



## PAYER: Social Determinants and What to Do with Them: Improving Cost Projections and Nailing Resource Allocation

**Avalere Health** | An Inovalon Company  
May, 2016

# Session Agenda

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Welcome!

Our Story Arc

Presentations

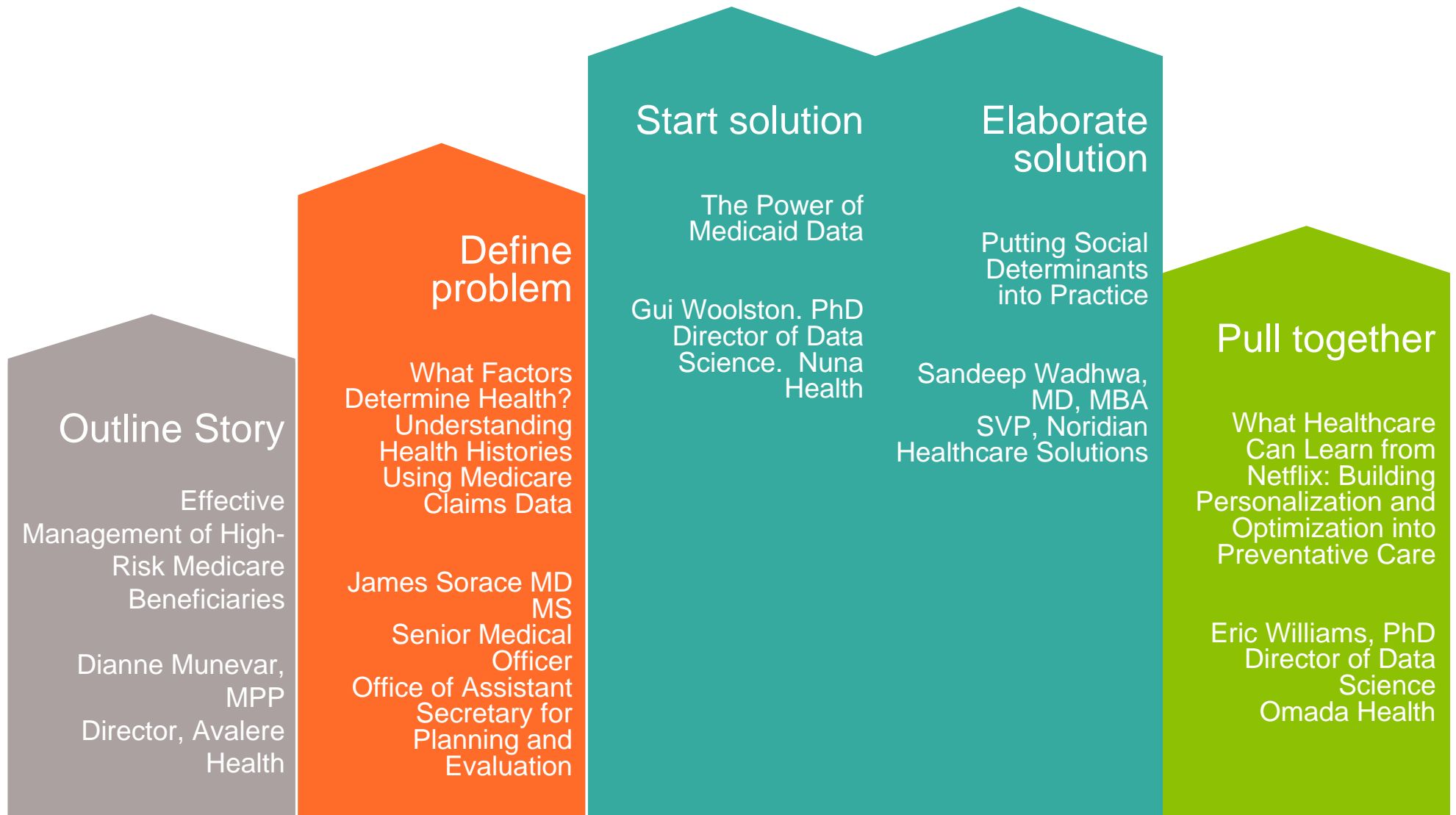
Moderated Discussion

Q & A



# Our Story Arc

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# Key Questions We'll Answer Today

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What are social determinants of care?

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Why should we care about understanding a member's social risk factors?

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Which data sources can be used to analyze the impact of social risk factors on population risk?

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How can health plans leverage these data to predict the risk high-cost medical events and improve management of high-risk members?

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What is the business case for using these data to predict and manage population risk?





## Presentations



# Overview

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THE GOALS OF THE COLLABORATIVE WORK BETWEEN THE SCAN FOUNDATION AND AVALERE WERE TO:

1

Promote a greater understanding of the characteristics that make an individual more likely to have high Medicare service use and spending

2

Evaluate the state of patient care surveys used by Medicare Advantage plans and recommend key improvements

3

Conduct a qualitative analysis on current care transition and coordination interventions

4

Illustrate the quantifiable range for the return-on-investment (ROI) for selected care coordination programs

# Combination of Medical and Non-Medical Characteristics Predict Risk for High Healthcare Utilization and Spending

Patient-Level Characteristic	Increase in Probability <sup>1</sup>
High Medicare spending in the prior year (PMPM) <sup>2</sup>	11.3%; 8.8%
Diabetes with complications	8.8%
Neurological or psychological conditions, respectively	8.8%; 6.4%
AMI or vascular conditions without complications, respectively	8.6%; 7.5%
Kidney disease	6.8%

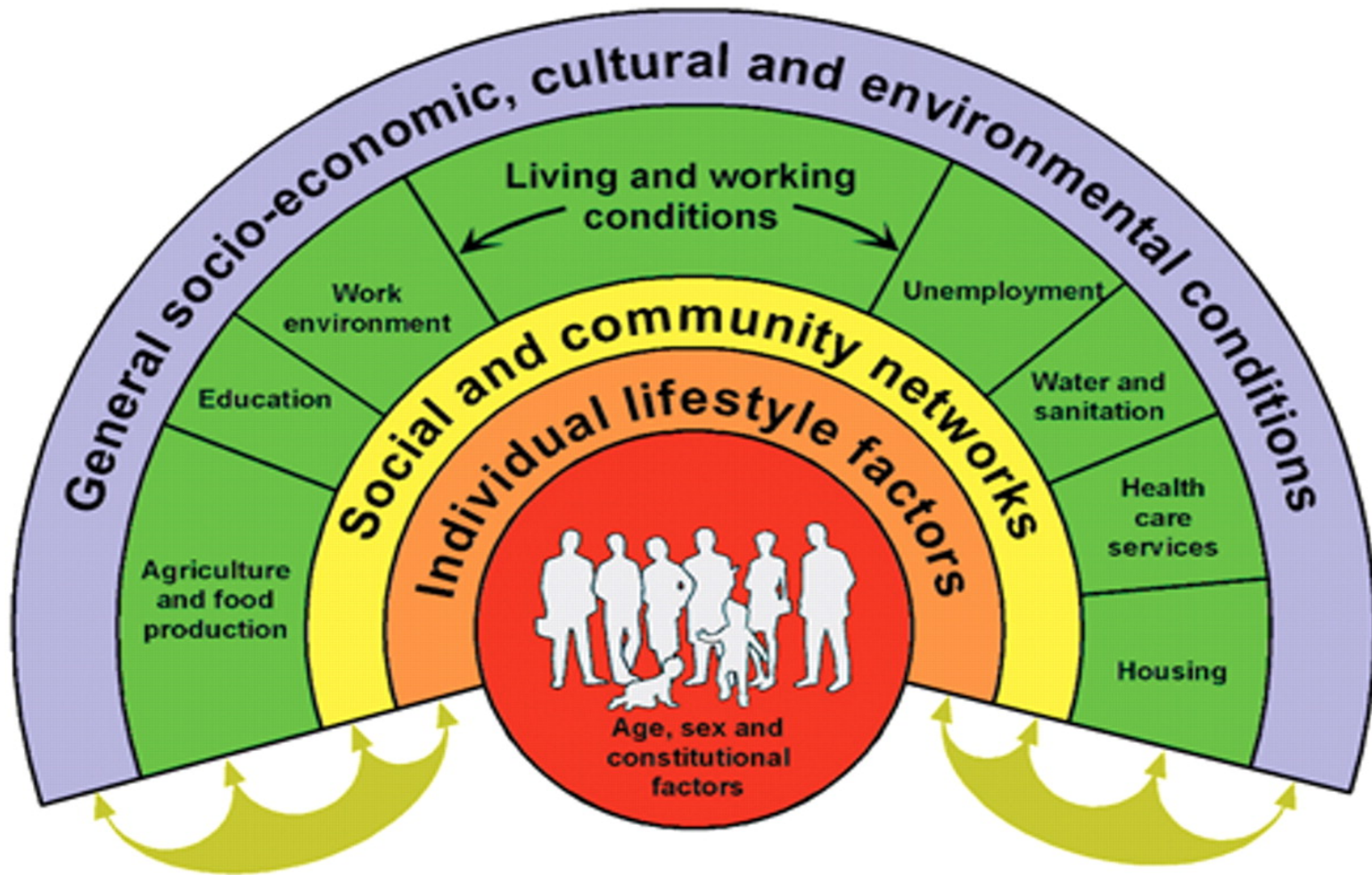
Patient-Level Characteristic	Increase in Probability <sup>1</sup>
High home health (41 or more visits) <sup>3</sup>	16.2%
Self-reported fair or poor health status	8.1%
High hospital outpatient (34 or more visits) utilization in the prior year <sup>3</sup>	7.8%
Functional impairment (between 2 and 5 ADLs and/or IADLs)	6.9%
Age 85 and older	6.6%



**Medical issues related to high-risk beneficiaries are expected. However, and potentially more importantly, some non-medical characteristics increase the probability of being high-risk that cannot be definitively identified using administrative claims**

1. Average percentage point increase for patients having the factor based on a logistic regression model using the validation sample (2009 and 2010 data); and are rounded to the nearest tenth decimal  
 2. Defined as being in the top 10 or 20 percent of Medicare spending, respectively, based on a Per Member Per Month estimate  
 3. "High" utilization is defined as being in the top 75th percentile of the number of stays (inpatient services) or visits (ambulatory care) in the prior year  
 4. Estimates are consistent from one year to another but there is relatively low precision of predictive power

# SDOH framework



Source: Dahlgren, G. and Whitehead, M. (1991) Policies and Strategies to Promote Social Equity in Health. Stockholm Institute for Futures Studies

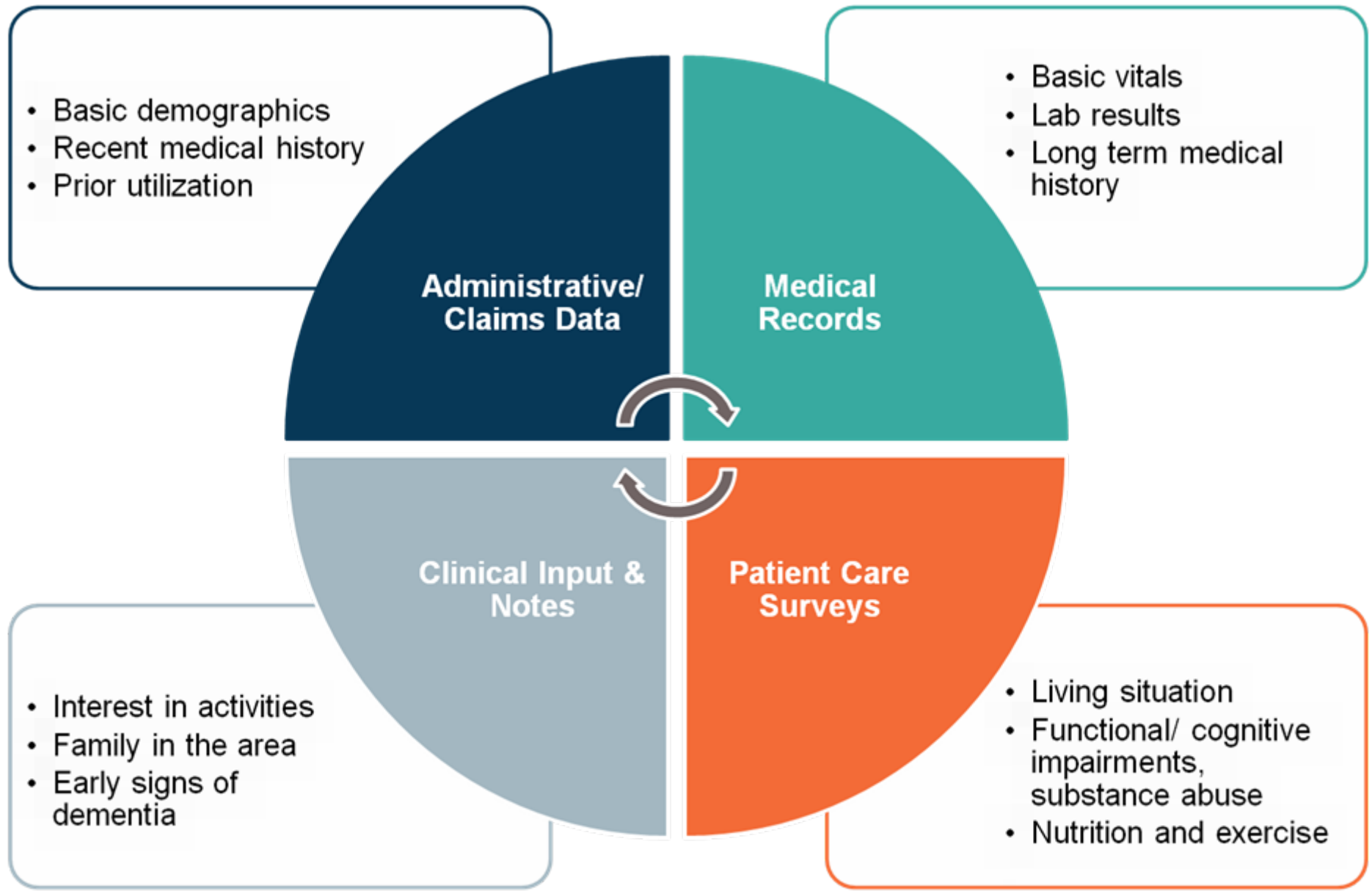


U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

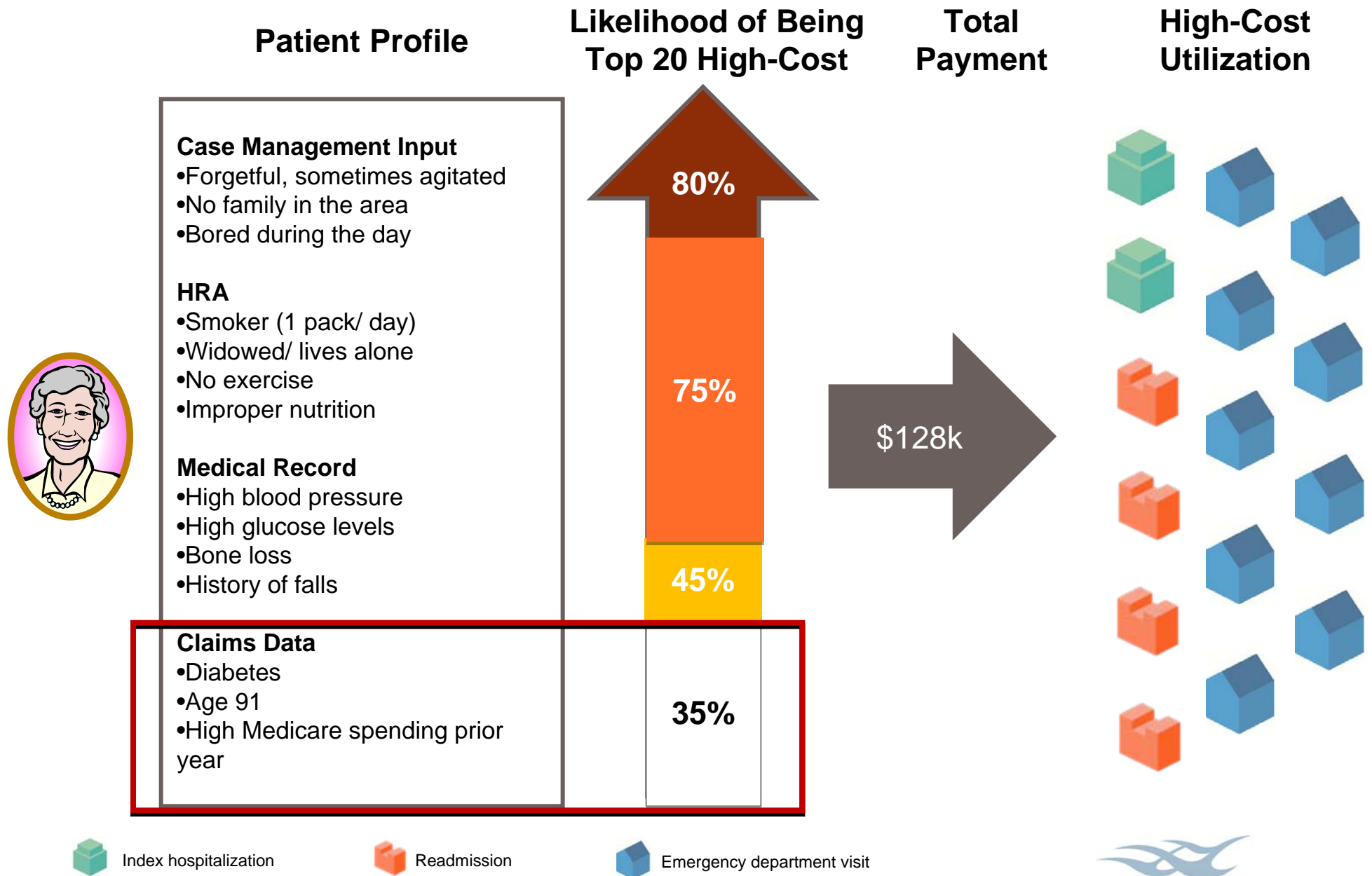
Office of the Assistant Secretary for Planning and Evaluation



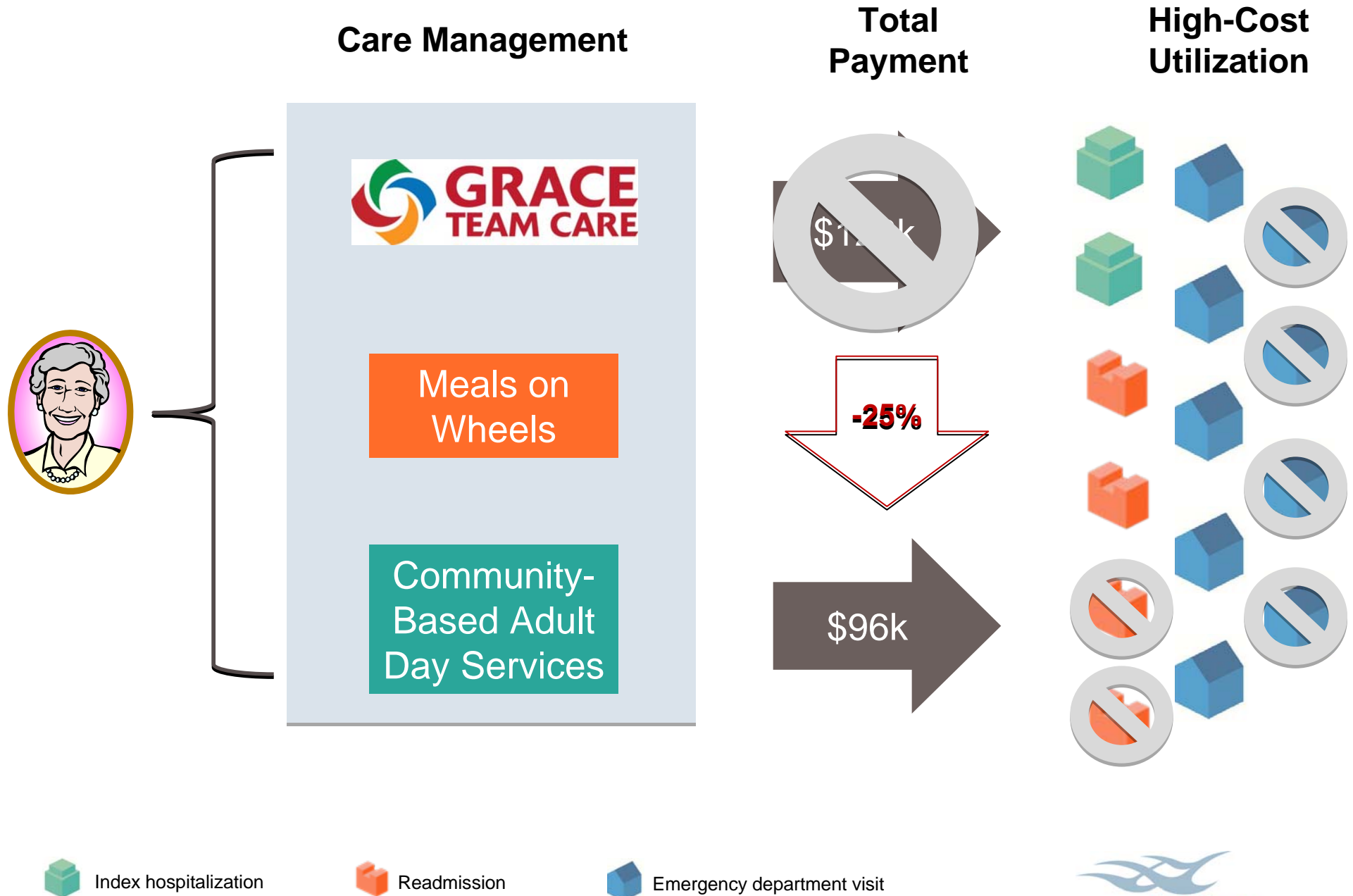
# Looking Beyond Medical Claims Data



# Using Comprehensive Patient Data Can Help Prevent High-Cost Medical Surprises



# Matching Appropriate Services to the Individual Has Potential to Reduce High-Cost Utilization



# Putting It All Together

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## Benefits

- ✓ Reduced unnecessary utilization
- ✓ Reduced spending by \$32,000 – that's a 25 percent reduction in a single year
- ✓ Improved Ruth's quality of life
- ✓ Allowed Ruth to live independently

## Costs

- ✓ GRACE Team Care intervention
- ✓ Meals on Wheels
- ✓ Adult Day Care Services

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**\$32,000**



**300%**



**\$8,000**

# Case Study: Care At Hand

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CARE AT HAND'S TECHNOLOGY SOLUTION WAS ASSOCIATED WITH A POSITIVE TREND IN PATIENT OUTCOMES FOR MEDICARE FFS BENEFICIARIES

More than three days between hospital discharge and readmission<sup>1</sup>

Two more days between hospital discharge and emergency department visit<sup>2</sup>

Approximately \$4,500 reduction in Medicare program expenditures for Part A and Part B, per beneficiary

<sup>1</sup> When there was a readmission within 30 days of hospital discharge

<sup>2</sup> When there was an ED visit within 30 days of hospital discharge





# Beyond ROI

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ENHANCED DATA COLLECTION AND ANALYSES WILL LIKELY REQUIRE MORE FINANCIAL INVESTMENT, BUT THE BENEFITS CAN ALLOW HEALTH PLANS TO:

Better coordinate the care of their members

Help keep members in the community

Improve patient satisfaction scores

Support patient education and engagement efforts

Increase member retention rates



**Plans that use social factors to support risk stratification and care management efforts will have a competitive edge in an evolving Medicare paradigm that rewards population management and spending efficiency**



## Moderated Discussion



## Questions & Answers