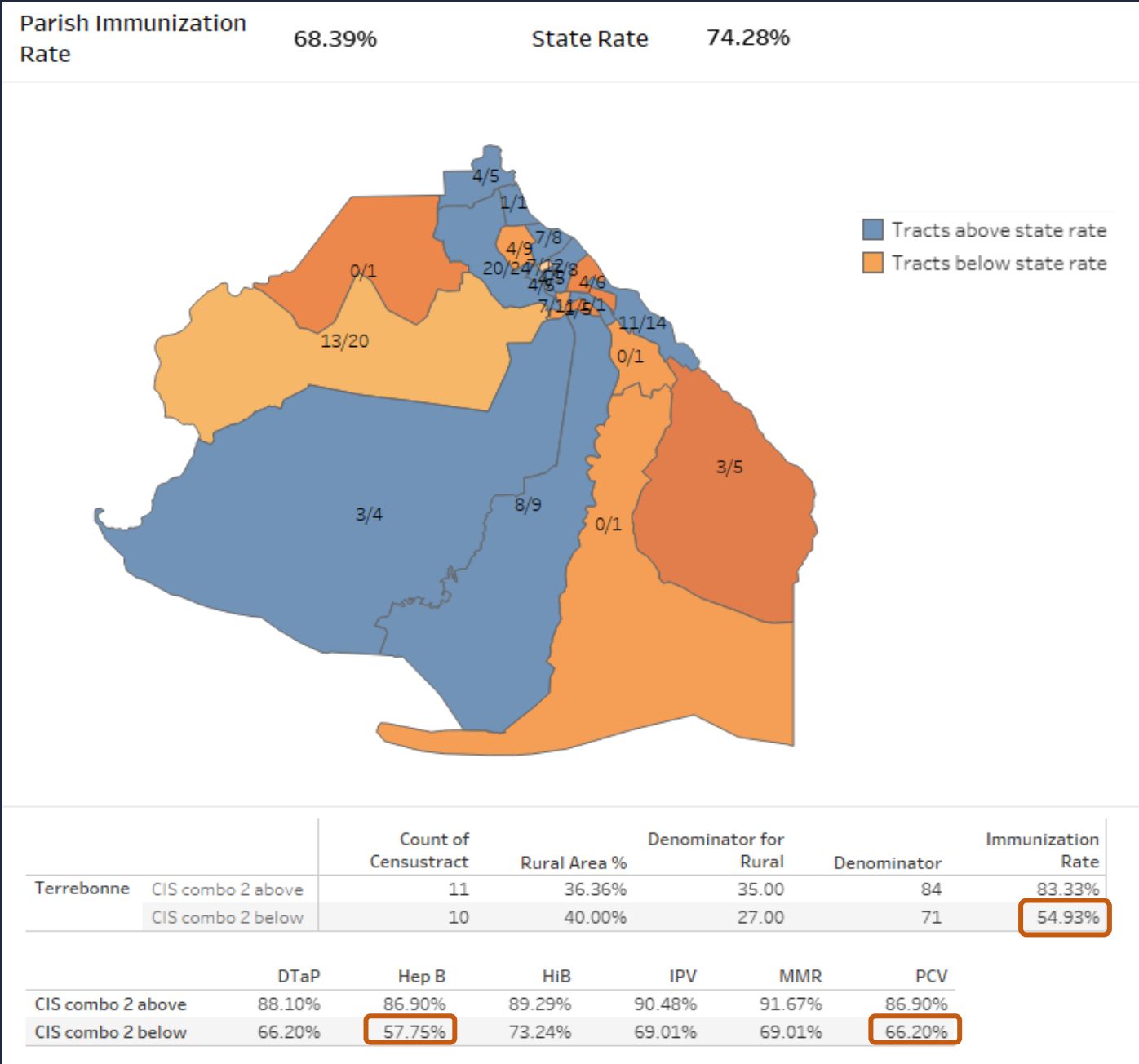
Rapides Parish SDOH and Childhood Immunization Rate

- Findings for tracts below state immunization rate:
 - Yellow tracts rate at 56.59%
 - 50% of these are rural tracts
 - Besides Hepatitis B, parish is also very low in IPV rate
- Focus points based on SDOH:
 - Majority of yellow tracts have poor socioeconomic scores with low food accessibility to children and poor walkability



Terrebonne Parish SDOH and Childhood Immunization Rate

- Findings for tracts below state immunization rate:
 - Yellow tracts rate at 54.93%
 - Low in Hepatitis B and PCV
- Focus points based on SDOH:
 - Majority of tracts are poor in socioeconomic scores, and 60% of these have high population of residents with disabilities
 - Gaps are prevalent in areas that are dominant in the White population with low education level
 - Other issues are poor walkability and low life expectancy



Maternal Health Equity Actions: Reduce Racial Disparities by 50% in Five Years



1 Engage maternal voices and community stakeholders to craft, build and sustain a holistic maternal health program. Form public and private partnerships to address root causes of disparities, inequalities and SDOH.



6 Expand benefit coverage to ensure postpartum care including behavioral health care to 1-year post-delivery.



2 Provide access to cultural humility and unconscious bias training for everyone in the maternal care continuum.



7 Align quality measurement with national standards setting organizations and tie back to provider quality programs.



3 Include nurse midwives and birthing centers in provider networks and design programs to increase education and awareness for members.



8 Join and participate in a Perinatal Quality Collaborative.



4 Facilitate access to doulas and community health workers for maternal support services.



9 Implement value-based contracts specific to maternal health.



5 Implement facilitated self-management or peer prenatal care models such as CenteringPregnancy.™



10 Amplify programs of special significance such as vaccination programs with a focus on COVID-19 and influenza.



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APPENDIX

SDOH Public Data Sources

- **Zipatlas**

- <http://zipatlas.com/>
- Zip Atlas is a structured collection of zip code, area code, city and state demographic, social and economic profiles. Here you will find employment and unemployment rates, industry statistics, household and personal income reports, property value assessment, housing unit occupancy and vacancy breakdown, mortgage and rent analysis, age, gender, ancestry and racial profiles, education attainment levels and school enrolment among many others.

- **County Health Rankings**

- <https://www.countyhealthrankings.org/>
- The rankings help us understand what influences our health and how long and well we live. The rankings are unique in their ability to provide measures of the current overall health of each county in all 50 states. They also look at a variety of measures that affect the future health of communities, such as high school graduation rates, access to healthy foods, rates of smoking, children in poverty, and teen births.

- **CDC's Social Vulnerability Index (SVI)**

- <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>
- CDC Social Vulnerability Index (CDC SVI) uses 15 U.S. census variables to help local officials identify communities that may need support before, during, or after disasters.

- **Robert Wood Johnson Foundation**

- <https://www.cdc.gov/nchs/nvss/usaleep/usaleep.html>
- Life Expectancy Files contain geographic identifiers, life expectancy at birth for 2010-2015, and flags noting whether the estimates were based exclusively on observed data, a combination of observed and predicted values, or exclusively predicted values.

- **500 Cities: Census Tract-level Data (New)**

- <https://chronicdata.cdc.gov/500-Cities-Places/500-Cities-Census-Tract-level-Data-GIS-Friendly-Fo/k86t-wghb>
- This data source provide measures such as dental visits, mammograms, Pap tests, colorectal cancer screening, core preventive services among older adults, and sleep less than 7 hours.

- **Food Insecurity (New)**

- <https://www.ers.usda.gov/data-products/food-access-research-atlas/>
- Food security in U.S. households; measuring the people and places facing barriers to accessing healthy and affordable food and conducts research examining the consequences of food access limitations on food spending, diet, and health.

- **Smart Location Database (New)**

- <https://edg.epa.gov/EPADataCommons/public/OP/SLD/>
- This includes more than 90 attributes summarizing characteristics such as housing density, diversity of land use, neighborhood design, destination accessibility, transit service, employment, and demographics.

- **Park Serve (New)**

- <https://www.tpl.org/parkserve/>

- **National Air Toxics Assessment (New)**

- <https://www.epa.gov/national-air-toxics-assessment/2014-nata-assessment-results>

