

# CT Maternity Bundled Payment Program

## Stakeholder Advisory Council

May 17<sup>th</sup>, 2022



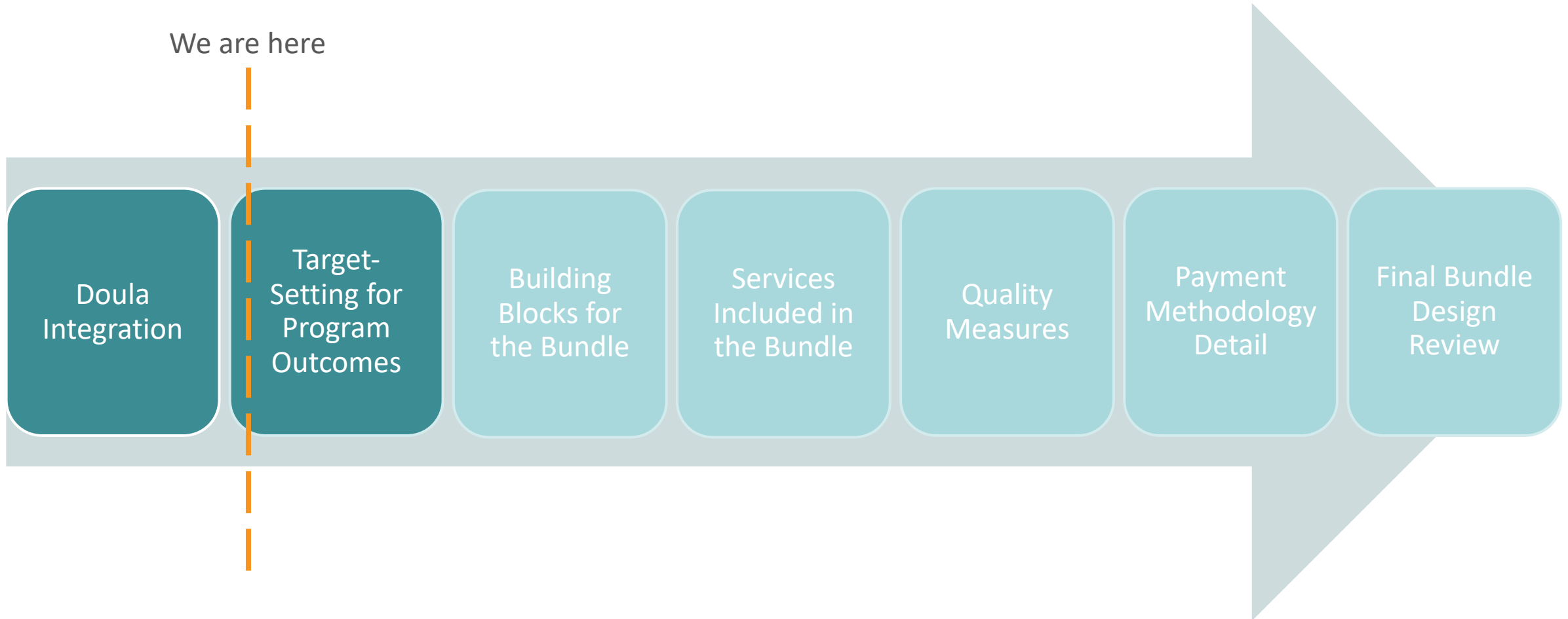
# Agenda

Topic	Timing
Welcome and overview <ul style="list-style-type: none"><li>• Welcome</li><li>• Roadmap and timeline review</li></ul>	10 Minutes
Key outcome measures and targets <ul style="list-style-type: none"><li>• Preliminary data and results</li><li>• Methodology</li><li>• Overall targets and gap closure targets for subpopulations</li></ul>	45 Minutes
Next Steps	5 Minutes

# Maternity Bundle Roadmap – Public Engagement

## Key Bundled Payment Design Topics for Discussion

We are here



# Reminder of Key Outcomes Measures

6 key outcome measures have been identified in initial round of stakeholder discussions to evaluate success of the overall bundled payment program with an emphasis on addressing racial disparities

## Health Equity Framework - Program Goals

### What are the Maternity Bundle goals?

Reduce rates of:

- Adverse maternal outcomes
- NICU Utilization
- NAS (Opioid Specific)
- NAS (Overall)
- NTSV c-section
- Overall c-section

### How will DSS accomplish these goals?

Develop maternity services that:

- Close racial disparity gaps in maternal health and birth outcomes
- Support parity between provider types (OBs & Midwives)
- Include access to doula services, CHWs, lactation counseling, and other supports
- Improve patient experience of care
- Align payment models across Medicaid and State Employee Health Plan
- Align quality measures

**Goal for today's meeting:** Quantify targets for each outcome measure overall and to close racial disparity gaps

#### Notes:

- Additional measures will also be included in the quality measure slate (to be discussed in a later meeting) for provider accountability and performance incentives.
- As a key goal is to improve patient experience of care, DSS is also striving to include a validated patient experience measure that spans the birthing person's full perinatal period

# Starting Point: Baseline Data and Trend

Team assessed baseline and trend data to inform overall quantitative targets and quantitative targets to close racial disparity gaps

Metric Rates	2017 Actuals	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Projected*	2017-2022 Avg Ann Trend Rate
Adverse Maternal Outcome	23.7%	24.0%	25.2%	25.1%	27.5%	28.3%	3.0%
NICU Utilization	7.7%	7.0%	7.9%	8.5%	8.3%	8.5%	1.6%
NAS (Opioid Specific)	2.3%	2.0%	1.9%	2.1%	2.0%	2.0%	-2.4%
NAS (Overall)	3.7%	3.9%	4.2%	4.7%	4.6%	4.8%	4.4%
NTSV C-Section	31.2%	31.2%	30.6%	29.6%	31.5%	31.6%	0.2%
Overall C-Section	34.1%	34.1%	33.8%	33.2%	34.4%	34.4%	0.1%

\*Note: 2022 projections were extrapolated from the historical trend rate.

Source: CT DSS Data, provided by CHN

**About the Metrics:** **C-Section** – Race based on mother’s member record. Determined by match in the C-Section value set. **NTSV** – Race based on mother’s member record. **Adverse Maternal Outcome** – Race based on mother’s member record. Current outcomes defined as Adverse Maternal Outcomes: Acute Myocardial Infarction, Cerebral Infarction, Disseminated Intravascular Coagulation, Eclampsia, HELLP Syndrome, Hemorrhage, Maternal Death within 1 year, Peripartum Cardiomyopathy, Placenta Accreta, Placenta Increta, Placenta Infarction, Placenta Percreta, Placenta Previa, Preeclampsia, Premature Separation of Placenta, Stillborn, Thrombosis Embolism. **Opioid-Specific NAS** – Race based on baby’s member record. Determined by diagnosis code P96.1 on baby’s birth claim. **Overall NAS** – Race based on baby’s member record. Determined by presence of one of the following diagnosis codes on baby’s birth claim: P96.1, P04.42, P04.1A, P04.14, P04.40, P04.41, P04.81, P04.49, and P04.16. **NICU** – Race based on baby’s member record. Defined by a stay under revenue codes 0174 or 0203 prior to baby turning 29 days old.

# Target Trends

Overall Targets: When available, benchmarks informed the following 2027 draft target rates.  
 Health Equity Goal: Eliminate disparities for each measures in 10 years (by 2032); Reduce by 50% by 2027.

Metric Rates	2022 Projected Rate	Target Decrease (Points)	2027 Target Rate	Rationale for Target Decrease ( <i>Source</i> )	Historical Avg Ann Trend	2022-2027 Target Ann Trend
Adverse Maternal Outcome	28.3%	4.0%	24.3%	Reduce to return to Husky CY 2018 rates ( <i>Straw target</i> )	3.0%	-3.0%
NICU Utilization	8.5%	2.5%	6.0%	Reduce to lower beyond Husky CY 2018 rates ( <i>Straw target</i> )	1.6%	-6.8%
NAS (Opioid Specific)	2.0%	0.5%	1.5%	Reduce to lower opioid-specific NAS rates ( <i>Straw target</i> )	-2.4%	-5.7%
NAS (Overall)	4.8%	1.5%	3.3%	Reduce to lower beyond Husky CY 2017 rates ( <i>Straw target</i> )	4.4%	-7.2%
NTSV C-Section	31.6%	6.5%	25.1%	Reduce to get closer to the 2018 Medicaid average rate ( <i>Medicaid and CHIP Beneficiary Profile: Maternal and Infant Health</i> )	0.2%	-4.5%
Overall C-Section	34.4%	3.5%	30.9%	Reduce to meet the 2020 New England average rate, excluding CT ( <i>CDC Cesarean Delivery Rate</i> )	0.1%	-2.1%

# Subpopulations: Starting Point

Using the 2022 projected metric rates as a starting point, it is evident that there are significant differences by subpopulation for certain metrics and populations.

Metric	2022 Projected Rates				Percent Difference to Overall		
	Overall	Black	Hispanic	White	Black	Hispanic	White
Adverse Maternal Outcome Rate	<b>28.3%</b>	34.5%	30.2%	26.0%	<b>21.7%</b>	<b>6.6%</b>	<b>-8.1%</b>
NICU Utilization Rate	<b>8.5%</b>	10.2%	7.7%	7.1%	<b>21.0%</b>	<b>-8.6%</b>	<b>-15.6%</b>
NAS Rate (Opioid Specific)	<b>2.0%</b>	0.9%	2.3%	7.9%	<b>-56.2%</b>	<b>15.4%</b>	<b>302.0%</b>
NAS Rate (Overall)	<b>4.8%</b>	5.5%	4.6%	9.8%	<b>14.6%</b>	<b>-4.8%</b>	<b>104.0%</b>
NTSV C-Section Rate	<b>31.6%</b>	32.4%	30.6%	32.5%	<b>2.5%</b>	<b>-3.1%</b>	<b>2.8%</b>
Overall C-Section Rate	<b>34.4%</b>	38.2%	32.8%	34.9%	<b>11.1%</b>	<b>-4.8%</b>	<b>1.6%</b>

**\*Note:** 2022 projections were extrapolated from the historical trend rate.

**Source:** CT DSS Data, provided by CHN

# Subpopulation Racial Gap Closure Targets: Approach

In order to acknowledge the existing disparity in the metrics by subpopulation, target trend rates can be adjusted to “close the gap” between subpopulations and the overall population.

- **Starting Point:** actuals for 2017-2021 for all metrics
  - Note high levels of unidentified members in existing dataset and variation of unknown percentage by metric
  - Source data for subpopulations: CT DSS Data, provided by CHN
- **Methodology:**
  - Identify the gaps between the values for each subpopulation and the value for the overall population.
  - Modify the target trends for each metric for each subpopulation to ‘close the gap’ between the overall metric value and the value by subpopulation

**% of Members by subpopulation by Metric** *(based on denominator in dataset)*

Metric	Black	White	Hispanic	Unknown/Other
Adverse Maternal Outcome	15%	27%	24%	34%
NICU Utilization	6%	7%	10%	76%
NAS (Opioid Specific)	6%	7%	10%	77%
NAS (Overall)	6%	7%	10%	77%
NTSV	16%	23%	23%	38%
Overall C-Section	16%	23%	23%	38%

## Key Learnings:

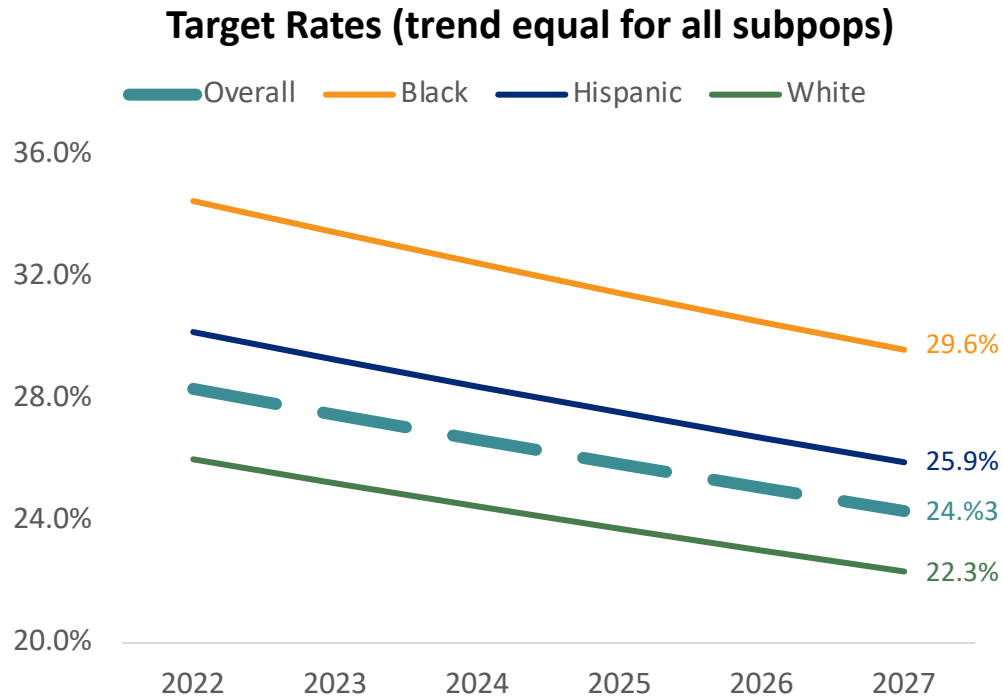
- Data limited, but consistent with industry research findings
- Significant gaps exist by race/ethnicity that should be taken into account when setting targets
- Analysis of the gaps and setting targets doesn’t solve equity issues - but does highlight where we need to ask more questions.
- Initial focus on setting targets by Black, Hispanic, and White/Caucasian populations based on available data as the sample sizes for other races/ethnicities were too small to draw significant conclusions



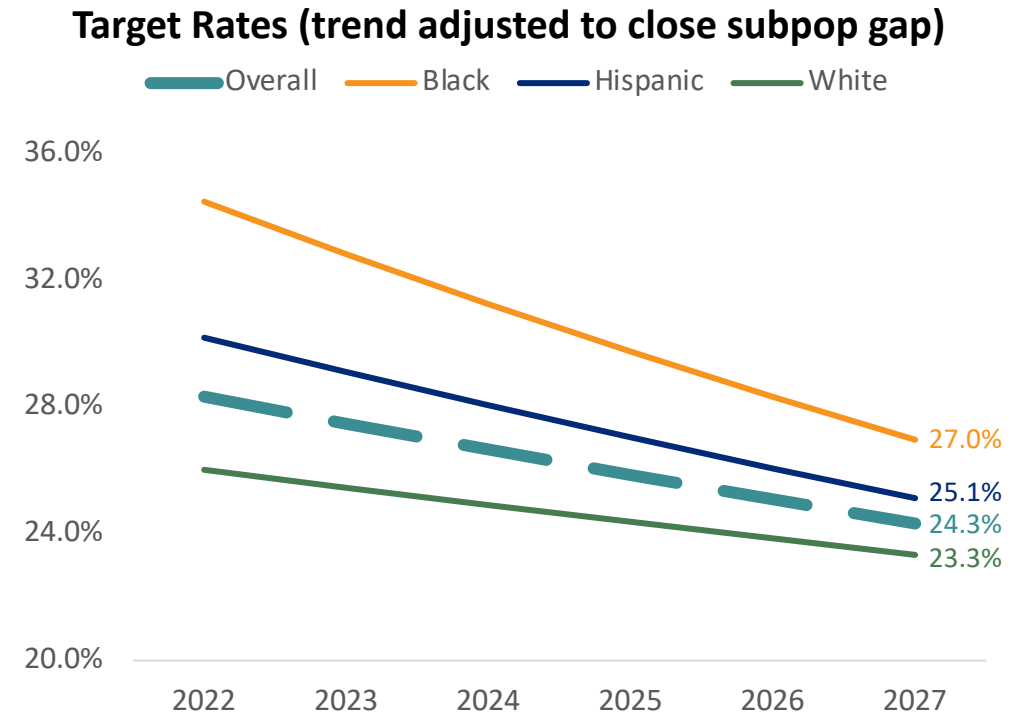
# Adverse Maternal Outcome Subpopulation Modeling

The 2022 overall Adverse Maternal Outcome rate is projected to be 28.3%. To reach the 2027 target rate of 24.3%, the overall rate needs to decrease by 4.0% percentage points by 2027, which would require a reduction trend rate of -3.0% per year.

## Adverse Maternal Outcome Rate



Reduce gap  
to overall by  
50%

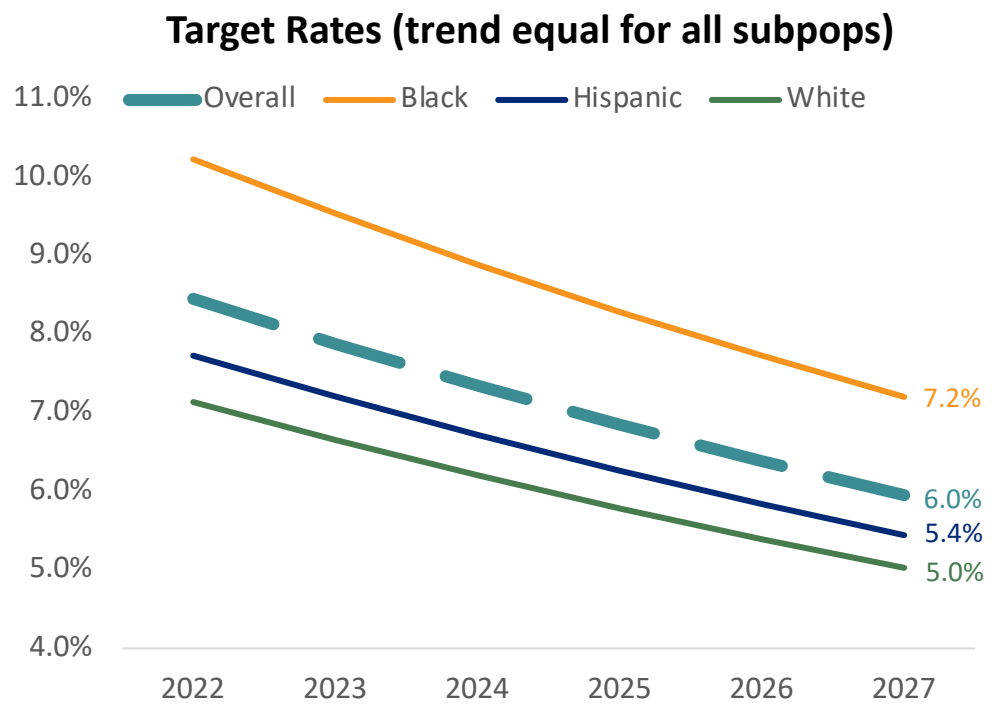


# NICU Utilization Subpopulation Modeling

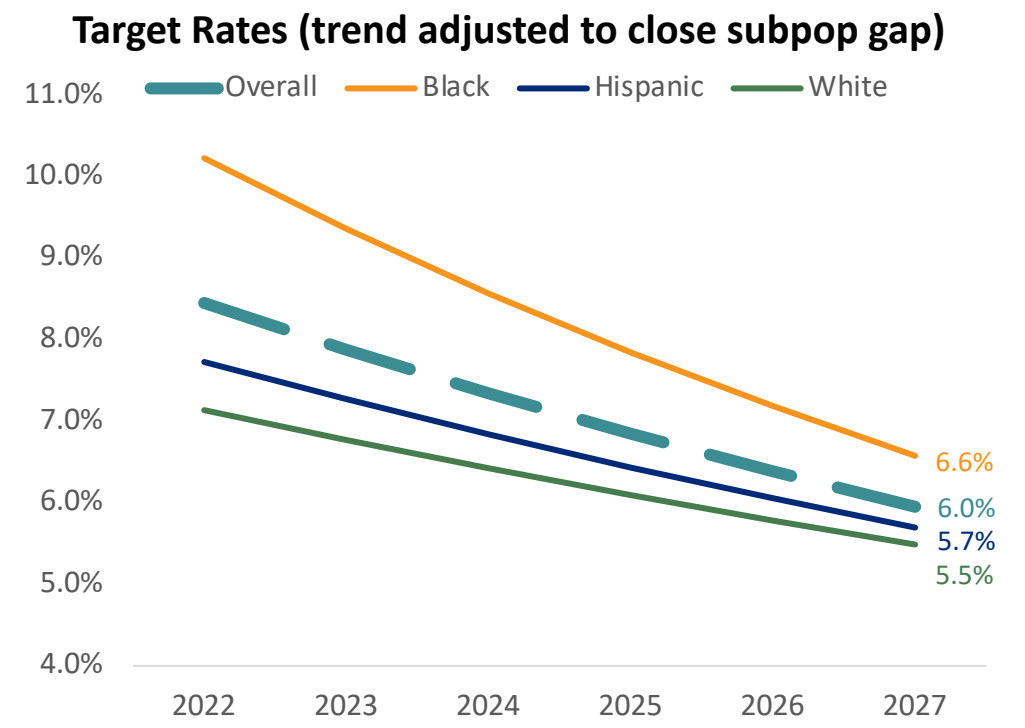
The 2022 overall NICU utilization rate is projected to be 8.5%. To reach the 2027 target rate of 6.0%, the overall rate needs to decrease by 2.5% percentage points by 2027, which would a reduction trend rate of -6.8% per year for 5 years.

- The 2022 rate of Black Husky members is projected to be 10.2%, which is 20% higher than the overall rate. To close the gap to the overall population rate by 50% by 2027 requires a reduction trend rate of -8.5% per year for the Black population.

## NICU Utilization Rate *(note unknown/other not shown accounts for 77% of overall – so chart is illustrative)*



Reduce gap to overall by 50%

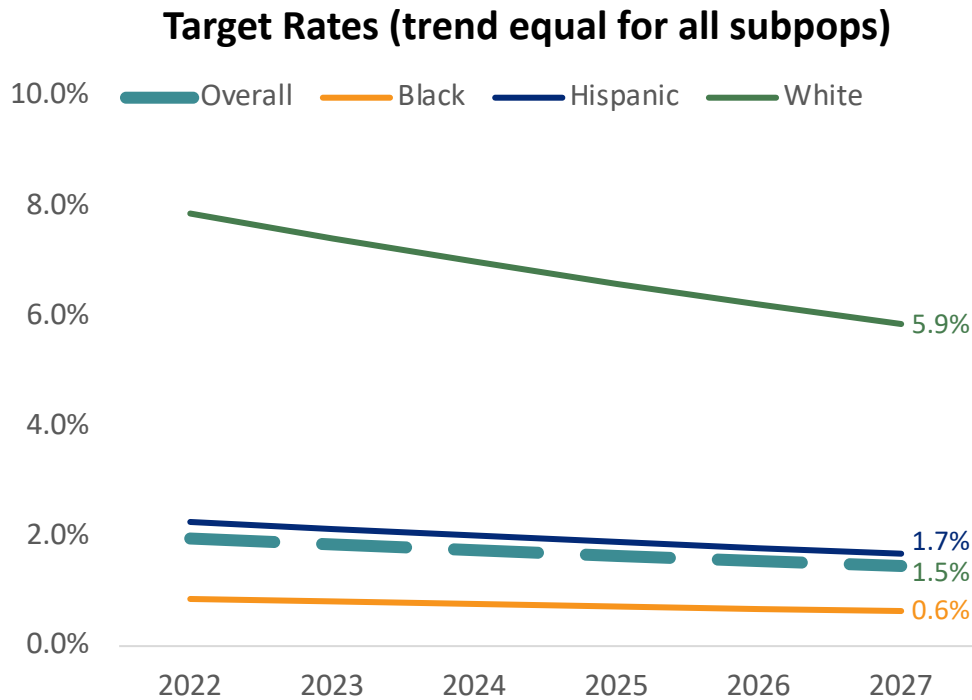


# NAS (Opioid Specific) Subpopulation Modeling

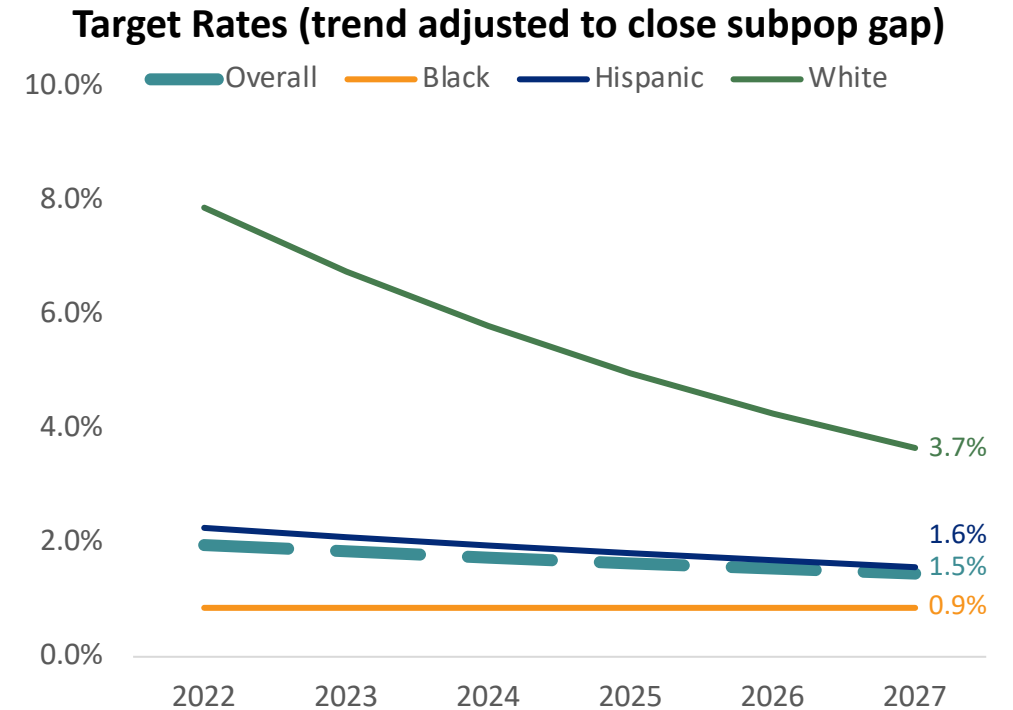
The 2022 opioid-specific NAS rate is projected to be 2.0%. To reach the 2027 target rate of 1.5%, the overall rate needs to decrease by 0.5% percentage points by 2027, which would require a reduction trend rate of -5.7% per year.

- Note: Although the rates among Husky birthing people who identify as multiple race and Native American are based on a small sample size, their NAS rates were also disproportionately high in 2021 (10.1% and 5.9%, respectively).

## NAS (Opioid Specific) Rate *(note unknown/other not shown accounts for 77% of overall – so chart is illustrative)*



Reduce gap to overall by 50%



Note: Preliminary Target Rates are still in draft form and are intended for feedback and discussion.

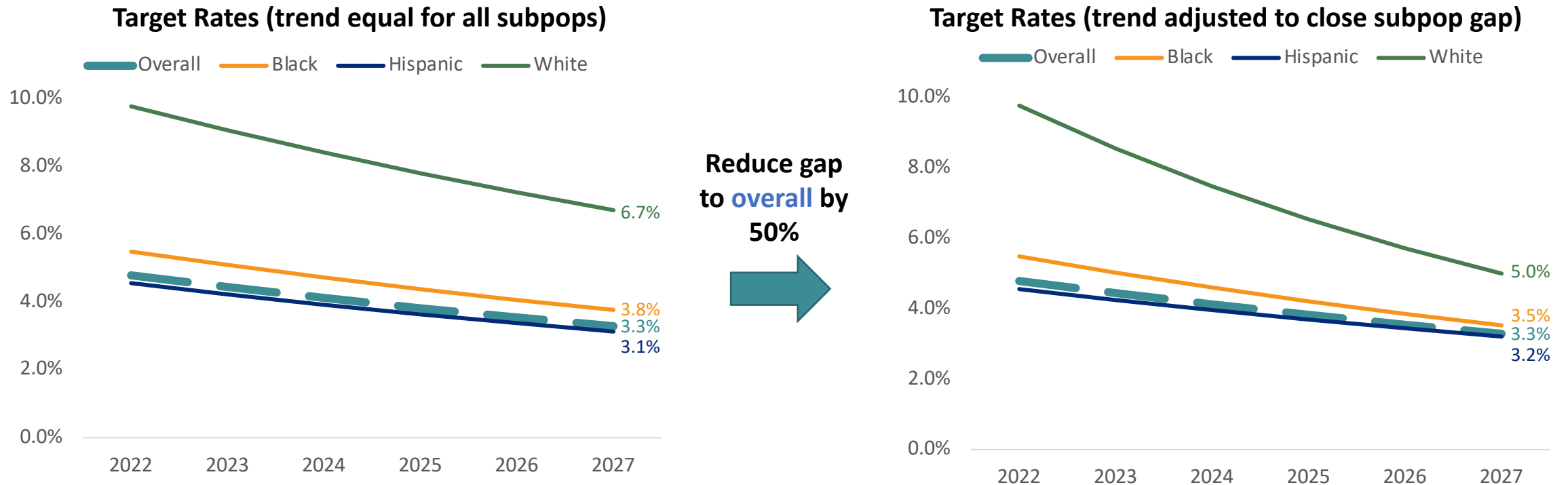
Note: Rate for Black members would increase in this scenario of closing the gap by 50%. Instead, we correct edge cases to model subpopulation trend as at most flat trend.

# NAS (Overall) Subpopulation Modeling

The 2022 overall NAS rate is projected to be 4.8%. To reach the 2027 target rate of 3.3%, the overall rate needs to decrease by 1.5% percentage points by 2027, which would a reduction trend rate of -7.2% per year.

- Note: Although the rates among Husky birthing people who identify as multiple race and Native American are based on a small sample size, their NAS rates were also disproportionately high in 2021 (18.8% and 8.8%, respectively).

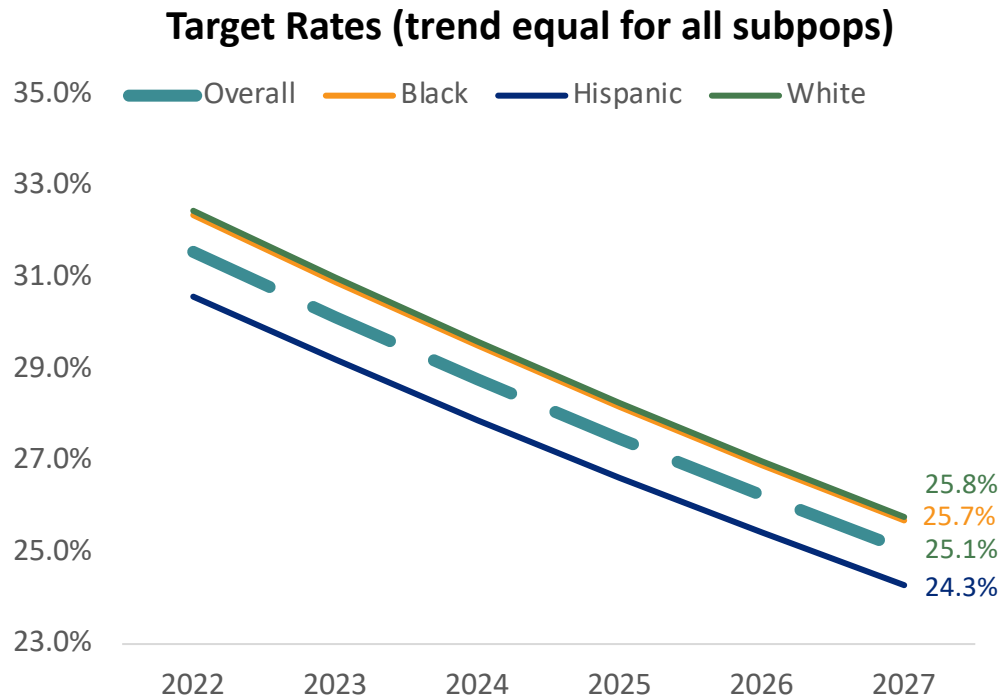
## NAS (Overall) Rate *(note unknown/other not shown accounts for 77% of overall – so chart is illustrative)*



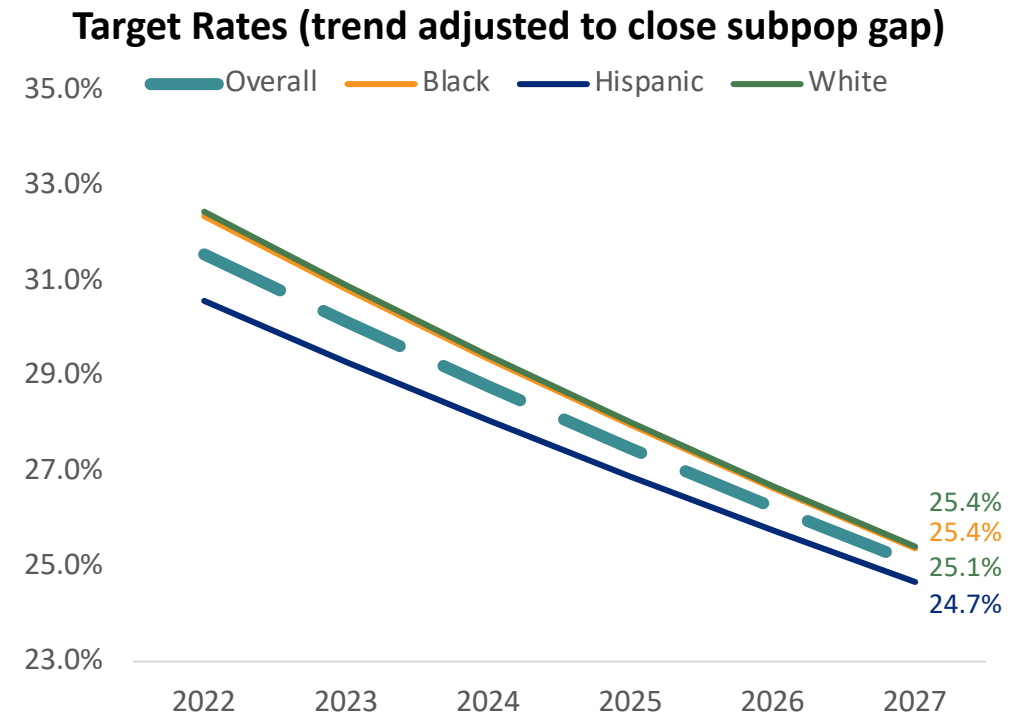
# NTSV C-Section Subpopulation Modeling

The 2022 overall NTSV rate is projected to be 31.6%. To reach the 2027 target rate of 25.1%, the overall rate needs to decrease by 6.5% percentage points by 2027, which would require a reduction trend rate of -4.5% per year.

## NTSV Rate



Reduce gap to overall by 50%

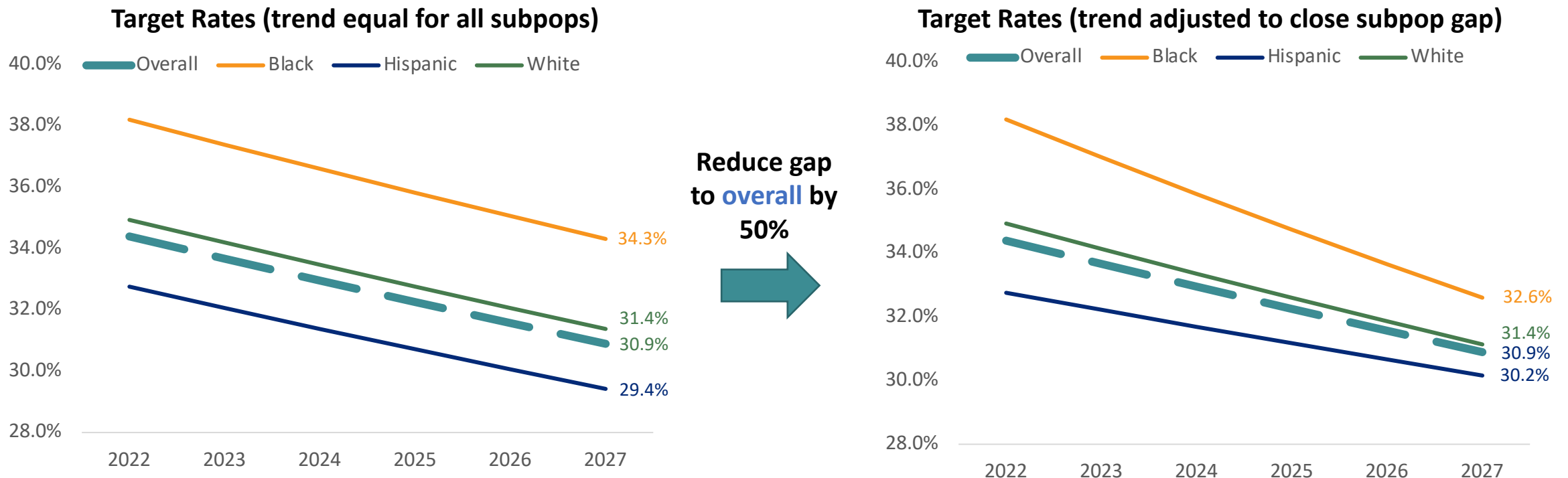


# Overall C-Section Subpopulation Modeling

The 2022 overall C-section rate is projected to be 34.4%. To reach the 2027 target rate of 30.9%, the overall rate needs to decrease by 3.5 percentage points by 2027, which would require a reduction trend rate of -2.1% per year.

- The 2022 rate of Black Husky members is projected to be 38.2%, which is 11% higher than the overall rate. To close the gap to the overall population rate by 50% by 2027 requires a reduction trend rate of -3.1% per year for the Black population.
- The 2022 rate of Hispanic Husky members is projected to be 32.8%, which is 5% lower than the overall rate. To close the gap to the overall population rate by 50% by 2027 requires a reduction trend rate of -1.6% per year for the Hispanic population.

## Overall C-Section Rate



# Next Steps

- Incorporate feedback from today's discussion into the overall targets and gap closure targets for subpopulations
- Next Advisory Council meeting is scheduled for June 21<sup>st</sup>

# Appendix

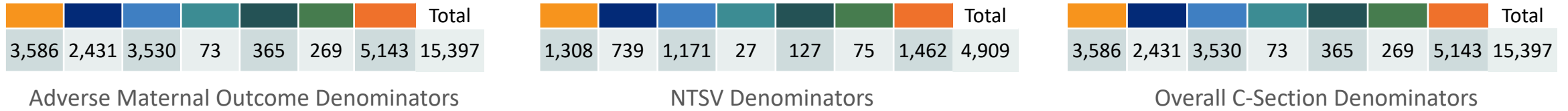




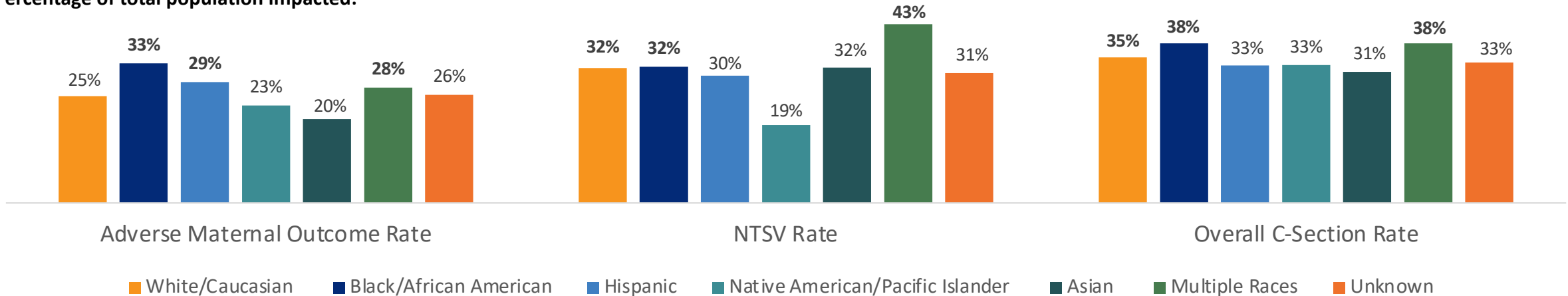
# 2021 Maternal Health Outcomes by Race & Ethnicity

## Maternity Benchmarking Metrics by Race / Ethnicity, CT, 2021

Total population of birthing people by race/ethnicity:



Percentage of total population impacted:



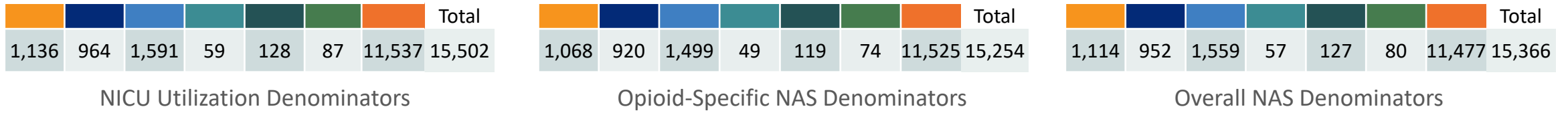
Source: CT DSS Provided Data, provided by CHN

**About the Metrics:** **Adverse Maternal Outcome** – Race based on mother’s member record. Current outcomes defined as Adverse Maternal Outcomes: Acute Myocardial Infarction, Cerebral Infarction, Disseminated Intravascular Coagulation, Eclampsia, HELLP Syndrome, Hemorrhage, Maternal Death within 1 year, Peripartum Cardiomyopathy, Placenta Accreta, Placenta Increta, Placenta Infarction, Placenta Percreta, Placenta Previa, Preeclampsia, Premature Separation of Placenta, Stillborn, Thrombosis Embolism. **NTSV** – Race based on mother’s member record. **Overall C-Section** – Race based on mother’s member record. Determined by match in the C-Section value set.

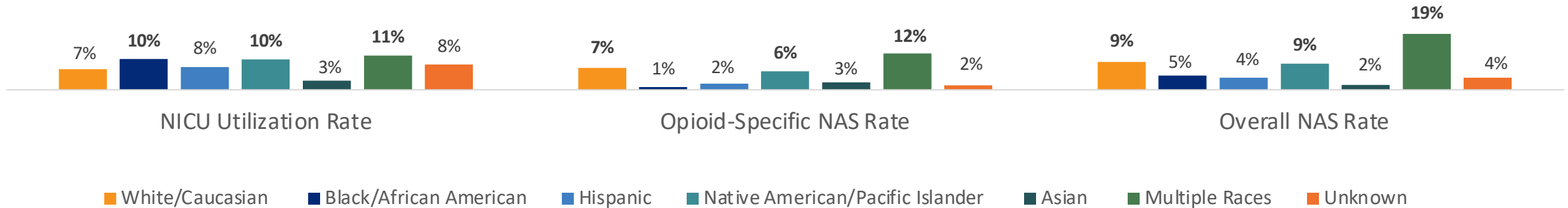
# 2021 Infant Health Outcomes by Race & Ethnicity

## Maternity Benchmarking Metrics by Race / Ethnicity, CT, 2021

Total population of birthing people by race/ethnicity:



Percentage of total population impacted:



Source: CT DSS Provided Data, provided by CHN

**About the Metrics:** **NICU** – Race based on baby’s member record. Defined by a stay under revenue codes 0174 or 0203 prior to baby turning 29 days old. **Opioid-Specific NAS** – Race based on baby’s member record. Determined by diagnosis code P96.1 on baby’s birth claim. **Overall NAS** - Race based on baby's member record. Determined by presence of one of the following diagnosis codes on baby's birth claim: P96.1, P04.42, P04.1A, P04.14, P04.40, P04.41, P04.81, P04.49, and P04.16.