Healthy Opportunities Pilots: Standard Plan Roundtable on the Evidence Base

April 29, 2022
Meeting #4
## Context & Objectives

### Context

- This is the fourth meeting in the Healthy Opportunities Evidence Based Roundtable Series.
- The roundtable series offers a **forum for the Department, key Pilot entities and local and national experts** to discuss the latest findings and share key resources and insights.
- PHPs must **develop a plan for their investments, due to the Department on May 31, 2022 (Revised Date)**, that reflects the plan’s strategic approach to enrolling high priority populations and your evidence-informed understanding of population-level service needs.

### Objectives for Today’s Meeting

- Provide a high-level orientation to the existing evidence base supporting the use of Pilot services, including:
  - Housing-related services
  - Medical respite
  - Linkages to legal services
  - Transportation.
## Roundtable Meeting Series Schedule

<table>
<thead>
<tr>
<th>Working Session #</th>
<th>Timing</th>
<th>Topic</th>
<th>Objective</th>
</tr>
</thead>
<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>
</tr>
<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>4/21</td>
<td>Evidence Overview 1 (Pilot evaluation overview; food)</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>Today</td>
<td>Evidence Overview 2 (housing, medical respite, legal support and transportation)</td>
<td>Provide an overview of Pilot region demographics and key considerations for delivering Pilot services</td>
</tr>
<tr>
<td>5</td>
<td>5/12</td>
<td>Network Leads Presentation</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>6</td>
<td>5/16</td>
<td>Evidence Overview 3 (IPV)</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
## Today’s Presenters

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<thead>
<tr>
<th>Category</th>
<th>Name</th>
<th>Position/Role</th>
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<tbody>
<tr>
<td>Housing &amp; Medical Respite</td>
<td>Mina Silberberg</td>
<td>Associate Professor in Family Medicine and Community Health, Duke University</td>
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<td>Brooks Ann McKinney</td>
<td>Director of Vulnerable Populations, Cone Health</td>
</tr>
<tr>
<td>Legal Supports</td>
<td>Madlyn Morreale</td>
<td>Attorney, Legal Aid of North Carolina</td>
</tr>
<tr>
<td>Transportation</td>
<td>Amy Conrick</td>
<td>Director, National Center for Mobility Management</td>
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</table>
Housing-Related Pilot Services
Housing Navigation, Support, and Sustaining Services +:
A Pathway to Housing and Health
Objectives

• Define permanent housing
• Why part of Healthy Opportunities?
• Evidence base
• Impact on health and health-related costs
• Promising practices
• Metrics
• Thinking about subpopulations
• Assessment for engagement
• References and other resources
Why Part of HOP?

Housing  Health

Human Right  Olmstead Decision (1999)
The Evidence Base for Tenancy Support Services and Health

- Most of research comes from PSH, not rapid rehousing

- There is a body of research on impact and models, but...

- No standard definition of services and lack of information about nature of services in studies

- Scarce integration of housing and health data sets

- For cost studies, quality issues and mixed outcomes

- Particularly limited evidence re: screening/assessment tools
The Evidence Base for Tenancy Support Services and Health

### Strong Evidence
- People with HIV/AIDS (e.g., Buchanan, Kee et al, 2009; NASEM, 2018)
- Improvement in overall well-being (NASEM, 2018)

### Moderate Evidence
- Increased use of outpatient and preventive services (Rieke, Smolsky et al. 2015; NASEM, 2018; Tsai et al, 2019)
- Improvement in self-reported health status and needs (CORE, 2013; Wright et al, 2016; Tsai et al, 2019)
- Aggregate evidence PSH is cost-effective for people experiencing persistent homelessness and serious mental illness.” (NASEM, 2018).

### Little Evidence
- Little evidence for change in other physical health indicators or for change in MH/SA (NASEM 2018)
- Limited (and mixed) evidence for cost-effectiveness overall.
“The committee believes that housing in general improves health and that PSH is important in increasing the ability of some individuals to become and remain housed.” (NASEM 2018)

Little evidence ≠ negative evidence. Particularly for cost studies, lots of choices about design, what counts as cost and what counts as benefit.
Promising Practices
Promising Practices: Housing First

• Approach based on strong evidence (USICH, 2017)
  o Quicker acquisition of housing than Treatment First, longer stays in housing, greater housing stability (Tsemberis et al, 2004; Gulcur et al, 2007; Killaspy et al, 2022)
  o More outpatient visits (Gilmer, Stefancic et al. 2015)
  o Stronger relationships with staff; greater awareness of guarding against being exploited due to new housing. (Henwood, Stefancic et al. 2015)

• Specific ingredients: low-threshold admissions, harm reduction, eviction prevention, reduced service requirements (consumer choice), separation of housing and services, consumer education (Watson, Wagner et al. 2013)
But...Some People Do Best With Semi-Independent Housing

• For Example: For people with HIV, having nurses on-site at housing was associated with better clinical outcomes and fewer ED visits (Dobbins, Cruz et al. 2016)

• Some surveys show preference for “scattered-site housing” (Hogan, 1996), while some people feel more secure in dedicated housing (Parsell et al, 2015)

• Trial and error (Biederman et al)
Promising Practices: Teams, Support, Specialization

• Teams provide a variety of benefits, both in terms of role back-up and specialization (Biederman et al)

• Can have variety of staff even within same housing service definition.
Promising Practices: Beyond Getting Housed

• Post-housing adjustments and issues (Biederman et al)

• Importance and complexity of social relationships (Henwood, 2015; Biederman et al)

• Complicated relationship between housing and health (Biederman et al)

• Eviction prevention a critical component of Housing First (Watson, Wagner et al, 2013)
Promising Practices: Individualized Services

• Individualized needs and assets, learning over time, and change over time (Biederman et al)

• Customer preference a critical component of getting housed (Watson, Wagner et al, 2013)

• The headphone story
How Do You Know It’s Working?

HUD System Performance Measures

System Performance Measures - HUD Exchange
Promising Practices: Housing Remediation

- Multi-pronged housing remediation strategies can improve asthma control and other respiratory outcomes (Krieger et al, 2010)

- Housing code enforcement promotes health (Schilling et al, 2021)

- State-level study (Kentucky) indicated that long-term benefits of reducing the outcomes associated with lost productivity among young children per year due to lead exposure would generate sufficient tax revenue to pay for complete remediation of all high-risk low-quality housing units (Rosenblatt, 2007)
Promising Practices: Security and First Month’s Rent

• **Bottom line**: We know that these costs can be barriers to being housed and being housed quickly (Williamson, 2021; Biederman et al)

• Rental assistance is a staple of PSH and rapid rehousing
Sub-Populations
There is Stronger Evidence of Benefit for Some Groups

- PWHA
- People with housing-sensitive conditions
  - Medicine must be refrigerated
  - Wound dressing needs frequent changing
  - Legs must be elevated
  - People experiencing drowsiness, vomiting, diarrhea
  - Ambulatory-care sensitive conditions
  - Infectious diseases
There are some strong need and asset differences by sub-population, e.g., age and people with physical disabilities, veterans
But Some Cautions on Thinking in Terms of Sub-Populations

• Goal clarity
  o Those who are most challenging to house may also produce greatest health savings when housed (e.g., chronically homeless)

• Many subgroup differences re: PSH benefit unclear and/or small (e.g., age, SA/MH)

• Equity issues

• Lack of evidence for assessment tools

• The progressive assistance/engagement trend

• Healthy Opportunities is an entitlement program
NCCARE 360 is developing screener for early-stage engagement. But need engagement for housing navigation as well. Look to homeless services agencies like Homeward Bound.
References


References

Krieger J. (2010). “Home is where the triggers are: Increasing asthma control by improving the home environment “ Pediatric Allergy, Immunology, and Pulmonology. 23(2):139-45.


Other Resources

• UCSF: Margot Kushel
• University of Pennsylvania: Dennis Culhane
• Redesign Collaborative, LLC
• Colburn G and Aldern CP (2022). Homelessness is a Housing Problem. Berkeley: University of California Press
• Urban Institute
• (TAC)
Medical Respite-Related Pilot Services
Healthy Opportunities and
MEDICAL RESPITE CARE
FOR PEOPLE EXPERIENCING
HOMELESSNESS
Definition

Medical respite care is short-term residential care that allows individuals experiencing homelessness the opportunity to rest in a safe environment while accessing medical care and other supportive services. This care can be for acute and post-acute care for persons who are not ill enough to be in a hospital and can be offered in a variety of settings.
Components of MRC

Although each program and model of Medical Respite Care may differ, all programs should include:

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<tr>
<th>Icon</th>
<th>Description</th>
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<tbody>
<tr>
<td>🛏️</td>
<td>24-hour access to a bed</td>
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<td>🚗</td>
<td>Transportation to any/all medical appointments</td>
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<tr>
<td>🗝️</td>
<td>Safe space to store personal items</td>
</tr>
<tr>
<td>💼</td>
<td>Wellness check at least once every 24 hours by medical respite staff (clinical or non-clinical)</td>
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<td>⌁</td>
<td>3 meals a day</td>
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<td>↔️</td>
<td>Care coordination</td>
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<td>Access to a phone for telehealth and/or communications related to medical needs</td>
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Medical Respite Care (MRC) Outcomes

- Without MRC, people experiencing homelessness have longer hospitalizations, are more likely to spend their first night post-hospitalization on the streets or in shelters, and have sub-optimal outcomes due to a lack of appropriate discharge options.

- MRC admissions decreased time spent in the hospital, ED use, and readmission rates, resulting in cost savings for hospitals.

- MRC can improve health-related quality of life and health management for consumers.

- MRC can reduce gaps in services and increase connection and use of benefits and outpatient primary and mental health care.

More detailed information is available in a recent literature review by the National Institute for Medical Respite Care.
The Need for MRC

Consumer perspectives highlighted the critical need for medical respite in communities to provide stability and opportunity to address health and basic needs.

- Without such a program, consumers experienced major uncertainty regarding discharge and overall medical care.

- Consumers additionally noted that medical procedures had been delayed, often multiple times, and were threatened to be cancelled altogether due to the dearth of safe discharge placements.

## Standards for Medical Respite Programs

<table>
<thead>
<tr>
<th>Standard 1</th>
<th>Medical respite program provides safe and quality accommodations</th>
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<tr>
<td>Standard 2</td>
<td>Medical respite program provides quality environmental services</td>
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<tr>
<td>Standard 3</td>
<td>Medical respite program manages timely and safe care transitions to medical respite from acute care, specialty care, and/or community settings</td>
</tr>
<tr>
<td>Standard 4</td>
<td>Medical respite program administers high quality post-acute clinical care</td>
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<tr>
<td>Standard 5</td>
<td>Medical respite program assists in health care coordination and provides wrap-around support services</td>
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<tr>
<td>Standard 6</td>
<td>Medical respite program facilitates safe and appropriate care transitions from medical respite to the community</td>
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<tr>
<td>Standard 7</td>
<td>Medical respite care is driven by quality improvement</td>
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More information on the Standards is available [here](#).
Additional MRC Details

- Patients can be identified in EMR by Z codes, homeless identifiers, or address of local shelters.

- High utilization is common for patients experiencing homelessness with at least 3 inpatient stays or 3 Emergency Room visits. MRC can show decrease in readmissions by comparing number of visits prior and 3, 6 and 12 months after intervention.

- Average length of stay is 32 days but range of care can be 2 weeks up to 6 months depending on physician recommendations and supportive services available to transition patient to stable housing.
| Legal Supports-Related Pilot Services |
Healthy Opportunities Pilot Program - Evidence Base for Drivers of Health

Focus on Linkages to Health-Related Legal Supports

NC DHHS Roundtable Series - Meeting #4
April 29, 2021

Madlyn C. Morreale, JD, MPH
Managing Attorney, Medical-Legal Partnership Program
Legal Aid of North Carolina
The Role of Access to Legal Services in Efforts to Address Health Equity and Health Disparities

Health equity means that everyone has a fair and just opportunity to be as healthy as possible.

- This requires removing obstacles to health, such as poverty, discrimination, and their consequences including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

Health disparities are differences in health or in the key determinants of health, such as education, safe housing, and discrimination, which adversely affect marginalized or excluded groups.

- Reducing and ultimately eliminating disparities in health and its determinants of health is how we measure progress toward health equity.


Madlyn Morreale, Medical-Legal Partnership Program, Legal Aid of North Carolina, April 28, 2022
Is there a Lawyer in the House? Integrating Access to Legal Remedies in Collaborative Efforts to Address Social Drivers of Health

<table>
<thead>
<tr>
<th>Social Drivers of Health</th>
<th>Examples of How Legal Services Can Help</th>
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</table>
| **Safe, Affordable Housing** | - Prevent improper and illegal evictions and terminations of housing subsidies  
- Ensure that repairs and services are made to unsafe rental homes  
- Save homes from foreclosure  
- Help homeowners and renters displaced by natural disasters |
| **Family Safety and Stability** | - Secure protective orders for victims of domestic violence  
- Assist victims of domestic violence to retain custody of their children  
- Protect seniors from financial exploitation |
| **Access to Economic Opportunity** | - Provide immigration assistance for victims of domestic violence, sexual assault, human trafficking, and other violence  
- Remove barriers to employment, housing, and other supports for people involved with the justice system  
- Protect farmworkers’ rights to housing and workplace safety, enforce employment contracts  
- Prevent discrimination in employment, housing, and education |
| **Food Security, Health Insurance, Access to Other Safety Net Supports** | - Appeal improper denial, termination, or reduction of safety net support services  
  - Medicaid  
  - Supplemental Nutrition Assistance Program (SNAP)/Food Stamps  
  - Unemployment Benefits  
  - Disability Income  
  - Veteran’s Benefits  
  - Disaster-Related Services |
| **Access to Quality Education** | - Help children in public schools get the quality education they deserve  
- Enforce special education rights  
- Challenge improper school disciplinary actions, including suspensions and expulsions  
- Protect children from bullying/harassment  
- Help students experiencing academic failure |
“The WHAT”: Core Components of our Medical-Legal Partnership Program

1. Training, consultation, and other capacity-building activities

2. Screening for unmet needs

3. Brief assessment to determine how to respond when patient/caregiver responds “yes” to a screening question

4. Action steps

   ✓ Provide information about community resources and programs

   ✓ Provide other types of direct assistance (e.g., help with applications for safety net programs, letters to support requests for reasonable accommodations, IEPs, etc.)

   ✓ Make referrals to other community partners

   ✓ Make direct referrals to MLP

     ❏ May request de-identified consultation to determine whether to refer to MLP

5. Identify follow up or other steps that may be needed

6. Document screening, assessment, action steps and follow up needed

7. Dedicated MLP referral, intake, and information-sharing protocols

   ✓ Health professionals:
     - Explain MLP (what it is, services are free and confidential, etc.)
     - Complete all fields in MLP referral form
     - Review consent language, document consent
     - Submit referral
     - With permission, share additional information to support work on behalf of patient/caregiver/family

   ✓ Legal professionals:
     - Confirm receipt of referral
     - Request assistance if additional information is needed
     - Determine whether applicant is eligible for help
     - With applicant’s permission, “close the loop” about the outcome of the referral and share additional information to support work on behalf of patient/caregiver/family

8. Legal work on behalf of our shared “patients/clients”

9. Work collaboratively to:
   - Establish goals and priorities
   - Document outcomes and measure impact
   - Identify training or service gaps, operational challenges, and potential solutions
   - Secure resources to ensure sustainability
Studies Show That When Legal Expertise and Services Are Used to Address Social Needs

People with chronic illnesses are healthier and admitted to the hospital less frequently, saving health care costs too.

People more commonly take their medications as prescribed.

People report less stress and experience improvements in mental health.

People are more stably housed and their utilities are less likely to be shut off.

People have access to greater financial resources.

Clinical services are more frequently reimbursed by public and private payers.

Examples include:
- Improved housing conditions led to improved health in asthma patients
- Youth with diabetes had significant improvement in their glycemic control
- Sickle cell patients were healthier
- Health care spending on high-need, high-cost patients was reduced
- Families of healthy newborns in a randomized control trial increased their use of preventive health care

One MLP program recovered $300,000 in back benefits for families over a three-year period, while another recovered more than $500,000 in financial benefits for families over a seven-year period.

Medical-legal partnerships have been shown to save patients health care costs and recover cash benefits.

Source: National Center for Medical-Legal Partnership: https://medical-legalpartnership.org/impact/
Madlyn Morreale, Medical-Legal Partnership Program, Legal Aid of North Carolina, April 28, 2022
**Medical-legal partnerships**

**Expected Beneficial Outcomes (Rated)**
- Improved access to legal services
- Improved health outcomes
- Improved well-being
- Reduced stress

**Other Potential Beneficial Outcomes**
- Improved access to social services
- Increased enrollment in social services
- Improved economic security
- Increased housing stability
- Improved housing quality

**Impact on Disparities**
Likely to decrease disparities


Madlyn Morreale, Medical-Legal Partnership Program, Legal Aid of North Carolina, April 28, 2022

- The pre-implementation readmission rate of 10.3% declined to 7.4% and remained stable during a 4-month post-intervention observation period.
- Among 1,394 families screened for adverse SDH, 48% reported and received assistance with ≥ 1 concern.
- An intervention bundle, including SDH, was associated with a sustained reduction in readmission rates to 2 general pediatric services. Transitional care that addresses multiple domains of family need during a child's health crisis can help reduce pediatric readmissions.


- Median predicted hospitalization rate for children in the year after referral was 37.9 percent lower if children received the legal intervention than if they did not.
- We suspect that this decrease in hospitalizations was driven by the ability of legal advocates to address acute legal needs (for example, threat of eviction and public benefit denial) and, when possible, to confront root causes of ill health (for example, unhealthy housing conditions).
- Interventions such as those provided through a Medical-Legal partnership may be important components of integrated, value-based service delivery models.
In Pursuit of Justice: An Assessment of the Civil Legal Needs of North Carolina, 2021

- 71% of low-income families experience at least one civil legal problem in a given year
- 86% of those needs go unmet because of limited resources for civil legal aid providers.
This service will assist Enrollees with a specific matter with legal implications that influences their ability to secure and/or maintain healthy and safe housing and mitigate or eliminate exposure to interpersonal violence or toxic stress. This service may cover, for example:

- **Assessing an Enrollee to identify legal issues** that, if addressed, could help to secure or maintain healthy and safe housing and mitigate or eliminate exposure to interpersonal violence or toxic stress, including by reviewing information such as specific facts, documents (e.g., leases, notices, and letters), laws, and programmatic rules relevant to an Enrollee’s current or potential legal problem;

- **Helping Enrollees understand their legal rights related to maintaining healthy and safe housing and mitigating or eliminating exposure to interpersonal violence or toxic stress** (e.g., explaining rights related to landlord/tenant disputes, explaining the purpose of an order of protection and the process for obtaining one);

- **Identifying potential legal options, resources, tools and strategies that may help an Enrollee to secure or maintain healthy and safe housing and mitigate or eliminate exposure to interpersonal violence or toxic stress** (e.g., providing self-advocacy instructions, removing a former partner’s debts from credit rating);

- **Providing advice to Enrollees about relevant laws and course(s) of action and, as appropriate, helping an Enrollee prepare “pro se” (without counsel) documents.**

- **This service is meant to address the needs of an individual who requires legal expertise, as opposed to the more general support that can be offered by a Care Manager, case manager or peer advocate. The Care Manager or case manager coordinating this service must clearly identify the scope of the authorized health-related legal support within the Enrollee’s care plan.**
This service is limited to providing advice and counsel to Enrollees and does not include “legal representation,” such as making contact with or negotiating with an Enrollee’s potential adverse party (e.g., landlord, abuser, creditor, or employer) or representing an Enrollee in litigation, administrative proceedings, or alternative dispute proceedings.

After issues are identified and potential strategies reviewed with an Enrollee, the service provider is expected to connect the Enrollee to an organization or individual that can provide legal representation and/or additional legal support with non-Pilot resources.

Frequency: As needed when minimum eligibility criteria are met

Duration: Services are provided in short sessions that generally total no more than 10 hours.

Minimum Eligibility Criteria:

• Service does not cover legal representation.
• Services are authorized in accordance with PHP authorization policies, such as but not limited to service being indicated in the enrollee's person-centered care plan.
• The enrollee’s Medicaid care manager or HSO case manager is responsible for clearly defining the scope of the authorized health-related legal support services.
• Enrollee is not currently receiving duplicative support through other Pilot services.
• Enrollee is not currently receiving duplicative support through other federal, state, or locally-funded programs.
Access to Linkages to Health-Related Legal Supports Can and Should Play a Critical Role in Enhancing Outcomes for Other Pilot Services

- Housing Navigation, Support and Sustaining Services
- Inspection for Housing Safety and Quality
- Home Remediation Services
- Home Accessibility and Safety Modifications
- One-Time Payment for Security Deposit and First Month’s rent
- IPV Case Management Services
- Holistic High Intensity Enhanced Case Management

What Services Can Enrollees Receive Through the Pilots?

The federal government has approved 29 services to be offered through the Pilots in five priority service domains. Examples include:

**Housing**
- Tenancy support and sustaining services
- Housing quality and safety improvements
- One-time securing house payments (e.g., first month’s rent and security deposit)

**Food**
- Linkages to community-based food services (e.g., SNAP/WIC application support)
- Nutrition and cooking coaching/counseling
- Healthy food boxes
- Medically tailored meal delivery

**Transportation**
- Linkages to existing public transit
- Payment for transit to support access to pilot services (e.g., bus passes, taxi vouchers, ride-sharing credits)

**Interpersonal Violence**
- Linkages to legal services for IPV related issues
- Evidence-based parenting support programs
- Evidence-based home visiting services

**Cross-Domain**
- Medical respite care
- Linkages to health-related legal supports

Madlyn Morreale, Medical-Legal Partnership Program, Legal Aid of North Carolina, April 28, 2022
Discussion and Opportunity for Questions

Madlyn C. Morreale, JD, MPH
Managing Attorney, Medical-Legal Partnership Program
Legal Aid of North Carolina
madlynm@legalaidnc.org
Transportation-Related Pilot Services
National nonprofit membership association representing small urban, rural, and specialized transportation providers

ctaa.org

Federally funded technical assistance center promoting cross-sector work between transportation providers and key transportation destinations

nc4mm.org

Bill Wagner: wagner@ctaa.org; Amy Conrick, conrick@ctaa.org
Transportation is not an end in itself; it is solely in the business of getting people to essential destinations.
When analyzing improvement in well-being (food access, sustainable housing, employment, mental health support, etc.)

How do we measure the impact of a transportation “intervention”? 
Considerations in Measuring Outcomes of Providing Transportation to SDOH Destinations

- Much easier to measure impact of transportation to health care appts (% decrease missed appts, ED usage, late arrivals)

- Improvements in well-being are multifactorial
  It can be difficult to isolate the impact of providing a ride

- The destinations a person chooses reflects their priorities for that day
  “I can’t go to my doctor’s appt because my neighbor is taking me to WalMart today”

- Privacy considerations may lead people to be reluctant to provide data on trips and the reasons why they took them
So How Do We Measure Outcomes?

- Self-report data (anecdotes, scales measuring well-being, interviews) may be the most effective way to measure impact.

- Data on destinations they travel too. *Again, reflect personal priorities, but at least you know they are going to the food bank, mental health services, etc.*

- Change in school behavior (attendance, in-class focus) of children from target families.

- Connect data on “interventions” (e.g., food, housing, transportation, supports) to form a whole picture on a person.

- Strict control groups. *How do you closely match conditions between groups being compared? How do you deny an intervention to the control group that help?*
Using Z Codes: The Social Determinants of Health (SDOH) Data Journey to Better Outcomes

What are Z codes? SDOH-related Z codes ranging from Z55-Z65 are the ICD-10-CM encounter reason codes used to document SDOH data (e.g., housing, food insecurity, transportation, etc.). SDOH are the conditions in the environments where people are born, live, learn, work, play, and age.

Step 1: Collect SDOH Data
Any member of a person’s care team can collect SDOH data during any encounter.
- Includes providers, social workers, community health workers, case managers, patient navigators, and nurses.
- Can be collected at intake through health risk assessments, screening tools, person-provider interaction, and individual self-reporting.

Step 2: Document SDOH Data
Data are recorded in a person’s paper or electronic health record (EHR).
- SDOH data may be documented in the problem or diagnosis list, patient or client history, or provider notes.
- Care teams may collect more detailed SDOH data than current Z codes allow. These data should be retained.
- Efforts are ongoing to close Z code gaps and standardize SDOH data.

Step 3: Map SDOH Data to Z Codes
Assistance is available from the ICD-10-CM Official Guidelines for Coding and Reporting.1
- Coding, billing, and EHR systems help coders assign standardized codes (e.g., Z codes).
- Coders can assign SDOH Z codes based on self-reported data and/or information documented in an individual’s health care record by any member of the care team.2

Step 4: Use SDOH Z Code Data
Data analysis can help improve quality, care coordination, and experience of care.
- Identify individuals’ social risk factors and unmet needs.
- Inform health care and services, follow-up, and discharge planning.
- Trigger referrals to social services that meet individuals’ needs.
- Track referrals between providers and social service organizations.

Step 5: Report SDOH Z Code Data Findings
SDOH data can be added to key reports for executive leadership and Boards of Directors to inform value-based care opportunities.
- Findings can be shared with social service organizations, providers, health plans, and consumer/patient advisory boards to identify unmet needs.
- A Disparities Impact Statement can be used to identify opportunities for advancing health equity.

For Questions: Contact the CMS Health Equity Technical Assistance Program

cms.gov/medicare/icd-10/2021-icd-10-cm
Keck Medicine of USC Study (2019)

Finding: Older adults with chronic disease taught to use on-demand transportation report less social isolation and increased quality of life

- 3-month study, offering free transportation to patients ages 60+ with chronic disease and self-reported transportation barriers
- Medical appointment rides = 12% of destinations
- Remaining rides = errands, entertainment, social visits, and fitness classes
- Improved quality-of-daily-living was reported in 90% of subjects and 66% reported increased social visits.
The Role of Transportation in Improving Health Outcomes
Unmet Medicaid Transportation Needs

• 2017 initiated a transportation pilot addressing unmet transportation needs of the vulnerable Medicaid population.

• Initially available by referral to residents of Broome, Chenango, Tioga and parts of Delaware Counties, and expanded to Otsego and all of Delaware counties.

• The Voucher Program is made possibly through DYSRIP funding
Voucher Program

• Medicaid individuals for non Medicaid eligible trips

• Prevents hospital readmissions due to lack of access to Prescription medication, food, etc. and prevents personal crises (with health implications) that could be averted through transportation services

• Targets individuals who could most benefit or are most vulnerable to a health crisis(e.g., individuals recently discharged from the hospital with limited family or community support systems)

• Access transportation services relative to Social Determinants of Health
## Medicaid Voucher Program

### Care Compass Network Innovation Funds Project

<table>
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<tr>
<th>Question</th>
<th>Description</th>
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<tbody>
<tr>
<td>□ Hospitalized in the past 30 days?</td>
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<td>□ Enrolled in a chronic disease self-management prevention class (CDSMP) or other preventative health class?</td>
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<tr>
<td>□ Have a prescription or need for medical supplies/equipment?</td>
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<tr>
<td>□ Participating in prescribed health improvement dietary program, e.g. FVRX or has an immediate need to access food?</td>
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<tr>
<td>□ Enrolled in mental health/substance abuse support services not eligible for Medicaid transportation.</td>
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<tr>
<td>□ Have a chronic condition with a high risk of hospitalization and/or needs access to services to prevent severe health deterioration (fitness, pain management, fall prevention?)</td>
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</table>
Qualifying Reason for Voucher Referral 2017-2019

- Prescription/supplies: 40%
- Health improvement dietary program: 5%
- Mental health/substance abuse support: 5%
- Hospitalized in past 30 days: 45%
- CDSMP/class: 5%

1,778 Vouchers (trips)  
770 individuals
Voucher Use

- Food Assistance: 45%
- Shopping Health Needs: 10%
- Prescriptions: 21%
- Benefit Renewal: 20%
- Other: 4%

- Food Assistance
- Shopping Health Needs
- Prescriptions
- Benefit renewal
- Other
Return on Investment

*By providing transportation in these and other scenarios like them:*

Could the transportation...

- Improve the health condition?
- Prevent potential health crisis?
- Save significant costs to health care?
Q&A
Reminders & Next Steps

• During the next meeting on **May 12th from 10:00 – 11:30 AM**, Network Leads will present to the SPs about their regions. Please submit suggestions for information you would like the Network Leads to speak to by **EOD today** to the Healthy Opportunities email box and copy 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 31, 2022 (Revised Date)**.
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

<table>
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<tr>
<th>Population</th>
<th>Age</th>
<th>Physical/Behavioral Health-Based Criteria</th>
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</table>
| Adults                | 22+  | • 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).  
• Repeated incidents of emergency department use (defined as more than four visits per year) or hospital admissions. |
| Pregnant Women        | N/A  | • Multifetal gestation  
• Chronic condition likely to complicate pregnancy, including hypertension and mental illness  
• Current or recent (month prior to learning of pregnancy) use of drugs or heavy alcohol  
• Adolescent ≤ 15 years of age  
• Advanced maternal age, ≥ 40 years of age  
• Less than one year since last delivery  
• History of poor birth outcome including: preterm birth, low birth weight, fetal death, neonatal death |
| Children              | 0-3  | • Neonatal intensive care unit graduate  
• Neonatal Abstinence Syndrome  
• Prematurity, defined by births that occur at or before 36 completed weeks gestation  
• Low birth weight, defined as weighing less than 2500 grams or 5 pounds 8 ounces upon birth  
• Positive maternal depression screen at an infant well-visit |
|                       | 0-21 | • 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 <5th or >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  
• 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)  
• Enrolled in North Carolina’s foster care or kinship placement system |
## 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 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:
  - 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.
  - 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.
SDOH Screening Questions

DHHS, in partnership with a diverse set of stakeholders from across the state, developed a standardized set of SDOH screening questions.

The SDOH Screening Questions Are Available Here:
https://www.ncdhhs.gov/about/department-initiatives/healthy-opportunities/screening-questions