Healthy Opportunities Pilots:
Standard Plan Roundtable on the Evidence Base

April 21, 2022
Meeting #3
## Context & Objectives

### Context

- This is the third meeting in the **Healthy Opportunities Evidence Based Roundtable** Series.

- The roundtable series offers a **forum for PHPs, the Department, Network Leads and local and national experts** to discuss the latest findings and share key resources and insights.

- As a reminder, PHPs must **develop a plan for their investments, due to the Department on May 17, 2022**, that reflects strategic consideration of high priority populations and current evidence regarding which services offer the greatest benefit to specific populations.

### Objectives for Today’s Meeting

- Discuss the main objectives and metrics of the **Healthy Opportunities Pilots evaluation**.

- Provide a high-level orientation to the existing evidence base supporting the use of **food-related Pilot services**.
# Roundtable Meeting Series Schedule

<table>
<thead>
<tr>
<th>Working Session #</th>
<th>Timing</th>
<th>Topic</th>
<th>Objective</th>
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<tbody>
<tr>
<td>1</td>
<td>4/6</td>
<td>Introduction to Meeting Series</td>
<td>Provide context for PHPs’ role in maximizing the value of the Pilots; review the “Enrolling High-Priority Pilot Populations Plan” report requirements</td>
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<tr>
<td>2</td>
<td>4/12</td>
<td>Introduction to SIREN</td>
<td>General orientation to SIREN to describe the database and search option</td>
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<tr>
<td>3</td>
<td>Today</td>
<td>Evidence Overview 1 (<em>Pilot evaluation overview; food</em>)</td>
<td>Forums to discuss the state of the art and key issues surrounding the evidence base for Pilot service domains with NC and national subject matter experts</td>
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<tr>
<td>4</td>
<td>4/29</td>
<td>Evidence Overview 2 (<em>housing, legal aid and transportation</em>)</td>
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<tr>
<td>5</td>
<td>5/12</td>
<td>Network Leads Presentation</td>
<td>Provide an overview of Pilot region demographics and key considerations for delivering Pilot services</td>
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<tr>
<td>6</td>
<td>5/16</td>
<td>Evidence Overview 3 (<em>IPV/toxic stress</em>)</td>
<td>Forums to discuss the state of the art and key issues surrounding the evidence base for Pilot service domains with NC and national subject matter experts</td>
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Each SP is asked to share at least one evidence base resource, relevant initiative or key question during an “Evidence Overview” meeting. SPs should let DHHS know in advance which Healthy Opportunity domain their contribution will address. Please submit to medicaid.healthyopportunities@dhhs.nc.gov
Healthy Opportunities Evaluation: Objectives and Key Metrics
Overview

The Healthy Opportunities Pilots evaluation will utilize a rapid cycle assessment phase and a summative evaluation phase.

Rapid Cycle Evaluation

- **Goal**: Provide results to DHHS to inform modifications to Pilot services, as needed, to maximize their effectiveness or discontinue services that are less effective.
- Evaluation design uses qualitative and quantitative assessments to obtain perspectives from both Pilot participants and health services organizations.
- Rapid cycle evaluation culminates in an interim evaluation which will:
  - Summarize all changes made during this period
  - Describe the final iteration of the intervention programs that will be tested during the summative evaluation phase.

Summative Evaluation

- **Goal**: Test the ‘final’ version of the Pilots that were developed after the rapid cycle phase and produce knowledge that can guide the state in scaling up successful components of the Pilot into state-wide programs.
- Leverages qualitative and quantitative assessments

More information can be found in Attachment H of the CMS-approved Pilot Evaluation Design, found [here](#).
Driver Diagram

More information can be found in Attachment H [here](#).
## Hypotheses and Evaluation Questions (1/2)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Evaluation Question(s)</th>
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<tbody>
<tr>
<td><strong>Network Leads will enable effective delivery of Pilot services.</strong></td>
<td>• How do Network Leads establish the necessary infrastructure, workforce, and data systems needed to effectively contract with and build the capacity of a network of HSOs?</td>
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<td>• How do Network Leads oversee and maintain the ability of a network of HSOs to deliver pilot services, once established?</td>
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<td><strong>The Pilot program will increase rates of Medicaid enrollees screened for social risk factors and connected to services that address these risk factors</strong></td>
<td>• Do the PHPs and care management entities participating in the Pilot in Pilot regions:</td>
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<tr>
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<td>o Screen a higher proportion of Medicaid beneficiaries for their social risk factors; and</td>
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<td>o Connect a higher proportion of Medicaid beneficiaries with social risk factors to services that address these risk factors, compared to entities not participating in the Pilot?</td>
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<td><strong>The Pilot program will measurably improve the qualifying social risk factors in participants</strong></td>
<td>• Do Pilot services improve social risk factors in qualifying participants (stratified by adults, pregnant women, young children and children/adolescents)?</td>
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More information can be found in Attachment H [here.](#)
## Hypotheses and Evaluation Questions (2/2)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Evaluation Question(s)</th>
<th>Example Metrics</th>
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| The Pilot program will measurably improve enrollees’:                     | Do Pilot services improve **health outcomes**, including patient-reported outcomes (PRO), experience of care, and quality of care metrics in qualifying enrollees? | • Comprehensive Diabetes Care, HbA1c poor control (>9.0%)  
• Controlling High Blood Pressure  
• PROMIS Health Questionnaire (self-report version for adults and children ≥13 years, version for parent/guardian proxy reporting for younger children)  
• Live Births Weighing Less than 2,500 Grams  
• Children and Adolescents' Access to Primary Care Practitioners  
• Life Skills Progression  
• Health Related Quality of Life (“Measuring Healthy Days” tool) |
| health outcomes; healthcare utilization; and healthcare costs.             | Do Pilot services improve **healthcare utilization**, including increasing primary care and preventive services/wellness utilization, and decreasing hospitalization and emergency department visits in qualifying enrollees? | • Medication Management for People With Asthma  
• Prenatal and Postpartum Care (Both Rates)  
• Child and Adolescent Well-are Visits  
• Well-child Visits in the First 30 Months of Life (W30)  
• Inpatient Utilization, General Hospital/Acute Care (IPU) Ambulatory Care (AMB) |
|                                                                          | Do Pilot services improve **Medicaid expenditure** in adult enrollees?                 | • Total Cost of Care (total Medicaid spend per beneficiary per month)                                                                                                                                          |
Evidence Base for Food-Related Pilot Services
FOOD INSECURITY AND HEALTH

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University of North Carolina at Chapel Hill
• I have no conflicts of interest to report
• I have received research funding from the NIH, USDA, the Robert Wood Johnson Foundation, AARP Foundation, the Rockefeller Foundation, Blue Cross Blue Shield of North Carolina, and Feeding America
• I have received personal fees from the Aspen Institute, Gretchen Swanson Center for Nutrition, and Kaiser Permanente
“The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities – the unfair and avoidable differences in health status seen within and between countries.” – WHO definition
Social determinants of health include a large number of factors

Macro-level forces that shape the distribution of health in a society
• Social determinants of health are modifiable through policy
• Generally not modifiable through clinical medicine
• Instead, clinical medicine responds to ‘health-related social needs’
• These are individual-level social and material factors that influence health

• Can think of these as ‘the basics’
  o Food
  o Housing
  o Transportation
  o Medications
  o Social Support
• When health-related social needs go unmet → poor health
• Food insecurity is a key health-related social need
• Food insecurity: inadequate access “to enough food for an active, healthy life”
  o Financial constraints a major driver
  o Also issues of neighborhood food access, mobility, food storage, transportation
• In typical year, 10-15% of US population experiences food insecurity
• Food insecurity disproportionately affects racial/ethnic minorities and individuals with lower SES
  o 2.5x increased prevalence in non-Hispanic black individuals with T2DM (compared with non-Hispanic white)
  o 2x increased prevalence in Hispanic individuals with T2DM
  o 2.4x increased prevalence in individuals with < HS diploma and T2DM (compared with college degree or >)
• Food insecurity likely key pathway for health disparities
• Food insecurity does not occur in isolation
  o Lower income
  o Other health-related social needs (e.g., housing, transportation)
  o Other adverse social circumstances (e.g., social isolation)
MECHANISMS

Food Insecurity

Nutritional

Constrained Dietary Options

Compensatory

Trade-offs

Self-management

Psychological

Stress

Mental Health

Self-Efficacy
• Mental health
  o E.g., depression

• Quality of life

• Cardiometabolic disease
  o Incidence
  o Complications

• Treatment Interruption
  o E.g., chemotherapy
• Poor health $\Rightarrow$ increased utilization
  o Esp. emergency department and inpatient
• Increased utilization $\Rightarrow$ healthcare spending
• Benefit enrollment
  - E.g. SNAP or WIC
• Food Subsidy
  o Increase purchasing of healthy foods
• Food Pantry
  o Improving quality of available foods
  o Can be issues with hours/transportation
• Food Delivery
  o E.g., grocery boxes
• Meal Delivery
  o Non-tailored
  o Medically-tailored
INTERVENTIONS

• Complementary
  o Does not provide resources but may help make better use
  o Lifestyle intervention, cooking class, peer support
• Chronic disease management
  o Diabetes, heart failure, ESRD

• Prevention
  o Weight loss/lifestyle intervention

• Treatment support
  o Chemotherapy

• Acute event
  o Post-hospitalization
TRADE-OFFS

• Optimization problem
  o Intensity of intervention needed
    ▪ E.g., food subsidy vs. medically tailored meals
    ▪ Largely depends on patient and clinic factors
  o Duration of intervention
    ▪ Support through difficult period?
    ▪ On-going need?
      • Can complementary intervention help (e.g., education/behavior change)?
  o Complexity of intervention
    ▪ Barriers to participation
• My Impression
  o Strong evidence links SNAP and lower healthcare use/cost
    ▪ Federal government pays for benefit
    ▪ Worth putting effort into getting people enrolled (can be complicated/lengthy)
  o Food subsides improve diet
    ▪ Should lead to better health (and thus lower use and cost) but evidence emerging
    ▪ Low barriers to participation
  o Food pantries/food delivery
    ▪ Participation can be harder than food subsides, but can potentially offer greater benefits
    ▪ Evidence underdeveloped
  o Meal delivery
    ▪ Good evidence for lower healthcare use and cost in very ill individuals
    ▪ Most expensive
    ▪ Participant selection is key
• My Impression
  o Complementary interventions
    ▪ Offer, but can be hard to fit in for everyone
  o Use CHWs (or CHW principles)
    ▪ Not one specific type of intervention but an overall approach
    ▪ Very good evidence across a number of contexts
• Food insecurity associated with direct harms
  ○ Also undermines other treatments

• Path to reduced healthcare use and cost is through better health

• Matching use case, patient needs, and intervention approach challenging, but important
  ○ Large menu to choose from
• Questions?
  o seth_berkowitz@med.unc.edu
SELECTED ADDITIONAL REFERENCES


SELECTED ADDITIONAL REFERENCES


SELECTED ADDITIONAL REFERENCES


Q&A
Reminders & Next Steps

• The next meeting in the Roundtable series is scheduled for April 29th from 2:00 – 3:30 PM ET and will cover the evidence base for housing (including medical respite), transportation and legal aid-related Pilot services.

• The Network Leads will present to the SPs about their regions on May 12th from 10:00 – 11:30 AM. Please submit suggestions for information you would like the Network Leads to speak to by EOD on Friday April 29th to the Healthy Opportunities email box; copying Amanda Van Vleet, Maria Perez and Andrea Price-Stogsdill.
  o HOP Email Box: medicaid.healthyopportunities@dhhs.nc.gov
  o Amanda Van Vleet: Amanda.VanVleet@dhhs.nc.gov
  o Maria Perez: Maria.Perez@dhhs.nc.gov
  o Andrea Price-Stogsdill: Andrea.Price-Stogsdill@dhhs.nc.gov

• The Enrolling High Priority Pilot Populations Report is due to the Department on May 17, 2022.
Appendix
To qualify for pilot services, Medicaid managed care enrollees must live in a Pilot Region and have:

**At least one Physical/Behavioral Health Criteria:**
- Adults (e.g., having two or more qualifying chronic conditions)
- Pregnant Women (e.g., history of poor birth outcomes such as low birth weight)
- Children, ages 0-3 (e.g., neonatal intensive care unit graduate)
- Children 0-20 (e.g., experiencing three or more categories of adverse childhood experiences)

**At least one Social Risk Factor:**
- Homeless and/or housing insecure
- Food insecure
- Transportation insecure
- At risk of, witnessing or experiencing interpersonal violence

Meet service specific eligibility criteria, as needed.
# Healthy Opportunities Pilots: Qualifying Physical/ Behavioral Health Criteria

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<tr>
<th>Population</th>
<th>Age</th>
<th>Physical/Behavioral Health-Based Criteria</th>
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<tbody>
<tr>
<td>Adults</td>
<td>22+</td>
<td>• 2 or more chronic conditions. Chronic conditions that qualify an individual for Pilot program enrollment include: BMI over 25, blindness, chronic cardiovascular disease, chronic pulmonary disease, congenital anomalies, chronic disease of the alimentary system, substance use disorder, chronic endocrine and cognitive conditions, chronic musculoskeletal conditions, chronic mental illness, chronic neurological disease and chronic renal failure, in accordance with Social Security Act section 1945(h)(2).&lt;br&gt;• Repeated incidents of emergency department use (defined as more than four visits per year) or hospital admissions.</td>
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<tr>
<td>Pregnant Women</td>
<td>N/A</td>
<td>• Multifetal gestation&lt;br&gt;• Chronic condition likely to complicate pregnancy, including hypertension and mental illness&lt;br&gt;• Current or recent (month prior to learning of pregnancy) use of drugs or heavy alcohol&lt;br&gt;• Adolescent ≤ 15 years of age&lt;br&gt;• Advanced maternal age, ≥ 40 years of age&lt;br&gt;• Less than one year since last delivery&lt;br&gt;• History of poor birth outcome including: preterm birth, low birth weight, fetal death, neonatal death</td>
</tr>
<tr>
<td>Children</td>
<td>0-3</td>
<td>• Neonatal intensive care unit graduate&lt;br&gt;• Neonatal Abstinence Syndrome&lt;br&gt;• Prematurity, defined by births that occur at or before 36 completed weeks gestation&lt;br&gt;• Low birth weight, defined as weighing less than 2500 grams or 5 pounds 8 ounces upon birth&lt;br&gt;• Positive maternal depression screen at an infant well-visit</td>
</tr>
<tr>
<td></td>
<td>0-21</td>
<td>• One or more significant uncontrolled chronic conditions or one or more controlled chronic conditions that have a high risk of becoming uncontrolled due to unmet social need, including: asthma, diabetes, underweight or overweight/obesity as defined by having a BMI of &lt;5th or &gt;85th percentile for age and gender, developmental delay, cognitive impairment, substance use disorder, behavioral/mental health diagnosis (including a diagnosis under DC: 0-5), attention deficit/hyperactivity disorder, and learning disorders&lt;br&gt;• Experiencing three or more categories of adverse childhood experiences (e.g. Psychological, Physical, or Sexual Abuse, or Household dysfunction related to substance abuse, mental illness, parental violence, criminal behavioral in household)&lt;br&gt;• Enrolled in North Carolina’s foster care or kinship placement system</td>
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## Healthy Opportunities Pilots: Social Risk Factors

<table>
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<tr>
<th>Risk Factor</th>
<th>Definition</th>
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| **Homelessness and Housing Insecurity** | • Individuals who are **homeless**: defined as an individual who lacks housing, including an individual whose primary residence during the night is a supervised public or private facility that provides temporary living accommodations and an individual who is a resident in transitional housing.  
  • Individuals who are **housing insecure**: including individuals who, within the past 12 months, have ever stayed outside, in a car, in a tent, in an overnight shelter, or temporarily in someone else’s home (i.e. couch surfing); are worried about losing their housing; or within the past 12 months have been unable to get utilities (heat, electricity) when it was really needed. |
| **Food Insecurity**                  | Patients who are experiencing food insecurity—defined as the disruption of food intake or eating patterns because of lack of money and other resources—including those who:  
  • Report reduced quality, variety, or desirability of diet. There may be little or no indication of reduced food intake. This is considered low food security.  
  • Report multiple indications of disrupted eating patterns and reduced food intake. This is considered very low food security.  
  • Report that within the past 12 months they worried that their food would run out before they got money to buy more.  
  • Report that within the past 12 months the food they bought did just not last and they didn’t have money to get more. |
| **Transportation Insecurity**        | Patients for whom, within the past 12 months, a lack of transportation has kept them from medical appointments or from doing things needed for daily living.                                                                                                                      |
| **At risk of, witnessing, or experiencing interpersonal violence** | Patients who report that they feel physically or emotionally unsafe where they currently live; within the past 12 months have been hit, slapped, kicked or otherwise physically hurt by anyone; or within the past 12 months have been humiliated or emotionally abused by anyone. |

In the Plan, PHPs must:

1. Identify priority populations; and
2. Describe strategies and operational approaches for ensuring equitable distribution of Pilot investments.

PHPs are required to submit the Healthy Opportunities Pilot Enrolling High-Priority Population Plan by May 17, 2022 (45 days prior to Pilot Service Delivery Year 2).

1. Identifying Priority Populations

PHPs must report on the anticipated proportion of enrollees for the second Pilot service delivery year (July 1, 2022 – June 30, 2023) who will:

- Be pregnant
- Be children ages 0-21
- Have high health care expenditures as determined by the PHP
  - The PHP must define “high-cost populations”, describe the methods the PHP will use to identify high-cost Pilot enrollees and any available evidence-base regarding the impact of Pilot-like services on this population.
  - Meet any additional priority population designations the PHP intends to focus on for Pilot enrollment (at the PHP’s discretion)
  - The PHP must describe how it will identify and define this population and the evidence-based rationale for focusing on the additional priority populations.
2. Ensuring Equitable Distribution of Pilot Investments

For the second Pilot service delivery year, the PHP must submit a description of its strategies and operational approaches for:

- Identifying and enrolling members residing in Pilot regions to ensure inclusive representation of priority populations.

- Ensuring the racial and ethnic composition of Pilot enrollees and expenditures are at least proportional to Medicaid demographics in the Pilot region.

- Ensuring that historically marginalized populations and communities in the Pilot region are proportionally represented among Pilot enrollees and service expenditures, including at minimum to meet the following goals:
  
  o Starting in Pilot Service Delivery Period II, the PHP shall direct Pilot services to be distributed to the following groups during each Service Pilot Delivery Period:
    
    ▪ At least thirty-three percent (33%) of Pilot enrollees are pregnant enrollees or children ages 0-21.
    ▪ At least thirty-three percent (33%) of Pilot enrollees are high-cost populations.

  o The PHP shall ensure that historically marginalized populations and communities in the Pilot region are at least proportionately represented in the delivery of Pilot services and service expenditures.