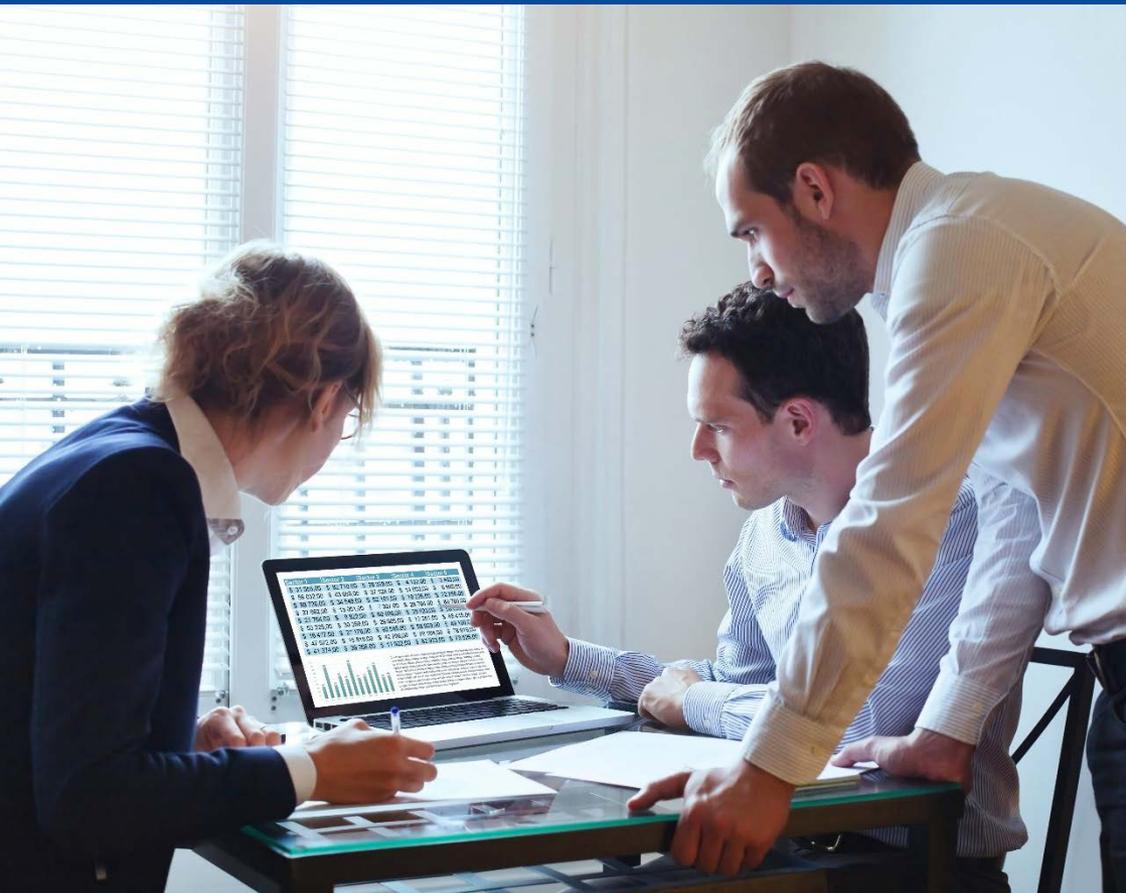




# Medicaid Innovation Accelerator Program



**Using Data Analytics to  
Better Understand  
Medicaid Populations  
with Serious Mental  
Illness: *Additional Data  
Sources***

**May 16, 2019**

**2:00 PM – 3:30 PM ET**

# Logistics for the Webinar

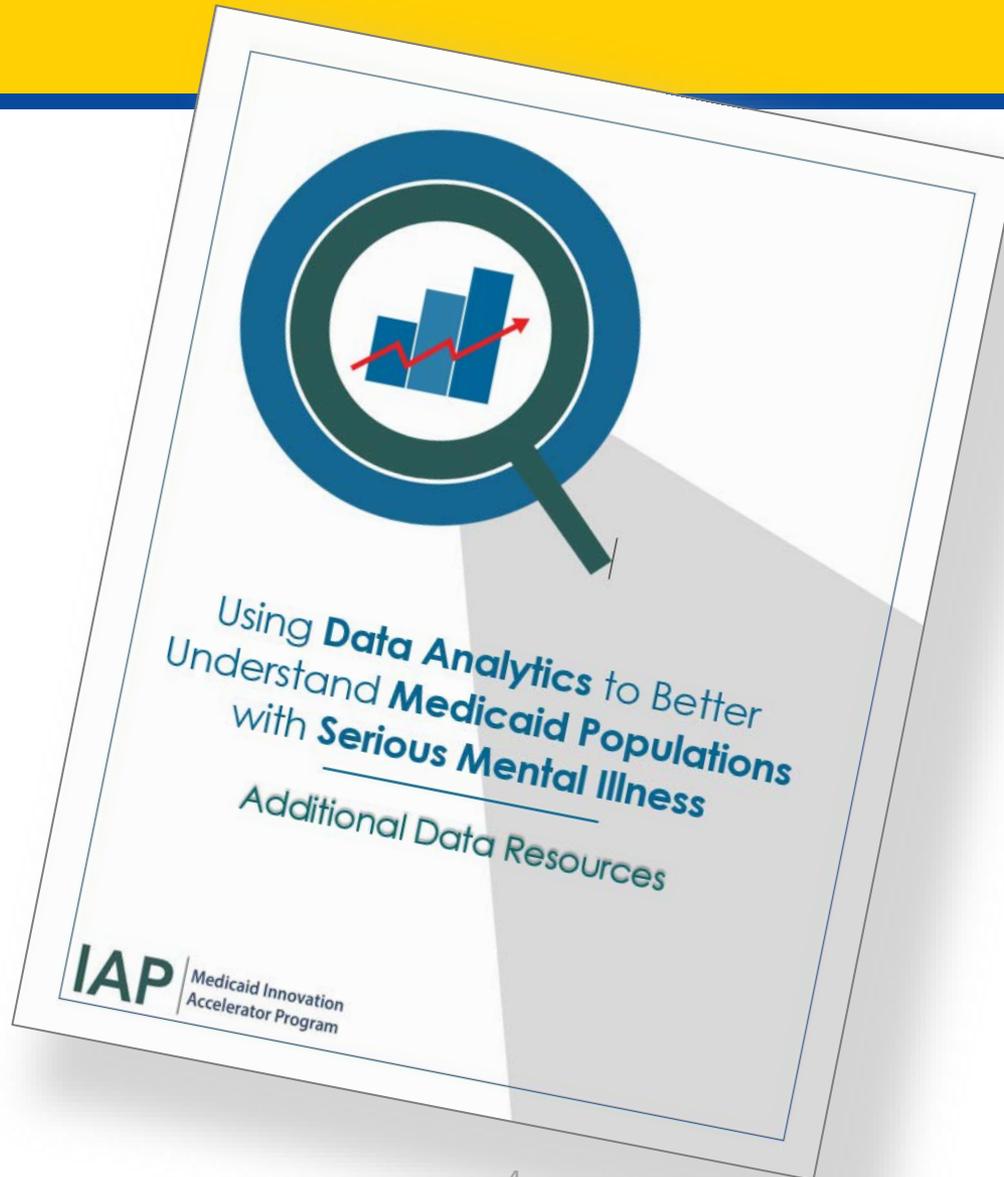
- All lines will be muted
- To participate in a polling question, exit out of “full screen” mode
- Use the chat box on your screen to ask a question or leave a comment
  - Note: chat box will not be seen if you are in “full screen” mode

# Welcome

Katherine Vedete



# Technical Resource for States



# Agenda

- Welcome
- Introduction to the Medicaid Innovation Accelerator Program's (IAP) Latest Technical Resource:
  - Objectives
  - Framework
- Minnesota Data Analysis on Social Risk Factors
- Data Analytic Examples
- Arizona Medicaid-Corrections Data Match
- Conclusion/Key Takeaways

# Presenters

- Katherine Vedete, Medicaid IAP, CMS
- Matt Roan, Health Management Associates
- Izanne Leonard-Haak, Health Management Associates
- Dr. Jeffery Schiff, Minnesota Medicaid
- Michal Rudnick, Arizona Medicaid

# Medicaid Innovation Accelerator Program

- Goal: To improve the health and health care of Medicaid beneficiaries, and to reduce costs by supporting states in their ongoing payment and delivery system reforms
- Supports state Medicaid agencies to build capacity in key program and functional areas by offering targeted technical support, tool development, and cross-state learning opportunities

# Introduction to IAP's Latest Technical Resource

Matt Roan



# Poll #1

- In what type of organization do you currently work (pick 1 that is most applicable)?
  - *State Medicaid agency*
  - *Other state agency*
  - *Managed Care Organization*
  - *Behavioral health provider*
  - *Medical provider*
  - *Social services*
  - *Other (enter in chat)*

# Poll #2

- How would you describe your primary area of responsibility within your organization (pick 1 that is most applicable):
  - *Manager*
  - *Policy*
  - *Program/Operations*
  - *Data Management/Analysis*
  - *Finance*
  - *Other*

# Why Understanding Medicaid Populations with SMI is Important

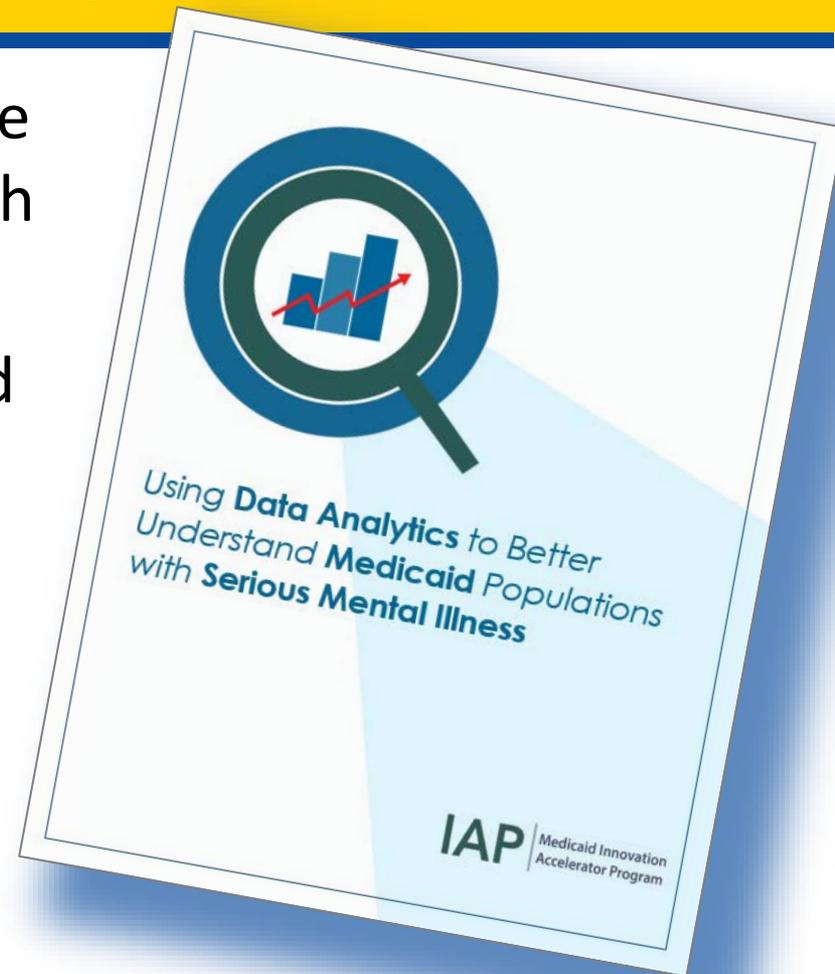
- Medicaid covers 21% of adults with mental illness and 26% of all adults with SMI<sup>1</sup>
- Factors including poverty, homelessness, and emotional trauma are likely to serve as important drivers of preventable/avoidable health care costs. Studies show that these non-medical factors often more acutely affect adult Medicaid beneficiaries with SMI<sup>2</sup>

<sup>1</sup> [Kaiser Foundation Infographic \(https://www.kff.org/infographic/medicaids-role-in-behavioral-health/\)](https://www.kff.org/infographic/medicaids-role-in-behavioral-health/)

<sup>2</sup> [Rutgers University Study \(http://www.cshp.rutgers.edu/Downloads/10890.pdf\)](http://www.cshp.rutgers.edu/Downloads/10890.pdf)

# This Technical Resource Complements Previous SMI Data Analytics Resource

- It is suggested that states use the new resource in conjunction with the IAP resource issued in 2018<sup>3</sup>
- Previous resource uses Medicaid claims, encounter and administrative data to better understand the population with SMI
- New Technical Resource may be used as a standalone document



<sup>3</sup> [SMI Technical Resource \(https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/program-areas/beneficiaries-with-complex-needs/index.html\)](https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/program-areas/beneficiaries-with-complex-needs/index.html)

# Objectives of New Technical Resource

- To identify pathways for state Medicaid agencies to acquire and conduct analyses with **non-Medicaid data** specific to factors that affect the Medicaid population with SMI
- To Identify **sample analytic questions** that could be answered with expanded analyses leveraging both Medicaid data and data from external data sources; and
- To assist state Medicaid agencies in using **data sources** that are available from or through other state/local public health, behavioral health, social services, or corrections agencies

# How to Use this Resource

- This Technical Resource is targeted to state Medicaid Agency policy and program staff
- State Medicaid policy, program and data analytic staff will need to work together to use this tool successfully
- The step by step instructions for the sample analyses provide a high-level description of the analytic process
- The instructions are written with a level of detail that would inform a data analyst's approach for working with data sets and developing queries within a state's specific Medicaid data environment

# Framework for Approaching Analysis

1. Identify Data Sources



2. Engage Data Partners



3. Develop Analytic Questions



4. Establish Data Sharing Agreements



5. Exchange Data and Check Data Quality



6. Match Data to Medicaid



7. Stratify Data to Identify SMI and other Sorting Criteria

# Data Considerations

- Partnering with
  - Other state agencies to identify existing data supports available to Medicaid beneficiaries with SMI
  - County and local governments and community based organizations
  - Managed Care Organizations (MCOs) to identify data related to social supports
- Types of non-Medicaid data used for analysis
  - Individual demographic data
  - Service/program level data
  - Outcomes data

# Why Understanding Medicaid Populations with SMI is Important

- Medicaid covers 21% of adults with mental illness and 26% of all adults with SMI<sup>1</sup>
- Factors including poverty, homelessness, and emotional trauma are likely to serve as important drivers of preventable/avoidable health care costs. Studies show that these non-medical factors often more acutely affect adult Medicaid beneficiaries with SMI<sup>2</sup>

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# Data Analytic Examples

- Food Insecurity Data
- Housing Data
- Corrections Data
- Analyses using Multiple Data Sources

# Questions & Answers



# Minnesota Data Analysis on Social Risk Factors

Jeff Schiff MD MBA



# Improving the Health of Medicaid Recipients who Experience Social Risk Factors

Jeff Schiff, MD MBA | Medical Director

# How can DHS address health disparities among program participants of different Ethnic backgrounds?

- It is DHS' charge to reduce disparities and improve outcomes for the racial and ethnically diverse populations of the state.
- We have historically done this by addressing the prevalence of many social risk factors (e.g. poverty, homelessness, lack of health insurance).
- Social risk factors
  - Family structure (including family composition)
  - Socio-economic indicators (income, neighborhood, homelessness)
  - Adult and parental functioning (mental health, substance use, child protection, incarceration)
  - (Non-impactible) Immigration status, ethnicity, language, lesbian, gay, bisexual, transgender, or queer status

# How can DHS address health disparities among program participants with Social Risk Factors?

Step 1: Analysis of Medicaid enrollment, claims data, plus cash assistance, child protection and prison data to identify the social risks MOST associated with poor health outcomes. The following factors were most associated with poor health.

- Substance Use Disorder
- Serious and Persistent Mental Illness
- Deep poverty (< 50% FPL)
- Homelessness
- Prison incarceration
- Children: all of the above, as well as child protection involvement

Step 2: Cross-division or cross-agency workgroups to identify interventions which can improve the health of these populations.

Step 3: Develop recommendations for improving the health of enrollees with each factor.

# Defining Serious Mental Illness/ Serious and Persistent Mental Illness

We chose a very narrow definition of Serious and Persistent Mental Illness (SPMI) for this project. To meet the criteria for this, they had to have Schizoaffective Disorder, Borderline Personality Disorder, Major Depression Disorder or Bipolar Disorder. This also had to have received a high level of mental health care, often inpatient or residential treatment.

In Minnesota

SPMI rate 6%

SMI rate 20%

# Analytic Approach by Risk Factor

- Prevalence of the risk factor (e.g. homelessness, prison incarceration)
- Prevalence of other risk factors in those with this risk factor
- Prevalence of health conditions (chronic disease, early death, preventable hospitalizations) in those with this risk factor
- Prevalence of health conditions in the children of those with this risk factor
- Prevalence by race/ethnicity and immigration status

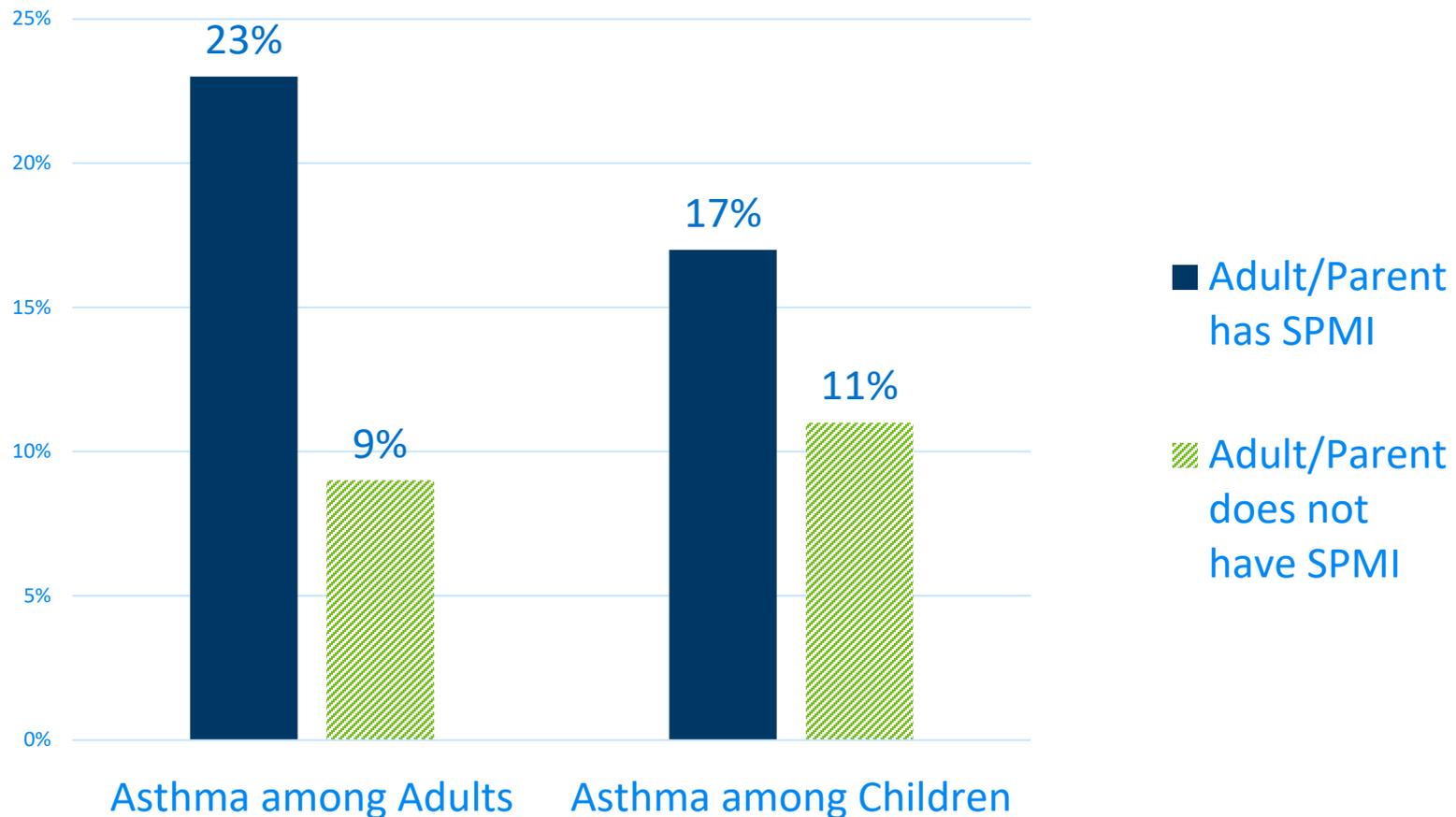
“The poor health outcomes experienced by adults with SPMI are second only to those experienced by those with SUD. ...

**One of the most striking findings is that in the 2.5 years it was measured, 1.7% of people with SPMI died, compared with 0.8% of the adult MA population.”**

## **Serious and Persistent Mental Illness (SPMI)**

- Adults diagnosed with SPMI have poor health outcomes for most conditions.
- They are 50 percent more likely to have asthma and diabetes, and 20 percent more likely to have hypertension or Chronic Obstructive Pulmonary Disease (COPD) than those without this diagnosis.
- Adults with SPMI incur the highest medical costs of any group that was examined.
- Children whose parents have SPMI are more likely to have asthma, Attention-Deficit/Hyperactivity Disorder (ADHD) and Substance Use Disorder (SUD) as teenagers than children whose parents do not have a diagnosis of SPMI.

# Asthma rates among adults with SPMI and their children, compared with asthma rates among all Medicaid enrollees



# Resources/Contacts

The Minnesota Department of Human Services worked with Health Management Associates (HMA) and the Disability Policy Consortium (DPC) to identify the Medicaid enrollees with the worst health disparities:

- **MN DHS**
- [Accounting for Social Risk Factors in Minnesota Health Care Program Payments \(https://edocs.dhs.state.mn.us/lfserver/Public/DHS-7834-ENG\)](https://edocs.dhs.state.mn.us/lfserver/Public/DHS-7834-ENG)
- This report also includes work with Wilder Research Center and the University of Minnesota to find interventions that are likely to lead to reduced disparities among people experiencing homelessness and people with Substance Use Disorder.
  
- **HMA & DPC**
- [An Account of Health Disparities in Minnesota's Medicaid Population: Which Populations Within the Medicaid Program Experience the Greatest Health Disparities and Poorest Health Outcomes? \(https://www.healthmanagement.com/wp-content/uploads/MN-Summary-Report-to-Legislature\\_DHS\\_HMA\\_DPC\\_08.01.17\\_6.11.18.pdf\)](https://www.healthmanagement.com/wp-content/uploads/MN-Summary-Report-to-Legislature_DHS_HMA_DPC_08.01.17_6.11.18.pdf)
- This report describes the results of a quantitative analysis of the relationship between Minnesota Medicaid enrollees' social risk factors and health outcomes.
- The [technical white paper \(https://www.healthmanagement.com/wp-content/uploads/MN-White-Paper\\_DHS\\_HMA\\_DPC\\_08.01.17\\_6.11.18.pdf\)](https://www.healthmanagement.com/wp-content/uploads/MN-White-Paper_DHS_HMA_DPC_08.01.17_6.11.18.pdf) can also be found online.
  
- **PROJECT TEAM**
- MN DHS: Jeff Schiff, MD MBA | Medical Director
- MN DHS: Dr. Justine Nelson
- HMA: Ellen Breslin, MPP; Dr. Anissa Lambertino
- DPC: Dennis Heaphy, MPH; Tony Dreyfus, MCP

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**651-431-5608**

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# Questions & Answers



## **Data Analytic Examples Using:**

- 1. Food Insecurity Data**
- 2. Housing Data**
- 3. Corrections Data**
- 4. Analyses using Multiple Data Sources**

# Discussion of Key Analytics Questions

For each type of additional data the Technical Resource provides:

- Data Landscape
- Analysis Questions
- Sample Analytic Question
  - Data Required
  - Analysis Approach
  - Sample Output



# 1. Food Insecurity Data Landscape

- **Federal programs** such as the U.S. Department of Agriculture Supplemental Nutrition Assistance Program (SNAP) which is administered by states
- **National data sets** provided by organizations that study geographic patterns related to hunger, food deserts, or food insecurity
- **State Medicaid programs**, which may have data from health risk assessments pertaining to food insecurity for individual beneficiaries with SMI, or information about covered and utilized nutritionist services, as well as Medicaid MCOs that may include supports from nutritionists as a part of their care management approach



# Food Insecurity Data: Analysis Questions & Data Required

Analysis Question	Required Data
<p>1. Are beneficiaries with SMI who are eligible for SNAP receiving those benefits at rates comparable to beneficiaries without SMI?</p>	<ul style="list-style-type: none"> <li>• SNAP and Medicaid eligibility criteria</li> <li>• SNAP beneficiary data</li> <li>• Medicaid beneficiary data (including identification of beneficiaries with SMI)</li> </ul>
<p>2. Do Medicaid beneficiaries with SMI who are receiving SNAP have better medication adherence?</p>	<ul style="list-style-type: none"> <li>• SNAP beneficiary data</li> <li>• Medicaid beneficiary data (including identification of beneficiaries with SMI)</li> <li>• Medicaid claims and encounters (pharmacy claims)</li> </ul>
<p>3. Do Medicaid beneficiaries with SMI who live in food deserts have higher rates of chronic disease than Medicaid beneficiaries with SMI who do not live in areas with poor access to food?</p>	<ul style="list-style-type: none"> <li>• U.S. Department of Agriculture Food Access Resource Atlas</li> <li>• Medicaid beneficiary data (including identification of beneficiaries with SMI and county of residence)</li> <li>• Medicaid claims and encounters (with diagnosis codes to identify chronic conditions)</li> </ul>



# Food Insecurity Data:

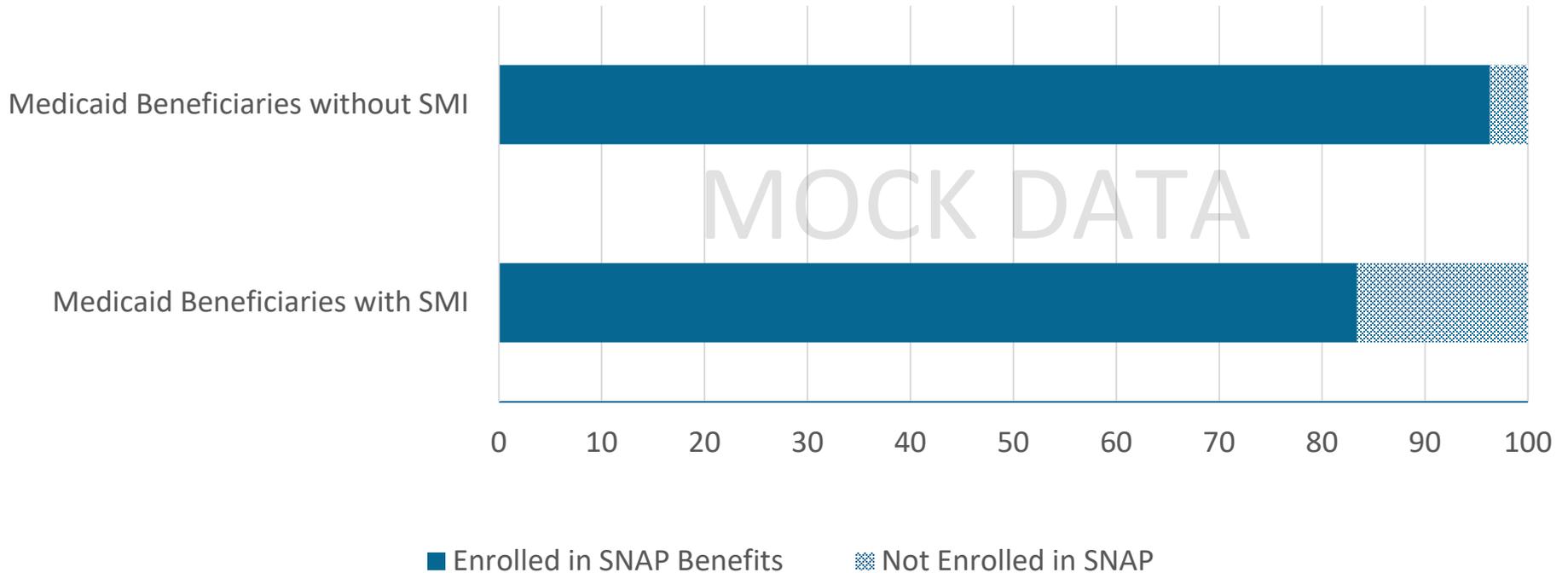
## Sample Analysis: SNAP and Medicaid

1. Compare SNAP and Medicaid eligibility criteria for Medicaid eligibility categories that include beneficiaries with SMI to validate that Medicaid eligibility is an indicator of likely eligibility for SNAP benefits.
2. If necessary, exclude Medicaid beneficiaries who are not likely to be eligible for SNAP benefits.
3. Match Medicaid enrollment data with SNAP enrollment files on the basis of identifiers such as last name, first name, and date of birth.
4. Calculate the number of Medicaid beneficiaries with SMI who are found in the SNAP enrollment file, and the number who do not appear in the SNAP enrollment file.
5. Calculate the percentage of beneficiaries with SMI who are likely to be eligible for SNAP benefits but are not enrolled.
6. Repeat steps 4 and 5 for a comparison group of beneficiaries who do not have SMI.



# Food Insecurity Data: Sample Output

FIGURE F.3 – MEDICAID BENEFICIARIES ENROLLED IN SNAP



Abbreviations: SNAP, Supplemental Nutrition Assistance Program; SMI, serious mental illness.

# Maryland: Medicaid-SNAP Data Match

- 2017 Study led by Benefits Data Trust, published in the journal Population Health Management<sup>4</sup>
- Linked Medicaid Eligibility and Utilization Data to SNAP Eligibility Data for Medicare and Medicaid dual-eligible and SNAP-eligible beneficiaries age 65+
- Focus to identify if SNAP benefits were associated with reduced hospital and emergency department utilization
- Study found 14% lower odds of hospitalization and 10% lower odds of Emergency Department (ED) visit than a eligible non-participant of SNAP

<sup>4</sup> [Population Health Management Study](https://www.bdtrust.org/wp-content/uploads/2017/07/Pop-Health-Mgmt-Hospitalizations-linked.pdf)  
(<https://www.bdtrust.org/wp-content/uploads/2017/07/Pop-Health-Mgmt-Hospitalizations-linked.pdf>)





## 2. Housing Data Landscape

- Creating Proxy Criteria for Housing Instability, e.g. 3 or more addresses in a year
- Leveraging administrative or national data sets (e.g. Homeless Management Information Systems (HMIS))
- Requiring MCOs or Administrative Services Organizations to share data for risk assessments or care needs assessments
- Examining Medicaid-funded Housing Related Services that can be covered (see 2016 CMS Informational Bulletin<sup>5</sup>)

<sup>5</sup>[2016 CMS Informational Bulletin \(https://www.medicaid.gov/federal-policy-guidance/downloads/cib-06-26-2015.pdf \)](https://www.medicaid.gov/federal-policy-guidance/downloads/cib-06-26-2015.pdf)



# Housing Data: Example Question & Data

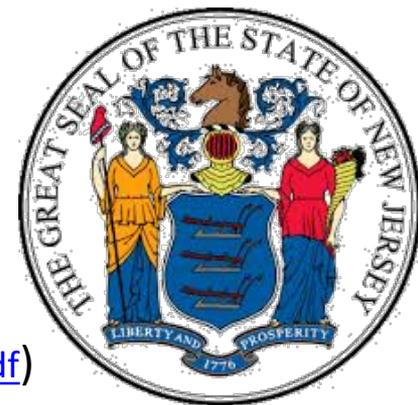
Analysis Question	Required Data
<p>1. Is homelessness more prevalent among Medicaid beneficiaries with SMI as compared to Medicaid beneficiaries without SMI?</p>	<ul style="list-style-type: none"><li>• HMIS data reflecting history of homelessness <b><u>OR</u></b></li><li>• Administrative data indicating history of homelessness <b><u>AND</u></b></li><li>• Medicaid beneficiary data*</li></ul>
<p>2. How do the rates of hospital ED and inpatient psychiatric admissions compare between beneficiaries with SMI who are homeless and beneficiaries with SMI who are not experiencing homelessness?</p>	<ul style="list-style-type: none"><li>• HMIS data reflecting history of homelessness <b><u>OR</u></b></li><li>• Administrative data indicating history of homelessness <b><u>AND</u></b></li><li>• Medicaid beneficiary data*</li><li>• Medicaid claims and encounters data (procedure codes)</li></ul>
<p>3. What proportion of the Medicaid population with SMI is considered to have housing instability? How many are receiving Medicaid-funded housing-related services/ supports? How do these supports affect their ED and psychiatric inpatient use, compared with the population with SMI that has housing instability and doesn't access these services?</p>	<ul style="list-style-type: none"><li>• HMIS data reflecting history of housing instability <b><u>OR</u></b></li><li>• Proxy for housing instability based on multiple addresses over a defined time (e.g. 3+ addresses in 12 mos.) <b><u>AND</u></b></li><li>• Medicaid beneficiary data*</li><li>• Administrative data from Medicaid-funded housing-related services and supports</li></ul>

\*including identification of beneficiaries with SMI

# New Jersey: Medicaid-Homeless Data Match

- 2017 Study by Rutgers University<sup>6</sup>
- Linked Homeless Management Information System (HMIS) Data to MMIS Data
- Focus to identify opportunities to generate Medicaid savings and improve patient outcomes among Medicaid beneficiaries that use homeless services
- The linked populations were much more likely to have substance use, mental health diagnosis, substance use with Mental Health (MH) Diagnosis or SMI
- Higher users of inpatient and ER care

<sup>6</sup>[Rutgers University Study \(http://www.cshp.rutgers.edu/Downloads/11230.pdf\)](http://www.cshp.rutgers.edu/Downloads/11230.pdf)





## 3. Corrections Data Landscape

- Most likely sources: corrections agencies and county jails
- State Correctional level easiest
- County-level jails more challenging
  - Depending on the number of counties, may want to consider prioritizing counties with higher populations
- Need to consider eligibility rules around Medicaid
  - Some states terminate Medicaid eligibility when incarcerated
  - Other suspend Medicaid eligibility and resume upon release
- Some national data sets available (see Appendix in Technical Resource)



# Corrections Data: Analysis Questions

Analysis Question	Required Data
1. How many and what percentage of Medicaid beneficiaries with SMI have been in a corrections facility (jail or prison) in a given period of time?	<ul style="list-style-type: none"><li>• Correctional system data including historical data.*</li><li>• Medicaid beneficiary data (including identification of beneficiaries with SMI)</li></ul>
2. What was the average amount of time between release from the correctional system for a beneficiary with SMI to access a Medicaid medical or behavioral health service?	<ul style="list-style-type: none"><li>• Correctional system data including historical data for the last 2 years.*</li><li>• Medicaid beneficiary data (including identification of beneficiaries with SMI)</li><li>• Medicaid claims and encounters data (date of service)</li></ul>
3. What are the most common initial services accessed by beneficiaries with SMI that become Medicaid-eligible after release from the corrections system	<ul style="list-style-type: none"><li>• Correctional system data including historical data for the last 2 years.*</li><li>• Medicaid beneficiary data (including identification of beneficiaries with SMI)</li><li>• Medicaid claims and encounters data (procedure codes)</li></ul>

\*Note: data should include unique identifiers such as first name, last name, date of birth and release dates. This analysis can be run with state prison data and/or county jail data.

# Questions & Answers



# Arizona Medicaid-Corrections Data Match

Michal Rudnick



# AZ Medicaid and Criminal Justice Involved Members

Michal Rudnick

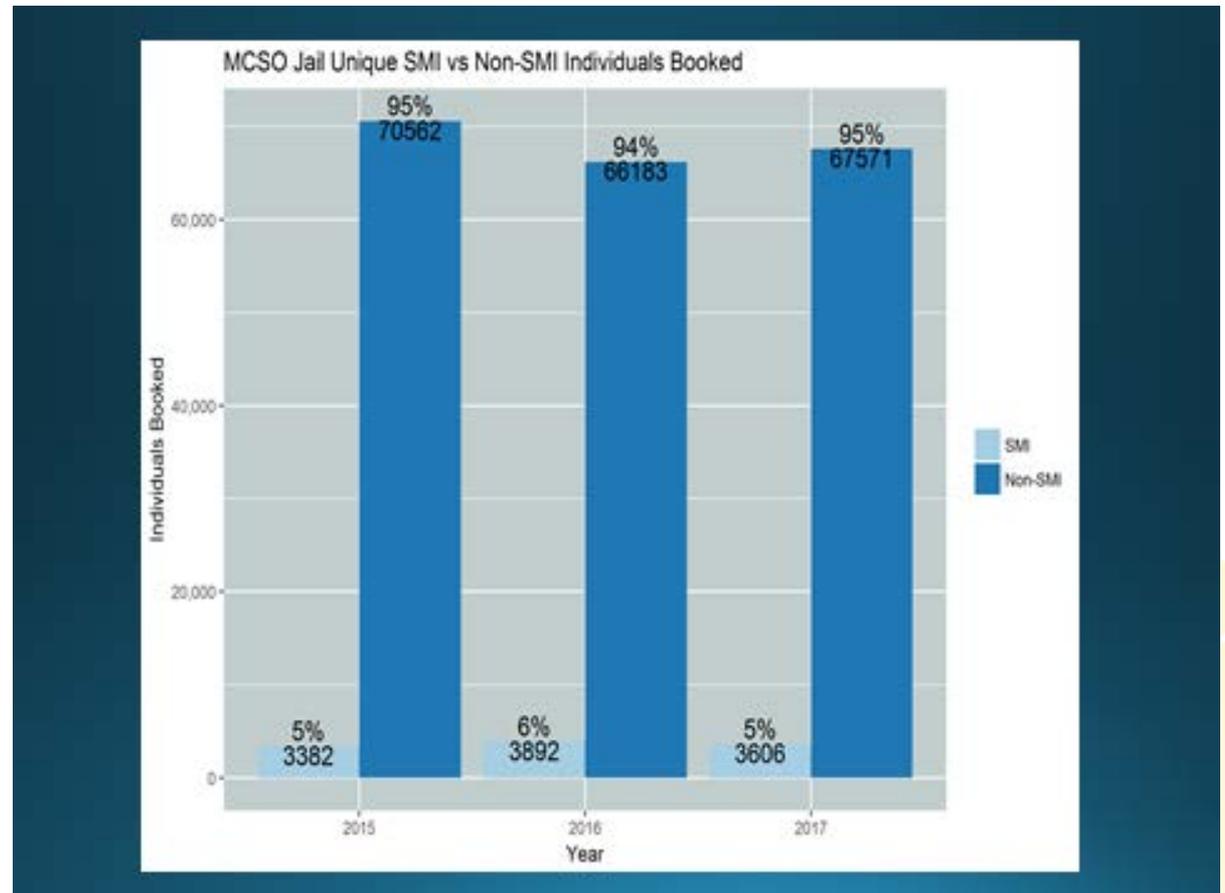
Project Manager

AHCCCS (Arizona's Medicaid Agency)



# Unique Challenges for SMI

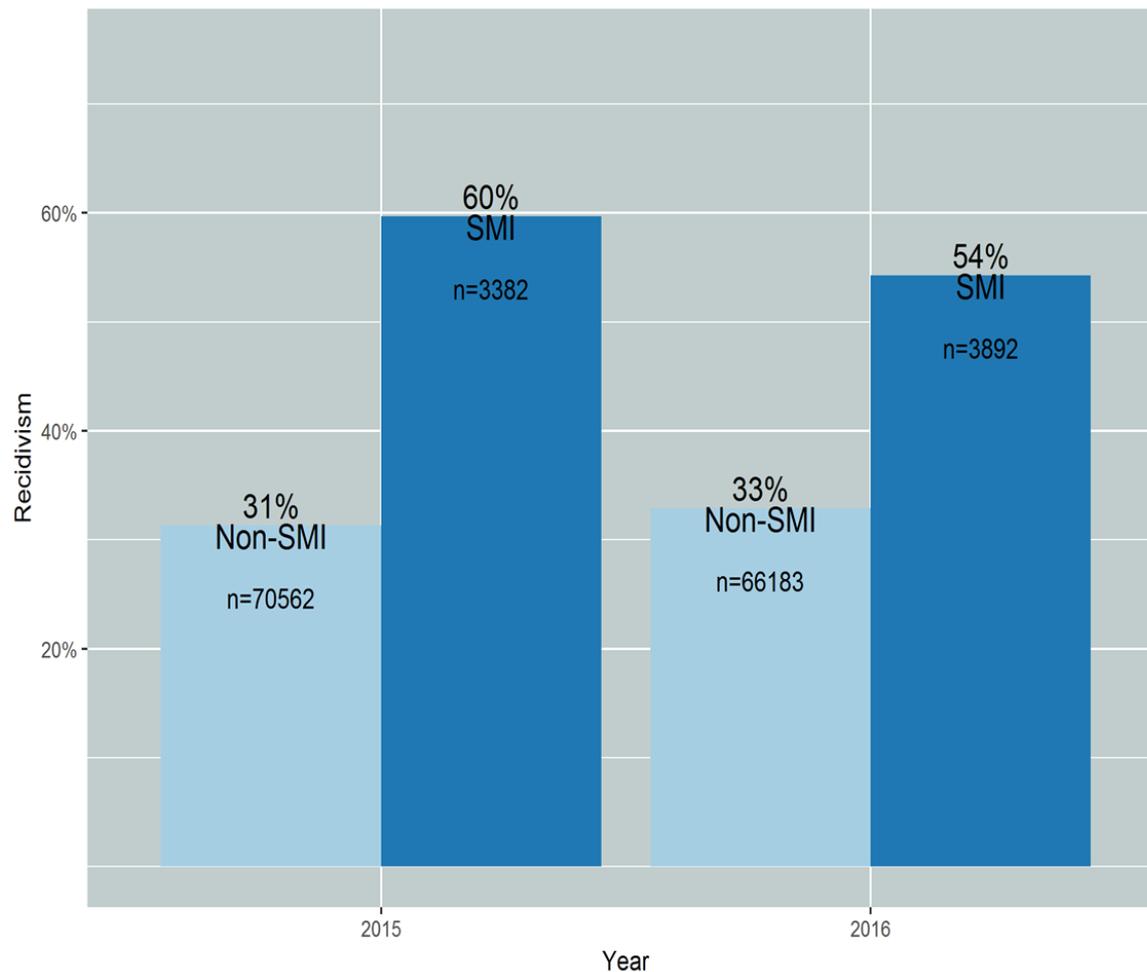
In AZ's largest county, the number of individuals booked into jail is about 5% of the total incarcerated population...



# Recidivism for Individuals with an SMI

...of the individuals booked with an SMI, the % who recidivate is significantly higher than non-SMI

MCSO Jail Recidivism Rates for All Groups



# Most Vulnerable Inmates: Point in time

Total population : 7,494 (5/18/18)

- Hepatitis C 507 (6.8%)
- Hypertension 466 (6.2%)
- Heart Disease/ Hyperlipidemia 152 (2%)
- Diabetes 168 (2/2%)
- SMI Active and Inactive 621 (8.3%)
- Mental Health Chronic Care 1013 (13.5%)
- Clinical Opiate Withdrawal Scale (COWS) 140 (1.9%)
- Clinical Institute Withdrawal Assessment (Alcohol CIWA-A and Benzodiazepines CIWA-B) 118 (1.6%)

# Data Sharing Agreements

- Data addresses:
  - Protocols for optimizing use of services for Mental Health (MH) and Substance Use Disorder (SUD) Courts
  - Coordination of care for individuals with an SMI designation
  - “Reach-in” - Coordination of Care for releasing members
- Data collected includes at a minimum: name, date of birth, AHCCCS ID, social security number, gender, Court Ordered Treatment (COT) status, public fiduciary/guardian status, assigned provider(s), name of AHCCCS Complete Care (ACC) plan, PCP name & #, diagnosis, medications

# Privacy and Information Sharing



## MARICOPA COUNTY CORRECTIONAL HEALTH SERVICES AUTHORIZATION FOR RELEASE OF MEDICAL INFORMATION

I, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
**Patient Name**                      **DOB**                      **Booking #**

I hereby authorize Maricopa County Correctional Health services (CHS) to disclose and share written and oral information for the purpose of coordination of care while in custody and to support my transition to the community. This form is intended to allow for a multiple agency/entity collaboration to most effectively address and accommodate identified health, mental health, and or human service needs I may have.

**Please check the specific entities to whom you authorize a release and sharing of information:**

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Mercy Care (RBHA)  | <input type="checkbox"/> Lifewell                    | <input type="checkbox"/> Horizon Health & Wellness      |
| <input type="checkbox"/> Community Bridges, Inc (CPEC)  | <input type="checkbox"/> Valle del Sol               | <input type="checkbox"/> Rally Point                    |
| <input type="checkbox"/> LaFrontera-Empact  | <input type="checkbox"/> Terros Health               | <input type="checkbox"/> Circle the City                |
| <input type="checkbox"/> Partners in Recovery   | <input type="checkbox"/> Chicanos Por La Causa       | <input type="checkbox"/> Southwest Network              |
| <input type="checkbox"/> NCADD  | <input type="checkbox"/> Southwest Behavioral Health | <input type="checkbox"/> Building Blocks Counseling     |
| <input type="checkbox"/> Marc Community Resources   | <input type="checkbox"/> CHEEERS                     | <input type="checkbox"/> Jewish Family and Children     |
| <input type="checkbox"/> Community Partners, Inc  | <input type="checkbox"/> MIHS - First Episode Center | <input type="checkbox"/> Juvenile Probation             |
| <input type="checkbox"/> Native American Connections  | <input type="checkbox"/> Tempe Human Services        | <input type="checkbox"/> ConnectionsAZ (UPC)            |
| <input type="checkbox"/> RI International (RRC)   | <input type="checkbox"/> Community Medical Services  | <input type="checkbox"/> Crisis Prep and Recovery (CPR) |
| <input type="checkbox"/> Maricopa County: <input type="checkbox"/> APD <input type="checkbox"/> Human Services <input type="checkbox"/> Public Health |  |   |
| <input type="checkbox"/> Other: _____   |  |   |

**AZ Complete Care Health Plans**

- |   |   |
|---|---|
| <input type="checkbox"/> Mercy Care (RBHA)                  | <input type="checkbox"/> United Healthcare Community Plan |
| <input type="checkbox"/> Banner University Family Care      | <input type="checkbox"/> Care1st                          |
| <input type="checkbox"/> Steward Health Choice              | <input type="checkbox"/> Arizona Complete Health          |
| <input type="checkbox"/> Magellan Complete Care             | <input type="checkbox"/> DES/DD                           |
| <input type="checkbox"/> Children's Rehabilitative Services | <input type="checkbox"/> Tribal RBHA                      |
| <input type="checkbox"/> American Indian Health Program     | <input type="checkbox"/> Other: _____                     |

**Please initial next to the types of information to share and/or release:**

- |                                |                              |                        |
|--------------------------------|------------------------------|------------------------|
| ____ Discharge/Release Summary | ____ History & Physical Exam | ____ Operative Reports |
| ____ X-ray reports             | ____ Lab Tests               | ____ Medications       |

# What's in it for corrections?

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- Shared commitment to improving health and reducing recidivism
- Jails and prisons must provide special care to inmates with a serious mental illness; data sharing is critical to continued care
- Cost savings – the state and counties are responsible for healthcare costs of inmates

# Initiatives Resulting from Data

- Pre-release eligibility process available to all inmates releasing to the community
- 2<sup>nd</sup> Chance Re-entry Centers  
(<https://www.youtube.com/watch?v=bwaMGUFaQ0c&feature=youtu.be>)  
Partnership with AZ Governor's Office and multiple state agencies
- Targeted Investments  
(<https://www.dropbox.com/s/ivh6furduq94lh4/North%20End%20Community%20Connections%20A%20Targeted%20Investment%20Project.mp4?dl=0>)  
Integrated Health Clinics co-located with probation/parole

# Best Practices & Lessons Learned

- Can't eat the elephant in one bite...
- Begin with smaller groups (e.g. one county) to establish processes & agreements
- Collaborate, collaborate, collaborate:
  - Identify key stakeholders in the Medicaid agency and in the CJ space (e.g. sheriffs, correctional healthcare staff, IT reps.)
  - Have a regular cadence of meetings and identify scope and strategies early
  - Learn each entities language – e.g. criminogenic, recidivism, SMI qualifiers, case plans
  - Identify key points of contact within jurisdictions & at Medicaid

# Resources

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- [AHCCCS Website](https://www.azahcccs.gov/AHCCCS/Initiatives/CareCoordination/justiceinitiatives.html)  
(<https://www.azahcccs.gov/AHCCCS/Initiatives/CareCoordination/justiceinitiatives.html>) Templates on this page address:
  - Enrollment Suspense/Reinstatement IGA
  - Technical Requirements for Enrollment Suspense Agreement
  - Hospitalization IGA
- [AHCCCS Contracts with Health Plans addressing Reentry](https://www.azahcccs.gov/Resources/Downloads/ContractAmendments/ACC/ACC_Contract_Amend_1.pdf)  
([https://www.azahcccs.gov/Resources/Downloads/ContractAmendments/ACC/ACC\\_Contract\\_Amend\\_1.pdf](https://www.azahcccs.gov/Resources/Downloads/ContractAmendments/ACC/ACC_Contract_Amend_1.pdf))

# Questions & Answers



# 4. Analyses Using Multiple Data Sources

- Targeted analyses can be valuable, but where analytic resources are available, a more comprehensive approach is recommended
- Data analytics that combine data from multiple sources provides a more comprehensive understanding of beneficiaries with SMI and the opportunities to improve the multi-disciplinary services that support them
- Some states, like Utah, have already begun combining data from multiple areas outside of Medicaid

# Utah Multi-Agency Data Match: Medicaid, Housing & Behavior Health

- Initiated by Utah Department of Workforce Development<sup>7</sup>
- Conducted 2 data matches:
  - HMIS and their Medicaid eligibility system
  - County jail and HMIS
  - County behavioral health providers and HMIS
- Felt the cross system integrated data capacity helps the state
  - better understand system level operation, effectiveness & efficiency
  - Supports goal of data-driven decision-making

<sup>7</sup>[Utah Report](#)

(<https://www.hudexchange.info/resources/documents/H2-Final-Report.pdf>)





# Key Takeaways

Matt Roan

# Key Takeaways

- As state agencies look for additional data to understand population health needs, a focused analysis of the needs of beneficiaries with SMI can help to identify which data sets can be helpful
- Engaging data sharing partners includes identifying the joint benefit of sharing data
- When data matching is not practical, proxy measures using Medicaid administrative data may be useful
- Analyses can build on one another as new data sets become available

# Poll #3

- What types of non-Medicaid data might you use related to Medicaid beneficiaries with SMI might you pursue as a result of this webinar (pick all that apply)?
  - *Food Insecurity*
  - *Corrections*
  - *Housing*
  - *Multi-factor*
  - *Other (enter in chat)*

# Where Can You Find the Resource?

An official website of the United States government

**Medicaid.gov**  
Keeping America Healthy

Q Search | Archive | Site Map | FAQs

Federal Policy Guidance | Resources for States | Medicaid | CHIP | Basic Health Program | State Overviews | About Us

Home > Resources for States > Innovation Accelerator Program

## Medicaid Innovation Accelerator Program

Program Areas

- Substance Use Disorders
- Medicaid Beneficiaries with Complex Care Needs and High Costs**
- Community Integration through Long-Term Services and Supports
- Physical and Mental Health Integration

### Improving Care for Medicaid Beneficiaries with Complex Care Needs and High Costs

Beneficiaries with Complex Care Needs and High Costs (BCNs) are Medicaid beneficiaries who, because of their health and/or social conditions, are likely to experience high levels of costly but preventable service utilization, and whose care patterns and costs are potentially "impactable" (CMCS July 24, 2013 Informational Bulletin (PDF 423.03 KB)). This subset of Medicaid beneficiaries ("super-utilizers") is an extremely heterogeneous group with varying medical, behavioral, and psycho-social needs. The distribution of spending is uneven within Medicaid, with just five percent of Medicaid beneficiaries accounting for 54 percent of total Medicaid expenditures and one percent of Medicaid beneficiaries accounting for 25 percent of total Medicaid expenditures.

### Program Support for State Medicaid Agencies

Under this program priority area, targeted program support is available for states that have ongoing efforts to improve care coordination for Medicaid BCNs. Medicaid IAP's specific goals are to:

State Medicaid & CHIP Profiles | About Us

[Link to Beneficiaries with Complex Care Needs and High Costs Program Area: https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/program-areas/beneficiaries-with-complex-needs/index.html](https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/program-areas/beneficiaries-with-complex-needs/index.html)

# Thank You!

**Thank you for joining us for this webinar about  
Using Non-Medicaid Data to Better Understand Medicaid  
Populations with SMI!**

Please complete the evaluation form  
following this presentation.

Contact Information: [MedicaidIAP@cms.hhs.gov](mailto:MedicaidIAP@cms.hhs.gov)

# APPENDIX

Jeff Schiff, MD MBA | Medical Director

# Framework and Measures

## From Conceptual Model to DHS Framework

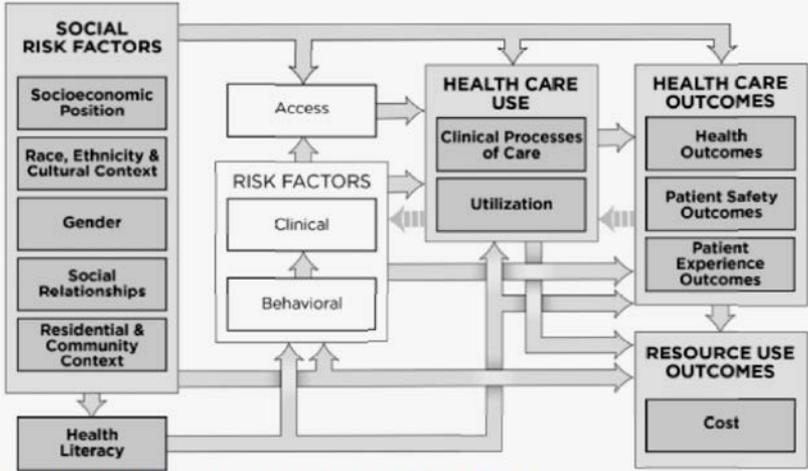


FIGURE 1-1 Conceptual framework of social risk factors for health care use, outcomes, and cost. NOTE: This conceptual framework illustrates primary hypothesized conceptual relationships.

**Conceptual Model.** The National Academies of Sciences, Engineering, and Medicine (2016) developed a 'Conceptual framework of social risk factors for health care use, outcomes and cost' shown on the next page. They use this to exemplify the processes by which social risk factors, such as those that we report on in this study, create problems with access, and clinical and behavioral risk factors, and how these in turn reduce the effectiveness of patients' 'health care use'. In their model, all of these processes result in poorer outcomes and higher costs. The Institute of Medicine used this to guide their understanding of how to account for social risk in Medicare payment and performance measures. **The DHS/HMA research team working on this project used this model to conceptualize where the various evidence-based interventions are found, and how they might interrelate.**

## Measures of Health Disparity and Costs Used by DHS to Identify Medicaid Population with the Greatest Health Disparities

HEALTH DISPARITIES					
Area	Description	# of Measures			
Health	Direct measures of health status and health outcomes	Young Children < 2 yrs.	All Children 0-17	All Adults 18-64	Total Unique Count
Mortality	Mortality rate (1 measure)	1	1	1	1
Morbidity	Prevalence rates for chronic disease and conditions including measures for physical health and behavioral health (15 measures)	3	6	13	15
Disability	Disability based on eligibility status (1 measure)	1	1	1	1
Area	Description	# of Measures			
Health Care	Measures of health care access, utilization, and quality	Young Children < 2 yrs.	All Children 0-17	All Adults 18-64	Total Unique Count
Health Care	Potentially preventable emergency department visits and potentially preventable hospital admissions	0	0	2	2
Health Care	HEDIS measures	0	2	3	4
COSTS					
Area	Description	# of Measures			
Cost	Cost Measures	Young Children < 2 yrs.	All Children 0-17	All Adults 18-64	Total Unique Count
Cost	Total expenditures for individuals over the calendar year for all services and for only services for which an Accountable Care Organization is responsible (2 measures)	2	2	2	2
TOTAL FOR ALL MEASURES					
Area	Description	# of Measures			
All Areas	Total	Young Children < 2 yrs.	All Children 0-17	All Adults 18-64	Total Unique Count
Health, Health Care, and Costs	Total (all measures)	7	12	22	25

**Social Risk Factors used in this study**

**ADULTS**

- Race/ethnicity by immigration status
- Homelessness
- Substance use disorder
- Deep poverty (< 50% FPL)
- Serious & Persistent Mental illness (SPMI)
- Prison history
- Education
- Immigration
- Language other than English
- Developmental disability

**CHILDREN**

- Deep poverty (<50% FPL)
- Homelessness
- Parental mental illness
- Parental substance use disorder
- Parental prison history
- Child protection involvement
- Single parent
- 4+ children in household
- Sibling medical condition
- Parental disability

**Clinical and Behavioral Resources**

Note: Not used in this study.

- Access to medical care
- Access to other resources (e.g. employment)
- Health-related behaviors
- Successful care management

**CENSUS TRACT INDICATORS**

- % in poverty
- % with HS diploma or less
- % non-citizens
- % who speak a language other than English
- % non-White

**Outcomes and Measures evaluated**

**MORTALITY**

**MORBIDITY**  
Presence or absence of health conditions

Physical Health

- Neo-natal intensive care unit stay
- Type 2 diabetes
- Asthma
- HIV /Hep-C
- Hypertension
- Cardiovascular disease
- COPD
- Injury due to violence or accident

Behavioral Health

- Substance use disorder (excluding tobacco)
- ADHD (children only)
- PTSD
- Depression (all except Major Depressive Disorder)
- Serious and Persistent Mental Illness (SPMI)

**Performance**

**HEALTH CARE (HC) USE**

- Potentially preventable Admissions
- Potentially preventable ED visits
- All condition readmissions

**HC QUALITY**

- Well-child visits
- Annual preventive visits for adults
- Annual dental visit
- Diabetes Care (A1c test administered)

**HC COSTS**

- Total cost of care
- Total adjusted cost of care

# Prevalence of mortality, chronic conditions, preventable costly utilization by race/ethnicity and immigration status Adult Medicaid enrollees, 2014

## MORTALITY AND MORBIDITY

	Enrollees who were born in the U.S.						Enrollees who immigrated to the U.S.					All
	American Indians	Black/ African Americans	Whites	Hispanics	Asians	Others/ Unknown	Black/ African Americans	Whites	Hispanics	Asians	Other/ Unknown	All Medicaid Enrollees
Mortality over 2.5 years	1.35	0.8	0.95	0.51	0.28	0.49	0.21	0.37	0.31	0.58	0.09	0.78
Type 2 Diabetes	12.37	8.28	6.19	7.6	4.9	5.32	7.66	7.54	10.88	9.71	6.52	6.95
Asthma	12.48	16.47	9.56	9.97	4.55	7.53	4.82	4.61	3.79	4.02	2.86	9.4
HIV/Hep-C	4.52	2.67	1.48	1.66	0.36	0.9	1.09	0.8	0.72	1.02	0.96	1.6
Hypertension	7.69	9.6	3.93	5.55	3	3.61	8.03	5.34	6.74	4.5	5.07	5.14
Heart failure, hospitalized heart conditions	2.05	1.96	1.46	0.65	0.57	1.08	0.64	0.96	0.79	1.27	0.59	1.37
COPD	11.91	8.4	10.17	6.72	2.98	6.33	5.1	5.65	3.92	4.46	2.74	8.53
Lung, Laryngeal Cancer	0.25	0.2	0.27	0.07	0.07	0.17	0.1	0.19	0.05	0.18	0.1	0.22

## BEHAVIORAL HEALTH

	Enrollees who were born in the U.S.						Enrollees who immigrated to the U.S.					All
	American Indians	Black/ African Americans	Whites	Hispanics	Asians	Others/ Unknown	Black/ African Americans	Whites	Hispanics	Asians	Other/ Unknown	All Medicaid Enrollees
Substance Use Disorder	35.37	20.09	15.64	14.12	4.33	12.34	2.56	3.75	3.97	2.78	2.37	14.42
PTSD	10.54	8.64	5.62	6.06	2.41	3.58	6.31	6.76	3.09	6.05	2.51	5.9
Depression	30.27	20.58	22.4	19.23	7.53	15.33	6.78	12.36	10.32	9.65	5.39	19.22
SPMI	7.36	7.09	6.19	4.77	2.94	3.68	2.73	4.47	1.59	5.48	1.38	5.55

# Prevalence of mortality, chronic conditions, preventable costly utilization by race/ethnicity and immigration status Adult Medicaid enrollees, 2014

## COSTLY UTILIZATION

	Enrollees who were born in the U.S.						Enrollees who immigrated to the U.S.					All
	American Indians	Black/African Americans	Whites	Hispanics	Asians	Others/Unknown	Black/African Americans	Whites	Hispanics	Asians	Other/Unknown	All Medicaid Enrollees
Injury due to accident, violence	10.45	7	6.02	6.57	2.26	4.85	3.16	2.3	2.1	1.58	2.14	5.59
Preventable hospitalization	1.09	1.02	0.6	0.5	0.23	0.51	0.31	0.31	0.27	0.42	0.2	0.6

## All

	Enrollees who were born in the U.S.						Enrollees who immigrated to the U.S.					All
	American Indians	Black/African Americans	Whites	Hispanics	Asians	Others/Unknown	Black/African Americans	Whites	Hispanics	Asians	Other/Unknown	All Medicaid Enrollees
Average Age	35.1	35.0	38.7	31.2	31.3	37.6	35.0	38.7	36.5	38.8	36.0	37.2
Total enrollee population	23,464	66,093	296,992	16,907	15,466	47,973	34,925	7,007	8,187	20,971	12,356	550,341

# Health Disparity Measures for Enrollees with SPMI

## RESULTS FOR ADULTS ONLY (18 TO 64 YEARS OF AGE INCLUDING 64) Group 2: Serious Persistent Mental Illness

Serious Persistent Mental Illness	Non-Serious Persistent Mental Illness	TOTAL
F=6.1% M=4.9%	F=93.9% M=95.1%	<u>100%</u>
n=30,529 (5.6%)	n=519,812 (94.5%)	n=550,341 (100%)
Average age=39.0	Average age=37.1	Average age=37.2

Framework for Health Disparity Measures: Health care, Access, Utilization, and Quality	Variables	Serious Persistent Mental Illness	Non-Serious Persistent Mental Illness	TOTAL
Potentially preventable emergency department visits	HCUseEDII	6,571 (21.5%)	51,371 (9.9%)	57,942 (10.5%)
Potentially preventable hospital admissions, using the Prevention Quality Indicator (PQI) due to acute diagnoses	HCUsePPA	444 (1.4%)	2,885 (0.56%)	3,329 (0.60%)
HEDIS Measure: Annual preventive visit	HWellA_denom, HWellA_num	15,079 (49.4%)	167,800 (32.3%)	182,879 (33.2%)
HEDIS Measure: Comprehensive diabetes care - A1c test	Hdiab_denom, Hdiab_num	2,796 (91.6%) n=3,054	18,835 (92.1%) n=20,457	21,631 (92.0%) n=23,511
HEDIS Measure: Well-child visits for all children	HWellC_denom, HWellC_num	n/a	n/a	n/a
Annual dental visit for kids and adults	ADV_denom, ADV_num	12,244 (57.2%) n=21,394	120,965 (47.7%) 253,651	133,209 (48.4%) n=275,045