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Indiana Council

Outcomes



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# Introductions

# Dimitri Cavathas, LCSW-C



- CEO, Lower Shore Clinic, Inc. (November 2015 - present)
- Awarded CCBHC Planning & Development Grant
- Responsible for all operations
  - integrated outpatient mental health
  - addictions
  - primary care clinic
  - psychosocial and residential rehabilitation
  - supported employment
  - health home services

# Melanie Elliott, PhD



- Vice President, Analytics Strategy, Afia, Inc.
- Over 2 decades of experience in Behavioral Health
- Building standardized, flexible multi-source data warehouses
- Measuring outcomes & evaluating progress
- Answering critical industry questions with data



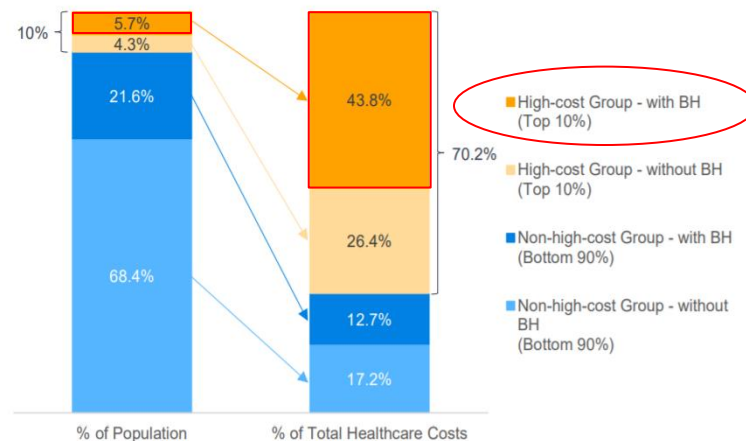
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# The Lower Shore Clinic Integrated Care Model

# The High Cost of Healthcare

- A Milliman study of 21 million insured lives (Davenport, Gray, & Melek, 2020) pointed out:
  - **10% of the population accounts for 70% of the healthcare spend**
  - **57% of this *high-cost group* has both physical and behavioral health conditions**

FIGURE 4: DISTRIBUTION OF THE POPULATION AND TOTAL HEALTHCARE COSTS AMONG COST AND BEHAVIORAL HEALTH GROUPS, 2017



# Integrated Care that Prioritizes SDoH



# Population Health Standards of Care

Preventive Care	General Care	Interventions	Outcomes
Immunizations	Regular Vitals (Weight/BMI, Blood Pressure)	Crisis Stabilization	Weight-related Health Concerns
Cancer Screenings (Breast, Cervical, Colorectal)	Annual Physical (Weight/BMI, Blood Pressure, hbA1C, Lipid Panel)	Mental Health Therapy	Diabetes
STI Screening	Annual Physical Health Screenings (Dental, Skin, Hearing, Vision)	Substance Use Therapy	Hypertension
Prenatal Care	Annual Behavioral Health Screenings (Tobacco, Alcohol, Depression)	Medication	Tobacco Use
		Education	Alcohol Use
		Training	Depression
		Community Support	Inpatient/ED Visits



# Population Health Standards of Care

## Preventive Care

Immunizations

**Cancer Screenings**  
(Breast, Cervical, Colorectal)

STI Screening

Prenatal Care

## General Care

**Regular Vitals**  
(Weight/BMI, Blood Pressure)

**Annual Physical**  
(Weight/BMI, Blood Pressure, hbA1C, Lipid Panel)

**Annual Physical Health Screenings**  
(Dental, Skin, Hearing, Vision)

**Annual Behavioral Health Screenings**  
(Tobacco, Alcohol, Depression)

## SDoH Supports

**Food Security**

**Stable Housing**

**Safe Neighborhood**

**Employment**

**Financial Security**

**Transportation**

**Social Support**

## Interventions

Crisis Stabilization

MH Therapy

**Substance Use Therapy**

Medication

Education/ Training

Community Support

## Outcomes

**Weight-related Health Concerns**

**Diabetes**

**Hypertension**

**Tobacco Use**

**Alcohol Use**

**Depression**

**Inpatient/ED Visits**

# Goals of the Lower Shore Integrated Care Model

- 95% of agency **housing will be occupied**
- 100% of housing will **pass safety & occupancy inspections**
- 95% of supportive housing clients will have a **positive home inspection**
- 100% of clients will have **potable water** in their home
- 25% reduction in **preventable ER visits**
- 30% **reduction in Inpatient admissions**
- 100% **reduction in suicide attempts**
- 80% of members **enrolled in medication adherence services**
- 15 or **fewer medication errors** in RRP & RCS
- 40% or more **graduation rate from Substance Use treatment programs**
- **0 overdoses**
- 75% **adherence to Vivitrol injections**
- 25% of tobacco users will participate in **cessation interventions**
- 35% of Supportive Employment clients are **employed**
- 90% of clients have **increased income**
- 15% of clients will use agency **financial management services** (rep payee)
- 40% of clients participate in **group activities**
- **90% of clients have reliable transportation**
- 2% or **fewer incident reports** due to violence
- 100,000 **nutritionally balanced meals** provided annually
- 50% of Diabetic clients have an **hbA1C reduction** of at least 2 points
- 35% of Obese clients have a **decreased BMI**
- 10% of **STI screenings** will be positive
- 50% of clients have **blood pressure below 140/90**

# Using Business Intelligence To Guide Clinical Decision Making

# Putting the Data To Work To Improve Outcomes

- Monitoring of data collection
  - Who needs to be assessed?
  - When are they coming in next?
  - Did we get the assessment when they came in?
- Monitoring progress by Service Providers, not just Program Directors
  - What is the client's current status?
  - How is that compared to Baseline
  - How is that compared to last visit?
  - Are they getting better?
- What needs to be done to improve/maintain client's well-being?
  - Data-informed clinical decision making
  - Person-centered intervention effectiveness

# Progress & Lessons Learned At Lower Shore Clinic

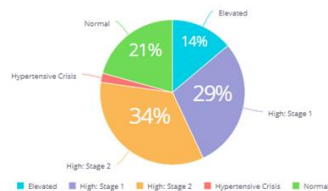
# Monitoring the Most In Need Populations

- Residential Rehabilitation (RRP)
- Psychiatric Rehabilitation (PRP)
- Assertive Community Treatment (ACT)
- Health Homes (HH)

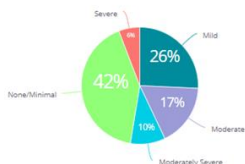
BMI Status  
@ Latest Checkpoint



Hypertension Status  
@ Latest Checkpoint



Depression Score Category  
@ Latest Checkpoint



Percent of Clients Who Use Tobacco  
@ Latest Checkpoint

48.19%

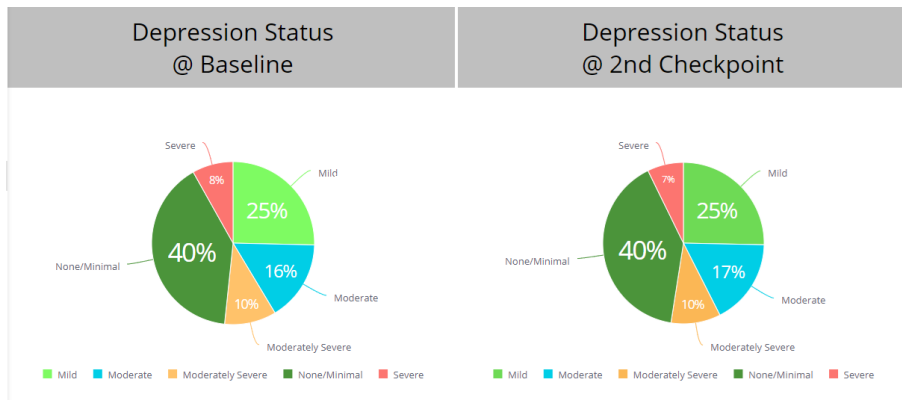
# Hypertension/Diabetes/BMI Interventions

- Monitoring vitals & hbA1C since 2017
- 2017 - 2020:
  - Saw improvement by 2nd post-Baseline checkpoint
  - But, also saw rebounding by 4th post-baseline checkpoint
- 2021-2022
  - Same findings
  - Better compliance with checkpoint data due to in house A1C machine
- Hard to evidence stable outcomes over time

# Depression Intervention

- Monitoring Depression since 2017

## Treatment as Usual 2017 - 2020



Little to No Change by 2nd Post-Baseline Checkpoint

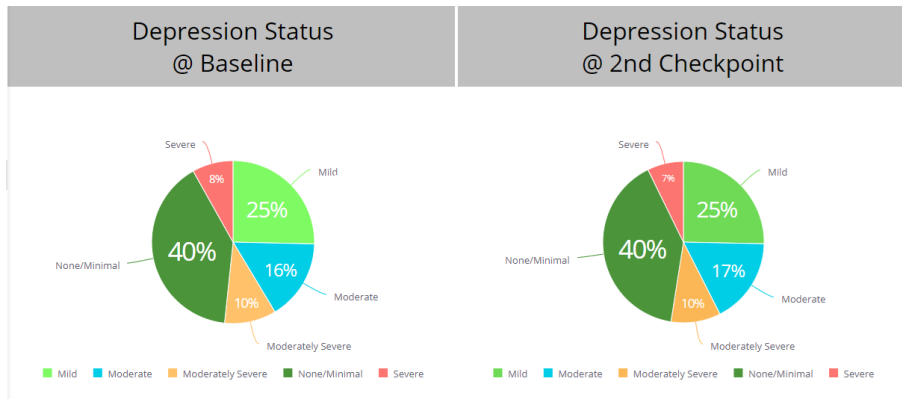
No Meaningful Results until 4th Checkpoint



# Depression Intervention

- Monitoring Depression since 2017

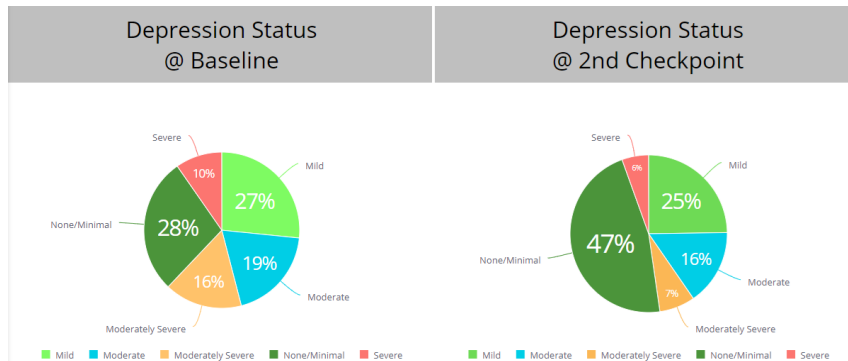
## Treatment as Usual 2017 - 2020



Little to No Change by 2nd Post-Baseline Checkpoint

No Meaningful Results until 4th Checkpoint

## Integrated Care with SDoH 2021 - 2022



By 2nd Checkpoint:  
30% Increase in Mild/No Depression  
50% Decrease in Severe/Mod. Severe Depression

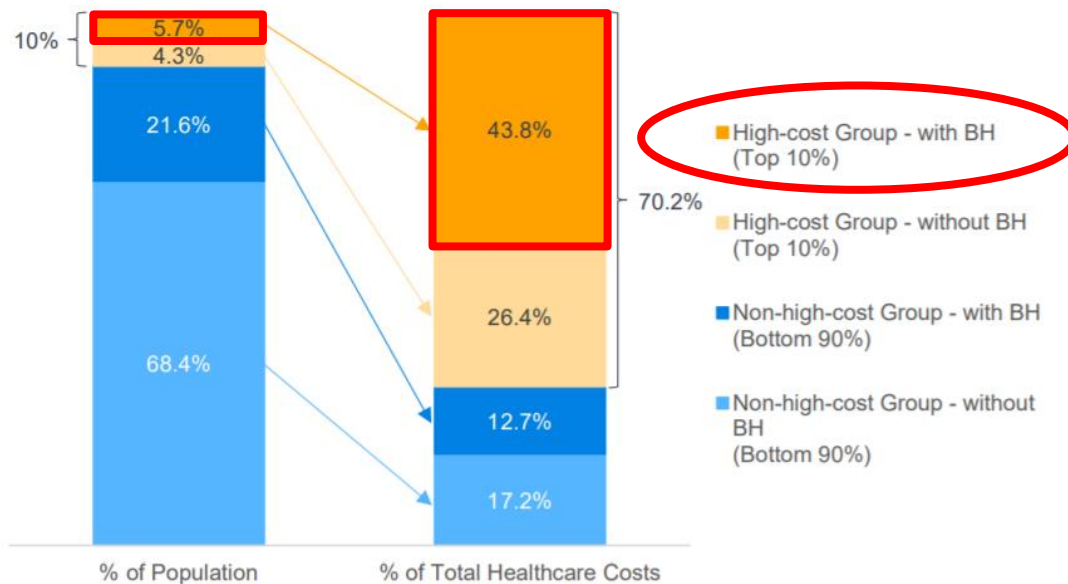
# Behavioral & Physical Health are Inextricably Linked

- **SDoH improvements needed** to make early & meaningful change
- Expect to see **follow on improvements in Physical Health** now that Depression has been reduced



# Behavioral & Physical Health Care Issues Drive Cost

FIGURE 4: DISTRIBUTION OF THE POPULATION AND TOTAL HEALTHCARE COSTS AMONG COST AND BEHAVIORAL HEALTH GROUPS, 2017



# SDoH Lessons Learned

- **Housing First**
  - Permanent supported housing (affordable housing)
- **Employment**
  - Reduce poverty & increase social connectedness
- **Healthy Food**
  - Must be easy and quick to prepare
- **Clinic-administered labs**
  - hbA1C machine & program-administered blood draws with processing by local lab
- **Transportation**
  - 91 vehicles & bus passes
- **Flex Funding**
  - Copays, first month rent, utilities, furniture, clothing, etc.
- **Harm Reduction**
  - Stagewise approach to Substance Use & other unhealthy habits
- **Rapid Access to Primary Care**
  - Primary Care practitioners employed by the agency
- **On-site Pharmacy Integration**
  - Pre-packaging to increase self management & improve adherence

# Measuring Progress

## CCBHC Measures

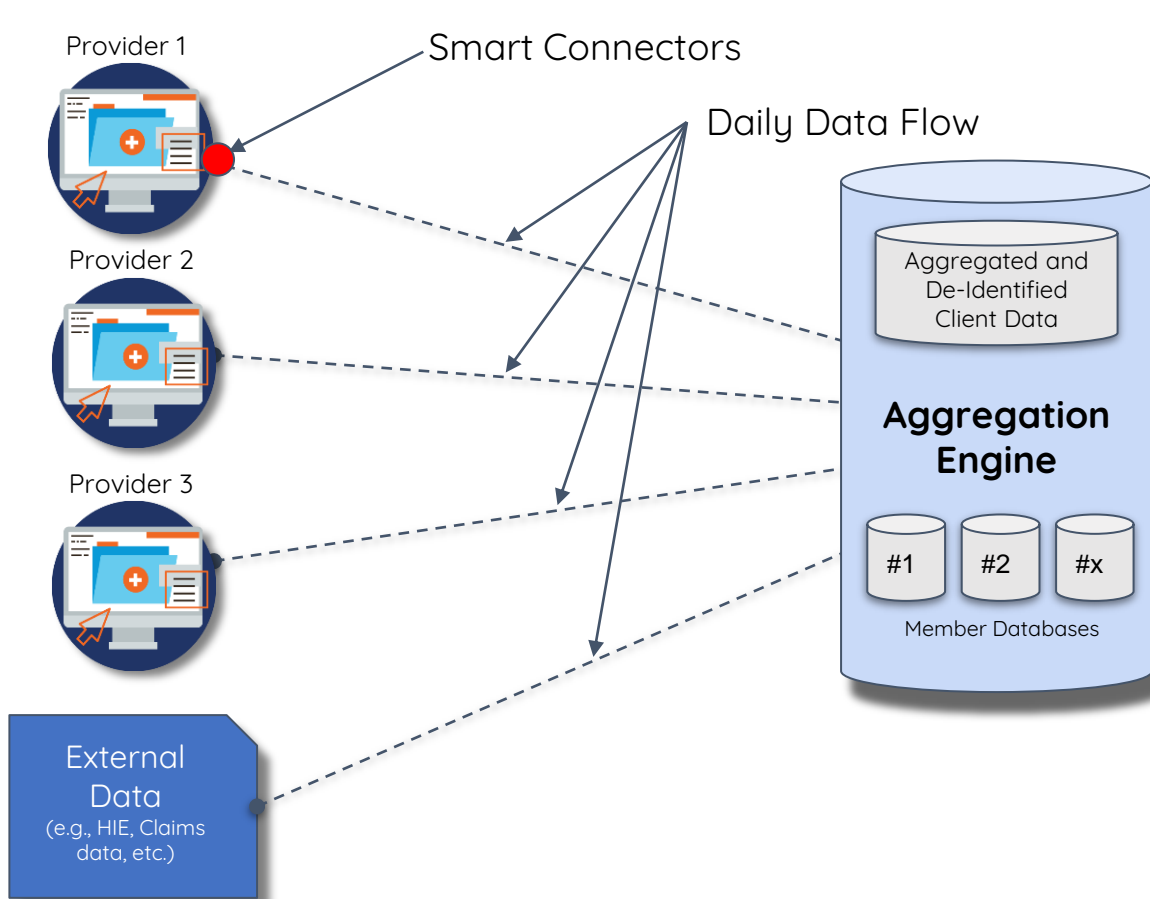
- Preventive Care & Screening: Body Mass Index (BMI) Screening & Follow-Up (BMI-SF)
- Weight Assessment for Children/Adolescents: Body Mass Index for Children/Adolescents (WCC-BH)
- Controlling High Blood Pressure (CBP-BH)
- Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention (TSC)
- Preventive Care & Screening: Unhealthy Alcohol Use: Screening & Brief Counseling (ASC)
- Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment (SRA-BH-C)
- Adult Major Depressive Disorder (MDD): Suicide Risk Assessment (SRA-A)
- Screening for Clinical Depression and Follow-Up Plan (CDF-BH)
- Depression Remission at Twelve Months (DEP-REM-12)
- Follow-up after Hospitalization for Mental Illness (FUH)
- Follow-up after Emergency Department Visit for Mental Illness (FUM)
- Follow-up after Emergency Department Visit for Substance or Alcohol Use (FUA)

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# Statewide Monitoring

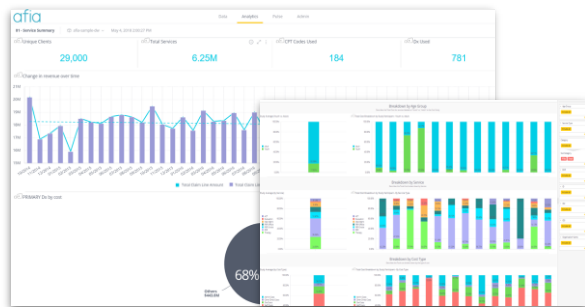
# State Data Aggregation



## Aggregate Dashboards



## Direct-Access Provider Dashboards



# ED Follow-up Monitored at the State Level

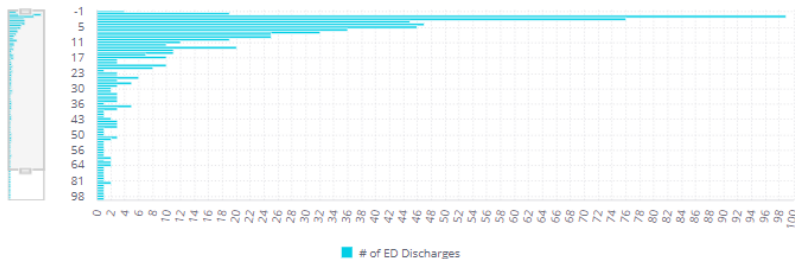
## Maryland Aggregate Dashboard MH/SUD ED Discharge Follow-up

The goal of the measure is to calculate the percent of ED Discharges with a MH/SUD diagnosis that receive a subsequent follow-up service.  
Note: A MH/SUD ED Discharge Follow-up pathway episode is created for a client if the client has a qualifying ED discharge.

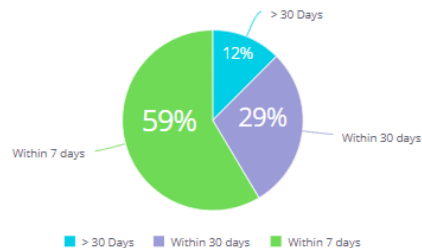
Clients with a MH/SUD ED Discharge

525

Number of Days Between MH/SUD ED Discharge & Follow-up



Number of Days Between MH/SUD ED Discharge & Follow-up





# Inpatient Follow-up Monitored at the State Level

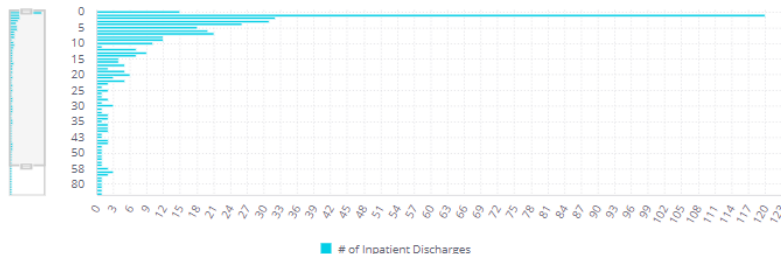
## Maryland Aggregate Dashboard MH/SUD Inpatient Discharge Follow-up

The goal of the measure is to calculate the percent of Inpatient Discharges with a MH/SUD diagnosis that receive a subsequent follow-up service.  
Note: A MH/SUD ED Discharge Follow-up pathway episode is created for a client if the client has a qualifying inpatient discharge.

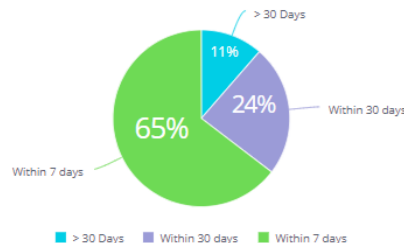
Clients with a MH/SUD Inpatient Discharge

381

Number of Days Between MH/SUD ED Discharge & Follow-up



Number of Days Between MH/SUD ED Discharge & Follow-up



# Inpatient Readmission Monitored at the State Level

## Maryland Aggregate Dashboard MH/SUD Readmission

The goal of the measure is to calculate the percent of Inpatient Admissions with a MH/SUD diagnosis that occur after previous MH/SUD Inpatient Discharge (i.e., the client was readmitted to an Inpatient stay).  
Note: A MH/SUD ED Discharge Follow-up pathway episode is created for a client if the client has a qualifying inpatient discharge.

Clients with a MH/SUD Inpatient Discharge

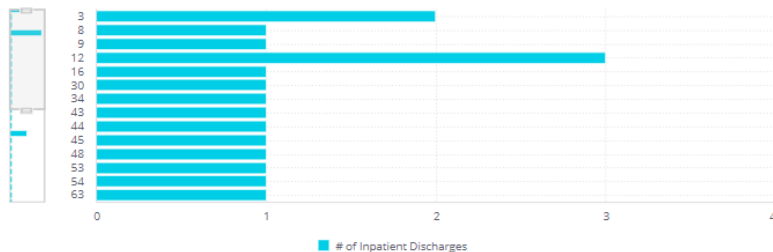
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Clients with at least one MH/SUD Inpatient Readmission

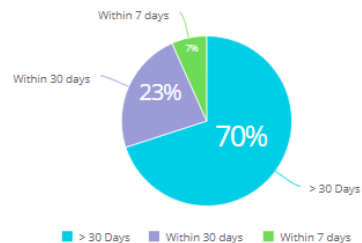
12

Percent of Clients with at least one MH/SUD Readmission 4.80%

Number of Days Between MH/SUD Inpatient Discharge & Subsequent MH/SUD Inpatient Admission



Number of Days Between MH/SUD Inpatient Discharge & Subsequent MH/SUD Inpatient Admission



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# Value-Based Care

# Widely Varied Value-based Payment Definitions

- Agencies should take control of the definition
- Negotiate reasonable rates & payment structures
- Lack of a model for SMI & high Cost/high utilization populations

**Value-based Care** =  
X Care  
Over Y Timeline  
To Produce Z Outcome  
For A Population  
At B Cost

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Q & A

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Thank you!

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