

CT Maternity Bundled Payment Program

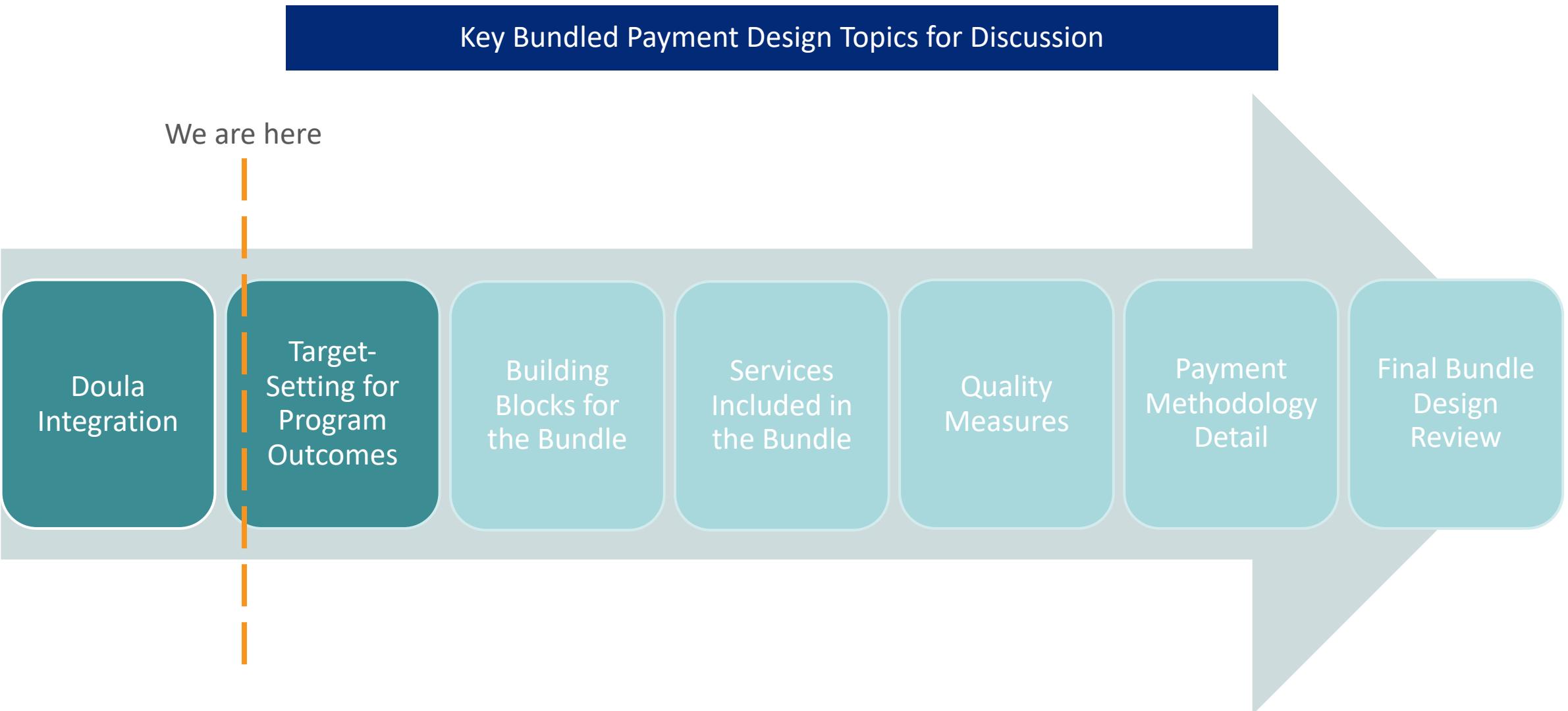
Stakeholder Advisory Council

May 17th, 2022

Agenda

Topic	Timing
Welcome and overview <ul data-bbox="258 468 1600 568" style="list-style-type: none">• Welcome• Roadmap and timeline review	10 Minutes
Key outcome measures and targets <ul data-bbox="258 662 1600 828" style="list-style-type: none">• Preliminary data and results• Methodology• Overall targets and gap closure targets for subpopulations	45 Minutes
Next Steps	5 Minutes

Maternity Bundle Roadmap – Public Engagement



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?	How will DSS accomplish these goals?
<p>Reduce rates of:</p> <ul style="list-style-type: none">• Adverse maternal outcomes• NICU Utilization• NAS (Opioid Specific)• NAS (Overall)• NTSV c-section• Overall c-section	<p>Develop maternity services that:</p> <ul style="list-style-type: none">• 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 (Source)	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	28.3%	34.5%	30.2%	26.0%	21.7%	6.6%	-8.1%
NICU Utilization Rate	8.5%	10.2%	7.7%	7.1%	21.0%	-8.6%	-15.6%
NAS Rate (Opioid Specific)	2.0%	0.9%	2.3%	7.9%	-56.2%	15.4%	302.0%
NAS Rate (Overall)	4.8%	5.5%	4.6%	9.8%	14.6%	-4.8%	104.0%
NTSV C-Section Rate	31.6%	32.4%	30.6%	32.5%	2.5%	-3.1%	2.8%
Overall C-Section Rate	34.4%	38.2%	32.8%	34.9%	11.1%	-4.8%	1.6%

*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:

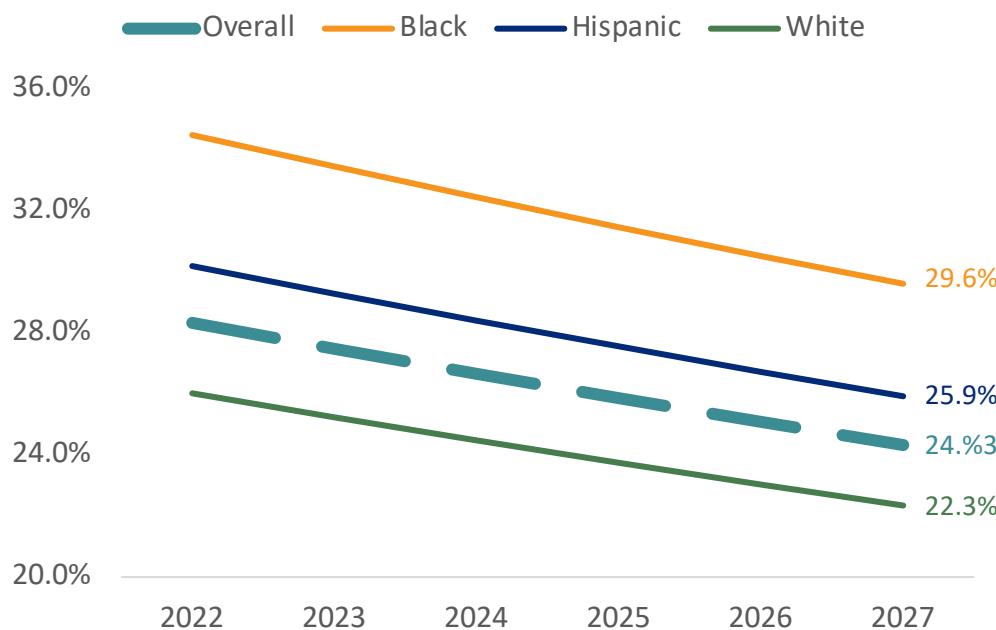
- Data limited, but consistent with industry research findings
- Significant gaps exist by race/ethnicity that should be taken into account when setting targets
- Analysis of the gaps and setting targets doesn’t solve equity issues - but does highlight where we need to ask more questions.
- Initial focus 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

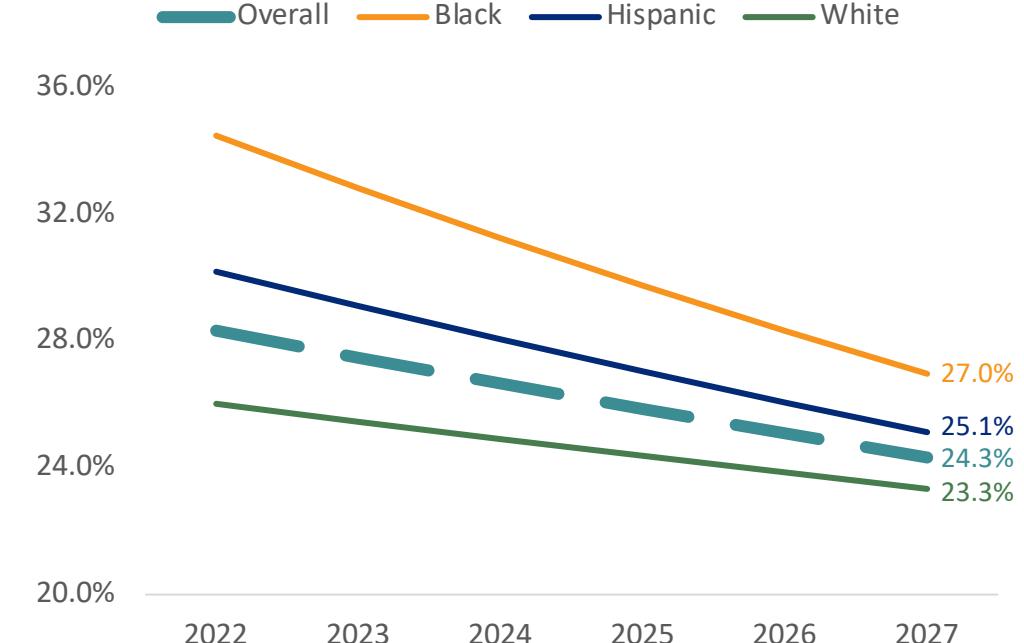
Target Rates (trend equal for all subpops)



Reduce gap
to overall by
50%



Target Rates (trend adjusted to close subpop gap)

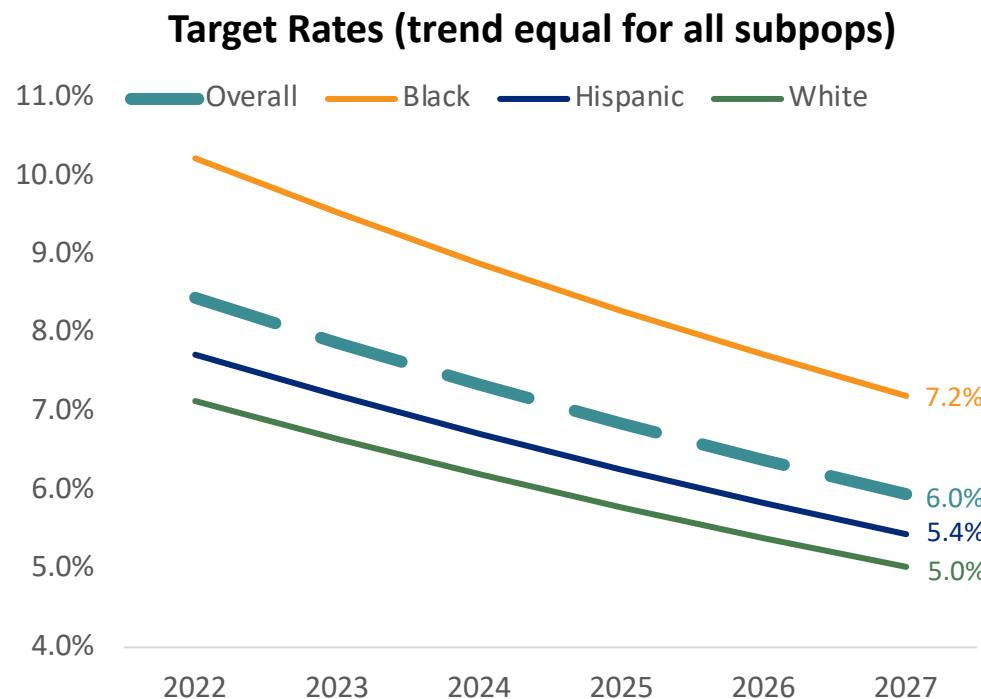


NICU Utilization Subpopulation Modeling

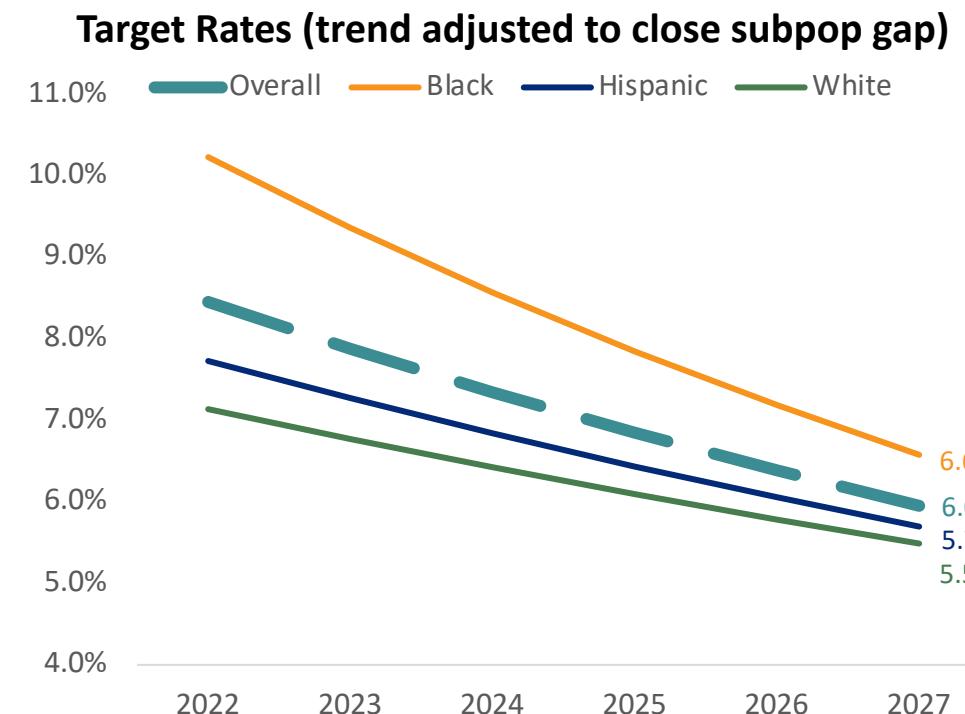
The 2022 overall NICU utilization rate is projected to be 8.5%. To reach the 2027 target rate of 6.0%, the overall rate needs to decrease by 2.5% percentage points by 2027, which would a reduction trend rate of -6.8% per year for 5 years.

- 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%

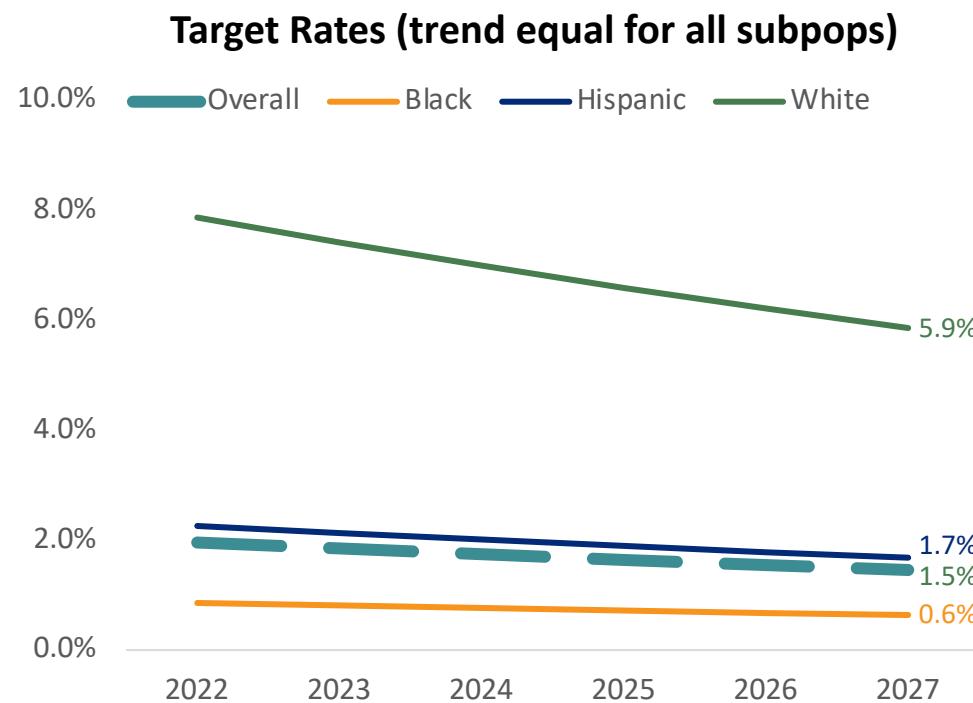


NAS (Opioid Specific) Subpopulation Modeling

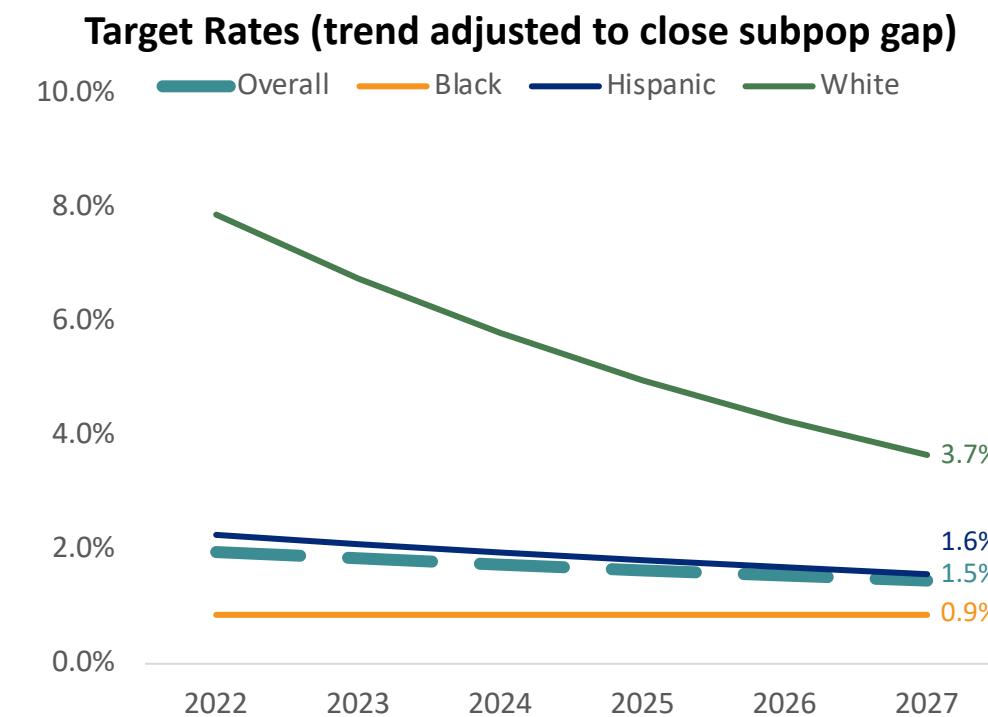
The 2022 opioid-specific NAS rate is projected to be 2.0%. To reach the 2027 target rate of 1.5%, the overall rate needs to decrease by 0.5% percentage points by 2027, which would require a reduction trend rate of -5.7% per year.

- 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.

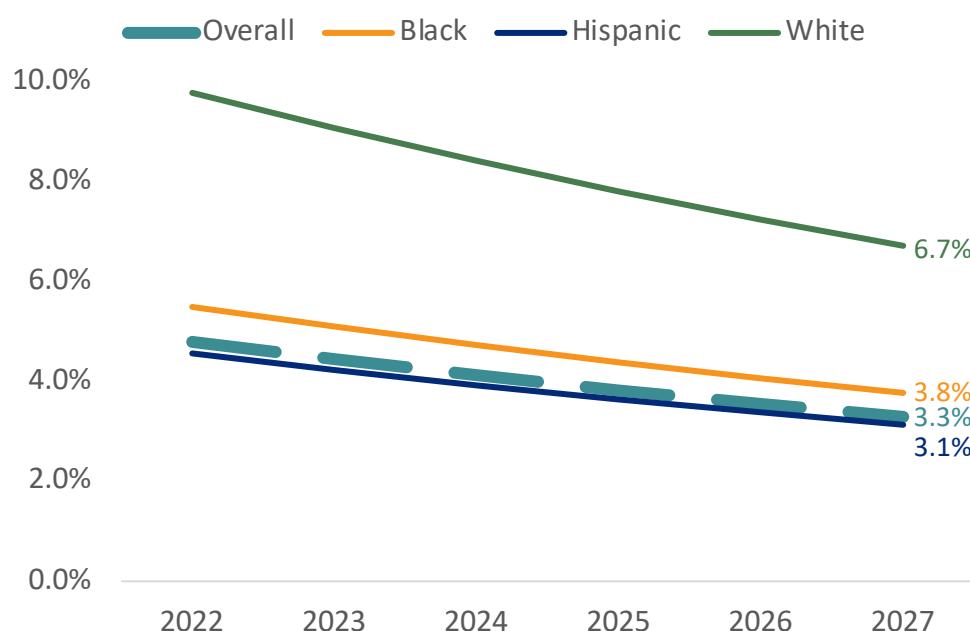
NAS (Overall) Subpopulation Modeling

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.

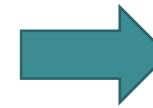
- Note: Although the rates among Husky birthing people who identify as multiple race and Native American are based on a small sample size, their NAS rates were also disproportionately high in 2021 (18.8% and 8.8%, respectively).

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

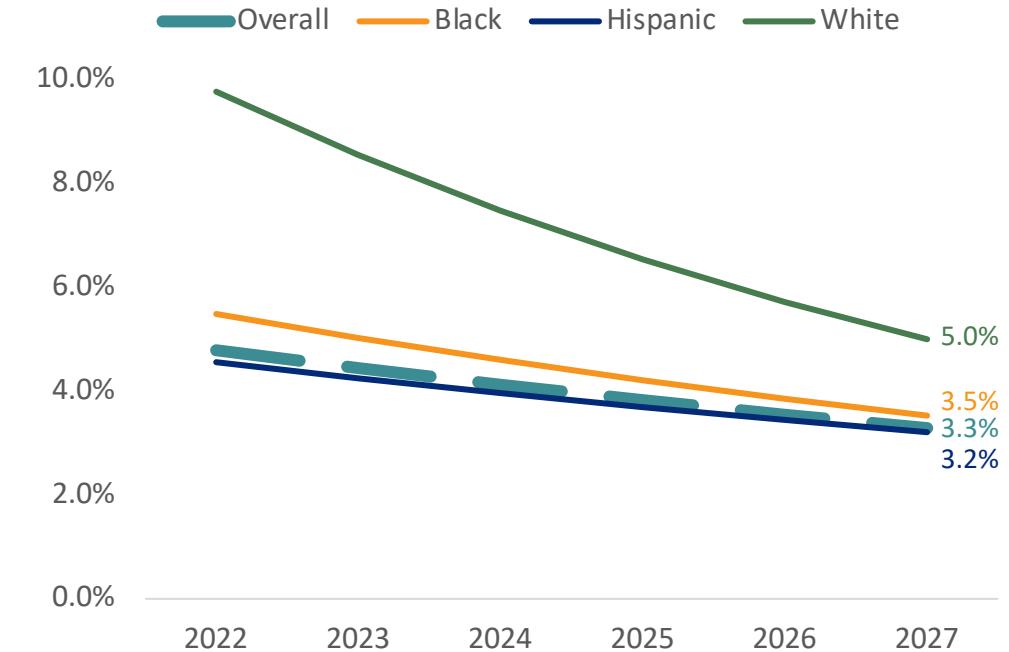
Target Rates (trend equal for all subpops)



Reduce gap
to overall by
50%



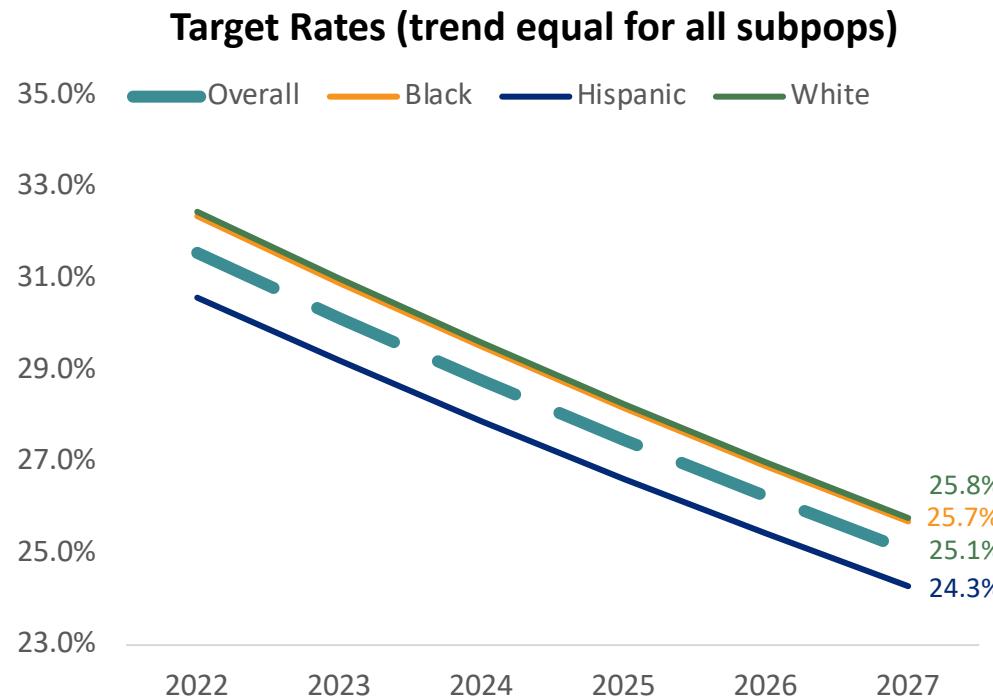
Target Rates (trend adjusted to close subpop gap)



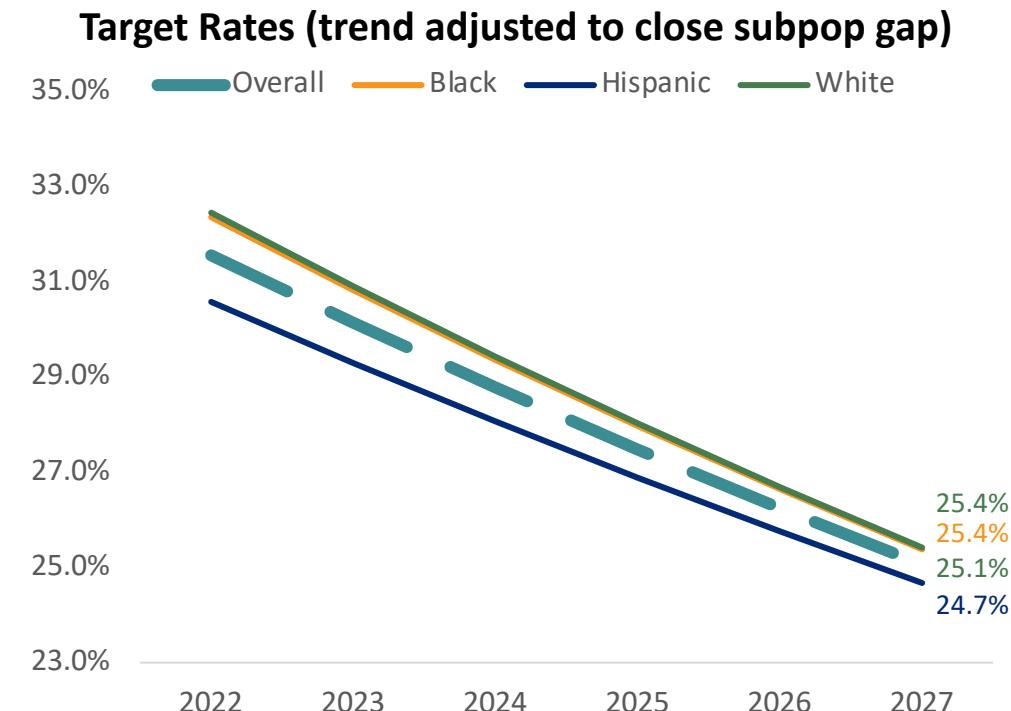
NTSV C-Section Subpopulation Modeling

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%

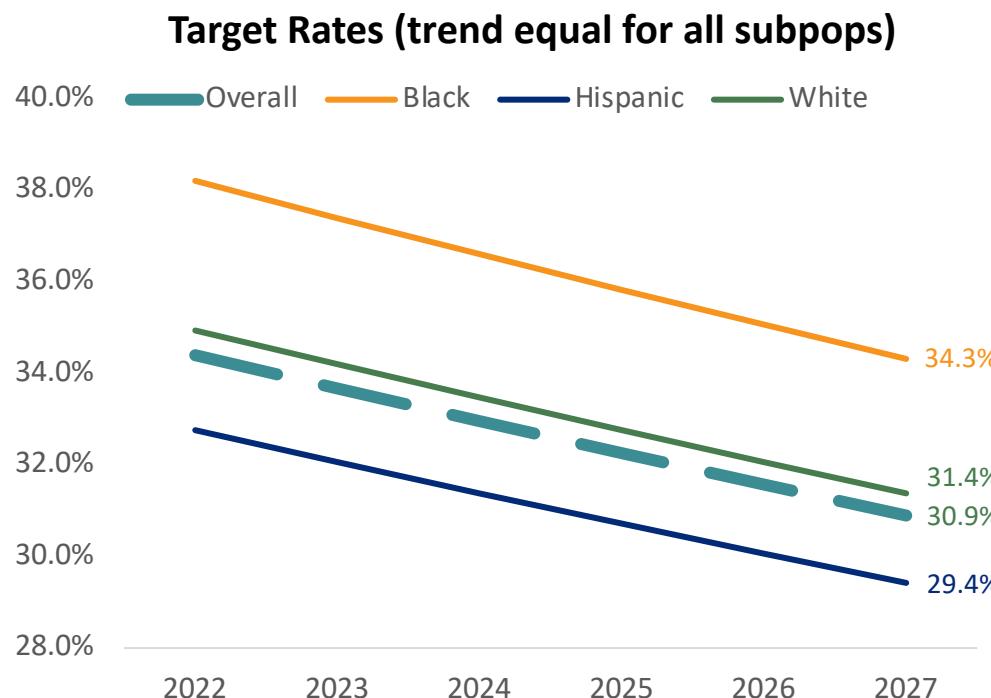


Overall C-Section Subpopulation Modeling

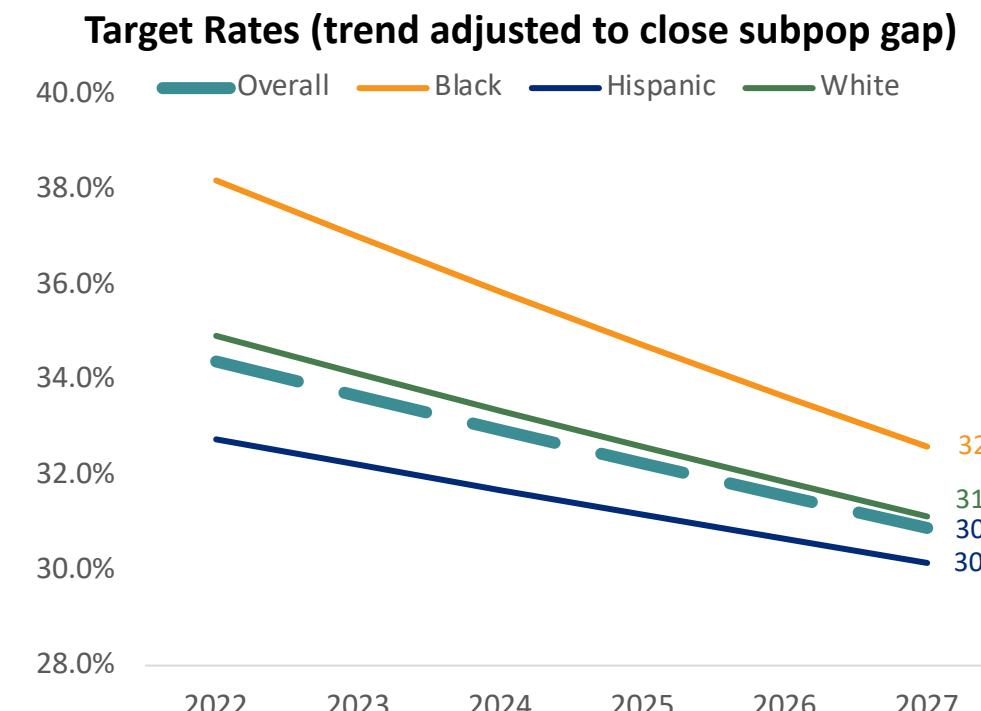
The 2022 overall C-section rate is projected to be 34.4%. To reach the 2027 target rate of 30.9%, the overall rate needs to decrease by 3.5% percentage points by 2027, which would require a reduction trend rate of -2.1% per year.

- 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



Reduce gap
to overall by
50%



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 21st

Appendix



2021 Maternal Health Outcomes by Race & Ethnicity

Maternity Benchmarking Metrics by Race / Ethnicity, CT, 2021

Total population of birthing people by race/ethnicity:

								Total
3,586	2,431	3,530	73	365	269	5,143	15,397	

Adverse Maternal Outcome Denominators

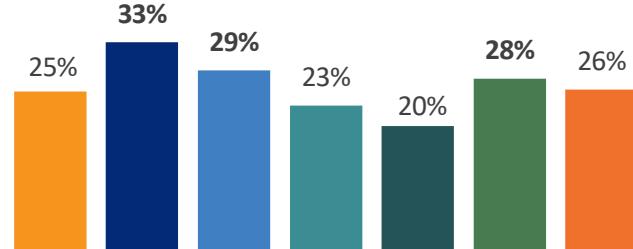
								Total
1,308	739	1,171	27	127	75	1,462	4,909	

NTSV Denominators

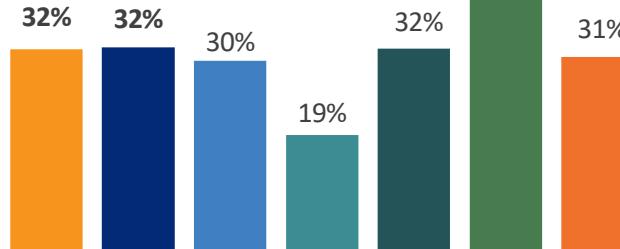
								Total
3,586	2,431	3,530	73	365	269	5,143	15,397	

Overall C-Section Denominators

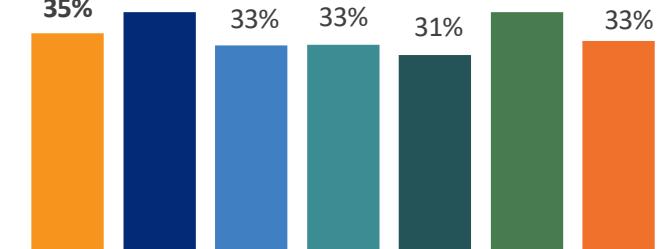
Percentage of total population impacted:



Adverse Maternal Outcome Rate



NTSV Rate



Overall C-Section Rate

Legend: White/Caucasian (Orange), Black/African American (Dark Blue), Hispanic (Light Blue), Native American/Pacific Islander (Teal), Asian (Dark Teal), Multiple Races (Green), Unknown (Orange)

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:

							Total
1,136	964	1,591	59	128	87	11,537	15,502

NICU Utilization Denominators

							Total
1,068	920	1,499	49	119	74	11,525	15,254

Opioid-Specific NAS Denominators

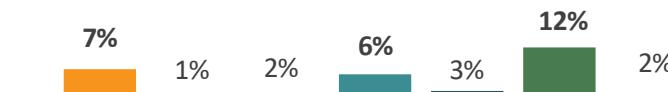
							Total
1,114	952	1,559	57	127	80	11,477	15,366

Overall NAS Denominators

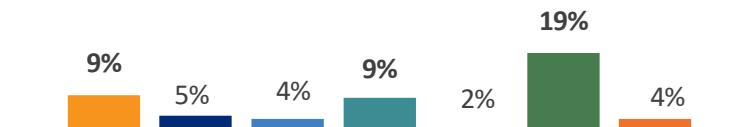
Percentage of total population impacted:



NICU Utilization Rate



Opioid-Specific NAS Rate



Overall NAS Rate

Legend: White/Caucasian, Black/African American, Hispanic, Native American/Pacific Islander, Asian, Multiple Races, Unknown

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.