

# Medicaid Innovation Accelerator Program

## Using Data to Identify Housing Needs and Target Resources

National Dissemination Webinar

November 7, 2018

2:00 PM – 3:30 PM ET



# Logistics for the Webinar

- All participant lines will be muted during today's webinar.
- To participate in a polling question, exit out of "full screen" mode.
- Use the chat box on your screen to ask a question or leave a comment.
  - Note: the chat box will not be seen if you are in "full screen" mode.
- Please complete the evaluation in the pop-up box after the webinar to help us continue to improve your experience.

# Welcome and Background

- **Melanie Brown**

Technical Director

Medicaid Innovation Accelerator Program (IAP)

Center for Medicaid and CHIP Services, CMS

# Polling Question #1

Who is joining us on the webinar today?  
(organizational affiliation):

- State Medicaid agency
- State housing agency
- Other state agency
- Regional or local housing organization
- Regional or local support/service provider
- Managed care organization
- Advocacy organization
- Contractor/vendor
- Other

# Purpose & Learning Objectives

- States will:
  - Learn the advantages of using data to identify needs and prioritize housing resources
  - Understand the range of data systems available for data matching and targeting
  - Become familiar with examples of cross-system data matching and targeting and their applicability to your state

# Agenda

- Overview of the Innovation Accelerator Program (IAP) Medicaid-Housing Agency Partnerships Track
- Framework for Cross-Systems Data Analysis and Targeting
- States' Experiences with Data Matching and Targeting:
  - Connecticut
  - Michigan
  - Massachusetts
- Questions and Answers
- Key Takeaways
- Closing Comments

# Previous Support: State Medicaid-Housing Agency Partnerships Track

- 2016 Cohort
  - Eight states: California, Connecticut, Hawaii, Illinois, Kentucky, Nevada, New Jersey, and Oregon
- 2017-2018 Cohort
  - Eight states: Alaska, Massachusetts, Michigan, Minnesota, Nebraska, Texas, Utah, and Virginia
- States received technical support using standard tools to identify goals and current resources, then create an action plan to move toward the state's goals.
- States also participated in cross-state learning opportunities.

# Partnerships States'

## Key Accomplishments

- Establishment of cross-agency partnerships and ongoing workgroups focused on Medicaid-housing partnerships
- Alignment of multiple existing housing and health care initiatives
- Development or expansion of data matching to target resources and examine costs and outcomes. Data sources included:
  - Medicaid Management Information Systems (MMIS)
  - Medicaid managed care data
  - Homelessness Management Information Systems (HMIS)

# Polling Question #2

Do you or your staff/department have experience bringing together data from across systems?

- Yes, we use cross-systems data frequently
- Yes, we did a one-time match
- No, but we are looking at options for cross-systems data matching
- No, we have no experience

# Framework for Cross-Systems Data Analysis and Targeting

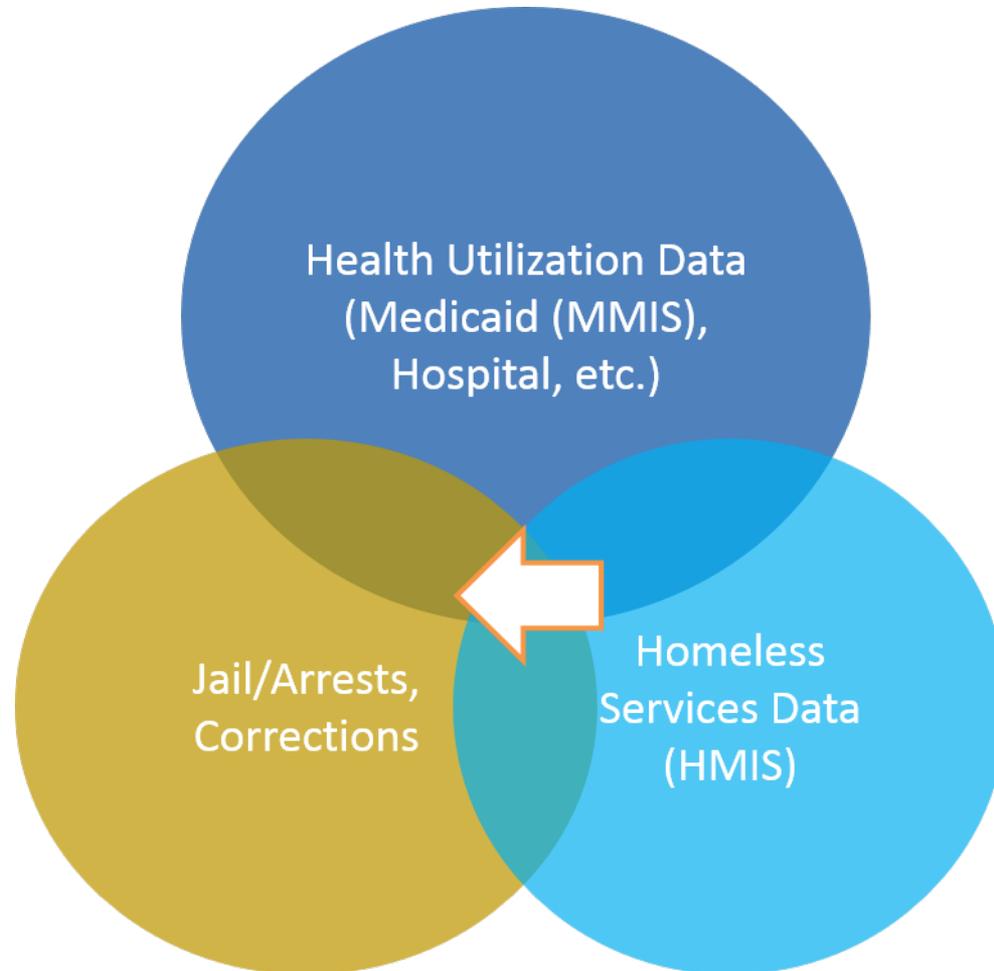
**Kim Keaton**

Director of Data and Analytics, CSH

# Benefits of Using Data to Identify Housing Needs and Target Resources

1. To understand the complexities of the target population, both medically and socially, and help address policy concerns such as rising health care costs
2. To identify members of the target population to prioritize for housing
3. To improve coordination between health and homeless and housing systems, which can in turn improve health and housing outcomes for Medicaid beneficiaries/clients
4. To make the business case for a supportive housing intervention, and with the right data on utilization costs and costs of housing and services, can often show a potential return on investment (ROI)

# Overlapping Systems from a Social Determinants Perspective



# Homeless Services Data (HMIS)

- **What is it?** Every Continuum of Care (CoC) is mandated by the U.S. Department of Housing and Urban Development (HUD) to record data in a Homeless Management Information System (HMIS). Geographic coverage can be county(s), city, or even statewide
- **What's in it?** Service utilization across a range of providers from outreach contacts, shelter stays, and entries and exits from housing
- **How does it enhance the picture for Medicaid beneficiaries?** Can confirm an individual's homeless status and show where they are staying so health plans may more effectively manage care for members.
- **Is it HIPAA protected?** No, but CoCs often have limited Releases of Information that need updating for specific data sharing purposes

# Methods for Defining the Target Population

Matching across systems to develop a list of priority individuals

- Flag individuals in a system (HMIS, hospital) for referral
- Partner with service providers, care coordinators, or outreach teams to find eligible members in the community (data use agreement needed)

Use de-identified administrative data to develop predictive algorithms

- Identify and engage high utilizers outside homeless system (e.g., hospitals) and make direct referrals to housing
- In Los Angeles, the 10<sup>th</sup> Decile Triage Tool created from county service use data is used in 14 hospital systems

Assessment tools (broader than a clinical assessment)

- All homeless systems are required to perform an assessment on people experiencing homelessness to assess their vulnerability and housing needs
- Vast majority are subjective on the part of the assessor and self reported by clients

# Tips for Getting Started

## 1. Leverage Existing Agreements

- Conduct a regional scan – what is happening currently?
- Can you build upon any existing data sharing arrangements?
- Does your region have an integrated data platform or real time data exchange?
- Who has access to previously shared data?

# Tips for Getting Started (cont.)

## 2. Familiarize Yourself with Basic Confidentiality Requirements

- Less protected data generally flow to higher protected data agencies: HMIS → Health
- Review Releases of Information – they may need to be revised (but not always)
- Is substance use data included? If so consider whether requirements under 42 CFR Part 2 apply

# Tips for Getting Started (cont.)

## 3. Review State Statutes

- Depending on the data being considered, there may be state statutes that facilitate data sharing OR rise to a higher level of protection than federal statutes
- Examples: Nevada, Florida

# Tips for Getting Started (cont.)

## 4. Look for Analytical Capacity

- Matching data on basic demographics (first/last name, SSN, gender) is best done through matching with either a deterministic or probabilistic algorithm involving a specific skill set.
- Some places employ a research and analysis unit to look at state/local data, while others might have a university that performs research and analyses on state/local data. Both options are worth pursuing.

## States' Experiences with Data Matching and Targeting

- Steve DiLella, Connecticut  
Department of Housing
- Paula Kaiser VanDam, Michigan  
Department of Health & Human  
Services
- Emily Cooper, Massachusetts  
Executive Office of Elder Affairs

# States' Experiences with Data Matching and Targeting

**Steve DiLella**

Director of Individual and Family  
Support Program Unit

Connecticut Department of Housing

# Developing a Data Driven Targeting Strategy in Connecticut

## Major Questions Include:

1. Why is data driven targeting important for identifying individuals for supportive housing?
2. What systems' data should be utilized in determining your approach?
3. What data matching strategies should our state consider?
4. How can data matching efforts be integrated into existing systems of care?

# Why is Data Driven Targeting Important for Identifying Individuals for Supportive Housing?



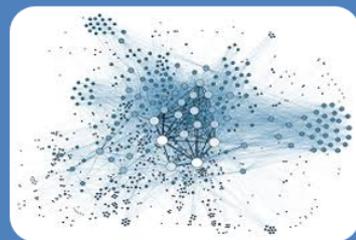
## Allows Deep Targeting of Costly Resources

- Best way of identifying service resistant vulnerable consumers
- Cross systems data can find people who cycle between multiple systems
- Poor outcomes for individuals... multiple arrests, risky behaviors, unmanaged chronic conditions



## Opportunity for Coordinated Service Delivery System

- Population demands a more comprehensive intervention than is available
- Builds integration with health care, improving access and outcomes while lowering costs
- Potential to free up dollars for further housing and/or for other purposes



## Spur Lasting Systems Change

- Systems come to a common definition on who qualifies for intervention
- Develop a services financing model that benefits all systems
- Diversify funding for services and reinvest savings from health/CJ system into housing and/or housing-based services
- Increase capacity of housing and health services interventions

# Some Common Systems that Serve Vulnerable People

- State Medicaid systems (MMIS)
- Homeless data – Homeless Management Information System (HMIS)
- Hospitals/hospital systems/ emergency departments
- Ambulance/emergency transport data
- Correctional institutions
- Institutionalized/disability departments

# Preliminary CT Medicaid/HMIS Data Match

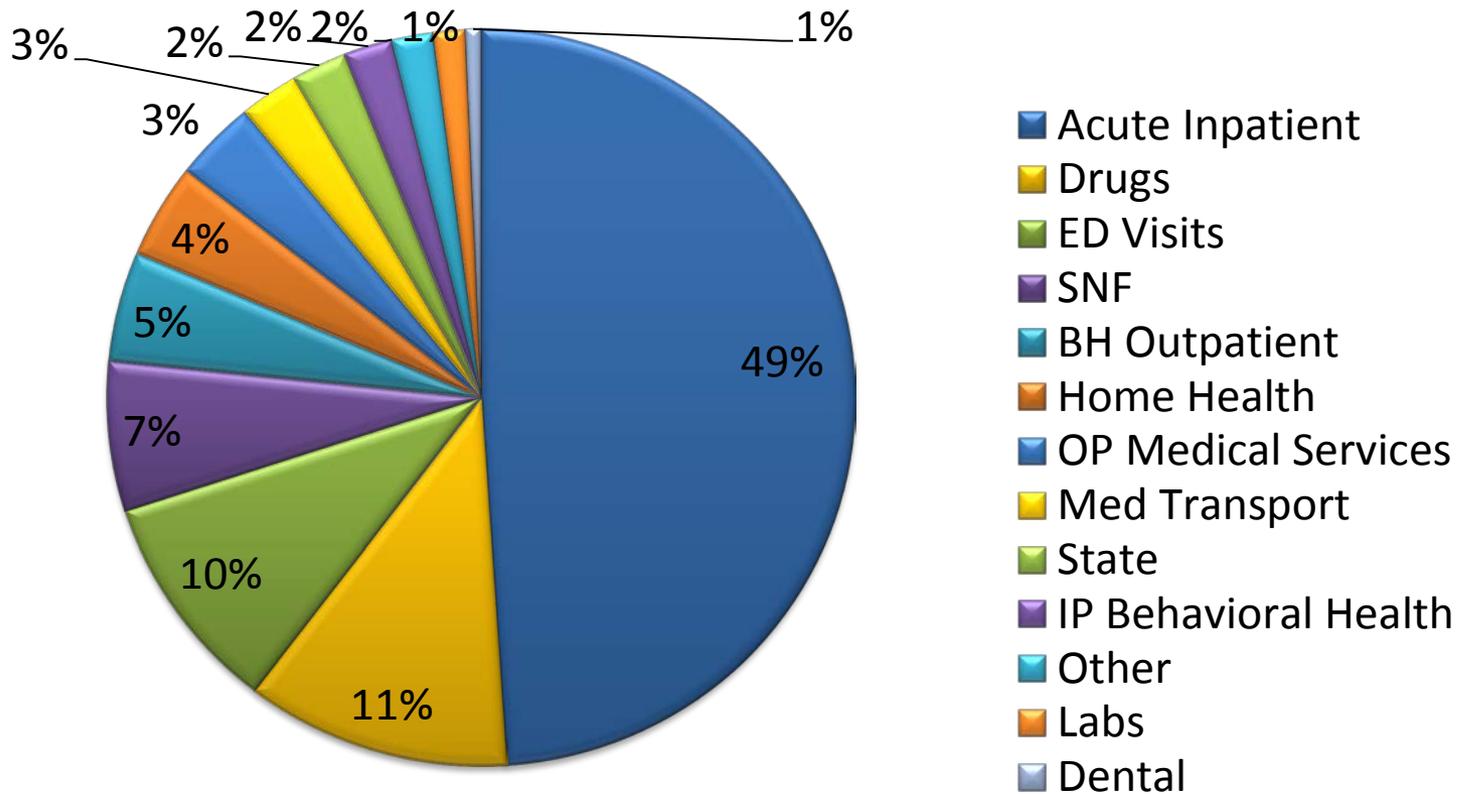
- Data set consisted of 8,132 clients from HMIS
- 4,193 adults were matched to State Medicaid data
- Top 10% of utilizers had average annual accruals of \$67,987



# Using Cross-Systems Data to Target High Cost, High Need Population

- 1,340 adult Medicaid beneficiaries identified as homeless and accrued > \$20,000 in costs annually:
  - 51% > 31 days in shelter
  - 32% > 61 days in shelter
  - 78% had 3+ ED visits
  - 49% had 6+ ED visits
  - 47% had 3+ inpatient visits
  - 52% had any chronic condition
- Max accrual was \$359,295 in one year
- \$67 million in annualized costs accrued by the 1,370 Medicaid beneficiaries

# Cost and Service Usage for Homeless High Cost Utilizers in CT



# Who Are We Reaching: 162 Housed

- ~\$76,000 Medicaid Benefits previous 12 months
- 77% are age 45 and over
- 80% Have any chronic condition
  - 60% Hypertension
  - 49% Diabetes
  - 35% Asthma
- 67% have 2 or more Chronic Health Conditions
- 83% Major Mental Health Diagnosis
- 65% Alcohol Use
- 88% Drug Use
- Concurrent involvement in the criminal justice system
  - 82% had at least one arrest
  - 45% had 6 or more arrests
  - 51% had 6 or more convictions

# Tracking Impact

- High Housing Retention Rate
  - 92% retention rate in supportive housing
- Decreases in the use of Emergency Departments (EDs) as the main source of care:
  - 90% actively connected to a primary health care provider
  - 91% actively connected to mental health care
  - 89% actively connected to specialty care
- Service utilization patterns are trending in a positive direction:
  - Overnight hospitalizations dropped from 8.5 before housing to 2.7 in the 12 months post housing placements and
  - ED visits decreased from 13 pre-housing to 5 in the 12 months post-housing



# Michigan's Health Through Housing Initiative Overview

**Paula Kaiser VanDam**

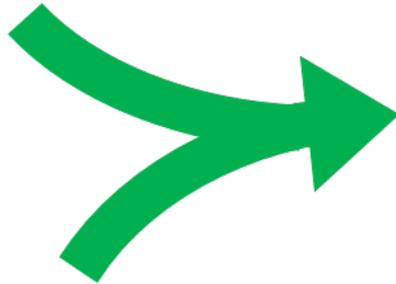
Director, Bureau of Community Services  
Michigan Department of Health &  
Human Services

# Health Through Housing

## Data Integration - Improve Capacity - Pilot

### Data Integration

- Data Matching for Prioritization of High Cost Population
- Improve Data Quality



### Permanent Supportive Housing (PSH) Frequent User Pilot

- Serving up to 200 Chronically Homeless High Medicaid Utilizers
- 3 Years Starting Fall 2018
- Case Management Funding per Voucher
- Address Other SDoH
- Systems Improvement Participation
- Housing Stability Health Outcomes Tracking and Evaluation

### Improve Capacity

- Improve Homeless Response System
- Gap Analysis
- Process Improvement Support
- Building Capacity to Enhance PSH Quality
- Building Capacity to Leverage Medicaid Reimbursement



# State Strategy – Data Integration

- Improve prioritizing of target population through data integration
  - Better data quality
  - Reduce duplication
  - Higher confidence in target population

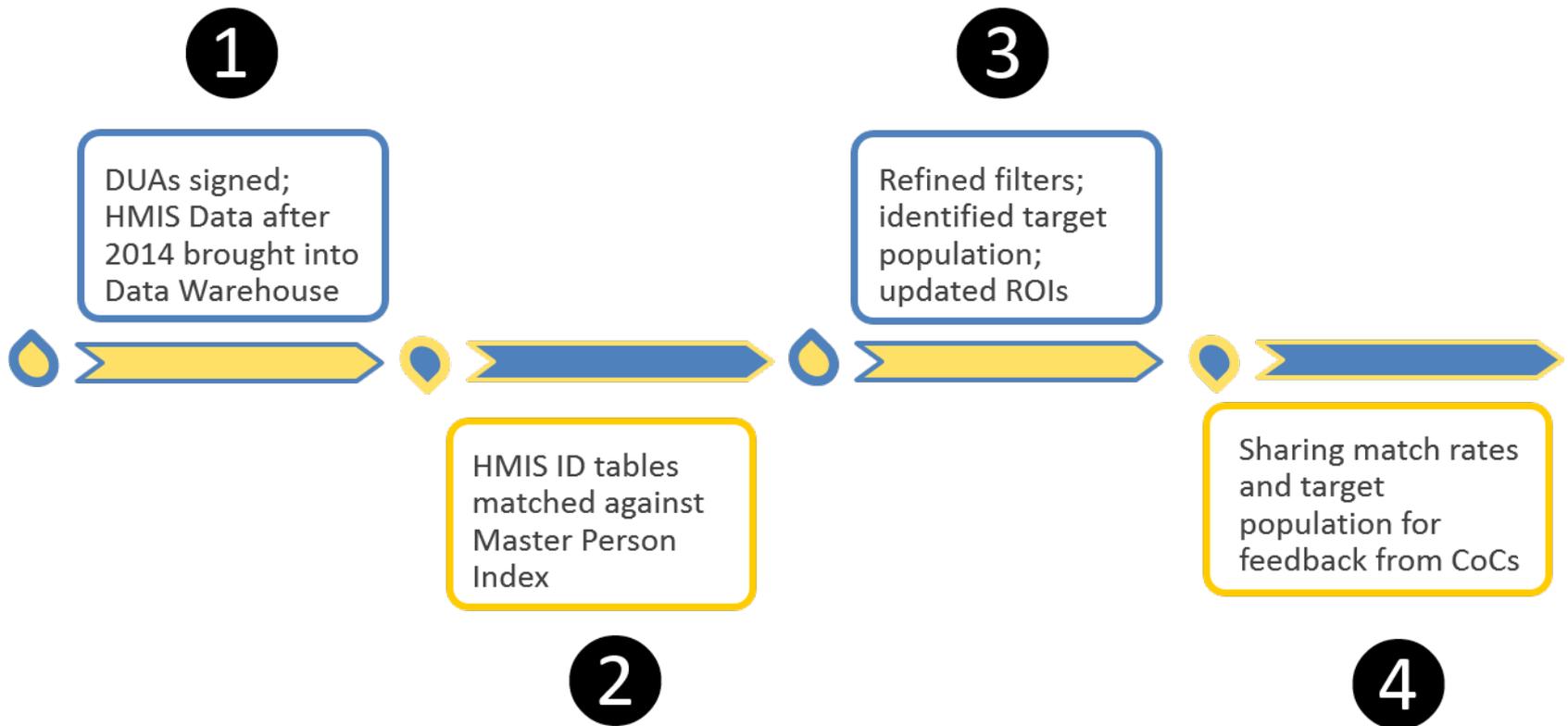
# Local Strategy – PSH Frequent User Pilot

- Locate currently homeless who are Medicaid high utilizers
- Connect them to permanent housing and support services
- Monitor their housing stability, use of ED and other high cost healthcare interventions
- Evaluate the effectiveness of permanent supportive housing on healthcare outcomes and cost

# Data Integration - Background

- Statewide HMIS system
- System began in 2005 -2006
- First match with Medicaid universe done in 2015 – 2016
- One-time match that provided valuable information about the two data sets and how they align
- Integration project was included as part of the State Innovation Model grant (SIM) in 2017
- Looking to automate match process to identify frequent users/high utilizers and help CoCs refine their prioritization process

# Michigan Data Integration Process



# Michigan Data Integration

- Integrating HMIS data into MDHHS data warehouse for matching against Medicaid Master Person Index (MPI)
- Client match process:
  - Algorithm matched first name, last name, date of birth and full social security number
  - Homeless within the last two years
  - Current Medicaid enrollment
  - Enrolled in a housing, outreach, or shelter program
- Pilot Criteria:
  - \$10,000 or more in Medicaid claims in the last three years
  - Still homeless and interested in housing

# Michigan Data Integration (cont.)

- Initial match done manually
- Because of the size of the data set, exports were segmented into multiple payloads
- Secure transfer of the data from MSHMIS team to the MDHHS team who reassembled the data in the research database using the keys for the various tables

# Data Integration – Long Term Strategies

- Determine a standardized data payload
- Create a custom payload extract which will be run on a regular interval schedule
- Make the data transfer an automated process between the parties
- Routinely provide information from match to CoCs
- Explore new ways for Medicaid Health Plans to collaborate with homeless services providers to serve mutual clients

# Massachusetts' Experience

**Emily Cooper**

Chief Housing Officer

Massachusetts Executive Office of Elder  
Affairs



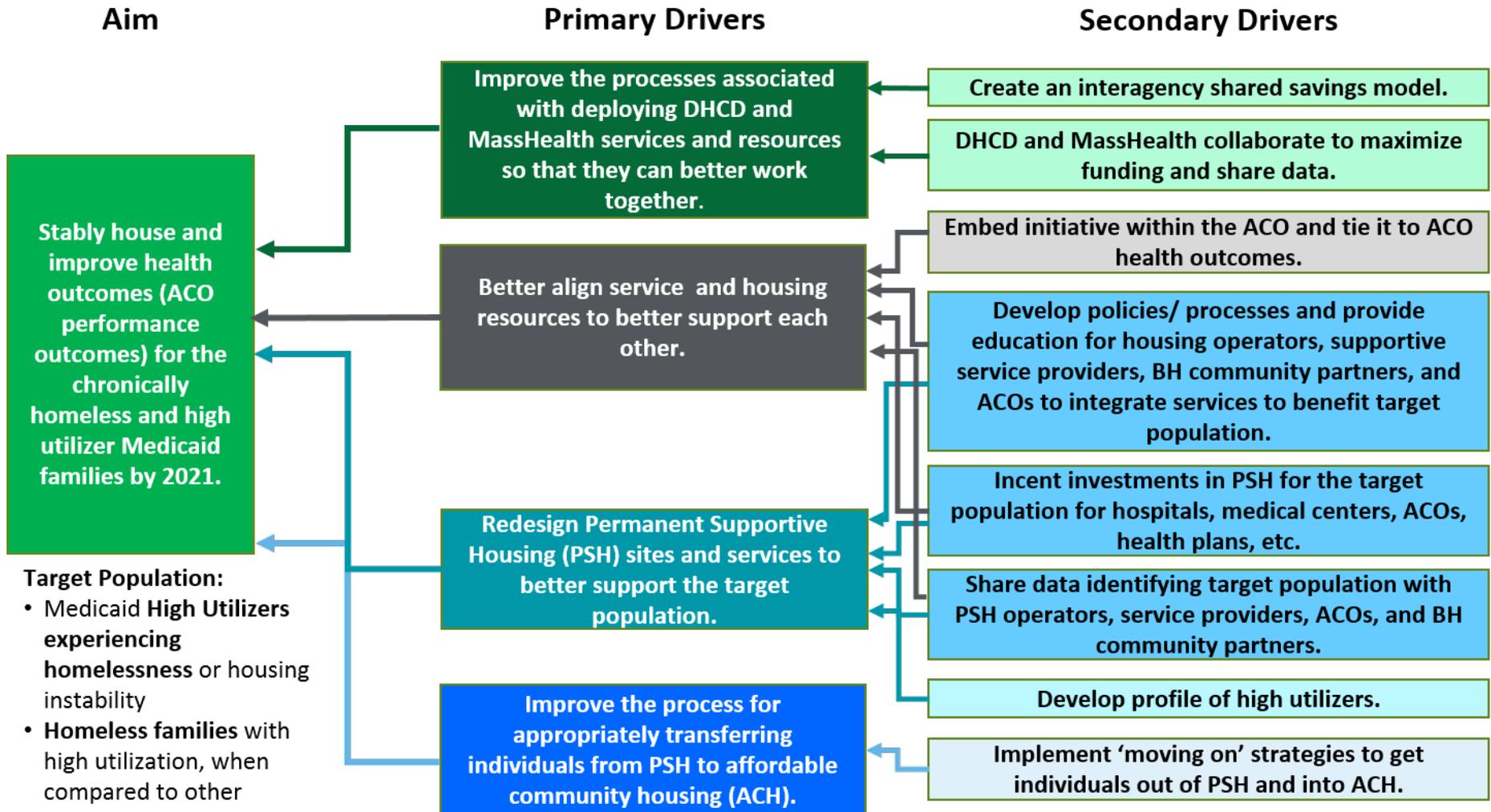
# Setting the Stage

- Massachusetts IAP Team included key leadership across Medicaid (MassHealth), Administration and Finance and Housing agencies
  - All parties aligned in goal to address chronic homelessness and high utilizers
- History of State-City Partnerships
  - Collaborated with Boston on homeless “surges”

# Setting the Stage (cont.)

- MassHealth is committed to addressing chronic homelessness
  - In 2005, Community Support Program for People Experiencing Chronic Homelessness was developed by MassHealth's Primary Care Clinician Plan behavioral health contractor
  - In 2016/17, Community Supportive Program services for chronically homeless individuals were added to two managed care contracts
  - Services include assessments to identify/address barriers to accessing clinical treatment and maintaining community tenure, developing safety plans, transportation to appointments, providing service coordination/linkage, and assisting members to obtain benefits, housing, and health care

# Massachusetts Driver Diagram



# Are Chronically Homeless Individuals High Utilizers of Health Care?

- Needed data to inform/confirm hypothesis
- Leveraged an existing data sharing agreement between the City of Boston and MassHealth
  - Boston provided ‘by name’ list of chronically homeless individuals
  - MassHealth analyzed coverage status, service utilization, and cost

# Characteristics of Population

- Average age = 53
- 81% male
- Average of 6.5 chronic conditions/individual
  - Most common conditions: mood and anxiety disorders, tobacco/alcohol/drug use, COPD/Asthma
  - 63% had more than four chronic conditions

# Coverage and Cost

- 15% of individuals had previously been enrolled in MassHealth, but lost coverage due to administrative reasons
- 32% of individuals on Fee-For-Service; number enrolled in Managed Care Organization (MCO)/Integrated Care Organization (ICO) growing
- Average per member per month cost of \$2,195
  - Highest cost services used by small number of people

# Service Utilization

- Average of 8.4 Emergency Department (ED) visits/year
  - 15% of individuals had 10+ ED visits/year with a cohort of 37 individuals that had 21+ visits/year
- Average of 2.8 hospital inpatient admissions/year
  - 6% of individuals had 4+ admissions/year with 16 people being admitted over 7 times
- Three local hospitals had the majority of ED visits and admissions
- 8% of chronically homeless individuals used no MassHealth funded services during the fiscal year

# Lessons Learned

- Need buy-in of leadership to make things happen
- Privacy laws make the mechanics of data sharing difficult
- Don't let perfect be the enemy of good



# Moving Forward

- City of Boston hoping to enter into BAA with MassHealth to use data to:
  - Inform matching through Coordinated Entry System
  - Ensure that chronically homeless individuals access, enroll, and maintain MassHealth benefits
- Boston working with local hospitals on a Permanent Supportive Housing initiative for chronically homeless
  - Allowing hospitals a “window into the system”
- Developing a statewide homeless data warehouse



# Questions?

Use the chat box to send in your written question.



# Polling Question #3

How likely is it that your state will engage in or expand cross-systems data matching and/or targeting as a result of this webinar:

- Very Likely
- Somewhat likely
- Not at all likely

## Closing Comments

- Melanie Brown
- Technical Director, Medicaid IAP,  
Center for Medicaid and CHIP Services,  
CMS

# Key Takeaways

Some state data matching lessons learned include:

- Data matching and analysis can effectively be used to identify target population needs and prioritize housing resources
- Many data sources and systems can be used in data matching
- Data Use Agreements are essential; leverage existing and update if needed and possible
- Review privacy statutes – some support data sharing, others don't
- Need agency/administration buy-in and support for success
- Analytical staffing is essential – consider option of partnering with other state agencies, colleges and universities, etc.
- Data matching takes time - don't let perfect be the enemy of good

# Reminder: Expressions of Interest for Partnerships Implementation Track Due Soon

Due: **November 15, 2018**

**@midnight ET**

Email form to:  
**MedicaidIAP@cms.hhs.gov**

**IAP** Medicaid Innovation Accelerator Program

**Promoting Community Integration through Long-Term Services and Supports  
State Medicaid-Housing Agency Partnerships Implementation**

**Expression of Interest Form**

The purpose of this Expression of Interest (EOI) form is to help the Medicaid Innovation Accelerator Program (IAP) with the selection process by getting a better sense of your state's established Medicaid-Housing Agency partnerships and planned activities to expand community living opportunities for Medicaid beneficiaries. The technical support available for states is detailed in the Program Overview document.

**I. Overview of State Medicaid-Housing Agency Partnerships Implementation Track Technical Support**

IAP is working closely with its federal partners, the US Department of Housing and Urban Development, the Substance Abuse and Mental Health Services Administration, the Office of the Assistant Secretary for Planning and Evaluation, and the US Interagency Council on Homelessness on planning and coordination of this technical support opportunity. IAP intends to leverage its collaboration with federal agencies to promote partnerships between state Medicaid agencies, state housing finance agencies, public housing agencies, state and local service agencies, and providers.

CMS is offering the State Medicaid-Housing Agency Partnerships Implementation Track for states that have well established Medicaid and housing agency partnerships and are ready to begin implementing housing and service changes to increase community living opportunities for their target population(s). It is designed to offer intensive, hands-on technical support for a ten-month period from November 2018 through August 2019. IAP will select up to eight states to participate in the Partnerships Implementation Track. Any state that has a written implementation plan and/or clearly identified strategies that can be implemented during the technical support period is able to submit an EOI. This includes any state that has completed partnerships work outside of IAP, as well as the 15 states that participated in the first two Partnerships Tracks—Alaska, California, Connecticut, Hawaii, Illinois, Kentucky, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Jersey, Oregon, Texas, Utah, and Virginia.

**General Information**

1. Name of your State Medicaid Agency: [Click here to enter text.](#)
2. Name of your State Medicaid Director: [Click here to enter text.](#)
3. The state Medicaid Director acknowledges that the state is seeking this IAP technical support and is committed to the proposed work:  
 Yes  No

# Key State Selection Dates

**November 15:**

Expressions of Interest Due to CMS

**November 27 – December 7:**

CMS holds 1:1 calls with interested states

**Early January 2019:**

State selection and state kick-off call

**Mid-late January 2019:**

Kick-off meeting with selected states

# Speaker Contact Information

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# Thank You!

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## Thank you for joining us!

Please complete the evaluation form  
following this presentation.