Lessons Learned in Diabetes Care for Homeless Populations

Introduction
Diabetes remains one of the leading causes of death in this nation with higher medical expenditures for those diagnosed with the disease than those without it. Stable and affordable housing remains a key social determinant in achieving health equity and reducing preventable hospitalizations and disease burden. Housing, coupled with quality, integrated health care and culturally-responsive health education is integral in reducing the burden of diabetes for the most vulnerable individuals with complex care needs, including the individuals experiencing homelessness.

In 2018, Corporation for Supportive Housing (CSH) and the National Health Care for Homeless Council (the Council) partnered to identify best practices in diabetes care for vulnerable populations through health center and supportive housing partnerships. Through a series of learning collaboratives that provided ongoing training and technical assistance, CSH and the Council sought to identify replicable and scalable models of health center and housing partnerships focused on reducing unmanaged diabetes.

Between January 2018 and June 2019 over 20 health centers and 25 supportive housing providers representing 20 total states participated in the A1C Health Center and A1C Supportive Housing Learning Collaboratives, respectively. The health center and the supportive housing learning collaboratives each operated as distinct collaboratives – one for health center staff and the other for supportive housing staff; however, a few virtual sessions were combined to address unique health and housing partnership opportunities. A learning collaborative, or learning community, is a dynamic, virtual and social peer exchange that enables dialogue among stakeholders pursuing similar objectives to explore new possibilities, share promising and best practices, solve challenging problems and create new and mutually-beneficial opportunities. The objective is to foster a virtual learning exchange to benefit all involved. Members from each collaborative met quarterly over the course of two years for peer exchange learning opportunities, with the goal of sharing evidence-based and promising practices. Virtual session workshops were led by subject matter experts navigating through the implementation of various evidence-based and promising community-based interventions aimed at managing uncontrolled diabetes among vulnerable populations. Both Collaboratives employed a ‘train-the-trainer’ approach, equipping participants with best practices, tools and ideas on how to implement lessons learned through program and service delivery changes. Session topics varied and were identified by collaborative members as issue areas and pain points they wanted to tackle. Topics included: promising practices in diabetes management, the role of care teams, health disparities, health center and housing partnerships, creative engagement strategies for hard-to-reach populations, non-clinical staff diabetes management trainings, behavioral health challenges and diabetes management, medication adherence and seniors.

This publication summarizes key barriers and promising practices in the field identified by collaborative participants related to diabetes care for individuals experiencing homelessness or formerly homeless in supportive housing.
Prior to starting the learning collaboratives, CSH and the Council convened a series of focus groups with expected health center and supportive housing staff collaborative participants aimed at identifying the challenges and successful strategies and innovations related to managing diabetes, as well as perceived barriers and resource gaps in the field. Focus groups identified challenges at the client level (supportive housing tenants and individuals experiencing homelessness/unstably housed health center clients); staff level (supportive housing case management staff and health center staff), and systemic level (health system, housing and environmental factors). Below is a summary of the major themes that arose in terms of key challenges and barriers.

### Client Level

<table>
<thead>
<tr>
<th>Health Centers</th>
<th>Supportive Housing Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of housing</td>
<td>Not a high priority among profound competing priorities</td>
</tr>
<tr>
<td>Prioritizing health</td>
<td>Lack of understanding of the disease</td>
</tr>
<tr>
<td>Access to food</td>
<td>Limited options for healthy foods</td>
</tr>
<tr>
<td>Health literacy</td>
<td>Distrust of health care system – due to mental health issue or general distrust</td>
</tr>
<tr>
<td>Feeling of “hopelessness”</td>
<td>Medication adherence</td>
</tr>
<tr>
<td>Seek episodic treatment</td>
<td>Hopelessness or feeling of inevitability</td>
</tr>
<tr>
<td>Uninsured or underinsured</td>
<td></td>
</tr>
<tr>
<td>Medication management</td>
<td></td>
</tr>
</tbody>
</table>

### Staff Level

<table>
<thead>
<tr>
<th>Health Centers</th>
<th>Supportive Housing Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding for staff</td>
<td>Diabetes is a complicated disease, signs and symptoms may mimic those of a mental health challenge</td>
</tr>
<tr>
<td>Capacity and creativity needed for engagement</td>
<td>Challenging for those without a health/clinical background</td>
</tr>
<tr>
<td>Need support for non-clinical staff to offer diabetes education tailored to a population experiencing homelessness</td>
<td>Lack of training/uncomfortable with discussing diabetes with tenants</td>
</tr>
<tr>
<td>Lack of integration of Behavioral Health Treatment in Primary Care Settings</td>
<td>Navigating their role as a housing provider</td>
</tr>
<tr>
<td></td>
<td>Being creative around engagement</td>
</tr>
</tbody>
</table>

### Systemic Level

<table>
<thead>
<tr>
<th>Health Centers</th>
<th>Supportive Housing Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Health Centers</td>
<td>Fragmented health care system that does not address whole-person care needs. Current system not patient-centered.</td>
</tr>
<tr>
<td>Educating “do-gooders” to donate healthier foods</td>
<td>Lack of trust/perceived miscommunication with health care system</td>
</tr>
<tr>
<td>Inability to control where and when the next meal will come</td>
<td>Social determinants such as transportation, food insecurity and costs of healthy food</td>
</tr>
<tr>
<td>Inability to monitor what the patient is doing and lack of accurate readings</td>
<td>Inconsistencies with insurance coverage</td>
</tr>
<tr>
<td>Transportation</td>
<td>Long waits in waiting rooms</td>
</tr>
<tr>
<td></td>
<td>Lack of safe and accessible places to engage in physical activity</td>
</tr>
</tbody>
</table>
Promising Practices to Overcome Barriers
Over the 18 months, collaborative participants met regularly to identify opportunities, both in practice and philosophy to better engage vulnerable homeless and formerly homeless individuals in diabetes self-management. The following is a compilation of the recommendations gathered from the learning collaborative modules convened between October 2018 and April 2019.

For Health Center Staff:
Effective Approaches to Engaging & Supporting Homeless Clients in Diabetes Care

Outreach & Engagement
- Incorporate assertive engagement techniques such as Motivational Interviewing and other key concepts around harm reduction, trauma-informed care and cultural humility.
- Utilize case managers and/or peers in engagement practices (e.g. Stanford Model, PEARLS Program).
- Establish more regular visits (quarterly is not enough) for vulnerable and transient clients.
- Partner with other government agencies to address social factors (e.g. transportation challenges) that impact routine care.
- Provide integrated services through a whole-person care approach.
- Examine patient experience to address any potential triggers that can serve as unintended barriers (e.g. having security).
- Utilize incentives (e.g. gift cards, bus passes, MetroCard) to address barriers to transportation and get clients back in the door.
- Work with case managers to help ensure consumers attend appointments, understand recommendations, etc.

Integrated Services
- Engage pharmacist on interdisciplinary care team; utilize pill packs to support medication management.
- Explore the possibility of nurse-managed health centers to meet the unique health care needs of many at-risk populations.

For Health Center and Supportive Housing Staff:
Considerations for Addressing Nutrition & Behavioral Needs

Behavioral Health Considerations
- Establish point-of-care screening for integrated behavioral and primary care.
- Explore interventions to address behavioral health and diabetes (mindfulness, healthy lifestyle, diet, sleep).
- Utilize the 5As behavioral intervention strategy (see resources) to increase patient motivation and behavioral change in weight-management consultations.
- Recognize the significance of a diabetes diagnosis.
**Nutrition**
- Use validated tools to assess for food insecurity such as *Hunger Vital Signs™*.  
- Provide nutrition counseling (group and/or individual).  
- Bring healthy snacks to consultations and take suggestions.  
- Build relationships with soup kitchens/food pantries/shelters.  
- Consider reorganizing the food-line order to start with vegetables.  
- Work with Farmer's Markets to get left-over vegetables/double credit, etc.  
- Coordinate with street medicine/outreach teams to create healthy snack-packs.  
- Share tools and resources with clients that aide them in shopping for nutritious and affordable food such as *Cooking Matters*.  

**Recommendations**
Engaging people formerly and currently experiencing homelessness in diabetes self-management care requires committed and resourceful staff who are open to creative engagement approaches for clients and tenants with complex care needs that may be hard-to-reach. While learning collaborative participants highlighted the various ways to improve health through assertive engagement practices, integrated service settings and access to nutritious foods, resoundingly participants underscored the role of housing as a stabilizing force that serves as a platform for achieving the best health possible.  

When planning for innovative interventions, we recommend performing a resource gaps analysis to identify what resources are needed, what resources currently exist, as well as barriers to accessing those resources and a clear path to addressing those barriers. It is also important that when building relationships to develop mutual respect for each partner and garner the individual expertise to augment the intervention and deliver care equitably.
## Resources

The following are links to resources mentioned in this paper and identified by collaborative participants.

### Assessment Tools
- **100 Million Lives Adult Well-Being Assessment**
- **ADA Risk Assessment**
  A printable diabetes risk assessment test from American Diabetes Association.  
- **ADA Screening: Type II Diabetes Risk Test**
- **Hunger Vital Sign™**
  A validated 2-question food insecurity screening tool based on the U.S. Household Food Security Survey Module to identify households at risk of food insecurity.  
- **ManageMed Screening (fee required for access).**
  An assessment tool designed to quickly determine if someone can handle a moderately difficult medication routine
- **MoCA – Montreal Cognitive Assessment.**
  The MoCA is a cognitive screening test designed to assist Health Professionals in the detection of mild cognitive impairment and Alzheimer’s disease.  
  [https://www.mocatest.org](https://www.mocatest.org)
- **Self-Efficacy Scale.**
  Diabetes management self-efficacy scale.  (Dropbox account needed to access)

### Building Diabetes Competency Among Non-Clinical Staff
- **American Diabetes Association (ADA).**
  [https://www.diabetes.org/](https://www.diabetes.org/)
- **ADA Living With Type 2 Diabetes**
- **Certified Peer Support Specialist Training**
  is certified in several states, developed to support individuals in developing the set off skills need to work as a Peer Support Specialist.
  [https://riinternational.com/consulting/training/certified-peer-support-specialist-training/](https://riinternational.com/consulting/training/certified-peer-support-specialist-training/)
- **Community Health Workers.**
  Integrating Community Health Workers into Primary Care Practice:
  [https://www.nhchc.org/chws/](https://www.nhchc.org/chws/)
- **Diabetes Peer Supporter Training Curriculum:**
- **MHA National Certified Peer Specialist Certification:**
- **National Certified Peer Support Recovery Support Specialist (NCPRSS):**
  [https://www.naadac.org/ncprss](https://www.naadac.org/ncprss)
- **National Diabetes Prevention Program:**
- **Patient Education Materials:**
Behavioral Health & Diabetes Management

- **5As Model.** The 5As model is a behavioral intervention strategy that has been modified for obesity management; it helps increase patient motivation and behavioral change in weight management consultations. [https://www.rethinkobesity.com/talking-with-patients/the-5as-model.html](https://www.rethinkobesity.com/talking-with-patients/the-5as-model.html)
- **PEARLS Program.** Pearls is an evidence-based program for late-life depression, bringing high quality mental health care into community based settings that reach older and more vulnerable adults. [http://www.pearlsprogram.org](http://www.pearlsprogram.org)
- **UIC Center on Psychiatric Disability and Co-Occurring Medical Conditions’ Diabetes Education Toolkit:** [http://www.cmhsrp.uic.edu/health/diabetes-library-home.asp](http://www.cmhsrp.uic.edu/health/diabetes-library-home.asp)

Evidence-based Practices

- Motivational Interviewing Online Webinar: click [here](https://www.demandchronicles.com/motivational-interviewing)

Integration Tools

- **American Association of Diabetes Educators.** AADE is an interdisciplinary professional membership organization dedicated to improving prediabetes, diabetes and cardio metabolic care through innovative education, management, and support. [https://www.diabeteseducator.org/](https://www.diabeteseducator.org/)
- **The 10 Building Blocks of Primary Care.** The building blocks represent a synthesis of the innovative thinking that is transforming primary care in the United States, are both a description of existing high-performing practices and a model for improvement. [http://www.annfammed.org/content/12/2/166.full.pdf+html](http://www.annfammed.org/content/12/2/166.full.pdf+html)
- **Institute for Healthcare Improvement (IHI) Quality Improvement Resources.** HI uses the Model for Improvement as the framework to guide improvement work. [http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx](http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx)
- **The Primary Care Team Guide.** Provides step-by-step direction on how to establish high-functioning teams and implement new functions essential to team-based care. Numerous tools and resources from 31 exemplary practices nationwide are made available to support you. [http://www.improvingprimarycare.org/](http://www.improvingprimarycare.org/)
- **Safety Net Medical Home Initiative Resources & Tools.** A library of publicly available resources and tools to help practices understand and implement the Patient-Centered Medical Home (PCMH) Model of Care. [http://www.safetynetmedicalhome.org/resources-tools](http://www.safetynetmedicalhome.org/resources-tools)
• SAMHSA-HRSA Center for Integrated Health Solutions (CIHS) promotes the development of integrated primary and behavioral health services to better address the needs of individuals with mental health and substance use conditions, whether seen in behavioral health or primary care provider settings. https://www.integration.samhsa.gov/

• Smiles for Life: A National Oral Health Curriculum provides educational resources to enhance the role of physicians training in Family Medicine residency programs in the promotion of oral health. https://www.smilesforlifeoralhealth.org/buildcontent.aspx?tut=555&pagekey=62948&cbreceipt=0

• THE MOUTH: The Missing Piece to Overall Wellness and Lower Medical Costs. A study examining whether or not treatment and maintenance of periodontal disease reduced medical costs and inpatient hospital admissions in members with certain chronic medical conditions and women who were pregnant. https://www.unitedconcordia.com/docs/united%20concordia%20oral%20health%20whitepaper.pdf

• Working Together to Manage Diabetes: A Guide for Pharmacy, Podiatry, Optometry, and Dentistry, shows how practitioners in the four disciplines can work collaboratively with each other, as well as with all other members of the health care team, such as primary health care providers, physician assistants, nurse educators, and community health workers to treat people with diabetes (or in some cases even prevent type 2 diabetes). https://www.cdc.gov/diabetes/ndep/pdfs/ppod-guide.pdf

Nutrition


• Cooking Matters. Share Our Strength’s “Cooking Matters” teaches participants to shop smarter, use nutrition information to make healthier choices and cook delicious, affordable meals. https://cookingmatters.org/what-we-do

• Food Rx: A Community-University Partnership to Prescribe Healthy Eating on the South Side of Chicago. Patients living with diabetes in underserved communities face significant challenge to eating healthy, and Food Rx shows promise as a model for integrating community and health care resources to support the health of underserved patients. (Dropbox account needed to access) https://www.dropbox.com/s/lzptvnswdc914qq/Food%20Rx%20UChicago.pdf?dl=0

• Farmer’s Markets & SNAP Resources

• Nutrition for homeless populations: shelters and soup kitchens as opportunities for intervention. Individuals experiencing homelessness in the United States suffer from a high prevalence of diseases related to malnutrition because nutrition is a daily challenge. By advancing food quality, education, and policies in shelters in kitchens, the homeless population can gain a chance to restore its nutrition and health. (Dropbox account needed to access) https://www.dropbox.com/s/4j3x6a4c7pmkyl6/soup%20kitchens%20as%20opportunities%20for%20intervention.pdf?dl=0

• Safe Healthy Food Pantries. Food insecurity, diet-related disease, and foodborne illness are rapidly increasing; this toolkit is offered as a way pantries can learn the latest research to be able to assess their current practices and create new and improved plans of action. (Dropbox account needed to access) https://www.dropbox.com/s/jean0z6o8i2nequ/Safe_Healthy_Food_Pantries.pdf?dl=0
• Soup Kitchen Survey. This survey collects information regarding finding allocated for food that may be available or unavailable to the shelter or kitchen. (Dropbox account needed to access) https://www.dropbox.com/s/o8uqpgdrw73f5m6/Soup%20Kitchen%20Survey.docx?dl=0

**Disease Management/ Medication Management**

• **Adapting your Practice: Medication Management for Patients Experiencing Homelessness Diagnosed with Diabetes.**

• AADE Self-Management AADE7 Self-Care Behaviors: The American Association of Diabetes Educators (AADE) has defined the AADE7 Self-Care Behaviors™ as a framework for patient centered diabetes self-management education (DSME) and care. https://www.diabeteseducator.org/living-with-diabetes/aaade7-self-care-behaviors

• CDC Managing Diabetes Self-Management Education Programs. *Diabetes self-management services provide information and skills for people to manage their diabetes and related conditions.* https://www.cdc.gov/learnmorefeelbetter/programs/diabetes.htm

• Covermymeds – Pre-authorization. CoverMyMeds partners with electronic health records (EHRs), payers, pharmacies and providers to initiate, transmit and track the status of PA requests within the clinical workflow, helping patients to more quickly get the medication they need to live healthy lives. https://www.covermymeds.com/main/


Other

- Description: The housing and health center learning collaboratives participants joined NHCHC’s Behavioral Health Learning Collaborative to explore Promising practices and challenges related to behavioral health and diabetes. Colorado Coalition for the Homeless shared their existing program and curriculum on behavioral health integration and Diabetes. Recording from April 16th Session [http://nhchc.adobeconnect.com/pxwo9lnzk1h7/](http://nhchc.adobeconnect.com/pxwo9lnzk1h7/)
- Adverse Childhood Experiences (ACEs) Fact Sheet [https://www.nhchc.org/aces/](https://www.nhchc.org/aces/)
- ACEs Coffee Chat [https://nhchc.org/clinicians-coffee-chat-adverse-childhood-experiences/](https://nhchc.org/clinicians-coffee-chat-adverse-childhood-experiences/)
- CDC Adverse Childhood Experiences (ACEs). Adverse Childhood Experiences have a tremendous impact on future violence, victimization, and perpetration, and lifelong health and opportunity. Working together, neighborhoods and communities can be such that every child can thrive. [https://www.cdc.gov/violenceprevention/acesstudy/index.html](https://www.cdc.gov/violenceprevention/acesstudy/index.html)
- Encampments Coffee Chat (recording of Brian Bickford’s previous presentation) [https://nhchc.org/clinicians-coffee-chat-encampments/](https://nhchc.org/clinicians-coffee-chat-encampments/)
- Organized, Evidence-Based Care: Oral Health Integration. An implementation guide offering guidance, resources and tools to help primary care practices integrate oral health into the primary care setting and achieve the vision of addressing oral health as part of whole-person care. [http://www.safetynetmedicalhome.org/sites/default/files/Guide-Oral-Health-Integration.pdf](http://www.safetynetmedicalhome.org/sites/default/files/Guide-Oral-Health-Integration.pdf)
- PRAPARE. The Prepare Assessment Tool is a set of national core measures and a set of optional measures for community priorities, informed by research, the experience of existing social risk assessments. The toolkit focuses on the major steps that are needed to implement a new data collection initiative on socioeconomic needs and circumstances. Tool & Overview: [http://www.nachc.org/research-and-data/prapare/](http://www.nachc.org/research-and-data/prapare/) Action Toolkit: [http://www.nachc.org/research-and-data/prapare/toolkit/](http://www.nachc.org/research-and-data/prapare/toolkit/)
Special Thanks

A heartfelt thanks to the A1C Learning Collaborative participants for your active participation in the collaborative sessions and your manifold contributions.

Health Center Participants
AltaMed Health Services – CA
Good Samaritan Hospital – CA
Native American Health Center NAHC – CA
Colorado Coalition for the Homeless – CO
Community Health Center, Inc. (CHCI) – CT
Pinellas County Government – FL
Mercy Care – GA
Macoupin County Public Health Department – IL
Pedigo Health Center – IN
Oakland Integrated Healthcare Network – CA
Hennepin County Health Care for the Homeless – MN
Gaston Family Health Services – NC
Trenton Health Team – NJ
Care for the Homeless NYC – NY
Oregon Health and Science University
La Comunidad Hispana (LCH) - PA
Project HOME - PA
University of Texas Medical Branch (UTMB)
Neighborcare Health - WA
Health care center for the homeless

Supportive Housing Participants
A Community of Friends – CA
Downtown Women’s Center – CA
LifeSTEPS – CA
MidPen Resident Services – CA
MidPen Housing Corporation – CA
Turning Point Community Programs – CA
Colorado Coalition for the Homeless – CO
Housing Catalyst – CO
Pinellas County – FL
Mercy Housing – GA
North Side Housing & Supportive Services – IL
Sarah’s Circle c/o Rebecca Sidorow – CA
HELP of Southern Nevada – NV
Acacia Network – NY
Buffalo Federation of Neighborhood Centers – NY
Geel Community Services, Inc. – NY
Institute for Community Living, Inc. (ICL) - NY
Integral Care – TX
St. Francis Center – CO
Tenderloin Neighborhood Development Corporation – CA
Turning Point Community Programs – CA
YMCA – OH
About CSH
CSH is the national champion for supportive housing, demonstrating its potential to improve the lives of very vulnerable individuals and families by helping communities create over 335,000 real homes for people who desperately need them. CSH funding, expertise, and advocacy have provided $1 billion in direct loans and grants for supportive housing across the country. Building on nearly 30 years of success developing multi and cross-sector partnerships, CSH engages broader systems to fully invest in solutions that drive equity, help people thrive, and harness data to generate concrete and sustainable results. By aligning affordable housing with services and other sectors, CSH helps communities move away from crisis, optimize their public resources, and ensure a better future for everyone. Visit us at csh.org.

About NHCHC
The National Health Care for the Homeless Council (NHCHC) is a network of doctors, nurses, social workers, consumers, and advocates who share the mission to eliminate homelessness. Since 1986 we have been the leading organization to call for comprehensive health care and secure housing for all. We produce leading research in the field and provide the highest level of training and resources related to care for persons experiencing homelessness. We collaborate with government agencies and private institutions in order to solve complex problems associated with homelessness. Additionally, we provide support to publicly funded health centers and Health Care for the Homeless programs in all 50 states. Visit nhchc.org to learn more.

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