CT Maternity Bundled Payment Program
Women and Children’s Health Subcommittee
July 11th, 2022
Project Objectives: DSS Goals & Principles for Design

**Goals:** Develop an innovative and nation-leading value-based payment for maternity services that:

1. Addresses **racial disparities** in maternal health (including SUD) and birth outcomes
2. Reduces incidence of **unnecessary Cesarean procedures & early elective births**
3. Supports parity between OBs & midwives, and includes **access to doula services, CHWs and breastfeeding support**
4. Creates opportunities to **align payment models** across Medicaid and State Employee Health Plan (particularly quality measures)
5. Ensures implementation remains **cost neutral** for DSS budget, and ultimately program should **save money** attributable to improved maternal & newborn outcomes
6. Considers impact of **timing of enrollment** in limited benefits on maternal health and birth outcome

**Principles:** Use the following principles when making policy recommendations:

1. Align with DSS Goals
2. Use evidence-based practices and model after best practices, including aligning financial incentives across public payer & providers
3. Health Equity Plan
4. Consider stakeholder input and priorities in bundle design
5. Keep bundle methodology simple wherever possible

Reflected in work completed to date
Initial rounds of stakeholder discussions identified six key outcome measures to evaluate success of the overall bundled payment program with an emphasis on addressing racial disparities.

**Goal - Reduce overall rates as well as disparities for the following key outcome measures:**

- NICU Utilization
- Overall Neonatal Abstinence Syndrome (NAS)
- Neonatal Opioid Withdraw Syndrome (NOWS)
- Adverse maternal outcomes
- NTSV c-section
- Overall c-section

**Notes:**
- Additional measures will also be included in the quality measure slate 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 metric that spans the birthing person’s full perinatal period.
### Maternity Benchmarking Metrics by Race / Ethnicity, CT, 2021

<table>
<thead>
<tr>
<th>Metric</th>
<th>Total</th>
<th>White/Caucasian</th>
<th>Black/African American</th>
<th>Hispanic</th>
<th>Native American/Pacific Islander</th>
<th>Asian</th>
<th>Multiple Races</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adverse Maternal Outcome Rate</strong></td>
<td>1,462</td>
<td>1,308</td>
<td>73</td>
<td>1,171</td>
<td>27</td>
<td>75</td>
<td>1,462</td>
<td>4,909</td>
</tr>
<tr>
<td><strong>NTSV Rate</strong></td>
<td>4,909</td>
<td>3,586</td>
<td>2,431</td>
<td>3,530</td>
<td>73</td>
<td>365</td>
<td>2,69</td>
<td>15,397</td>
</tr>
<tr>
<td><strong>Overall C-Section Rate</strong></td>
<td>15,397</td>
<td>3,586</td>
<td>2,431</td>
<td>3,530</td>
<td>73</td>
<td>365</td>
<td>2,69</td>
<td>15,397</td>
</tr>
</tbody>
</table>

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

**About the Metrics:**
- **Overall C-Section** – Race based on mother’s member record. Determined by match in the C-Section value set.

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DRAFT - FOR DISCUSSION ONLY
Maternity Benchmarking Metrics by Race / Ethnicity, CT, 2021

**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.

**Source:** CT DSS Provided Data, provided by CHN
What is a Maternity Bundle?

Prenatal
- Monthly prenatal visits
- Routine ultrasound
- Blood testing
- Diabetes testing
- Genetic testing
- Doulas
- Care navigators
- Group ed meetings
- Childhood ed classes
- Preventive screenings (chlamydia, cervical cancer, etc.)

Labor & Birth
- Labor and birth

Postpartum
- Breastfeeding support
- Depression screening
- Contraception Planning
- Ensuring link from birth to pediatric care provider occurs

Track Quality Measures
- Full-time birth rate
- C-section rate
- Pre-term/elective births
- Complications and mortality

## Maternity Bundle Key Design Elements (From 2021 Public Sessions)

This framework from 2021 offers high-level direction on each maternity bundle elements. Subsequent working sessions of this group will dive deeper into the specifics of each element within the context of the established framework (e.g. finalize services included in prospective vs retrospective bundle payment approach, finalize initial quality measures, and which ones would be pay for reporting vs. pay for reporting, etc.)

<table>
<thead>
<tr>
<th>Design Element</th>
<th>Straw Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Episode Definition</strong></td>
<td></td>
</tr>
<tr>
<td>Bundle Inclusions/ Exclusions</td>
<td>Episode defined as a <strong>Comprehensive Bundle</strong> inclusive of services across all phases of maternal health (prenatal, labor and delivery, postpartum).</td>
</tr>
<tr>
<td><strong>Accountable/ Contracting Entity</strong></td>
<td>All Obstetrics (OB)/Licensed <strong>Midwife practices</strong> in CT’s Medicaid program, as well as Family Medicine providers who provide OB services.</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Newborn care?           | **Newborn care is initially excluded from the bundle.**  
  • Over time, phase in newborn care.                                                                                                                      |
| **Population**          |                                                                                                                                                                                                                       |
| Any exclusion criteria? | All Medicaid births, except those excluded for **administrative reasons** (e.g. non-continuous enrollment, death, etc). Evaluate using a **financial proxy** to define high-cost episodes to be excluded from the bundle. Identify **limited clinical risk exclusion criteria**, so key diagnoses such as SUD are not categorically excluded from the program. |
| **Services included in Bundle** | **Included services:**  
  • **Prospective payment** dollars – **routine pregnancy** related visits that providers can impact  
  • **Retrospective payments** – those **services that may not always be necessary** during pregnancy  
  **Excluded services:**  
  • Not included to ensure there is **not adverse fallout for needed services that may be more costly to providers**                                                                 |
| **Quality Metrics**      | **Combination of State Employee Health Plan (SEHP) quality measures and Medicaid core maternity bundle measures:** 6 SEHP measures + ~4-6 additional measures including Vaginal Birth After Cesarean (VBAC), early elective delivery, prenatal timeliness of care, and postpartum care.*  
  **Stratify all measures by race/ethnicity**  
  Update measures & measure specifications as quality best practices evolve.                                                                                  |
Maternity Bundle Key Design Elements (From 2021 Public Sessions)

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<table>
<thead>
<tr>
<th>Design Element</th>
<th>Straw Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Flow</td>
<td>Hybrid financial model of <strong>prospective payment</strong> for services provided by OB + <strong>retrospective reconciliation</strong> for related services outside OB practice.</td>
</tr>
<tr>
<td>Episode Timing</td>
<td><strong>40 weeks before birth/at least 60 days postpartum</strong>, with plan to extend to longer postpartum time period</td>
</tr>
</tbody>
</table>
| Episode Pricing         | **Phased approach, such as:**  
                         - Year 1: Upside Only  
                         - Years 2-3: Asymmetric upside/downside (larger upside potential than downside exposure)  
                         - Year 4: Symmetrical up/downside risk                                                                                                                                                                                                                                    |
| Type and Level of Risk  | Blended price using statewide and provider-specific utilization history (50/50 ratio in Phase 1), including single blended rate for c-sections and vaginal births. Also adjusted for any reimbursement rate changes. Risk-adjust based on clinical risk; consider adding social determinants.                                                                                       |
| Impact of Quality       | Select key measures as pay for performance (P4P), with remaining reporting only (P4R). Move more measures from P4R to P4P over time. Use stratification of performance by race/ethnicity/language to incent improvements in quality disparities.                                                                                                      |
| Performance on Payment  |                                                                                                                                                                                                                                                                                                                                                         |
# Maternity Bundle Key Design Elements: Proposed Year 1 Quality Measures

<table>
<thead>
<tr>
<th>Proposed Measure</th>
<th>SEHP</th>
<th>Core Measures/ Used in Other Medicaid Bundles*</th>
<th>Addresses Disparities in Quality and Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low risk Cesarean rate:</strong> Number of women having a cesarean delivery with no predefined indications / Total number of deliveries</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Low Birth Weight (LBW)/Premature babies in nursery level 1:</strong> Number of LBW/premature babies in nursery level 1 / Total number of LBW/premature babies</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Incidence of Low Birth Weight/Premature babies:</strong> Number of LBW/Premature Babies / Total number of deliveries</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Maternity Adverse Actionable Event (AAE):</strong> % of Deliveries with AAEs adjusted for case mix = # of Deliveries with AAE flags / Total number of Deliveries / Case Mix index</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Missing Chlamydia, Group B Strep (GBS) and other Screening, Missing Vaccines:</strong> # of episodes missing a Screening and/or Vaccine / Total number of deliveries</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Missing Postpartum Depression Screening and Visits:</strong> # of episodes missing a Postpartum visit and or Depression screening / Total number of deliveries</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Vaginal Births After Cesarean (VBAC):</strong> Vaginal births per 1,000 deliveries by patients with previous Cesarean deliveries</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Early Elective Delivery:</strong> Inpatient (IP) hospitalizations for patients with elective deliveries by either medical induction of labor while not in labor prior to the procedure or Cesarean birth while not in labor and with no history of a prior uterine surgery / IP hospitalizations for patients delivering newborns with &gt;= 37 and &lt; 39 weeks of gestation completed</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Prenatal Timeliness of Care:</strong> Percentage of deliveries that received a prenatal care visit in the first trimester (also consider if measure should relate to timeliness between first patient contact and first prenatal appt)</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Postpartum Care:</strong> Percentage of deliveries that had a postpartum visit after delivery: Early postpartum visit – within 21 days after delivery. Late postpartum visit – within 22 – 84 days after delivery.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Note – the specific methodology used to calculate the measure may differ between SEHP and those used in other bundled programs.

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**For Reference: Husky Health P4P Metrics**
- Timely completion (within 14 days) of online obstetrics prenatal and post-partum notification forms
- A first obstetric visit with 14 days of confirmation of pregnancy
- A prescription for low-dose aspirin between 12 & 28 weeks of gestation
- At least one postpartum visit within 21 days after delivers
- Full-term, vaginal delivery (39 weeks gestation)

*Note – the specific methodology used to calculate the measure may differ between SEHP and those used in other bundled programs.*
Overview of the “Health Equity Yardstick”

Promoting health equity is a central component of CT DSS’ work.

- The team created a Health Equity Framework that aims to help DSS intentionally apply an equity lens at each program stage of development: initiation, design/implementation, and evaluation
- This tool will be used to ensure that equity is the driving force for all aspects of design and implementation of new DSS programs and existing program updates
- The Maternity Bundle Project will be the first opportunity to put this tool into practice

Section 1: Design Readiness Checklist

- Completed at the beginning of project work and the answers should be consistent throughout the project, but this section is open to changes as we learn more throughout the design process

Section 2: “The Equity Yardstick” for Design & Implementation Principles

- Completed for each element of design so is expected to potentially be completed several times and may have different responses (Ex. Responses for Doula Integration details may be differ from those related to Blended Case Rate)

Section 3: Post-Implementation Evaluation of the Overall Program

- Completed for each element of design to evaluate whether the program goals are being met and to identify changes or updates that may be needed to the program design

Note: The current draft of the health equity framework is intended for feedback and discussion. All questions and comments pertaining to the tool are welcome.
# Health Equity Framework Summary

This slide provides a summary of the Health Equity framework. The Advisory Council has worked through detailed analysis of each component through an equity lens.

<table>
<thead>
<tr>
<th>Design Element Goals</th>
<th>Overall</th>
<th>Doula Integration</th>
<th>Payment Methodology</th>
<th>Building Blocks for the Bundle (Who?)</th>
<th>Services Included in the Bundle</th>
<th>Quality Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce rates and close racial disparities for key outcome measures</td>
<td>Invest in doula infrastructure and capacity building to improve access to doula care, which improves maternal and infant health outcomes</td>
<td>Structure payment methodologies to improve equity across program outcomes, such as factoring SDOH into risk adjustment methodology</td>
<td>Define program parameters to maximize scope of program impact, such as inclusion of higher risk pregnancies</td>
<td>Designate services to create incentives that improve quality of care, including access to community-based services that are not traditionally covered by Medicaid (i.e., doulas, CHWs, breastfeeding support, contraception counseling)</td>
<td>Prioritize metrics for provider accountability based on impact on equity</td>
<td></td>
</tr>
</tbody>
</table>

### Community Context
- Promote culturally responsive care and improve the overall patient experience of birthing members
- Include access to community-based supports, like doulas, CHWs, etc., to strengthen a workforce that is reflective of the community being served
- Continuously review and monitor impact of payment methodology on outcomes to make mid-course adjustments as needed

### Community Engagement
- The Advisory Committee includes two members who have lived birthing experience through Husky Health.
- Smaller focused discussions will be scheduled for some of the design elements where appropriate to allow for additional time for design discussions.

### Data Analysis & Measurement
- Advisory Council input will be sought for (1) Quality slate and process measures and (2) Methods for data tracking, reporting, and communication of the metrics
- Performance data will be stratified by race/ethnicity, while DSS continues to explore strategies that improve race/ethnicity data collection
- DSS will monitor outcomes to inform necessary updates to the program design
Roadmap for Next Steps

- **Stakeholder Engagement**: Present – 12/2022

- **Analysis & Designed Detail**: Present – 12/2022
  - Refine details and operationalize maternity bundle design elements, including:
    - Maternity bundle building blocks
    - Services included in the bundle
    - Quality measures
    - Payment methodology

- **Preliminary Launch**: Q4 2022
  - Doula Integration
  - Baseline Data Public Report
  - Improvements to Race/Ethnicity Data Collection
  - Baseline Data Provider-level Reports

- **Full Launch**: 2023
Appendix
# Section 1: Design Readiness Checklist

*Complete this section once prior to conducting the detailed design of a program. As needed, revisit and update this section as additional information is gathered.*

## Overview

<table>
<thead>
<tr>
<th>Program/Alternative Payment Model:</th>
<th>Department/Team:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Lead Contacts:</td>
</tr>
</tbody>
</table>

## Goals

- What does this program aim to achieve? What problem(s) does it solve?
- What are the explicit health equity goals for this program?

## Intended Populations for Impact

- What is the target population or subpopulations? *Think about who will be most impacted (neighborhoods, regions, racial/ethnic groups, income groups) by the program, and consider whether the design will benefit different population groups the same, less so, or more so (e.g. Will Latino populations benefit more or less than Black populations? If yes, why?).*
- How is the design intended to improve health outcomes for the targeted population?

## Community Context

- Identify the history and current reality of structural barriers that negatively impact the affected communities. *Examples include unequal social determinants of health in education, income, neighborhood characteristics, housing, access to care, safety, and food stability and manifestations of systemic racism, such as redlining, mass incarceration, the racial pay gap, etc.*
- What does the data tell us about the current context? (e.g. current health disparities data)
- What are the potential barriers, challenges, or risks that may limit the ability of this program to achieve its intended outcomes for the target population? What specific design elements have been incorporated to mitigate these challenges?

## Community Engagement

- How are those most affected actively involved in defining the problem and shaping the solution? Who is missing and how can they be engaged?
- Feedback loop: What mechanism is in place to provide and receive timely feedback as issues arise?

## Data Analysis & Measurement

- How is data related to health disparities collected for this program? What are future plans for collecting this data?
- Can the measures be stratified by race/ethnicity, language, disability (RELD) and other demographics? What barriers to effective stratified data collection do you anticipate for this program and how have they been addressed?
Health Equity Framework Section 2: “The Equity Yardstick” for Design & Implementation Principles

Complete this section to guide design and implementation of each element of a program to ensure health equity focus—e.g. risk adjustment, quality metrics, member and/or provider eligibility, etc

<table>
<thead>
<tr>
<th>Goals</th>
<th>Community Context</th>
</tr>
</thead>
</table>
| ● Proposal  
  ○ What are the expected results and outcomes of design element? |
| ● Equity Alignment  
  ○ How does the proposed design element impact existing inequities?  
  ○ How does the proposed design element align with the project’s overall equity goals? |
| ● What are the potential barriers, challenges, or risks that may limit the ability of this program to achieve its intended outcomes for the target population? What specific design elements have been incorporated to mitigate these challenges? |

<table>
<thead>
<tr>
<th>Community Engagement</th>
<th>Data Analysis &amp; Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>● How was community voice considered for this design element? Ensure community members especially those who are most impacted by the program been informed, meaningfully involved, and authentically represented in the development of the program or initiative.</td>
<td></td>
</tr>
<tr>
<td>● What measures will be used to assess effectiveness of design? What are the success indicators and progress benchmarks? Do these measures reflect the equity goal(s)?</td>
<td></td>
</tr>
<tr>
<td>● What methods will be used for data tracking, reporting, and communication of the metrics selected?</td>
<td></td>
</tr>
</tbody>
</table>

Note: The current draft of the health equity framework is intended for feedback and discussion. All questions and comments pertaining to the tool are welcome.
Health Equity Framework Section 3: Post-Implementation Evaluation of the Overall Program

Complete this section after the program has been implemented to evaluate program impact and alignment its health equity goals.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Intended Populations for Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>● What were the initial goals of the program?</td>
<td>● Based on the outcomes, who has benefited so far? Are there additional populations or subgroups that can or should be targeted further to receive greater program benefit?</td>
</tr>
<tr>
<td>● What were the outcomes of the program implementation?</td>
<td>● What has changed (improved/declined) for the targeted population?</td>
</tr>
<tr>
<td>● Identify whether program goals were met. What changes are needed to achieve the desired outcomes and/or to align with health equity goals?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community Engagement</th>
<th>Data Analysis &amp; Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>● What feedback have impacted communities provided about the program? Do they believe the program is having its intended impact?</td>
<td>● Are the data providing the appropriate detail to evaluate whether metrics have been met?</td>
</tr>
<tr>
<td>● What barriers or challenges have been identified that limit the ability of this program to achieve its intended impact and/or to achieve its health equity goals?</td>
<td>● Are the design metrics providing the appropriate detail to evaluate program success?</td>
</tr>
</tbody>
</table>

Note: The current draft of the health equity framework is intended for feedback and discussion. All questions and comments pertaining to the tool are welcome.