Unleashing the Capabilities of MAOs to Deliver Health Innovation for Older Adults in Underserved Settings

In partnership with the CMS Innovation Center, the Office of the Assistant Secretary for Health (OASH) and the Administration for Community Living (ACL)

October 7, 2021

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Agenda

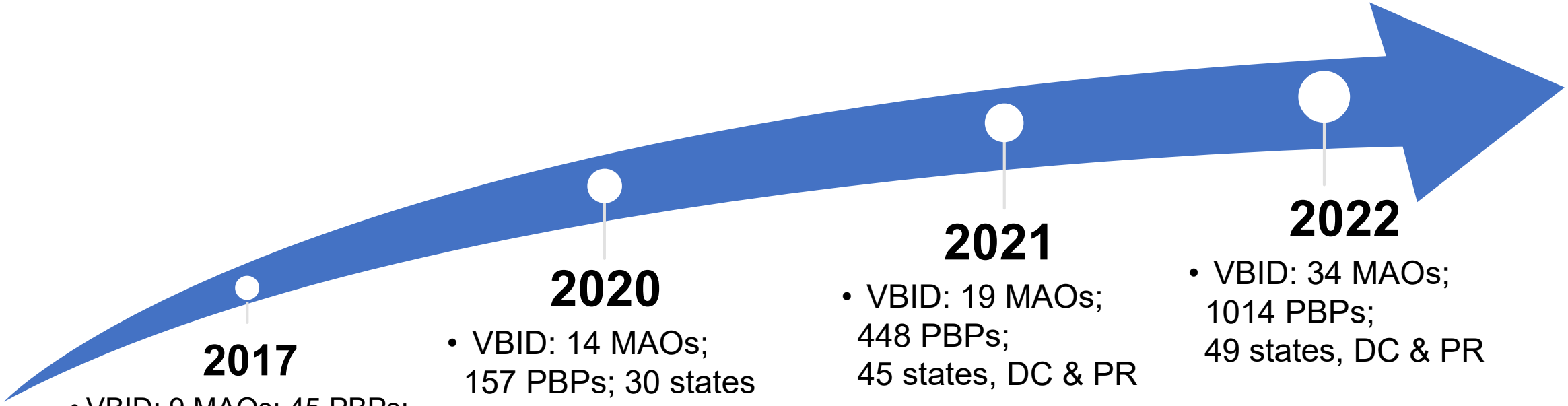
- **Welcome,** *Jason Petroski Ph.D., Director Division of Delivery System Demonstrations*
- **VBID's Role in Advancing Care for Underserved Populations,** *Sibel Ozcelik, ML, MS, VBID Model Co-Lead, CMMI*
- **Overview – ACL's Role Serving Older Adults**, *Vijeth Iyengar, Ph.D., Brain Health Lead & Technical Advisor to the Deputy Assistant Secretary for Aging, ACL*
- **Overview – RFI Lessons Learned**, *Leith J. States, MD, MPH, Acting Director, Office of Science and Medicine, Chief Medical Officer, OASH*
- **Improving Dementia Care Through Caregiver Support,** *John Wiecha MD, MPH, Medical Director, Senior Products Division, Point32Health*
- **Pandemic Telemedicine Experience with SUD,** *Caesar A. DeLeo, MD, MHSA, Vice President & Executive Medical Director Strategic Initiatives, Highmark Health Enterprise Clinical Organization, Highmark BCBS*
- **Prioritizing Vulnerable Populations through Predictive Modeling,** *Mona Siddiqui, MD, MPH, MSE, Senior Vice President for Enterprise Clinical Strategy and Quality, Humana*
- **Q&A**
- **Closing Remarks, Opportunities and Next Steps**

Health Equity – Building a Foundation in HPI Models

Executive Order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government (E.O. 13985)

- Prioritizing equity across CMMI's portfolio
- Centering equity in all stages of model design, operation, and evaluation
- Engaging providers who have not previously participated in value-based care initiatives
- Ensuring that eligibility criteria and application processes encourage care for historically underserved populations
- Utilizing patient-level demographic data and standardized social needs data, as well as tracking data on penetration of Innovation Center models in underserved communities

Significant Growth in Model Adoption and Partnerships



2017

- VBID: 9 MAOs; 45 PBPs; 3 States

2020

- VBID: 14 MAOs; 157 PBPs; 30 states and 1 territory

2021

- VBID: 19 MAOs; 448 PBPs; 45 states, DC & PR

2022

- VBID: 34 MAOs; 1014 PBPs; 49 states, DC & PR

CY 2022 VBID Model Components

Began in 2021

Tests Complementary MA Health Plan Innovations

Targeted Benefits by Condition, Socioeconomic Status (SES), or both	MA and Part D Rewards and Incentives (RI) Programs	Wellness and Health Care Planning (WHP)	Hospice Benefit Component	Cash or Monetary Rebates*	New and Existing Technologies*
Tests the impact of targeted reduced or eliminated cost-sharing (including for Part D drugs) or additional supplemental benefits based on enrollees: a. Chronic Condition(s) b. SES c. Both (a) and (b)	Tests how R&I programs that more closely reflect the expected benefit of the health related service or activity, within an annual limit, may impact enrollee decision-making about their health in more meaningful ways	Tests the impact of timely, coordinated approaches to wellness and health care planning, including advance care planning	Tests how including the Medicare hospice benefit in an enrollee's MA coverage impacts financial accountability and care coordination across the care continuum	Tests the impact of sharing statutory beneficiary rebates directly with enrollees, in the form of cash or cash equivalents rather than as Medicare premium payments or additional benefits	Tests the impact of allowing MAOs to cover new and existing FDA-approved technology not currently covered by the Medicare program

*As of CY 2021, there has been limited uptake of the Cash or Monetary Rebates Component and the New and Existing Technologies Component

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Importance of VBID in Promotion of Health Equity

MA Enrollment Is Dramatically Increasing

With overall enrollment in the MA program dramatically increasing, from 11.9M enrollees to 22.4M between 2010 and 2020, and projected to continue to grow to make up more than 50% of all Medicare beneficiaries by 2030[1].

MA is Becoming More Diverse

The goal of improving heath equity must be woven into investigating ways to enhance quality, benefit design and payment, recognizing enrollment increases in MA have been concentrated among dual-eligibles, Blacks, Hispanics and individuals in underserved geographic areas.[2] If MA care management interventions can be shown to address health disparities in MA's diverse population, there are potential implications for FFS services.

Opportunity to Test Health Equity Impact of Supplemental Benefits

As the dollar value of supplemental benefits grows, it is increasingly important to determine if these benefits are effective[3]. By better understanding the impact of supplemental benefits in MA, the CMS Innovation Center will be able to highlight the most valuable benefits that can be considered for Model tests in FFS/ACOs and those that have the most meaningful health equity outcomes.

Ability to Target by Sociodemographic Status (SES)

There are a number of flexibilities unique to the VBID Model that cannot be done/approximated within the recently broadened flexibilities in the regular MA program that allow MAOs to further invest in addressing social needs. Under the VBID Model MAOs may target beneficiaries by low-income subsidy (LIS) or dual status alone or in combination with other factors such as chronic conditions.

As the only CMMI Innovation Model focused on MA, the VBID Model is a critical lever to test new payment and service delivery models to shape the trajectory of health equity within the rapidly growing and diverse MA market.

[1] Refer to the MedPAC report.
[2] Refer to the Health Affairs study.
[3] Refer to MedPAC report focused on supplemental benefits in MA.

VBID Health Equity Business Case

INCREASE MEMBER ENGAGEMENT & RETENTION

Plans that offer supplemental benefits like meals have been shown to **receive a higher net promoter score and higher member retention**.[1]

IMPROVE QUALITY & MEMBER SATISFACTION

Focusing on social needs is correlated with positive quality of life and member satisfaction[7].

According to a 2020 McKinsey study, **MA plans with an average customer experience measure rating of 4 or more Stars added 2.1 times more net members** in 2019 than their less customer-friendly competitors.[2]

OFFER BENEFITS ONLY AVAILABLE TO MODEL PARTICIPANTS

VBID Model participants can **offer unique features only available to participating plans,** such as sharing beneficiary rebates more directly with members in the form of Cash or Monetary Rebates, MA and Part D RI Programs, and importantly, targeted non-primarily health-related supplemental benefits.* **VBID tests greater customization of benefits to underserved populations.**

LOWER MEDICAL SPENDING & UTILIZATION OF LOW-VALUE SERVICES

Addressing health-related social needs in member populations has been shown in other contexts to:

- Significantly lower healthcare utilization[3]
- Significantly lower Emergency Department (ED) visits[4]
- Significantly lower medical spending[5]
- Better chronic disease management [6]

MINIMIZE COSTS BY BETTER FOCUSING INTERVENTIONS

Additional targeting flexibilities available to VBID Model participants, such as targeting by socio-economic status, tests the benefits of allowing plans to **focus interventions on populations where the largest health improvements can be realized**.

In addition to improving member health and promoting health equity, **there is a strong business case for MAOs to participate in VBID and leverage the Model's waiver authority to address health disparities.**

[1] XM Institute NPS and Customer Ratings Benchmarks, Qualtrics 2020, https://www.Qualtrics.com
[2] Refer to McKinsey study
* Some marketing restrictions apply
[3] Berkowitz, et al., 2018; Martin et al., 2018
[4] Ibid
[5] Gurvey, et al., 2013
[6] Refer to Project Angel Heart study
[7] Refer to HMA MA Supplemental Benefits Report

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The U.S. Administration for Community Living: Mission, Values, and Impact

Vijeth Iyengar, PhD
Brain Health Lead & Technical Advisor to the Deputy Assistant Secretary on Aging
U.S. Administration on Aging (AoA)/Administration for Community Living (ACL)
October 7, 2021




Administration for Community Living (ACL)

ACL was initially established in April 2012 by bringing together the Administration on Aging, the Office on Disability and the Administration on Developmental Disabilities. ACL is responsible for increasing access to community supports, while focusing attention and resources on the unique needs of older Americans and people with disabilities across the lifespan.

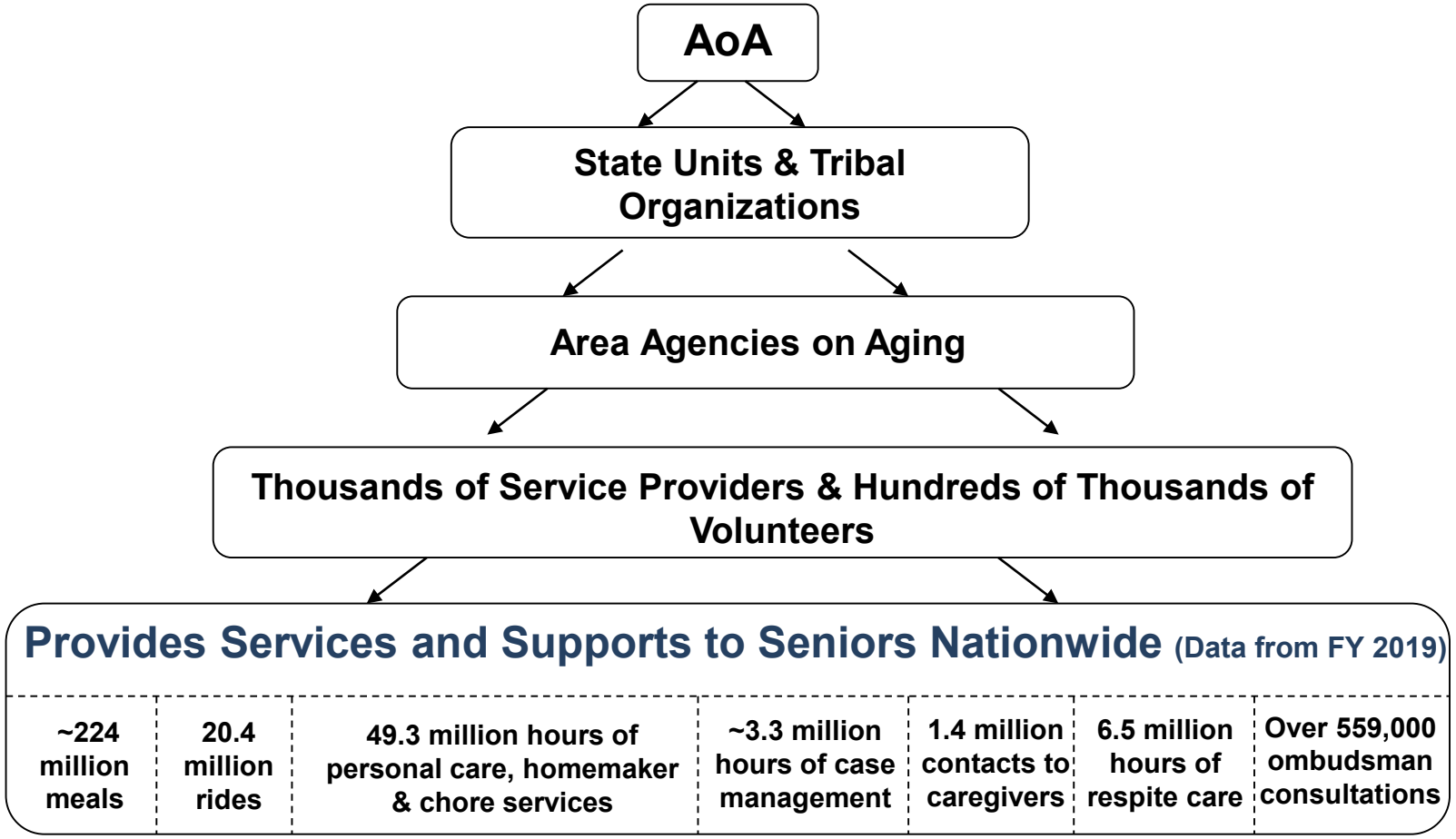
Mission

Maximize the independence, well-being, and health of older adults, people with disabilities across the lifespan, and their families and caregivers.

Vision

For all people, regardless of age and disability, to live with dignity, make their own choices, and participate fully in society.

The Older Americans Act, Administered by the Administration on Aging (AoA), Help Seniors Remain at Home through Low-Cost, Community-Based Services



Source: https://acl.gov/sites/default/files/about-acl/2021-06/FY%202022%20ACL%20Justification%20of%20Estimates%20for%20Appropriations%20Committees_Final.pdf.

Who Do We Serve?

- **Poor and Near Poor** *(below 150% Poverty)*

- **Frail and Vulnerable**
  - Lives Alone; Diabetes; Heart Condition; Minority; Rural

- **At Risk for ER visits & Hospitalization:**
  - Over 92% of OAA Clients have Multiple Chronic Conditions
    - Compared to 73% of general older adult population (age = 65+)
  - 69% of Case Management Clients take 5 or more medications daily

- **At Risk for Nursing Home Admission:**
  - 40% of Home-Delivered Nutrition Clients have 3+ Activities of Daily Living (ADL) Impairments
  - 72% of Home-Delivered Nutrition Clients have 3+ Instrumental Activities of Daily Living (IADL) Impairments

Thank you + Feel free to get in touch!

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Unleashing the Capabilities of MAOs to Deliver Health Innovation for Older Adults in Underserved Settings

RFI Lessons Learned

Leith J States, MD MPH

Acting Director, Office of Science and Medicine

Chief Medical Officer

OASH | Office of the Assistant Secretary for Health

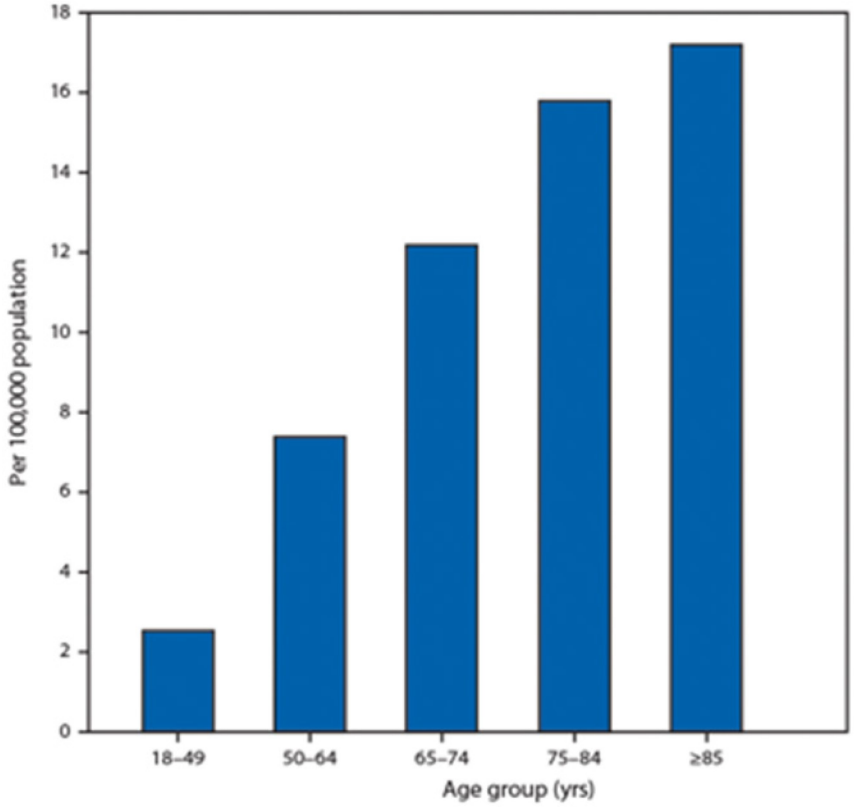
Road Map

- ✓ Background
- ✓ RFI Development
- ✓ Emerging Themes
- ✓ Outputs to Date
- ✓ Next Steps

Background

- >65 projected to be ~95 million by 2060
- Ages >65 at greatest risk from COVID-19 hospitalization and mortality
- Inequities exacerbated in rural compared to urban areas
- Rapid adoption of tech in health care delivery during COVID-19 response presents opportunities to develop/operationalize solutions

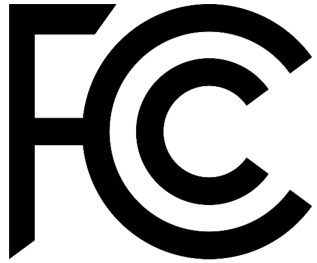
Laboratory-confirmed coronavirus disease 2019 (COVID-19)–associated hospitalization rates,* by age group — March 1–28, 2020



Sources: https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2017/08/Regional-Differences-in-Urban-and-Rural-Mortality-Trends.pdf; https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e3.htm; https://trumpwhitehouse.archives.gov/wp-content/uploads/2019/03/Emerging-Tech-to-Support-Aging-2019.pdf.

RFI Development

A Collaboration of Many Federal Agency Partners



RFI Development

Publishing and Descriptive Stats

Organization Type	# submissions
Trade Association	4
Academia	4
Insurer	4
Health tech	19
Lifestyle	2
Professional Associations	12
Advocacy / Consulting	6
NPO	5
Hospital System / Provider Group	3
Tech (non-health)	1
TOTAL	**60**

Sources: https://www.federalregister.gov/documents/2020/11/17/2020-25328/request-for-information-landscape-analysis-to-leverage-novel-technologies-for-chronic-disease.

Emerging Themes from RFI Respondents

- **Care Plans and Models**
  - Policy Considerations
    - ✓Reimbursement structure needs to continue to support remote patient monitoring and chronic disease management such that time can be proactively spent on these activities

- **Digital Health Literacy**
  - Policy Considerations
    - ✓Gap between what Medicare covers and what individuals or insurers pay for post-discharge care technology
    - ✓Rural areas especially rely on telephone services because many patients do not have access to, are not comfortable with, or do not have adequate internet bandwidth to use video technology

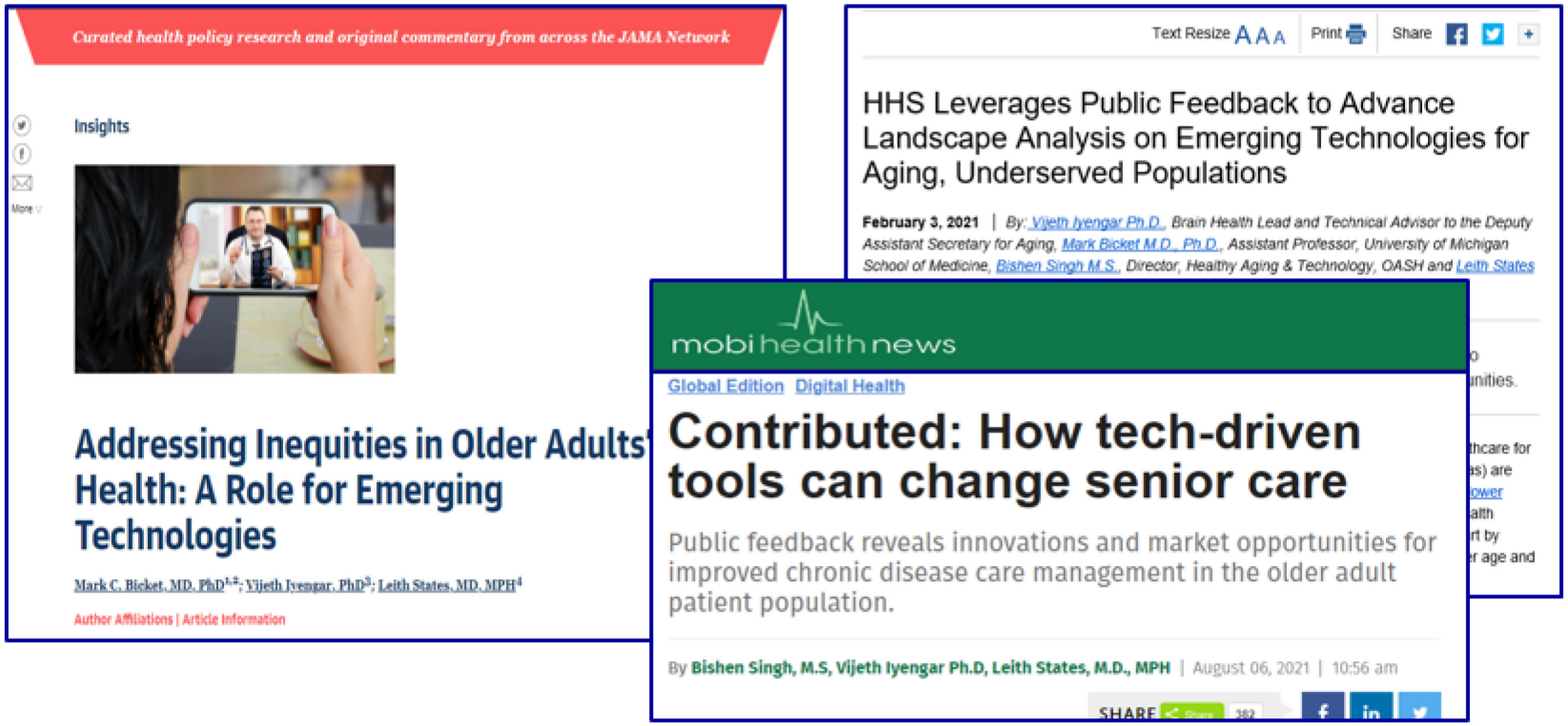
Emerging Themes from RFI Respondents

- **Remote Healthcare Delivery**
  - Policy Considerations
    - ✓Medicare's bifurcation of remote patient monitoring and telehealth. Technology solutions are usually integrated, but current polices treat them as separate when they naturally interoperate

- **Remote Health Monitoring**
  - Policy Considerations
    - ✓Lack of expanded remote patient monitoring usage for federally qualified health centers rural health clinics, and CMS Home Health Agencies
    - ✓CMS does not currently have a solid methodology for valuation of AI applications in practice expense

Deliverables to Date

Initial Focus on Knowledge Dissemination and Thought Leadership



Sources: https://www.hhs.gov/blog/2021/02/03/hhs-leverages-public-feedback-advance-landscape-analysis-emerging-technologies-aging-underserved-populations.html; https://jamanetwork.com/channels/health-forum/fullarticle/2778875; https://www.mobihealthnews.com/news/contributed-how-tech-driven-tools-can-change-senior-care

Next Steps

Collaboration and Follow Through

- Continued collaboration with HHS partners to identify opportunities to synergize efforts within the agency (such as our friends at CMMI)
- Engagement with ongoing interagency initiatives and priorities (e.g., Executive Orders, PHE status, telehealth payment, broadband access, health equity, preparedness and response)
- Exploring opportunities to share insights learned into public forums

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Thank You!

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John Wiecha MD, MPH

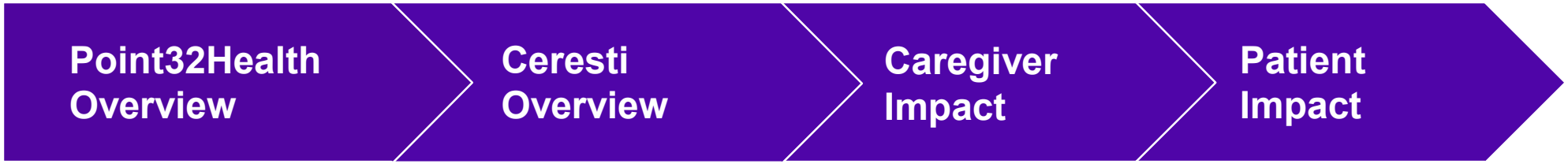
Dr. John Wiecha is currently Medical Director of Senior Products for Point32Health, the combined organization of Tufts Health Plan and Harvard Pilgrim Health Care. Prior to Point32Health, Dr. Wiecha had a research and academic administration career at Boston University School of Medicine, and he practiced primary care for 23 years at Boston Medical Center, a safety net hospital serving a diverse patient population. Dr. Wiecha has pursued funded research, by NIH and various foundations, in the use of technology for professional medical education, and the use of technology for remote monitoring and education to support patients with chronic disease. Dr. Wiecha received his medical degree from Stony Brook University and completed residencies in both Family Medicine and Preventive Medicine at the University of Massachusetts Medical School. He also holds a Master of Public Health from the University of Massachusetts.

Point32Health

Improving Dementia Care

Through Caregiver Support

Agenda



Our Family

Point32Health

Point32Health: We Guide and Empower Healthier Lives For Everyone, By Working Differently

Point32Health

Serving 2.2 Million Members Across 5 States

- Maine
- New Hampshire
- Massachusetts
- Connecticut
- Rhode Island

Spectrum of products including:

- Medicare Advantage
- Medicare Supplemental
- Medicaid
- Large Group Commercial
- Small Group Coverage
- Marketplace Exchange Coverage (ACA)

Product Quality Accolades:

HEALTH INSURANCE PLAN RATINGS NCQA 2015-16 PRIVATE PLAN

Tufts Health Plan is one of 11 NCQA U.S. Medicaid plans **rated 4.5 or higher**

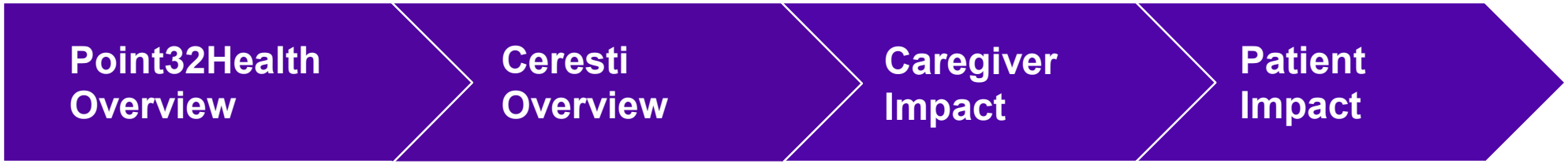
Tufts Medicare Preferred HMO earned a **5-star rating** from CMS for contract year 2020 **for the sixth consecutive year**

All Results are Draft and Preliminary

All Data Presented Today are
Preliminary
And Based on a
Harvard Pilgrim Health Care
Pilot Program In Process

Note: These results are not final

Agenda



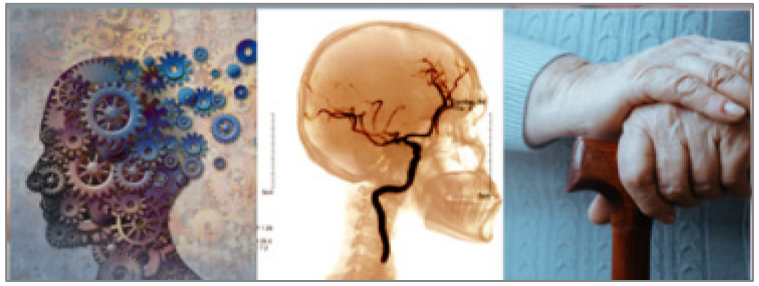
All Results are Draft and Preliminary

The Problem:
Certain Conditions Require High Level of Caregiver Support

Traditional approaches are not effective for Members with caregiver-supported conditions, and associated complex care needs, because

- Conditions lack effective Rx/treatments
- Members are unable to self-manage
- Members are difficult to engage in traditional care management programs

Caregiver Supported Conditions



ADRD* Stroke Parkinson's Disease

15% of MA Members have at least one of these 3 conditions that collectively drive*

- 43% of hospitalizations
- 53% of readmissions

*Milliman white paper

ADRD = Alzheimer's Disease and related Dementias

The Problem:
Dementia has Disproportionate Impact on Minority Populations

Blacks and Hispanics have a higher likelihood of dementia [1]

Relative Likelihood of Dementia

- Blacks: 2x
- Hispanics: 1.5x
- Whites 1x

Minority caregivers provide more care and report worse physical health [3]

% of Aged 70+ Who Receive Home-Based Family Caregiving

- Latinos 44%
- Blacks 34%
- Whites 25%

Low health literacy among Minority populations[4]

Below Basic Health Literacy

- Hispanic 41%
- Blacks 24%
- Whites 9%

1. https://www.alz.org/media/Documents/alzheimers-facts-and-figures.pdf
2. https://academic.oup.com/innovateage/article/2/suppl_1/644/5170005
3. https://www.apa.org/pi/about/publications/caregivers/faq/cultural-diversity
4. https://www.pfizer.com/health/literacy/public-policy-researchers/overview-of-health-literacy

Goals of Digital Caregiver Support with Ceresti

Improve your relationship with your loved one.

Gain access to a huge library of engaging videos to stimulate and bond with your loved one

Learn to manage your loved one's chronic conditions.

Learn how to help your loved one address their medications, weight, nutrition, exercise and other health concerns

Increase your family connectedness.

Invite friends and family to share in this adventure and learn alongside you

10		$0
Minutes a day	**Easy to use**	**No cost to you**
Daily educational content and support tailored to your needs and schedule	Everything is provided, and no technical experience or internet needed.	Ceresti's Caregiver Support Program is FREE to Harvard Pilgrim members.

Detect problems early and keep your loved one out of the hospital.

Daily Assessments and education will help teach you how to identify signs and symptoms to help avoid preventable hospitalizations

Get support from a dedicated coach.

Build a relationship with your Ceresti Coach, someone to help you along your journey

Become a more confident caregiver.

Gain the knowledge, skills, and confidence you need to care for your loved one

6-Month Digital Caregiver Empowerment Program

Ceresti Capabilities

- Predictive Analytics
- Enrollment
- **Education & Coaching**
- **Remote Monitoring**
- Reporting

Improve Caregiver Effectiveness via Education and Coaching

Mobile platform enables caregiver engagement in education, support, assessments and digital therapies

Experienced coaches proactively engage, monitor and support caregivers

Evidence-based medical and psychosocial content is curated to support caregivers

Reduce Patient Hospitalizations via Remote Monitoring

Predictive Analytics + Remote Risk Assessment → **Alerts** → **RISK MITIGATION**

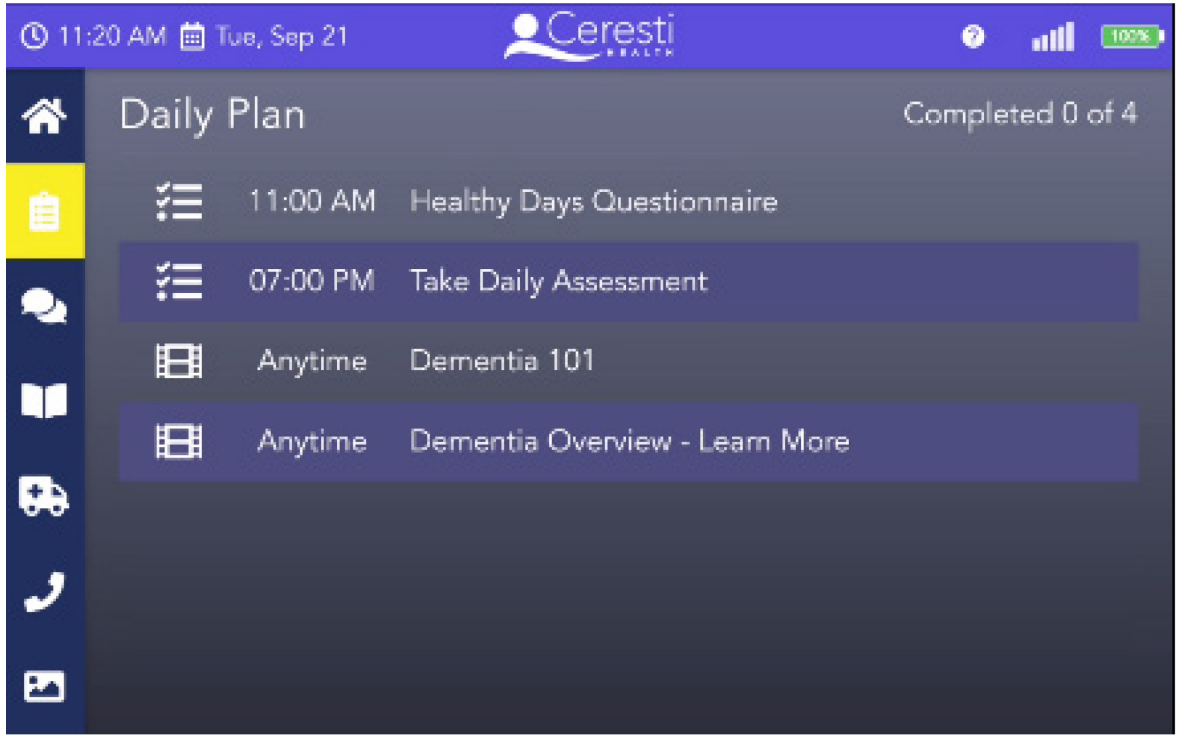
Example of Risk Mitigation

- Caregiver coaching
- Encourage primary care, alert care management teams
- Identify barriers, connect patients to plan benefits

All Results are Draft and Preliminary

Ceresti Provides Single-Purpose Tablet with Elderly-Friendly Menu

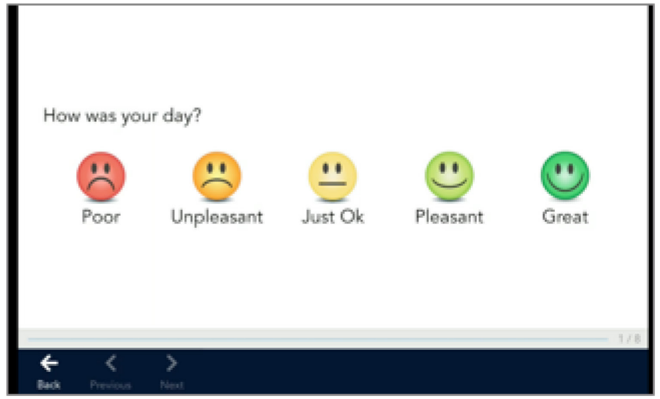
Daily Plan Automatically Includes Curated Content

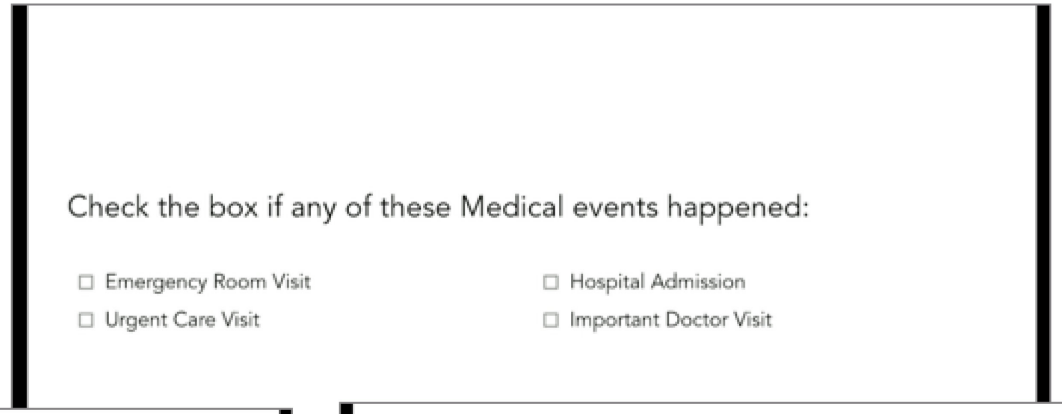


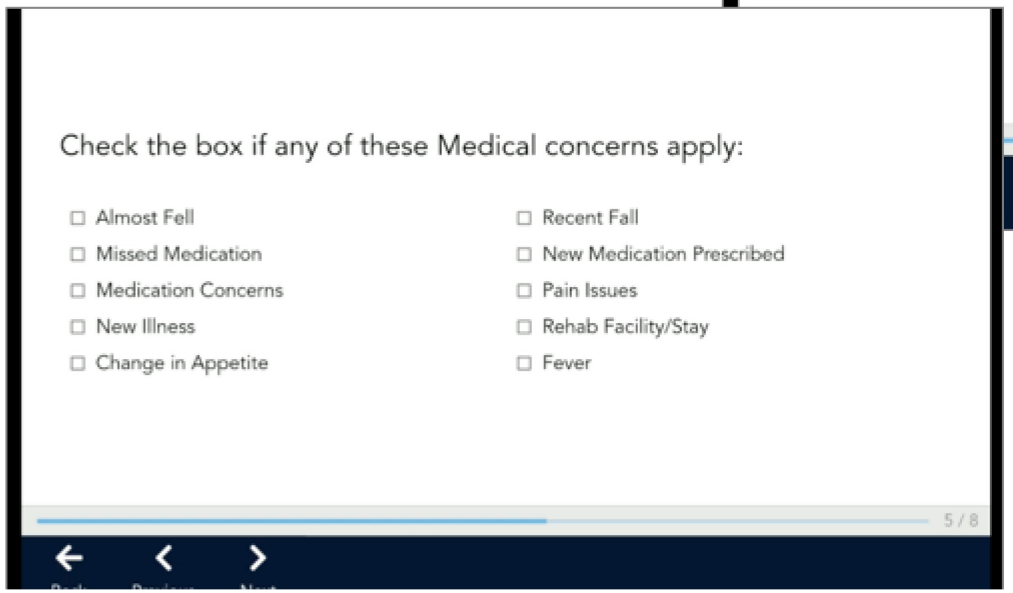
Always includes a reminder to complete the online daily assessment

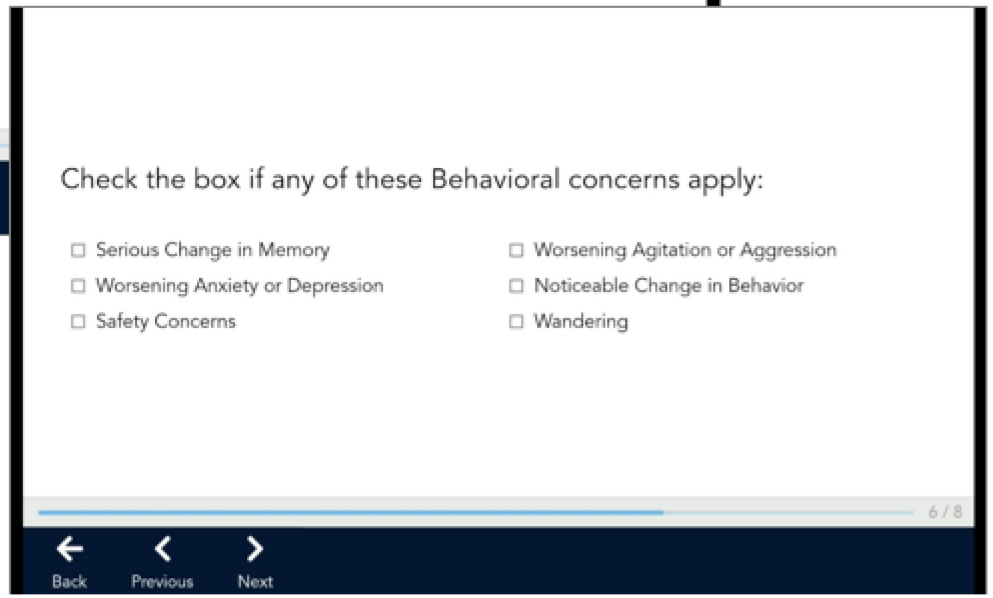
Includes content recommendations selected by algorithms based on personal situation and place in the caregiver journey

Simple Daily Assessment Tool For Caregiver









Risk Assessments Provide Actionable Alerts for Coach Follow-up

Ceresti Risk Assessment **Total Completed = 6,429**

Events		Count	Priority
1	Important Doctor Visit	57	M
2	Hospital Admission	10	H
3	Emergency Room Visit	10	H
4	Urgent Care Visit	2	M
	Reason Given for Event	*46*	

How was your day?	Poor	Fair	Count
Caregiver Rating	28	183	211
Member Rating	70	240	310

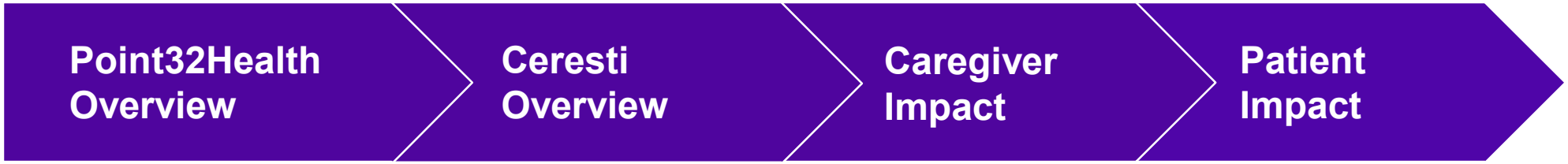
Free Form Response Provided *1737*

Medical		Count	Priority
1	Pain Issues	125	M
2	Change in Appetite	42	L
3	Recent Fall	43	M
4	Missed Medication	40	L
5	New Medication Prescribed	36	L
6	Almost Fell	21	L
7	Medication Concerns	16	M
8	New Illness	15	M
9	Rehab Facility/Stay	6	L
10	Fever	1	M
	Total Issues Reported	**1335**	

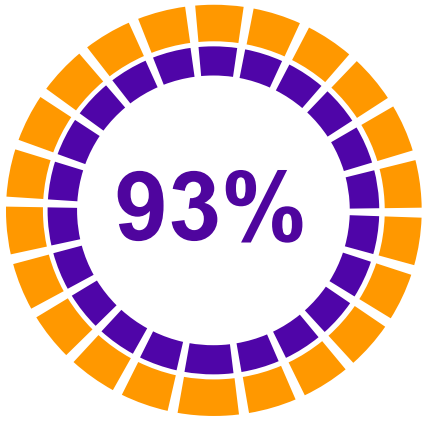
Behavioral		Count	Priority
1	Noticeable Change in Behavior	96	M
2	Serious Change in Memory	83	H
3	Worsening Anxiety or Depression	71	M
4	Worsening Agitation or Aggression	44	M
5	Safety Concerns	48	M
6	Wandered	2	L

Assessments with L, M or H issue	742
Assessments with High Priority issue	462
Assessments with Medium Priority issue	350
Assessments with Low Priority issue	131

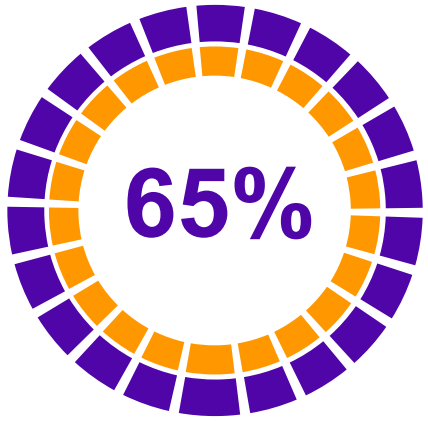
Caregiver Can Message with Their Coaches or Any Other Authorized Individual, if They Prefer Messaging Instead of Phone Call



High Caregiver Engagement with Ceresti



Monthly Engagement* Rate by Caregivers



Weekly Engagement Rate by Caregivers

Minutes per Week Engagement by Caregivers

Remote Risk Assessments Completed by Caregivers per Week

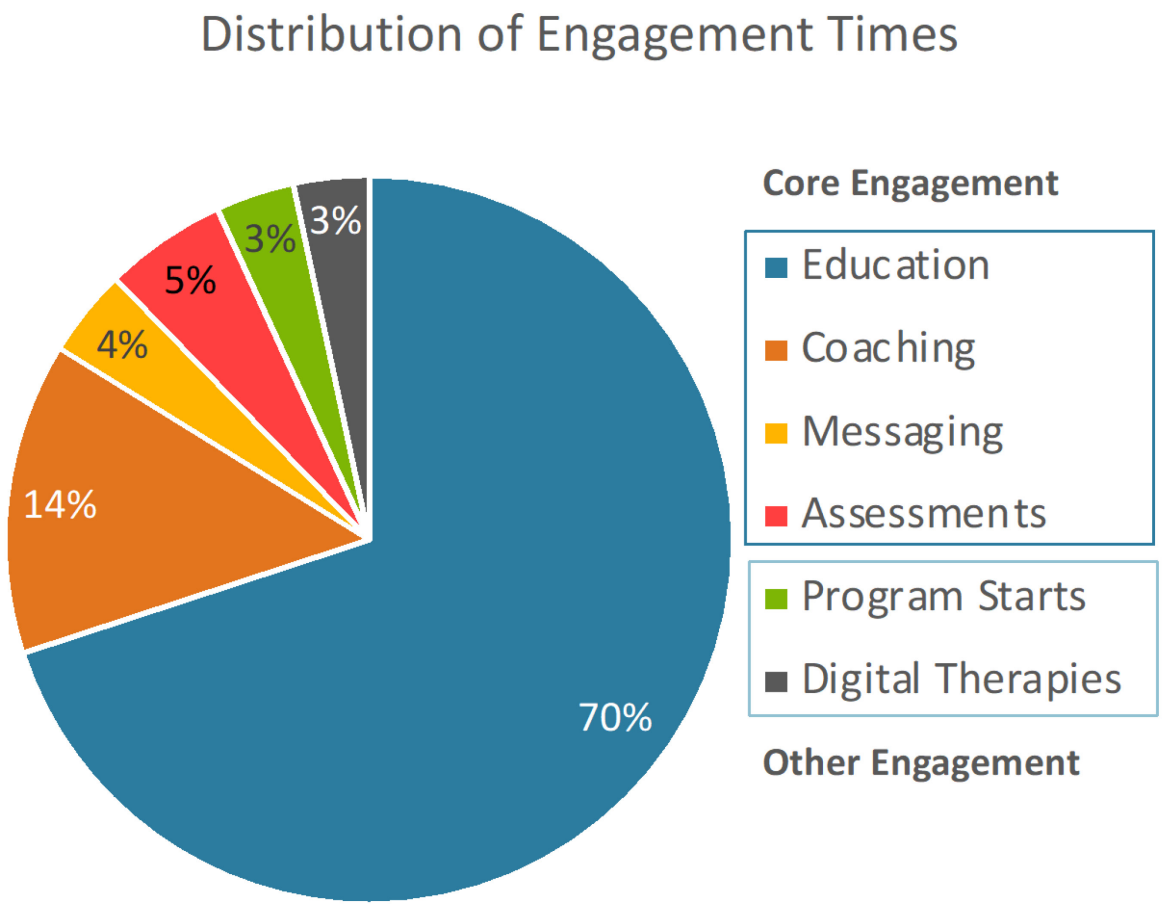
52% of Caregivers are Spousal Caregivers

*Monthly engagement requires:

- Call with a coach
- Caregiver sends message to their coach
- Program start
- 20 minutes of education

All Results are Draft and Preliminary

Distribution of Caregiver Engagement Times in THP Pilot Program



NOTES

This chart details the breakdown of the 39.5 minutes **average engagement time per caregiver per week by category, described below.**

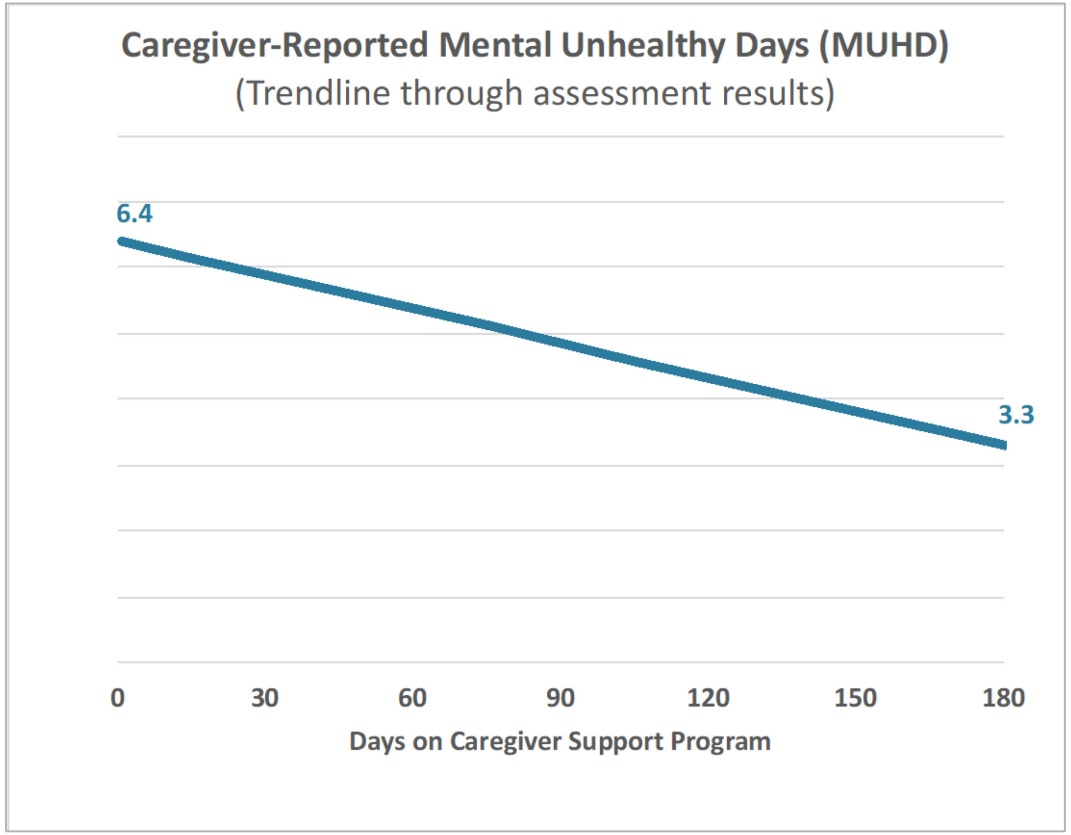
Category	Description
Education (70%)	Time spent engaging in tablet-based videos, tutorials, interactive sessions
Coaching (14%)	Phone calls with a coach
Messaging (4%)	Time spend messaging with a coach
Assessments (5%)	Time spent completing assessments (e.g., social style, healthy days, daily assessments)
Program Starts (3%)	Time spent learning about the program and use of tablets
Digital Therapies (3%)	Time spent using the “Engage” function on tablet (reminiscence therapy, etc.)

The Number of Mental Unhealthy Days (MUHD) Reported by Caregivers Enrolled in Pilot Program Decreased by 3.1 Days

- Caregivers were asked to completed the 4-question CDC-developed **Healthy Days assessment**
- One of the questions asks caregivers to report the number of **mental unhealth days (MUHD)**

> "Now thinking about your **mental health**, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

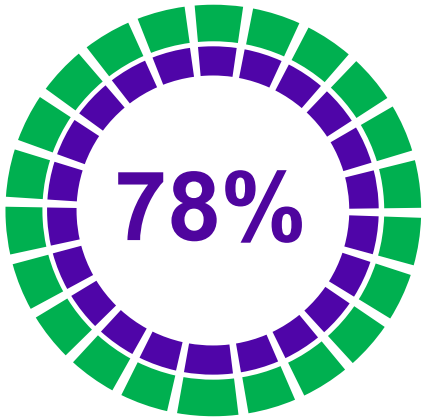
- The number of MUHD reported by caregivers declined as they engaged in their 6-month caregiver support programs



All Results are Draft and Preliminary

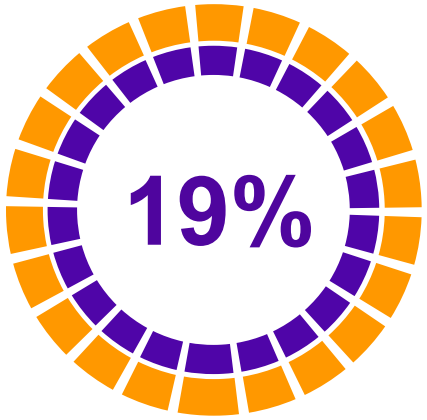
Significant Program Satisfaction

Among 164 Enrollees in Tufts Health Plan Pilot

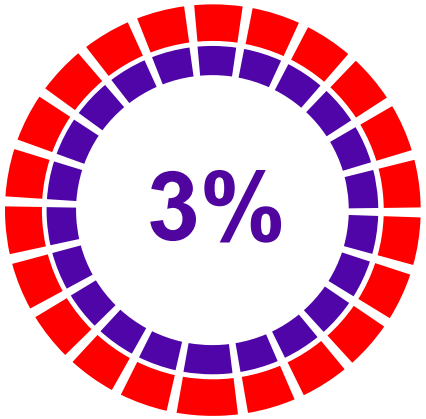


High Percentage of "Promoters"

Modest Percentage of "Passives"



Low Percentage of Detractors



Caregiver Voices Reveal Pilot Program Relieves Their Loneliness

...it makes it so much easier to do the right things. Everything makes so much sense and gives caregivers so much confidence to be aware of these behaviors.

… **I don't feel like I am alone**, ***dealing with this disease*.**

"I think this is a God-send ….

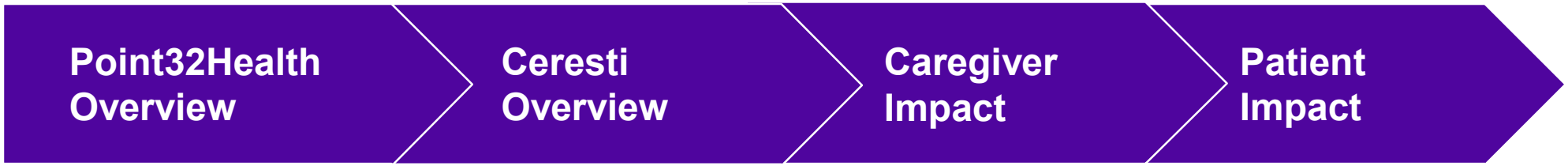
I dread the day the plug is pulled on my Ceresti program - you're pretty much my whole support system.

….knowing that you're there and I can contact you at any time and get some advice or to ask a question, that really gives me comfort.

I am so grateful for this program and that you called yesterday and made those suggestions….and I felt so prepared for my conversation with her today, I knew what to say because you and I had spoken.

I feel so much more supported by this program than any other health care related program I have been a part of before.

I appreciate you being there for me, because I don't have anyone else who is. This is a lifeline for me ….



Dementia Patient Medical Costs Decreased

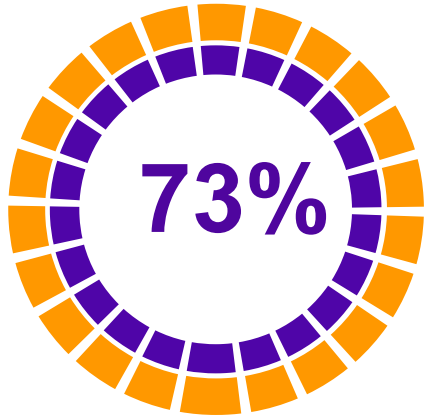
For Those Enrolled in Pilot Program > 45 Days

53% Reduction in PMPM

64% Reduction in PMPM in High Utilizers

80% Reduction in Admissions per 1,000 Members (ADK)

42% Reduction in Emergency Department Visits per 1,000 Members (EDK)



Reduction In Readmissions

Caesar A. DeLeo, MD MHSA

Dr. Dr. Caesar A. DeLeo is vice president and executive medical director of strategic initiatives for Highmark Inc. In this position, he leads innovative projects related to behavioral health, telemedicine and substance use disorder strategy. A third-generation physician, Dr. DeLeo began his career by making house calls with his father and developed a lifelong passion for equitable health and wellness. He practiced Internal Medicine and Emergency Medicine with Geisinger and EPMG in Michigan. He has more than 20 years of experience in leading departments, managing physicians and creating programs that enhance care quality and accessibility. He has experience in all aspects of health plan operations having held progressive leadership roles at CIGNA, Health America, Gateway Health and Highmark. Dr. DeLeo is a graduate of Lehigh University, Jefferson Medical College and the University of Michigan School of Public Health.

Multi-Product Insurer and Vertically Integrated Delivery System:

Pandemic Telemedicine Experience with SUD

Impact of Opioid Prescriber Profiling and Academic Detailing

HIGHMARK®

Caesar A. DeLeo, MD
VP Executive Medical Director
Strategic Initiatives

HIGHMARK.

Highmark Health is a national blended health organization

- Highmark is a Pittsburgh-based national blended health organization $18 billion in annual revenues made up of multiple entities employing 37,000 across 50 states.
- Highmark Inc. is fourth-largest overall Blue Cross and Blue Shield affiliated organization.
- Number one overall commercial market share in both Pennsylvania and across the PA-WV-DE region, along with western and northeastern New York.
- 6 million core health plan members in multiple products lines.
- Parent company of United Concordia Dental (sixth largest), HM Insurance Group and other subsidiaries.
- 29 Million lives under contract.
- Delivery System: 14 hospitals, 300 clinical facilities, 2,600 affiliated physicians and 21,000 health system employees

www.highmark.com

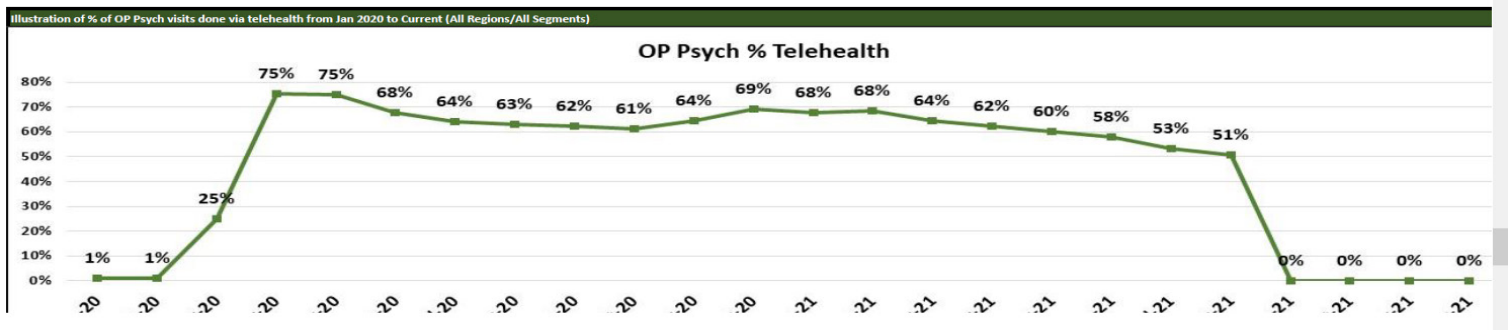
Three-Pronged Approach to SUD

- **Prevention:** Education to schools, employers, community, prescribers, social grants and anti-stigma programs.
- **Mitigation:** Opioid prescribers, PCP Integration (e.g., SBIRT or similar), Pharmacy tactics (PA, QL, Edits), **Profiling/Academic Detailing**, pharmacy (edits, quantity limits, prior auth addition/removals), Fraud Waste & Abuse investigations), State PDMPs/PMPs, law enforcement.
- **Treatment:** Addiction Medicine service line expansion, specialty providers, SBIRT, Warm Handoff programs, **telemedicine**, methadone coverage, harm reduction, long-term recovery support

Pandemic Telemedicine Experience with SUD

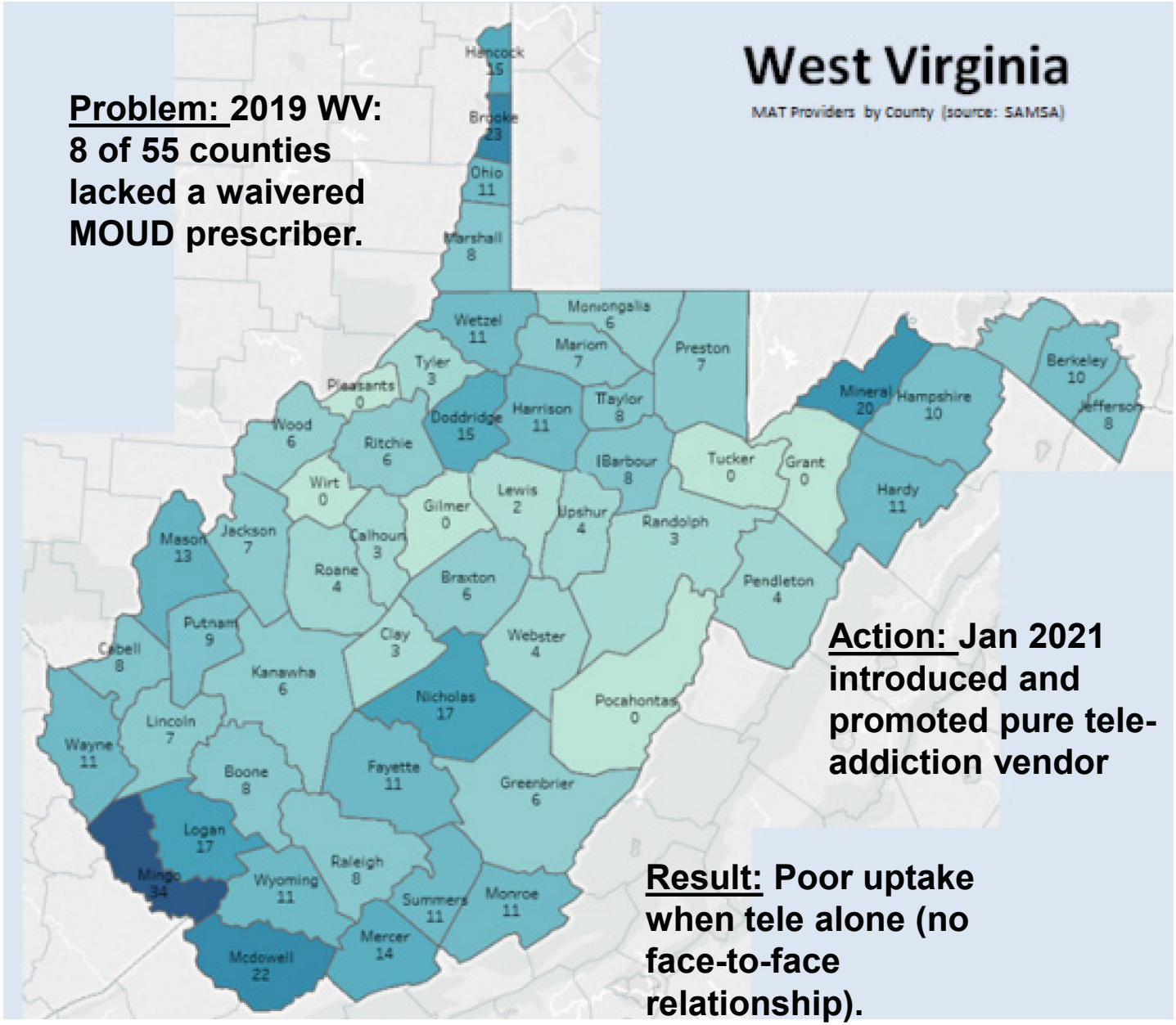
Telehealth During the Pandemic

- 2019 Vendor Telehealth (TH) = 50% of all TH
- 2020 TH grew 7100% organically through network providers
- 2021 Vendor TH makes up 2% of Highmark's TH
  - 2021 TH: 32% BH/SUD, 52% Primary Care
  - 2022 TH: 42% BH/SUD, 45% PC (preliminary)
- Overall BH is being delivered 51%



- Trends similar across three state region (DE, PA, WV)
- 2021 Medicare: 8.3% BH/SUD, 72% Primary Care

Tele-addiction Service Experiment (100% Tele Vendor)

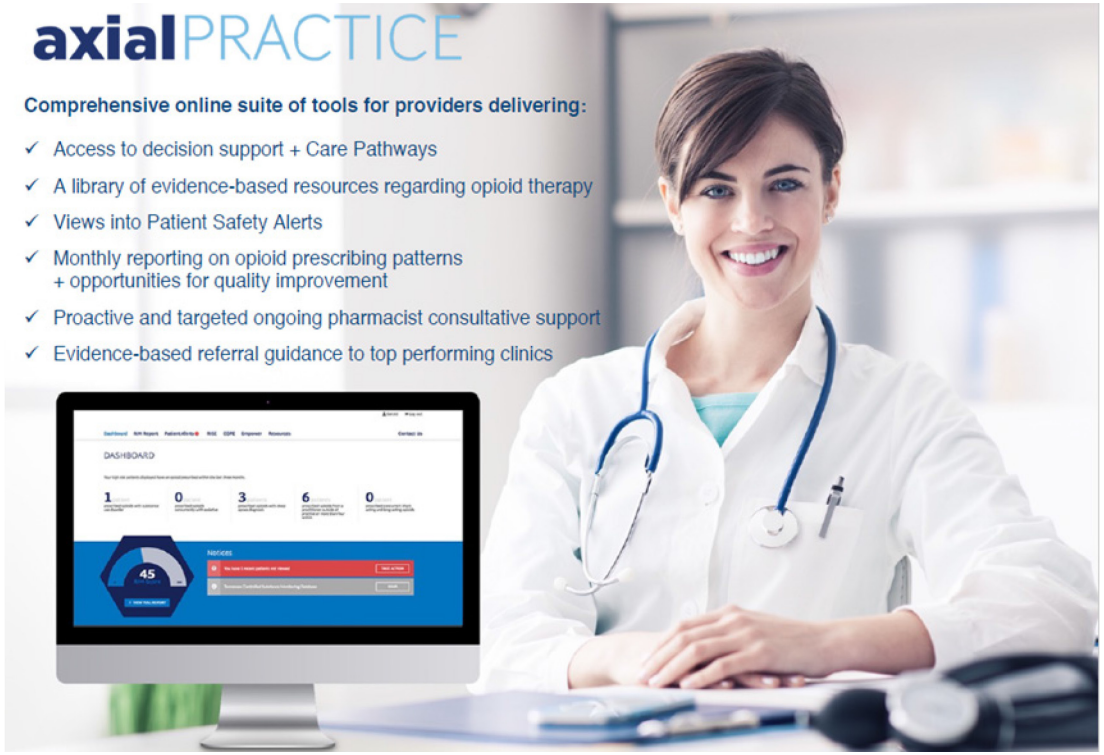


Problem: 2019 WV: 8 of 55 counties lacked a waivered MOUD prescriber.

Action: Jan 2021 introduced and promoted pure tele-addiction vendor

Result: Poor uptake when tele alone (no face-to-face relationship).

Opioid Risk Mitigation: Academic Detailing and Academic Detailing



Axial Practice Profile

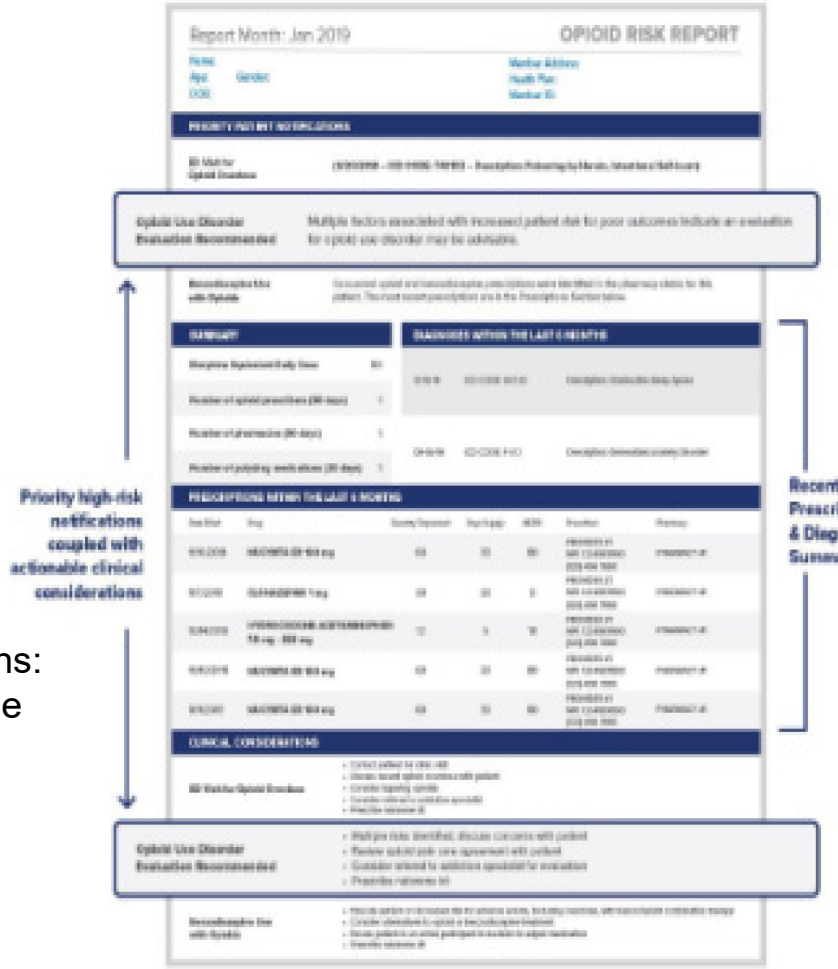
- **Monthly practice reports on opioid prescribing practices**
- **Self regulating**
- **Persistent outliers receive mail/email.**
- **Repeat persistent outliers received calls and academic detailing from axial pharmacy staff.**
- **Persistent outliers escalate to Fraud and Abuse and/or Credentialing Committee.**

Reporting and Interventions and Corrective Action Plans on Specific Members

axialHealthcare

Opioid Risk Report

Generated for opioid prescribed patients also flagged for high-risk notifications, multimodal Opioid Risk Reports offer an actionable, patient-specific snap shot of clinical information coupled with tailored clinical considerations.



Workflow integrated delivery options: eFax, secure email, direct message to EHR, or axialPractice Portal.

Highmark's Impact on Opioids Through Risk Mitigation (Profiling and Academic Detailing)

What

Risk Mitigation (opioid prescriber profiling and academic detailing) administered in conjunction with Axial

Markets

West Virginia	Pennsylvania
Risk Mitigation Launched Sept 2016	Risk Mitigation Launched Feb 2018

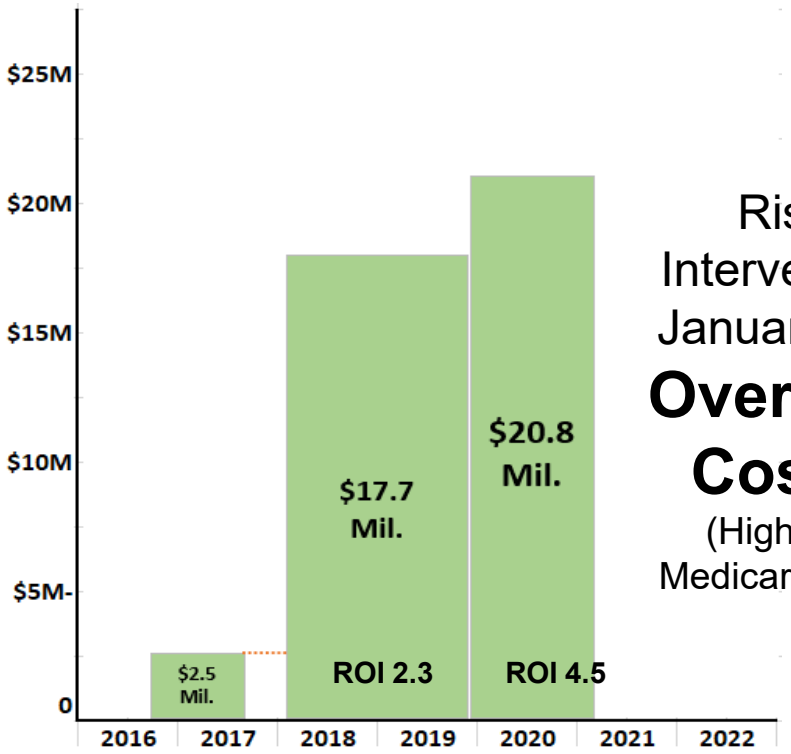
Operations

- Monthly opioid prescriber profiling reports
- 4280 Direct Provider Interventions
- 2900 Members Impacted

Clinical Results

- Monthly Risk Cohort Analysis pre and post
- Opioid Prescribing: Members on opioids, Ne Rx, Duration
- MEDD>50
- Multi-prescriber Risk
- High Risk Prescribing (concomitant benzo)

Successes



Risk Mitigation Interventions Through January 2021 Grew to **Over $42 Million Cost Savings**
(Highmark Health Plan Medicare, ACA, Commercial Risk)

Administered by Axial. Savings 9/1/17-1/31/18 not reported. 2020 savings numbers pending final Highmark Actuarial certification. 2021 not yet projected. Actual savings to be reported 2022.

Expanding Success

Highmark Building our success, expand Risk Mitigation

Delaware	New York
Risk Mitigation Proposed 2021	Risk Mitigation Proposed 2022

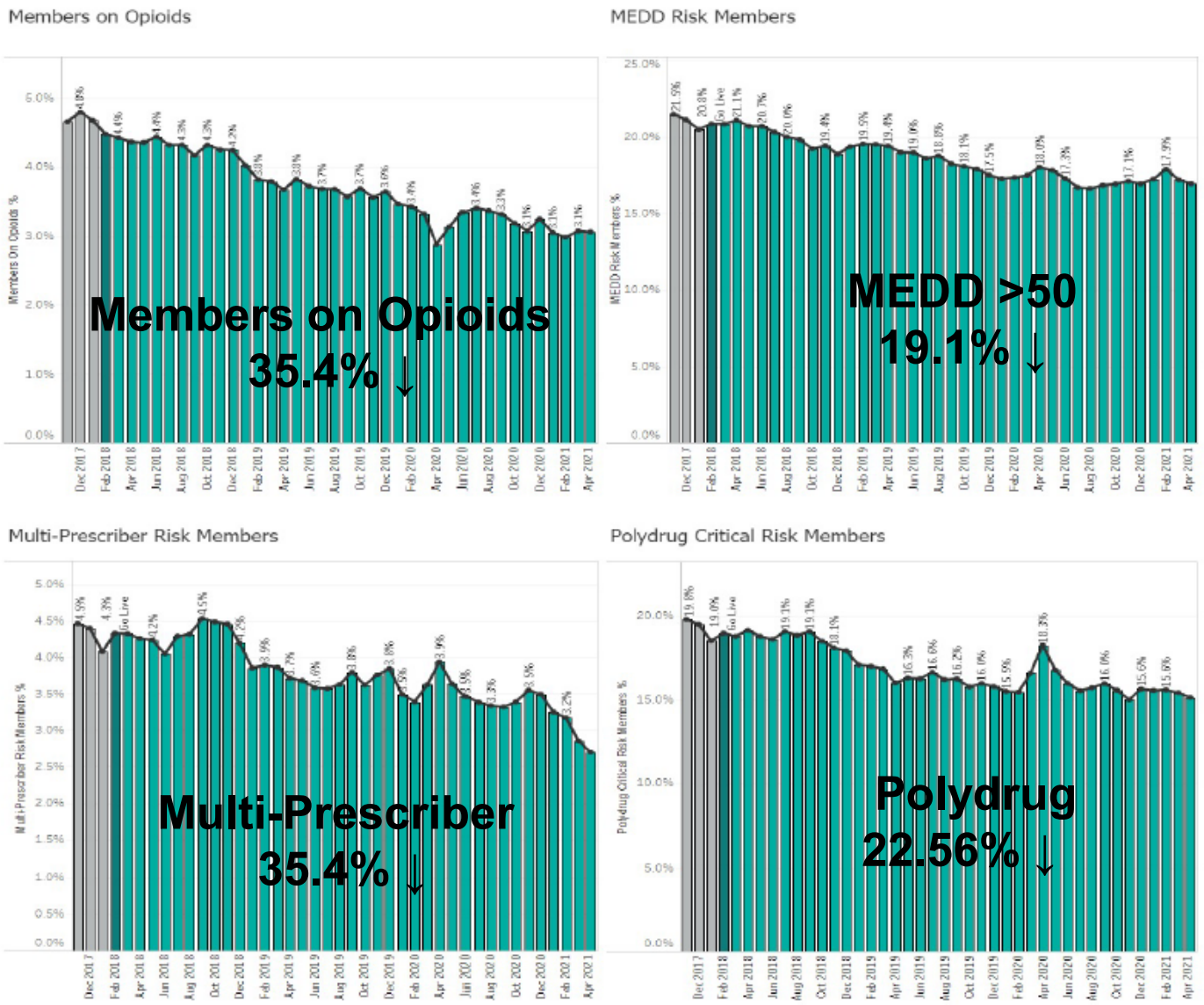
- Highmark Health Plan:
  - Delaware Q4 2021,
  - NY 2022
- Delaware Health Options Q4 2021
- Gateway Health Plan 2022

Additional Impacts:

- Treatment (MOUD) ↑ 30.8%
- Overdoses ↓ 33.3%

V9/21

Pennsylvania Results

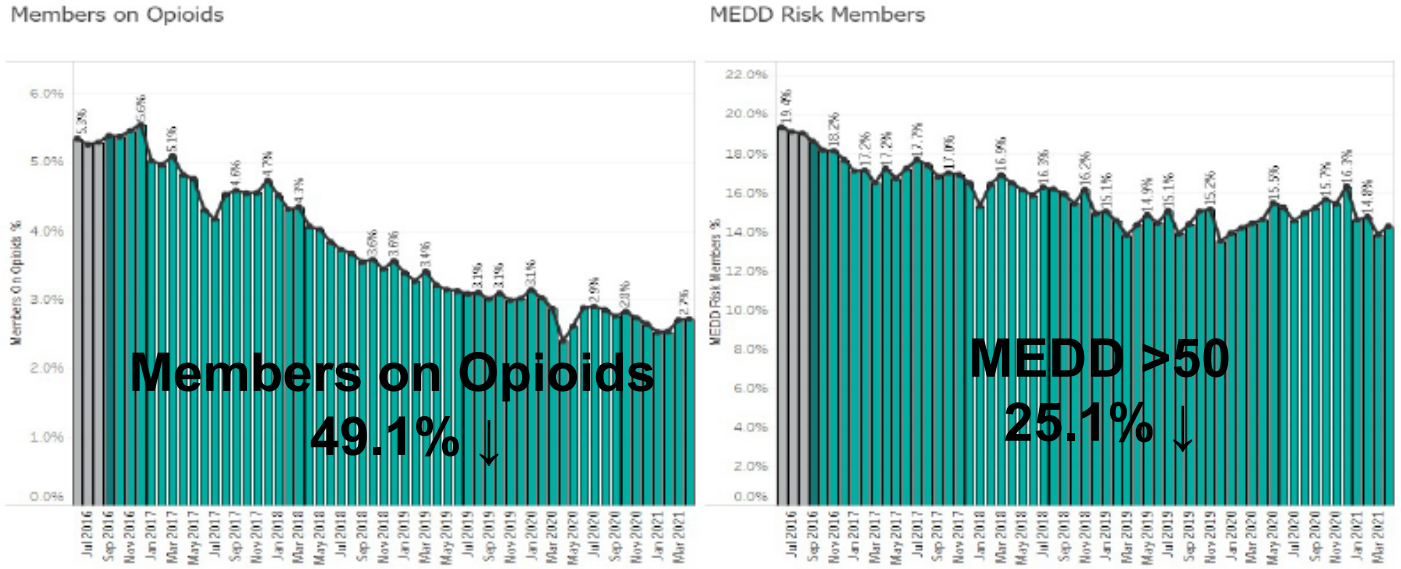


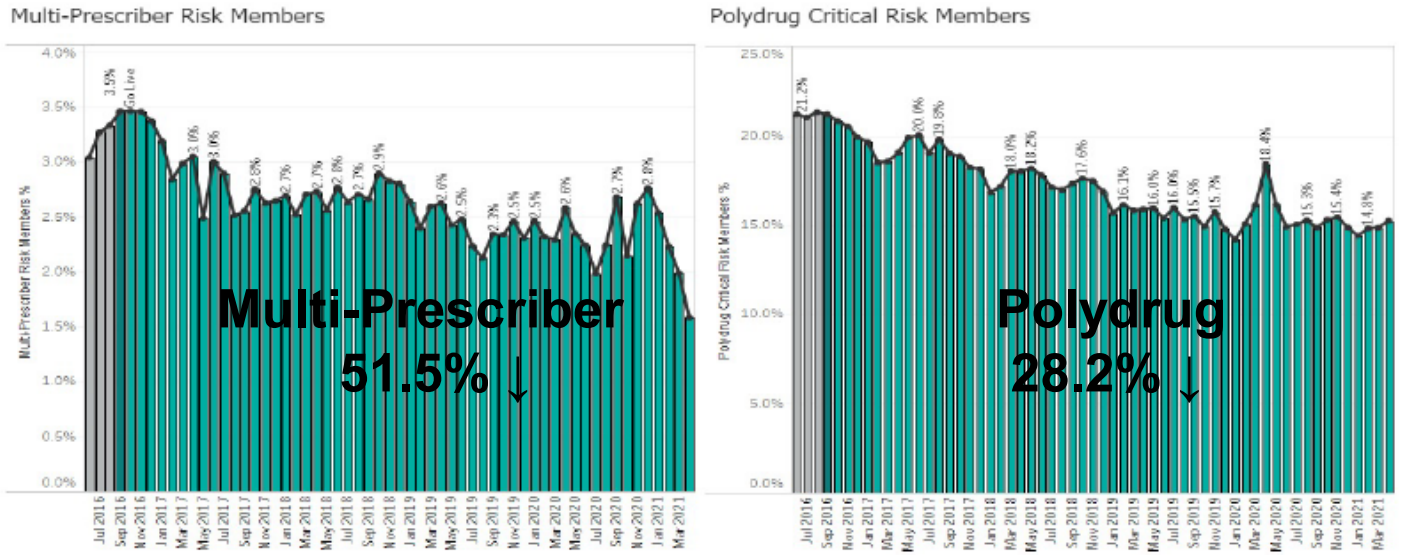
Notes and Key Takeaways

- Pennsylvania Population Pre-/Post-Contract Delta (Dec 2017/April 2021)
  - Members on Opioids % decreased by 1.7 percentage points (35.4% decrease)
  - Percent of Opioid Members with an MEDD Risk decreased by 4.2 percentage points (19.91% decrease)
  - Percent of Opioid Members with Mulit-prescriber Rise decreased by 1.7 percentage point (38.64% decrease)
  - Percent of Opioid Members with Polydrug Critical Risk decrease by 4.4 percentage points (22.56% decrease)

The denominator for the MEDD Risk Member %, Multi-Prescriber Risk Members %, and Polydrug Critical Risk Members % is the sum of opioid members. The denominator for the Members on Opioids is the sum of all eligible members.

West Virginia Results





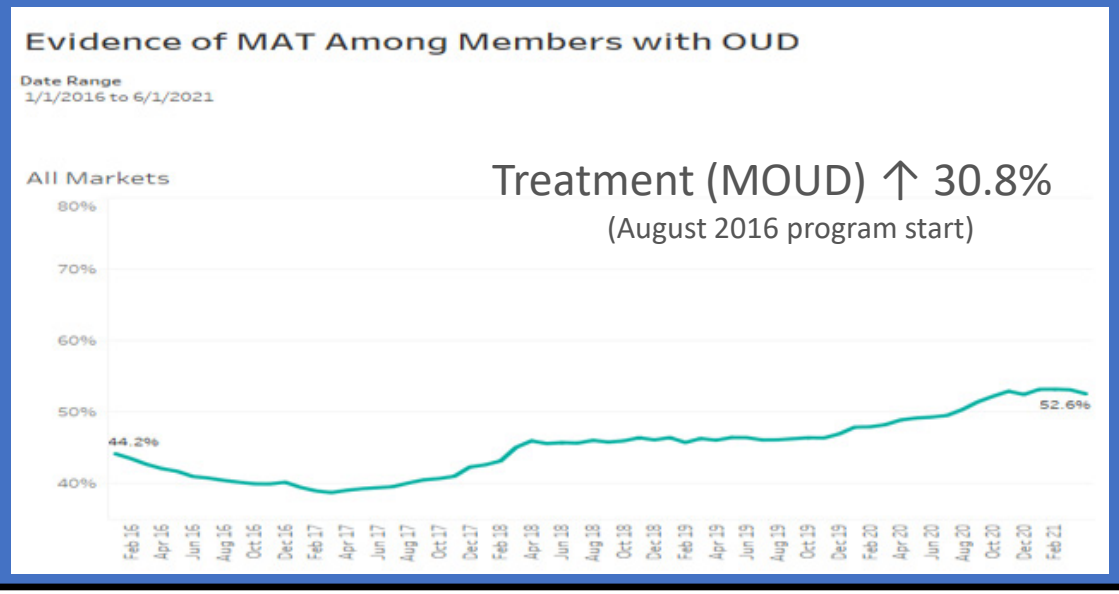
Notes and Key Takeaways

- West Virginia Population Pre-/Post-Contract Delta (Aug 2016/April 2021)
  - Members on Opioids % decreased by 2.6 percentage points (49.06% decrease)
  - Percent of Opioid Members with an MEDD Risk decreased by 4.8 percentage points (25.13% decrease)
  - Percent of Opioid Members with Mulit-prescriber Rise decreased by 1.7 percentage point (51.52% decrease)
  - Percent of Opioid Members with Polydrug Critical Risk decrease by 6 percentage points (28.17% decrease)

The denominator for the MEDD Risk Member %, Multi-Prescriber Risk Members %, and Polydrug Critical Risk Members % is the sum of opioid members. The denominator for the Members on Opioids is the sum of all eligible members.

OUD Treatment (MAT %) Across Products

MAT %	Com	ACA	MA	Medicaid	DSNP
PA	52%	49%	16%	68%	40%
WV	55%	55%	29%	No data	No data
DE				54%	



Mona Siddiqui MD, MPH, MSE

Mona Siddiqui, MD, MPH, MSE is Senior Vice President for Enterprise Clinical Strategy and Quality at Humana where she leads the development and management of Humana's integrated clinical strategy and provides strategic direction for clinical quality in an effort to improve the care and safety for patients. Dr. Siddiqui previously worked at the U.S. Department of Health and Human Services (HHS) where she served as the Department's inaugural Chief Data Officer. In that role, she led the effort to connect the nation's health care data through the build-out of an enterprise wide data-sharing platform and governance structure at HHS and advanced the Department's Artificial Intelligence strategy. Previously, Dr. Siddiqui served at the Centers for Medicare and Medicaid Innovation working towards implementing rapid cycle testing for payment models. She has also served with the White House Social and Behavioral Sciences Team ("nudge" unit) during the Obama administration. Prior to her work in the federal government, Dr. Siddiqui was at the Johns Hopkins University Health System where she was focused on driving value based care initiatives. Dr. Siddiqui holds a Medical Degree from the Johns Hopkins University School of Medicine, a Master's degree in Quantitative Methods from the Harvard School of Public Health, and a Master's degree in Management and Engineering from the Stanford University School of Engineering.

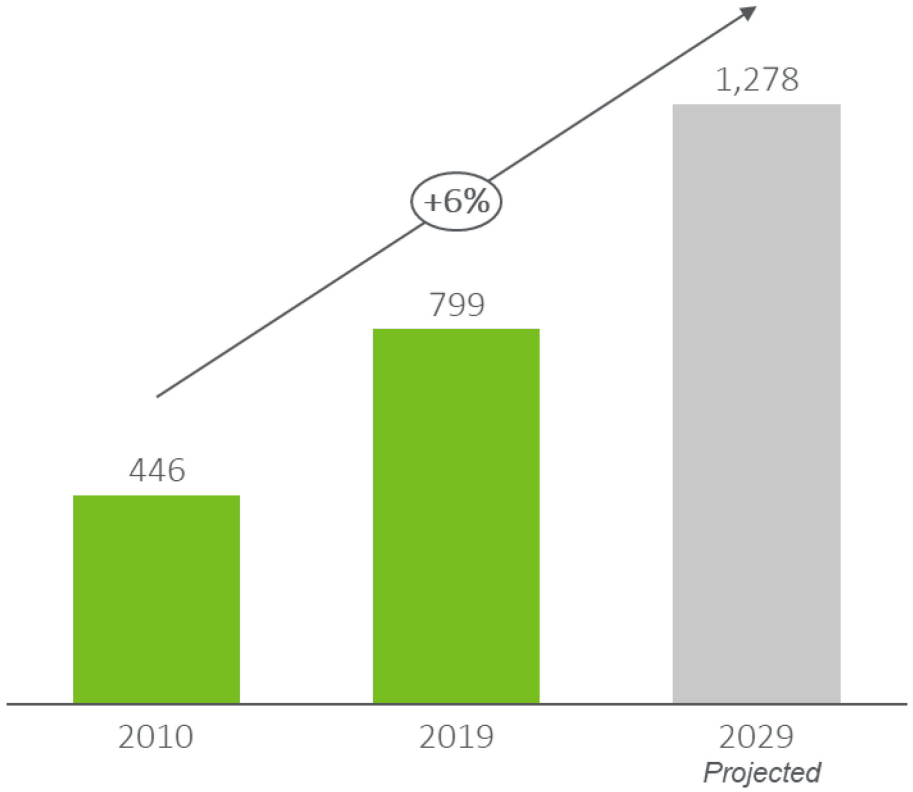
Prioritizing Vulnerable Populations through Predictive Modeling

Humana®

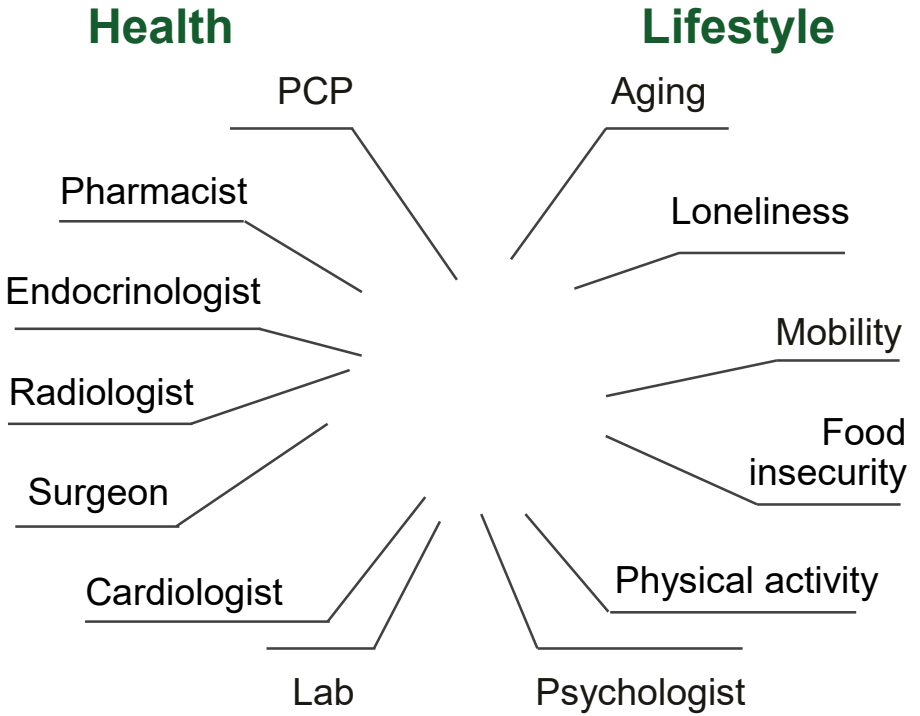
The health system is costly, complex, and poorly positioned to meet customer needs

Medicare spending grew to **~$800B** in 2019, **21% of total NHE**

Actual and Projected Net Medicare Spending *(billions)*



The **health system is complex**, and not positioned to meet seniors' needs

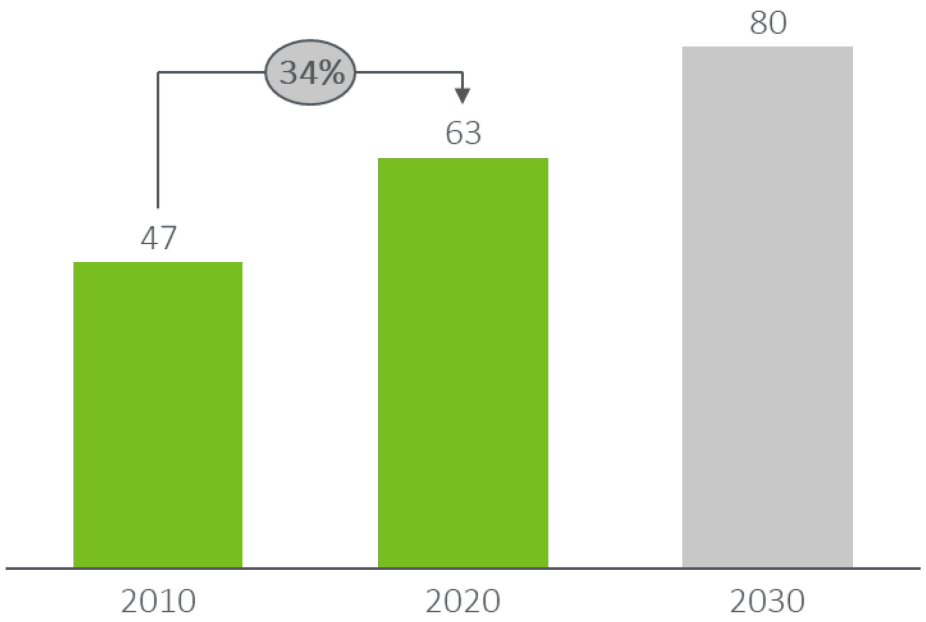


Fragmented. Complex. Focused on **episodic care**.

Demographic trends point to an aging and increasingly chronic population

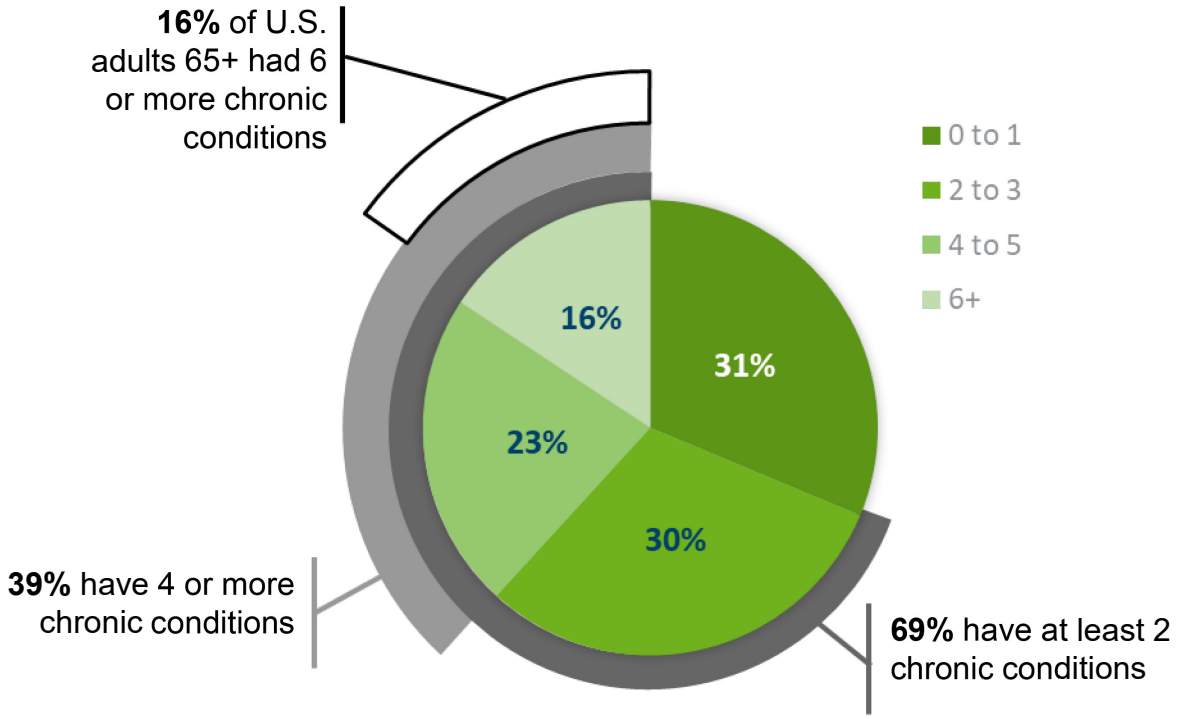
Medicare eligibles have **grown by over a third** since 2010

Medicare Beneficiaries
Aged and Disabled (millions)



Seven in ten Medicare Enrollees have **at least two chronic diseases**, and four in ten have four or more

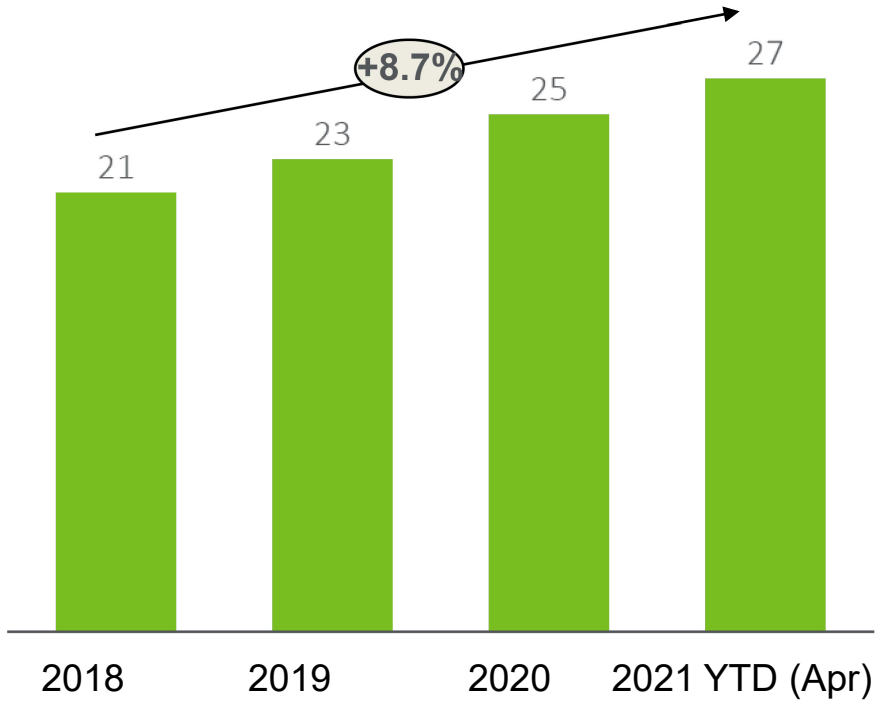
Percentage of U.S. Adults with Multiple Chronic Conditions, Non Duals >65 (2018)



Medicare Advantage has demonstrated the strength of holistic care

Medicare Advantage is a proven model to address structural changes, evident in its growth, affordability, and outcome improvement

Industry Medicare Advantage Enrollment *(millions)*



Exceptional clinical outcomes allow us to invest in our benefits…

43%

Fewer avoidable hospitalizations vs. Original Medicare

Holistic health benefits

…and strengthen the diversity of our membership.

Choose MA over traditional Medicare

Hispanic Americans

African Americans

Asian Americans

Technology and advances in value-based payment are enabling more convenient, proactive care

Accelerating data and analytics…

Interoperability

47%

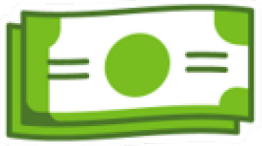
CAGR of industry progress toward interoperability, 2017-2020

Analytics

24%

Projected CAGR of healthcare analytics market

…are enabling value-based payment models…



90%

of Original Medicare Payments Linked to Quality or Value

…and redefining where and how care is delivered.

Higher Acuity
e.g., Emergency Dept.

Higher Skilled Workers
e.g., MD

Lower Acuity
e.g., Home & Digital

Lower Skilled Workers
e.g., Nurse

These trends create significant opportunity

1. The U.S. healthcare system is **costly** and **complex**

2. The U.S. population **continues to age** and be diagnosed with **multiple chronic conditions**

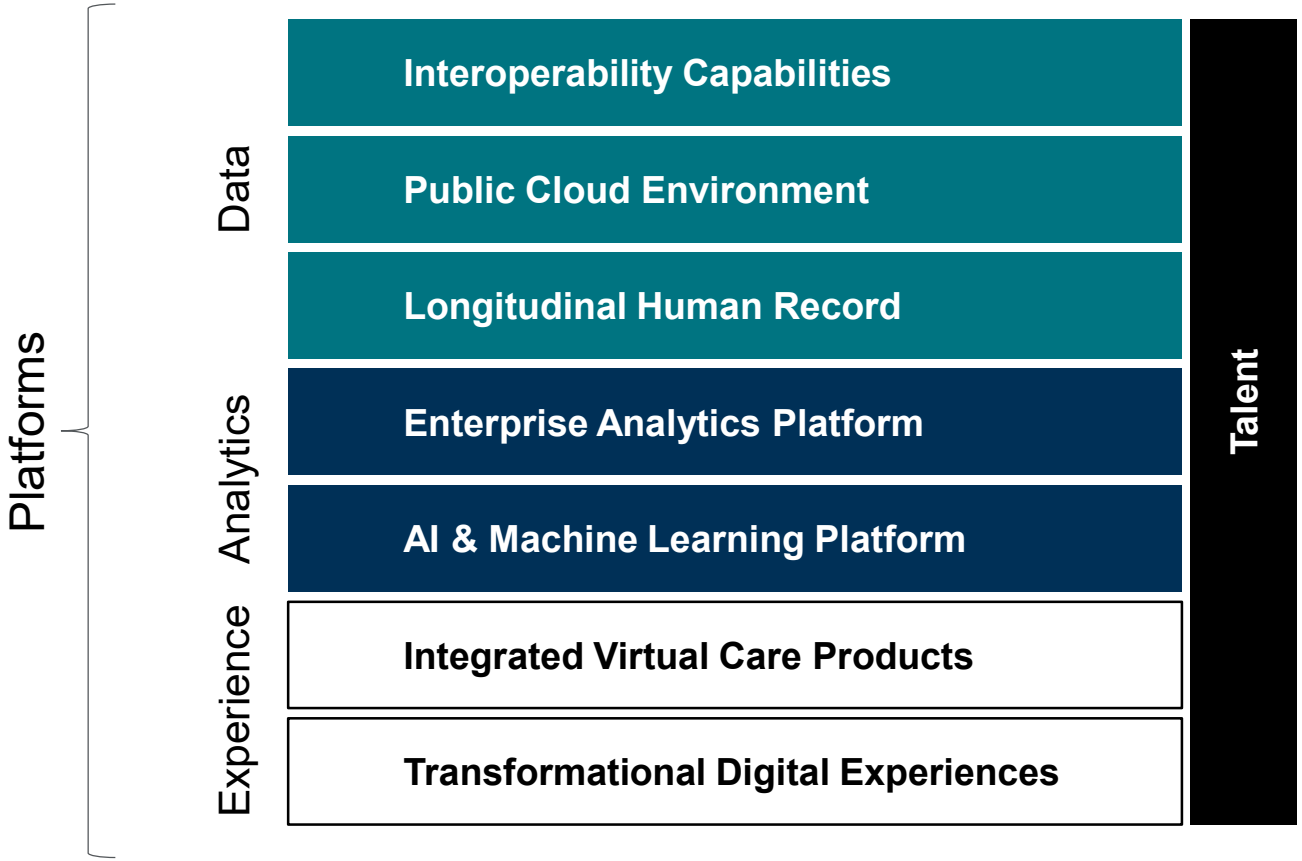
3. Technology is driving **structural shifts** in **where and how we receive care**

The opportunity is captured through:

- ✓ Holistic health outcomes-driven operating model
- ✓ Consumer centricity enabled by technology
- ✓ Locally-integrated health capabilities

To holistically address the needs of our members, we are building our contemporary technology stack and taking a platform approach

Our technology chassis are built with a platform approach



Extensibility

Build once and extend across the business platform (LOBs)

Reusability

Build once and reuse for multiple different use cases

Speed

Time to value is incrementally faster with each subsequent use case

Scalability

Cloud-based with unlimited computing power to support growing volume of users

Proactive Care: We target the right members, at the right time, with the right site of care

Our three pillars of effective clinical care…

Excellent Team

Providing and facilitating care from the **best clinicians** (e.g., having high quality clinicians to serve members)

Right Care

…**providing evidenced based care** (e.g., delivering the right care, avoiding complications)

Empowered Experience

…and ultimately **enabling a sense of autonomy** and **customer centricity**

…enable proactive care

Proactive Care

Primary Care

Home

Pharmacy

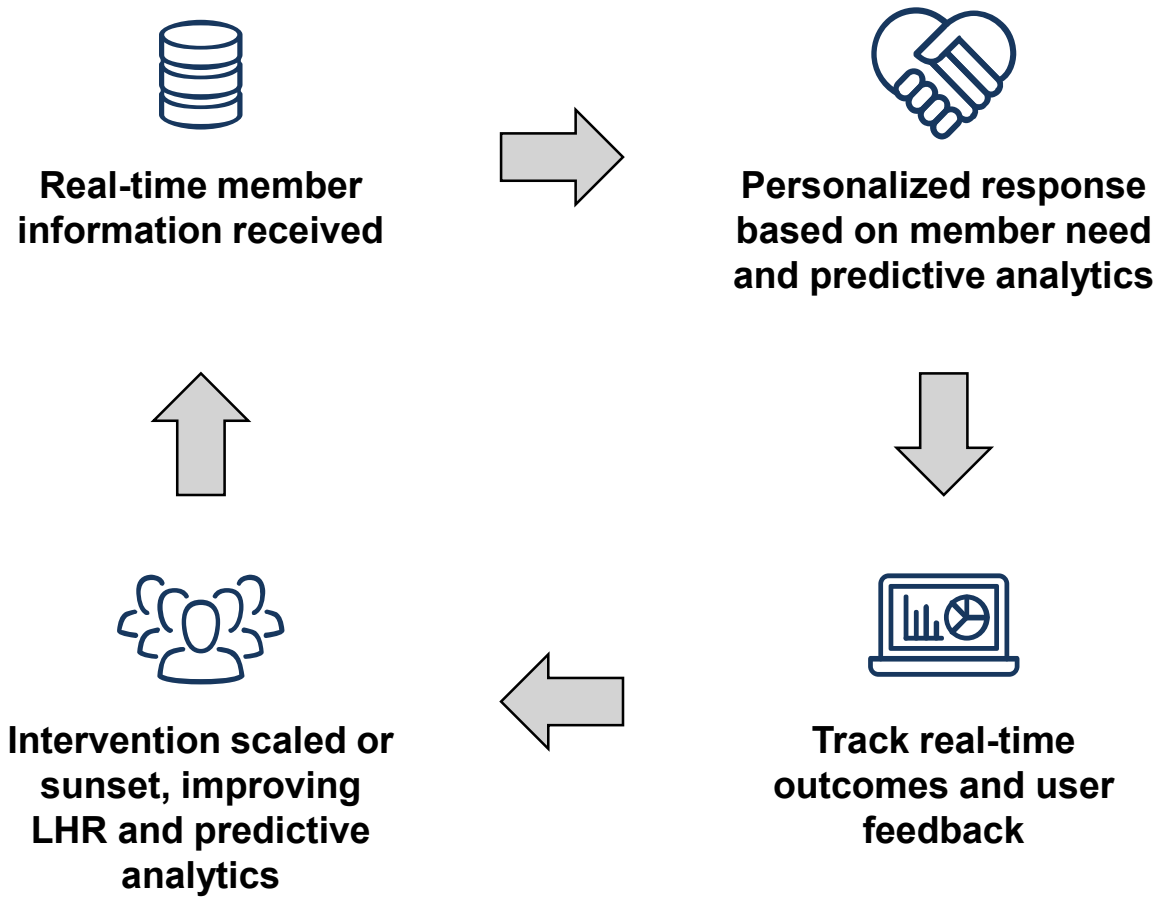
Social Determinants of Health

Behavioral Health

Rostering Members through Analytics

Longitudinal Human Record

Our platform approach to clinical interventions enables continuous improvement and more precise care



Continuous improvements in care

-17%

Avoidable hospitalizations for our MA members vs 2018

-45k

Days spent in hospital for our MA members vs 2018

An important application is how we address social determinants of health

Social determinants of health (SDOH) have an impact on health outcomes, but until now, we did not know the prevalence of a variety of social needs or their impact on member cost, utilization and compliance.

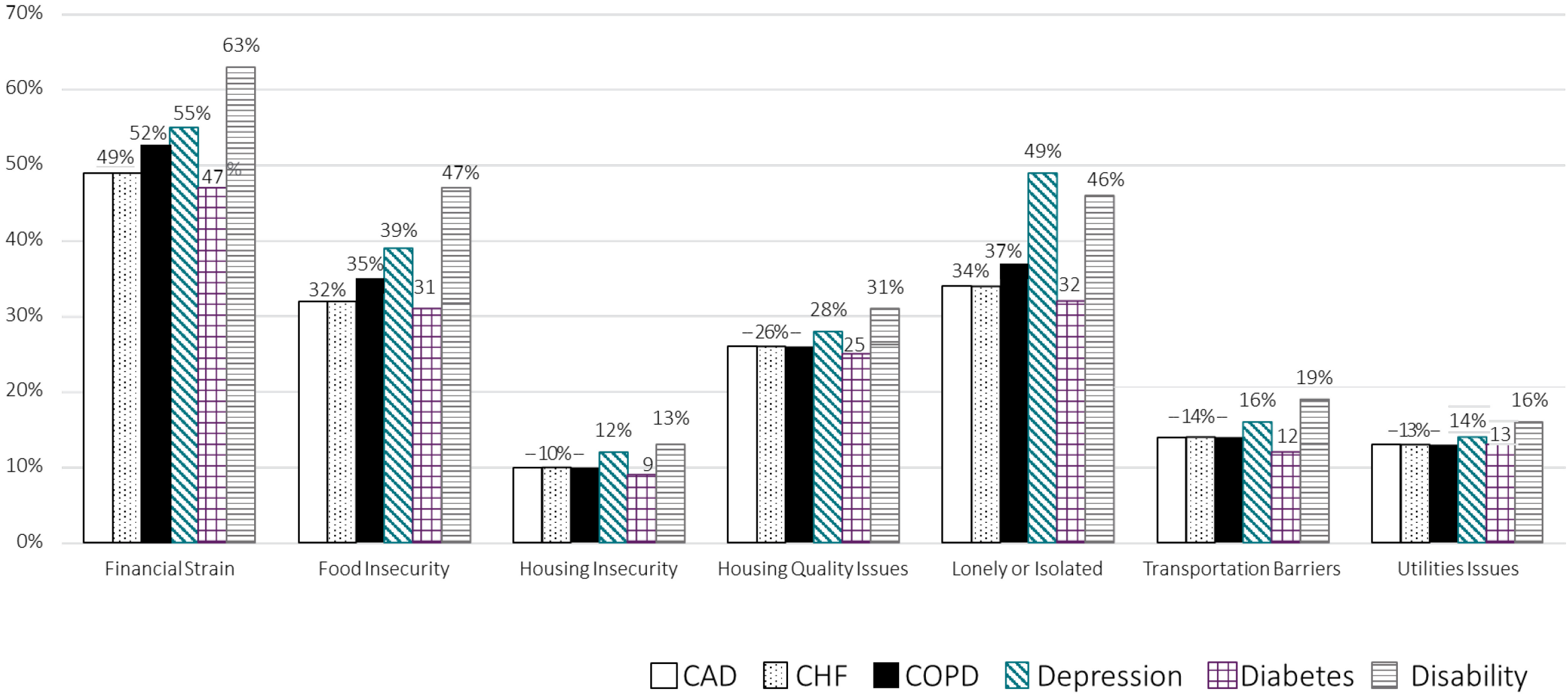
We conducted this multi-channel survey October 2019 – February 2020 with a nationally representative sample of MA members (individual and dual-eligible), and Florida Medicaid beneficiaries to help us better understand the following:

- Members' comprehensive social needs
- How health outcomes are impacted by social needs
- Actionable opportunities for the business

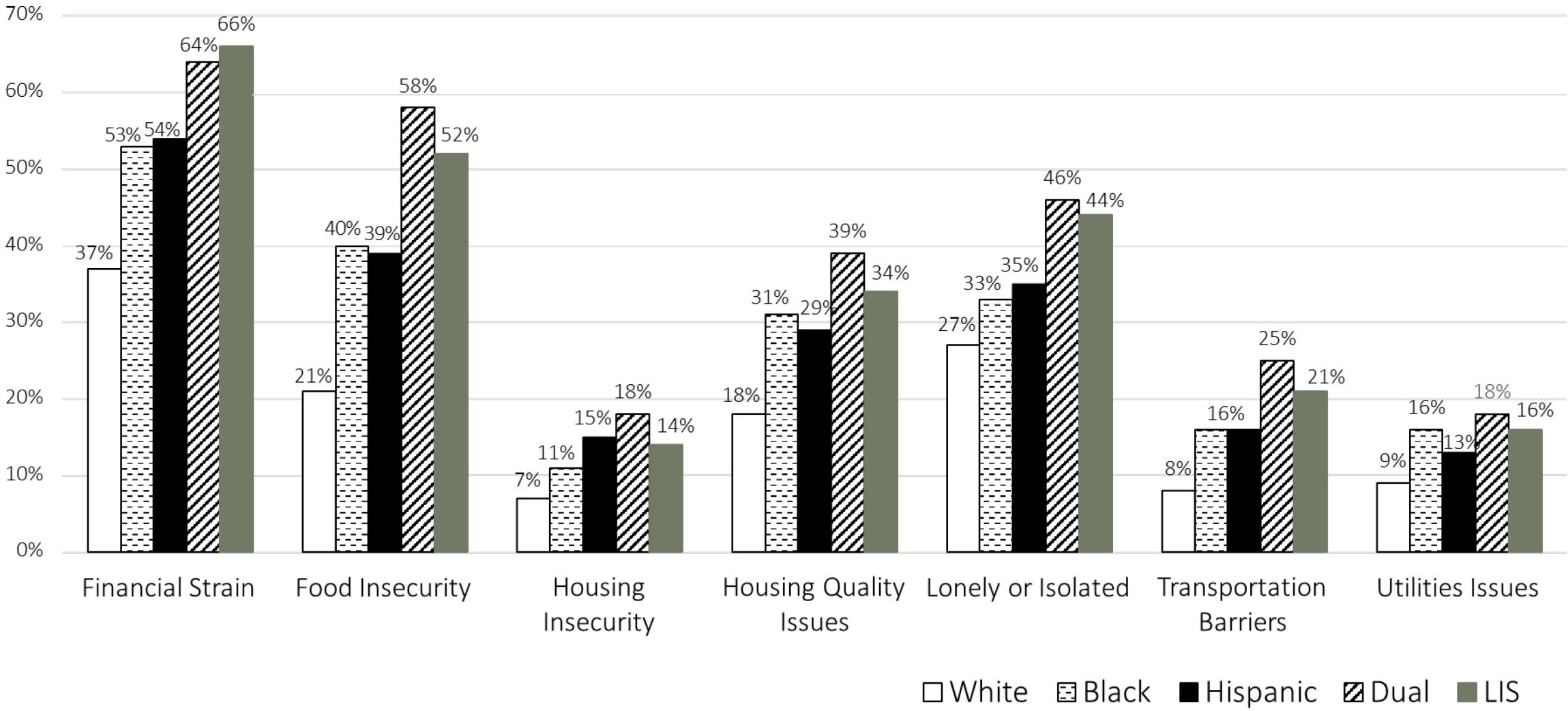
SDOH Domains Measured:

Financial strain, food insecurity, *Healthy Days*, housing insecurity, housing quality, *language*, loneliness/social Isolation, *physical inactivity*, transportation access, and utilities issues.

SDOH Insights | Condition Segments (MA only)



SDOH Insights | Member Demographic Segments (MA only)



SDOH data use cases

This information will help us do business differently by identifying members with reported or potential gaps in social care that may impact utilization, clinical quality, health outcomes, wellness, and member perception.

HAH/Home CM

Determine assignment of social workers and SW engagement strategy (timing; duration; intensity), potential resource efficiencies and potential to prevent downstream adverse health events by intervening appropriately

Stars/Quality

Noncompliant measures members/low propensity to close gaps; impacts to CAPHS and HOS scores by social risk score(s)

Neighborhood Centers

Understand social risk and have conversation to help connect members with resources in the community

Clinical

For focused strategies such as COPD, Diabetes, Behavioral Health conditions, etc., segment interventions and products offered according to social risk score

Provider/VBS

Identify social risk that contributes to patients' conditions, exacerbations, and cost in a value-based arrangement. Screen/code and intervene/provide or refer resources with improved efficiency. Control cost, improve patient health outcomes.

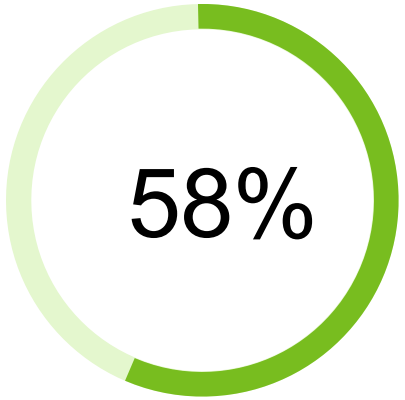
Customer Care Call Center

Understand social risk to help inform discussion; ask about awareness of benefits and resources

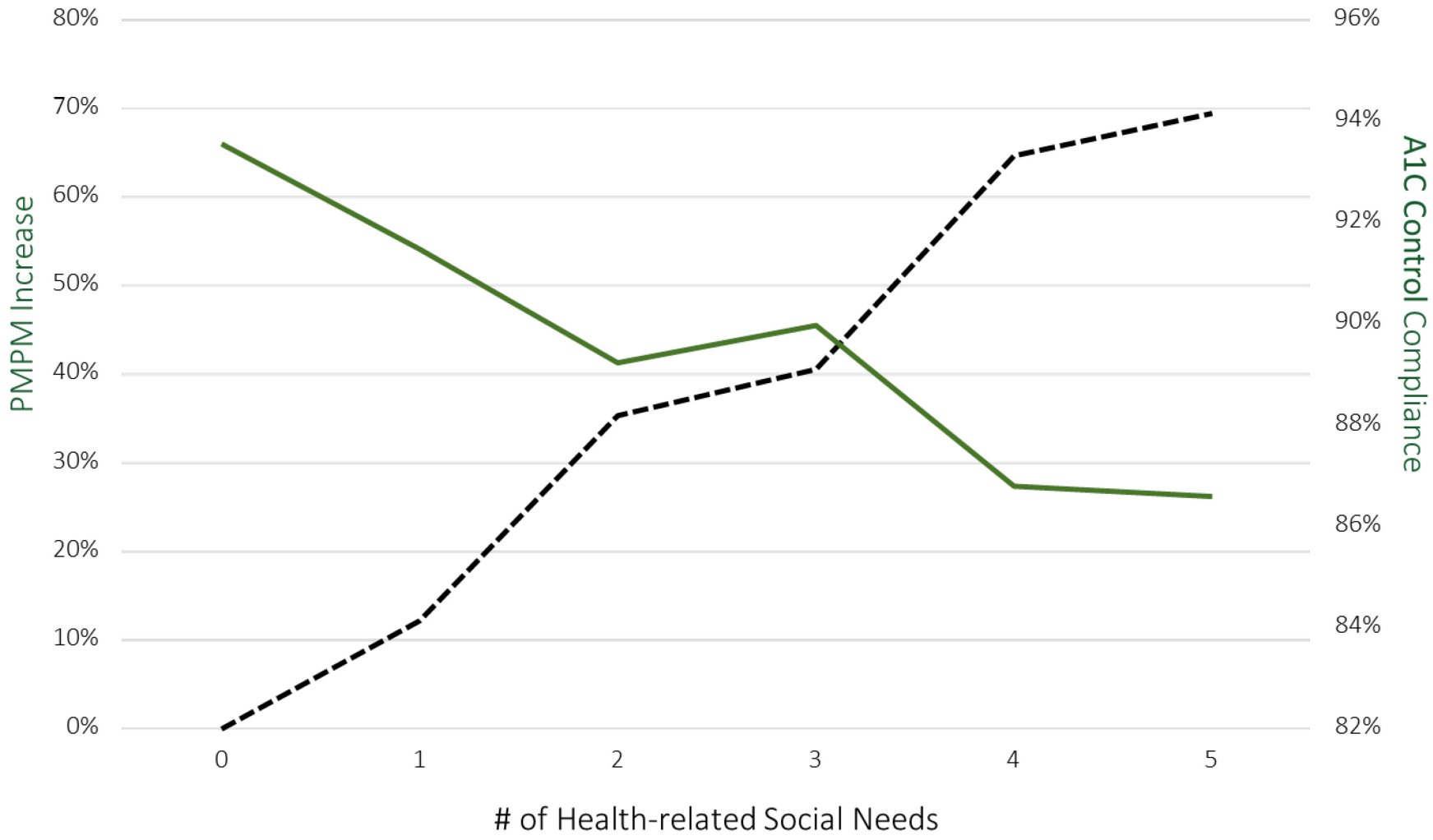
*Social Risk Index – ranges from 0-5 and include Food Insecurity, Loneliness, Financial Strain, Housing Insecurity, and Transportation

SDOH Insights | MA Members with Diabetes

For MA members with diabetes, social needs have a negative compounding effect on cost and compliance.



of MA members with diabetes screened positive for one or more social needs



SDOH is evolving into a sustainable model of care:

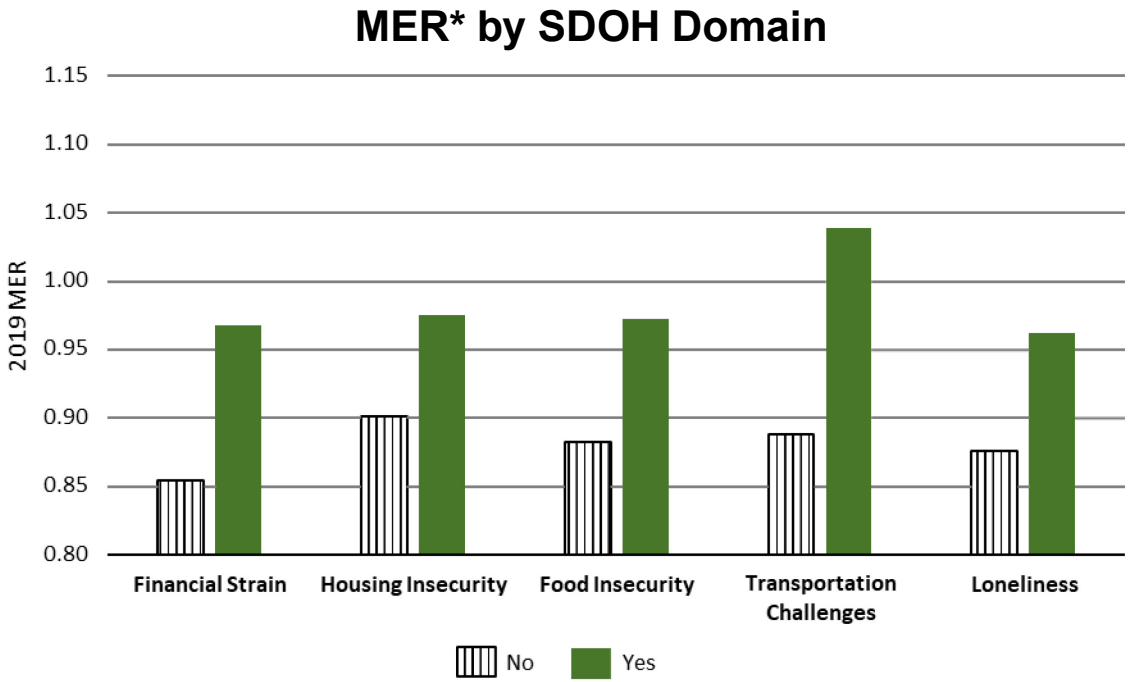
Sustainable Business Model
Benefits, SRA, VBC

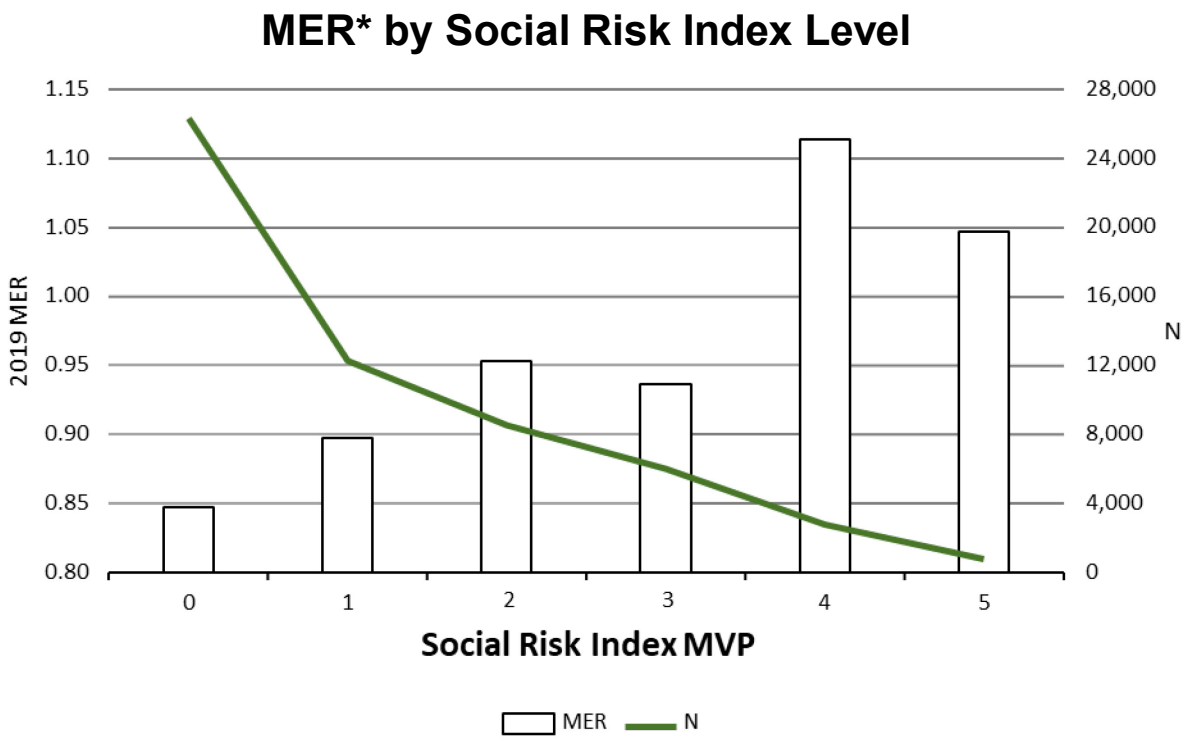
Evidence-Based Scalable Solution
Research, Pilots, Clinical Integration

Social Health Infrastructure
Data, Community Engagement, Policy

MERs for SDOH domains and social risk index MVP

Leveraging SDOH screening results





These five SDOH domains each show elevated MERs which represents higher observed costs compared to expected costs from CMS Premium.

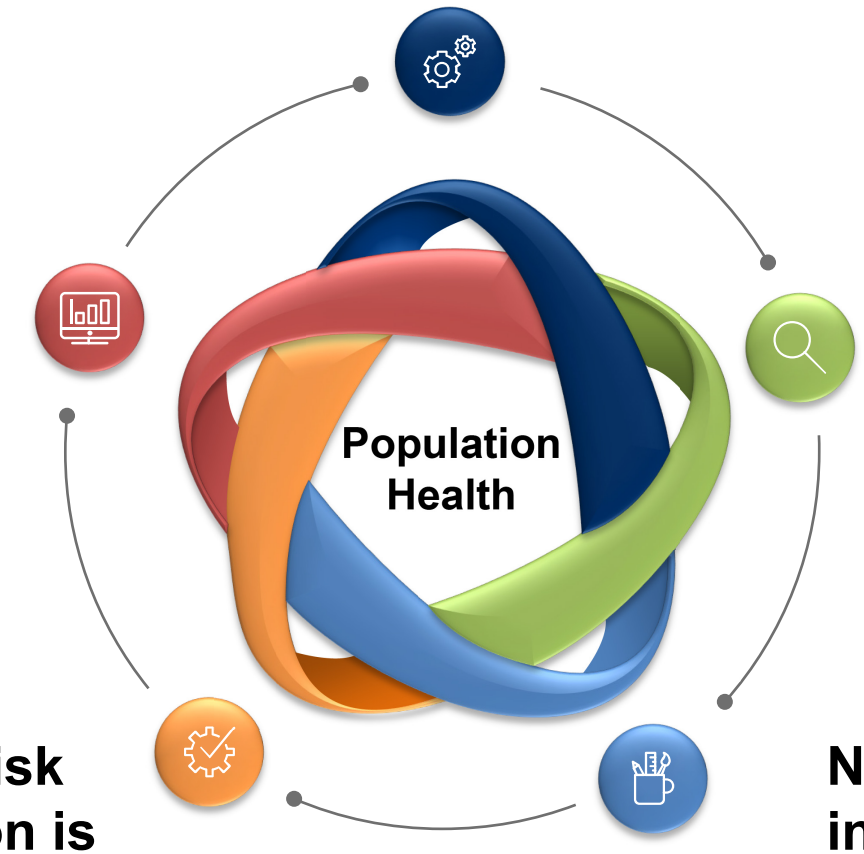
MER is elevated across the levels of the Social Risk Index MVP which is simply the sum of the five SDOH domains.

* Total allowed costs and CMS premium from **DATACIA.MED_MBR_MTH_EXTRACT**. Full Risk members not included.

Key challenges with SDOH data

Lack of Data Ontology

SDOH can change frequently. Lack mechanisms to capture these changes.

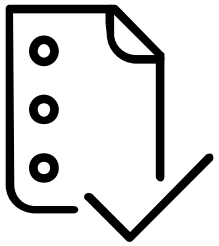


Lack of incentive to collect SDOH data

Social risk definition is evolving

No single platform for insights and member interventions

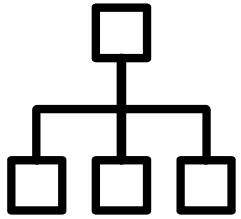
Steps to standardize SDOH data



Step 1:
Categorize SDOH Data

Step 2:
Build SDOH Data Ecosystem

Step 3:
Mapping SDOH Screening Questions

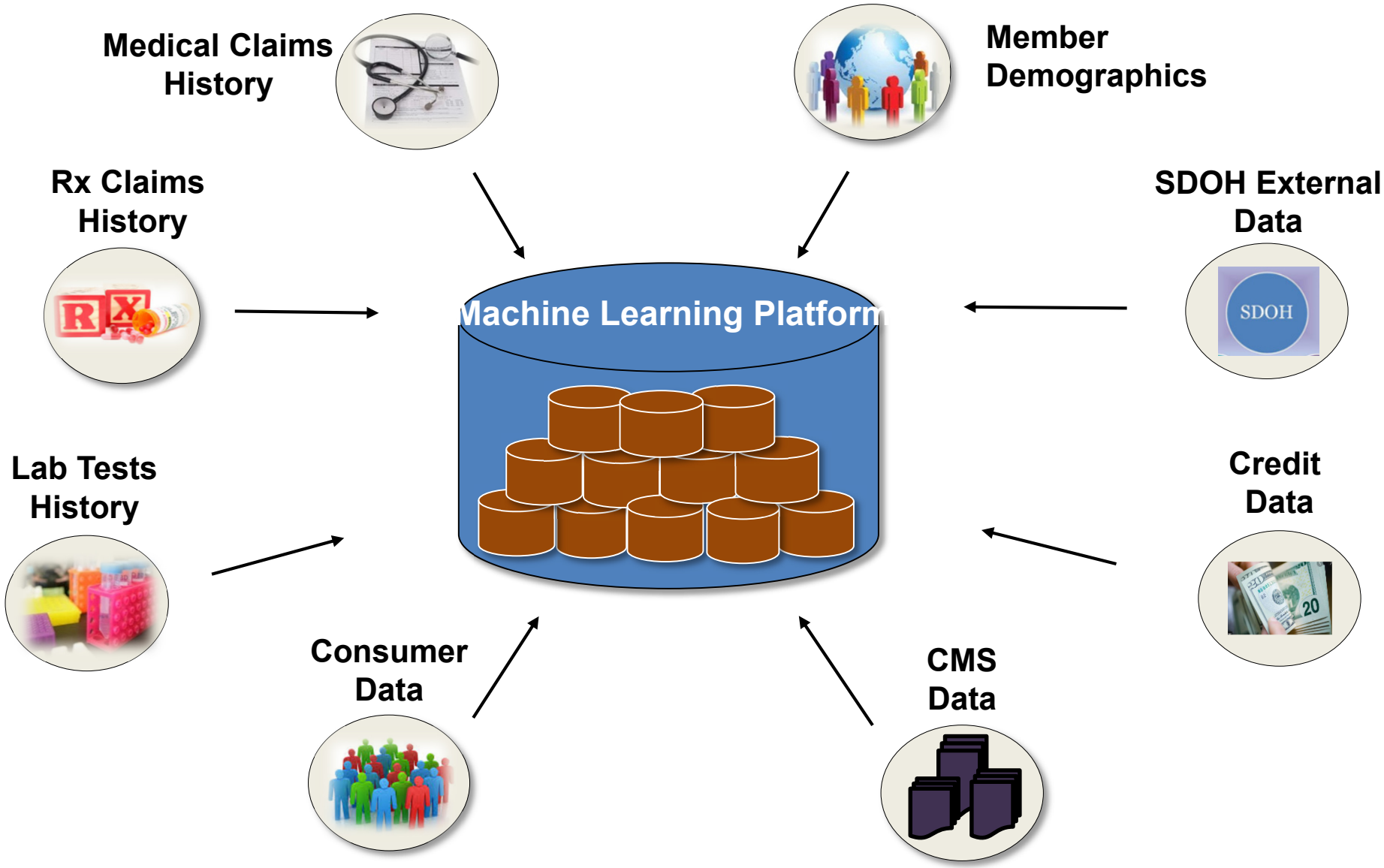


Step 4:
Develop SDOH Data Asset Hierarchy

Step 5:
Develop Social Health Record

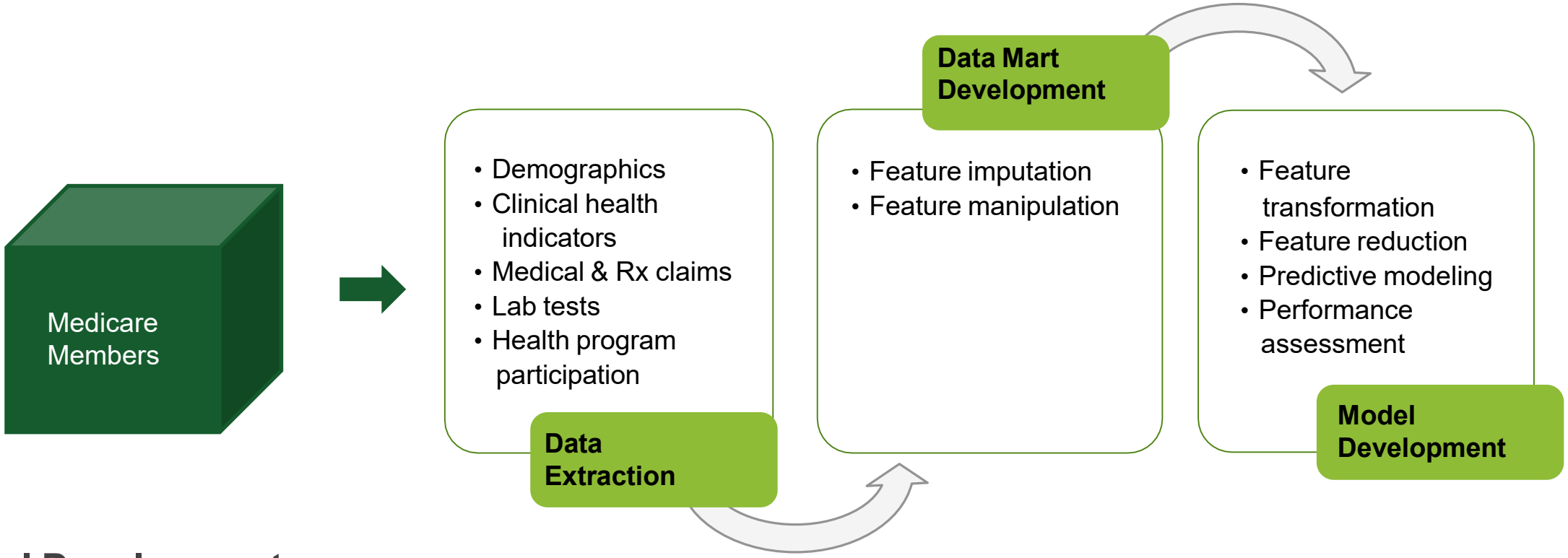
Step 6:
Build SDOH Data Product

Data sources for SDOH predictive models



* More than 20k variables were considered before feature reduction stage.

Model Development in MLP



Model Development:

The first step is data extraction which requires extracting relevant data from different data sources.

The second step is data mart development which involves feature engineering, feature reduction.

The third step is model development which involves feature imputation, feature transformation, feature selection, predictive modeling and performance assessment.

Contact: Yongjia Song

Transportation challenges and financial strain predictive models built in MLP

AUC = 0.79 *

Top Predictors
Total PartD Payment Amount
Disability
Age
Home Ownership
CMS Risk Score
Household Composition
Behavioral Health Utilization
Non-mortgage loan 60+ dpd
Transportation CPT codes
Has home loan within 12 months
Census % Motor Vehicle Ownership
Silver Sneaker Participation
Gender

AUC=0.74*

Top Predictors
Age
Total PartD Payment Amount
Disability
Low Income Score
CMS Risk Score
BH Utilization
Non-maintenance Prescriptions
Substance Abuse
Home Ownership
Opioid Usage
Household Composition
Obesity Claims Count
Musculoskeletal Back and Neck Pain
COPD Claims Count
ER Utilization

Contact: Yongjia Song

* The final model was an ensemble model, which was based on 5-fold cross validation.

Ensure that when we have two clinically analogous members – one with SDOH and one without—those with SDOH are prioritized

JANE

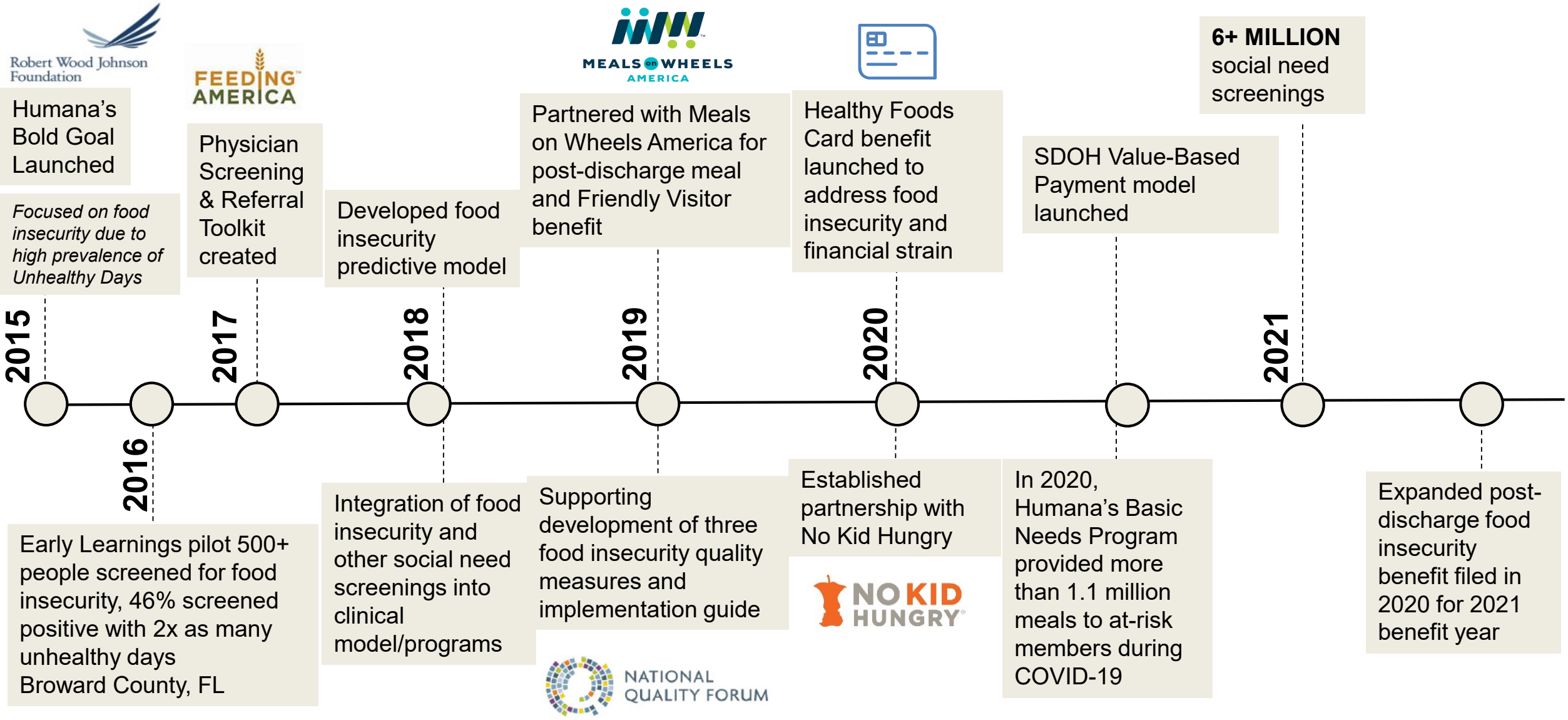
- Age: 77
- Dx: CHF, Diabetes
- Gaps in care: Multiple
- Utilization: 2 admits, 11 ER visits in 12 months
- Considerations: Lives alone, widow
- *SDOH: none*

BETTY

- Age: 75
- Dx: CHF, Diabetes
- Gaps in care: Multiple
- Utilization: 3 admits, 9 ER visits in 12 months
- Considerations: Lives alone, widow
- *SDOH: food insecurity*

Betty will not be able to focus on her health needs, like refilling her $75 medication, if her basic physiological needs are not met. With the addition of the Social Risk Index, Betty's social needs – like food insecurity – would be factored into rostering prioritization.

Scaling food insecurity



Humana's Healthy Foods Card Program

The Healthy Foods Card (HFC) is a **"direct-spend" card** ranging from $25-$75 to purchase approved groceries at broad range of retailers and was offered to **~87K low income seniors in 2020.**

In 2021, the program serves **approximately 450K low income seniors** in 77 plans across **25 states** and is expected to support **650K+ low income seniors in 2022.**

HFC is **simple and flexible** to use. Members are able to make the **best choices** for themselves, based on their unique individual health needs.

This card has a monthly allowance on it that can be used to purchase approved healthy foods at participating stores. Unused funds will not roll over to the next month.

To check the card balance, find a store, or get program details visit **<HealthyBenefitsPlus.com/HumanaHFC>**, or call **<1-855-233-4220 (TTY: 711)>** anytime.

If you have questions about your Humana Medicare plan, call **<1-800-457-4708 (TTY: 711)>** Monday-Friday 8 a.m. to 8 p.m.

Card Number: <1234 5678 9123 45678>
Security Code: <1234>

HMA56EN4003_12

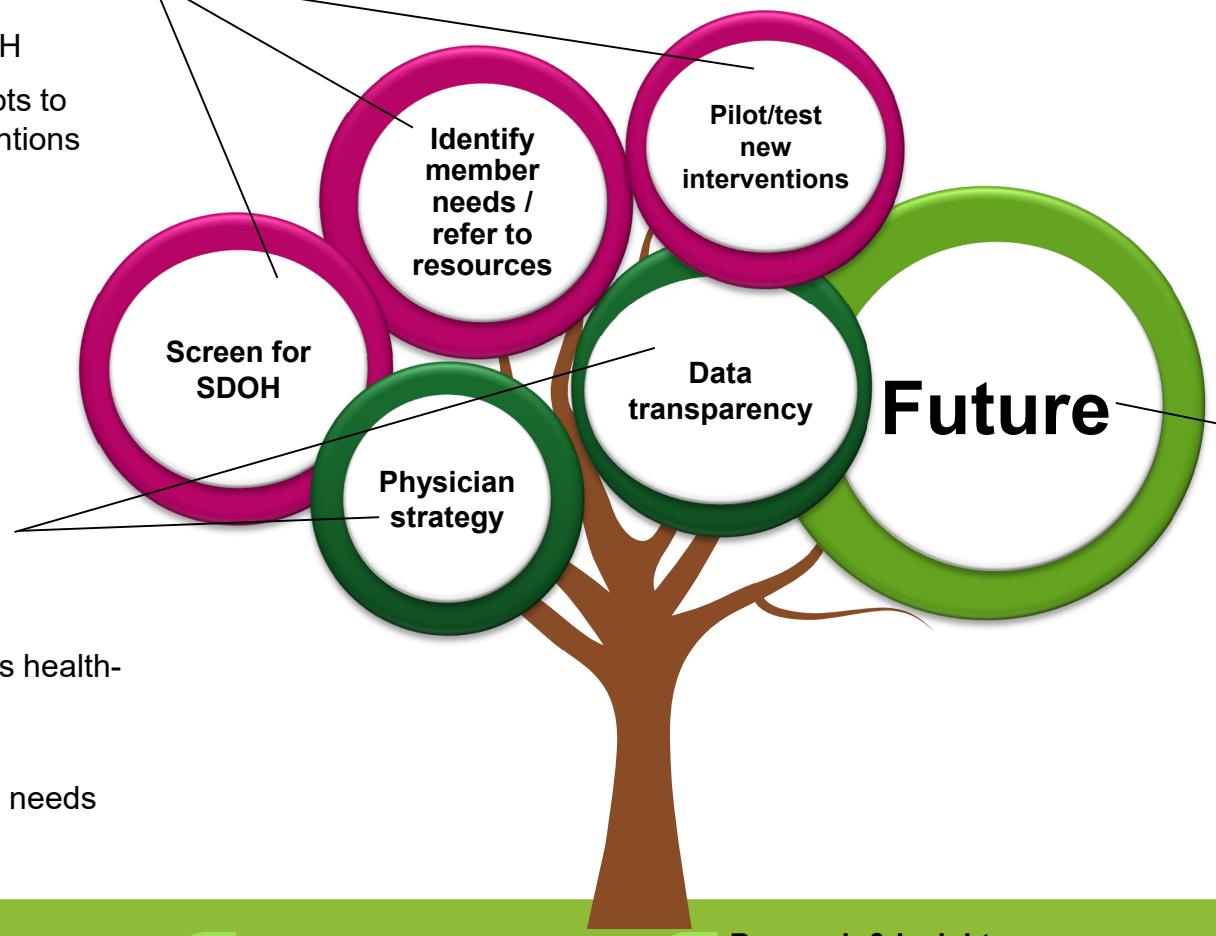
Our growth toward operational maturity

*The core promise of SDOH interventions is to drive value by **improving health outcomes**, however, they may also support **growth** and **improved experience.***

Ongoing

SDOH Screenings / Pilots & Tests

- Screen members for SDOH
- Design and implement pilots to identify successful interventions



Foundational

Table Stakes

- Integrate and support physicians/clinicians to address health-related social needs
- Provide internal & external transparency into social health needs

Long Term

Scaling & Operationalizing

- Prove results on pilots & tests
- Scale successful interventions through:
  1) Integration into clinical operating models
  2) Building into member plan benefits

Data & Analytics

Data on health-related social needs helps us identify member outreach

Research & Insights

Research and insights on our members' social health needs help us identify/test interventions

Questions ?

Please enter your questions in the Q&A

(Please do not enter questions in the chat).

Thank you for joining us today

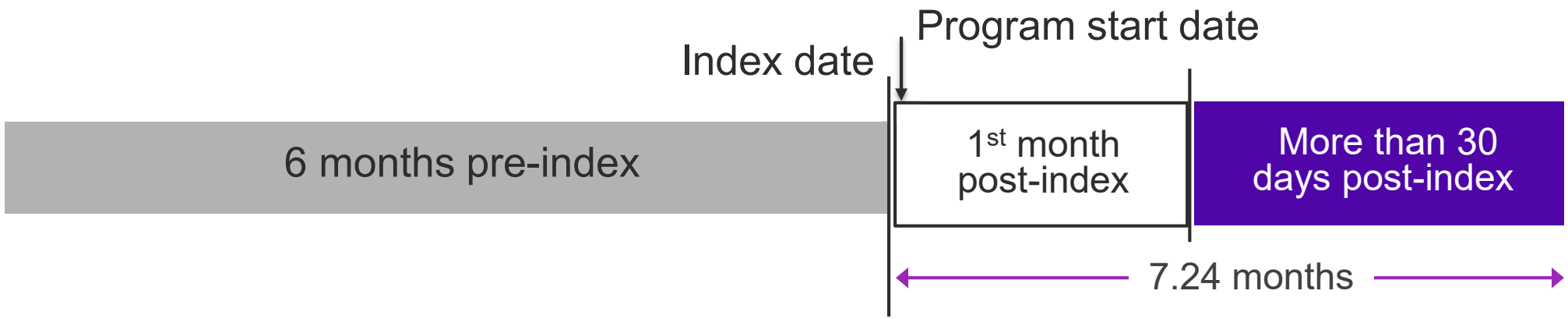
Please email us with questions or to discuss your interests at VBID@cms.hhs.gov

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Appendix

Appendix for Improving Dementia Care Through Caregiver Support, John Wiecha MD, MPH, Medical Director, Senior Products Division, Point32Health

Claims Analysis Methodology Overview



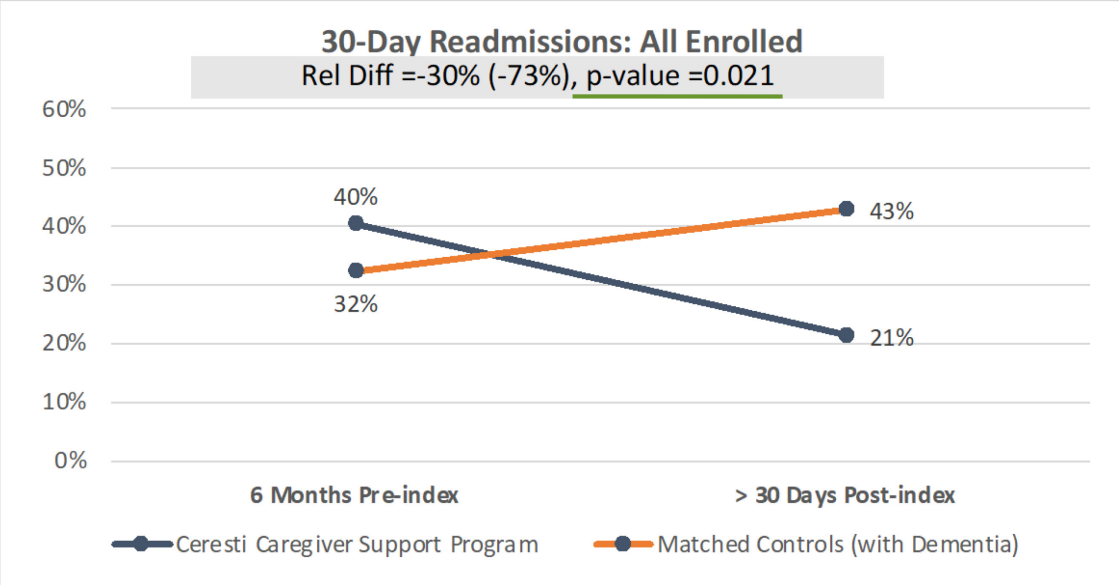
Member is included in analysis if their caregiver is **enrolled** in the Ceresti Program for ≥ 45 days

Enrolled Members and Matched Controls are matched 6 months pre-index on multiple variables, including age, sex, Charlson comorbidity index, utilization and cost.

Results are compared post-index from Program start to end of claims data (Aug 4, 2021)

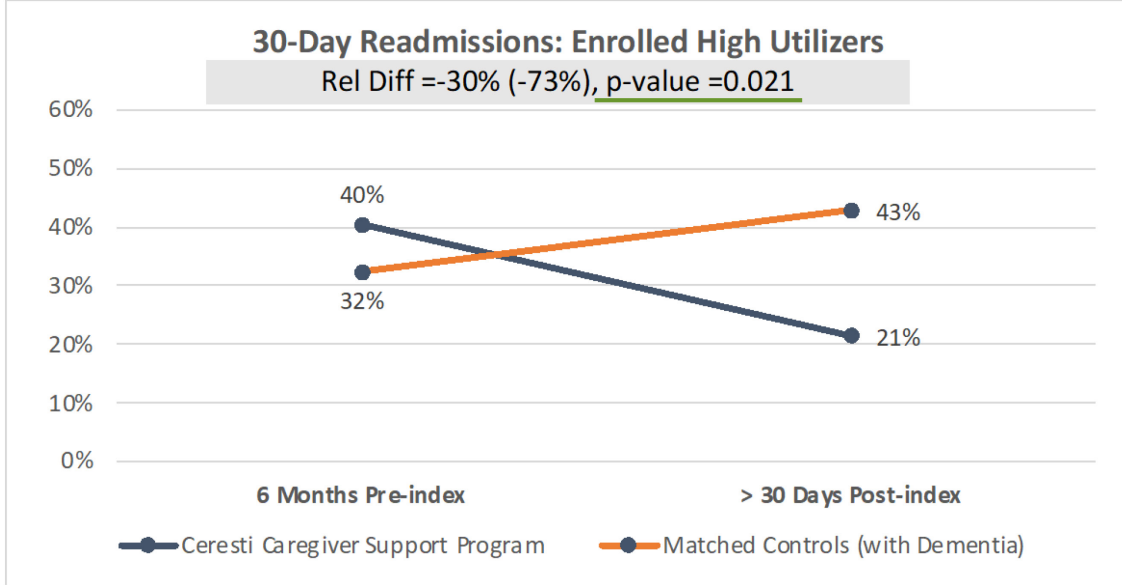
30-Day Readmissions Decreased by 73%

N = 131



3:1 propensity matching was used to evaluate the impact of the Ceresti program on all **enrolled members**

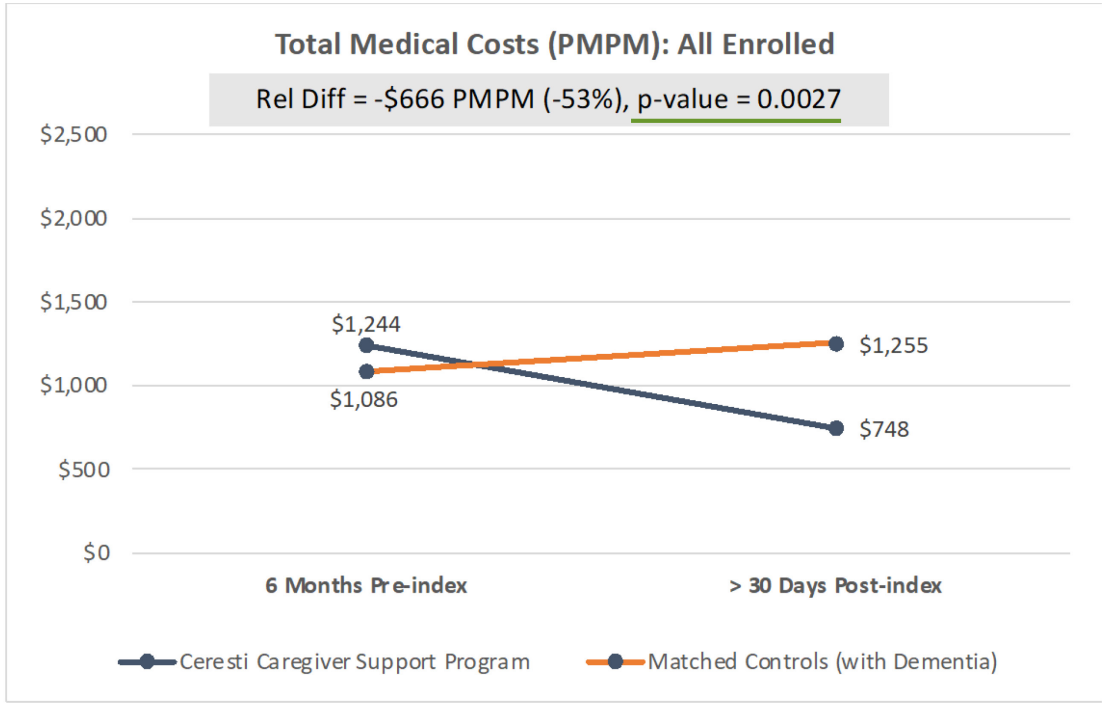
N = 62



3:1 propensity matching was used to evaluate the impact of the Ceresti program on **enrolled members that are high utilizers** (>1 ED visits or >0 hospitalizations in prior 2 years)

Total Medical Costs Decreased by $666 PMPM (-53%)
Additional Reductions ($1,433 PMPM) in High Utilizers

N = 131



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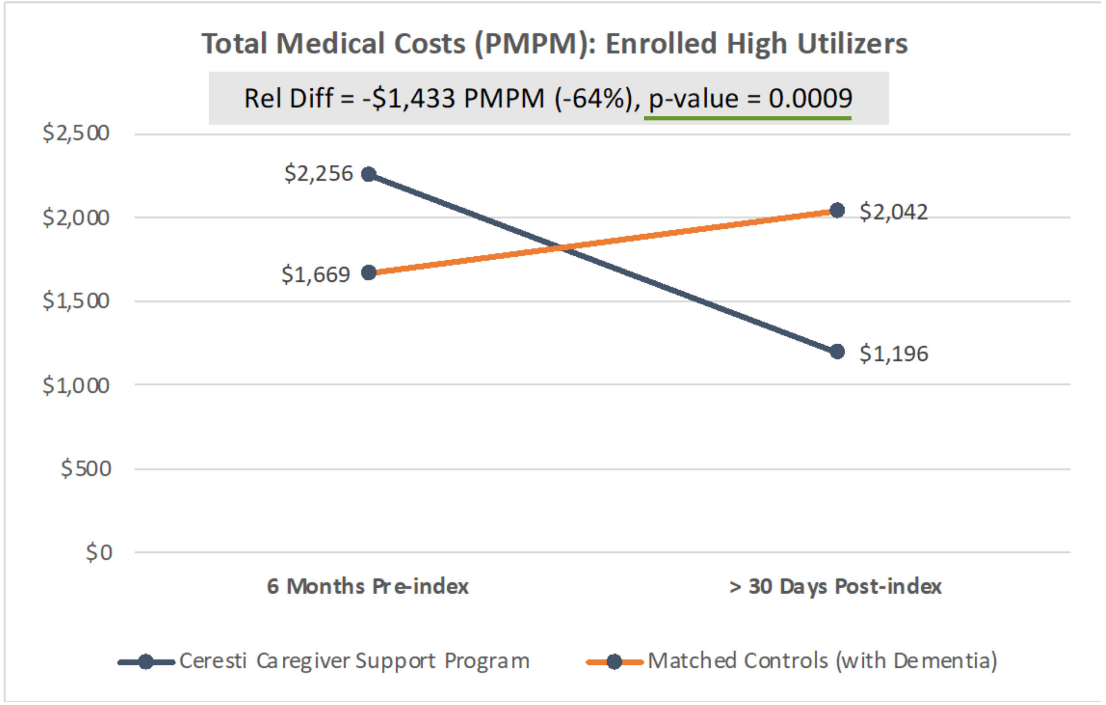
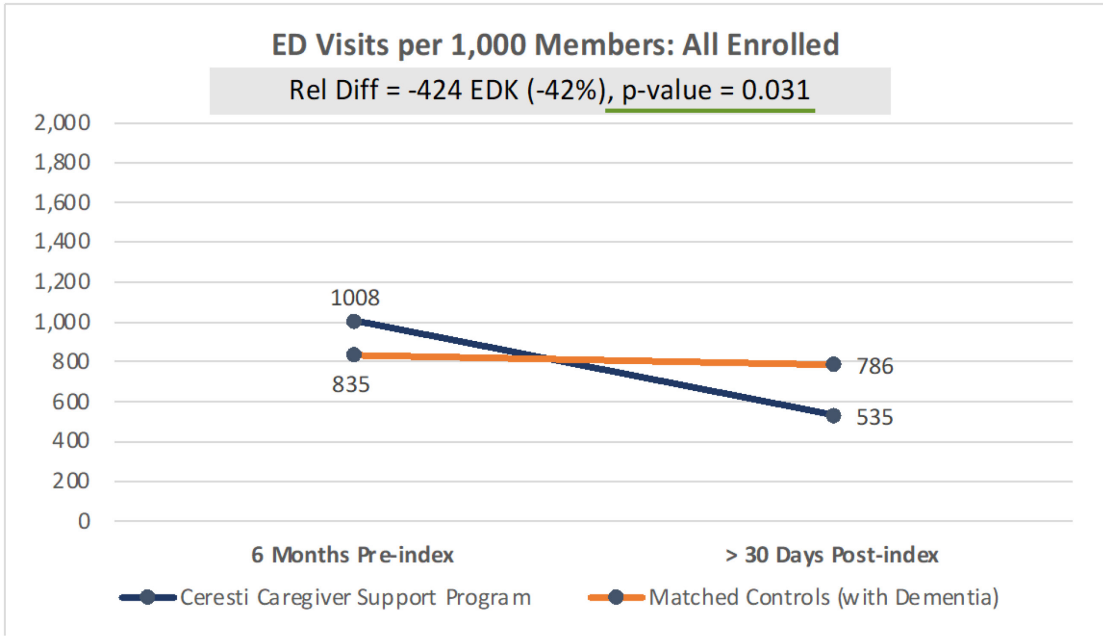


3:1 propensity matching was used to evaluate the impact of the Ceresti program on **enrolled members that are high utilizers** (>1 ED visits or >0 hospitalizations in prior 2 years)

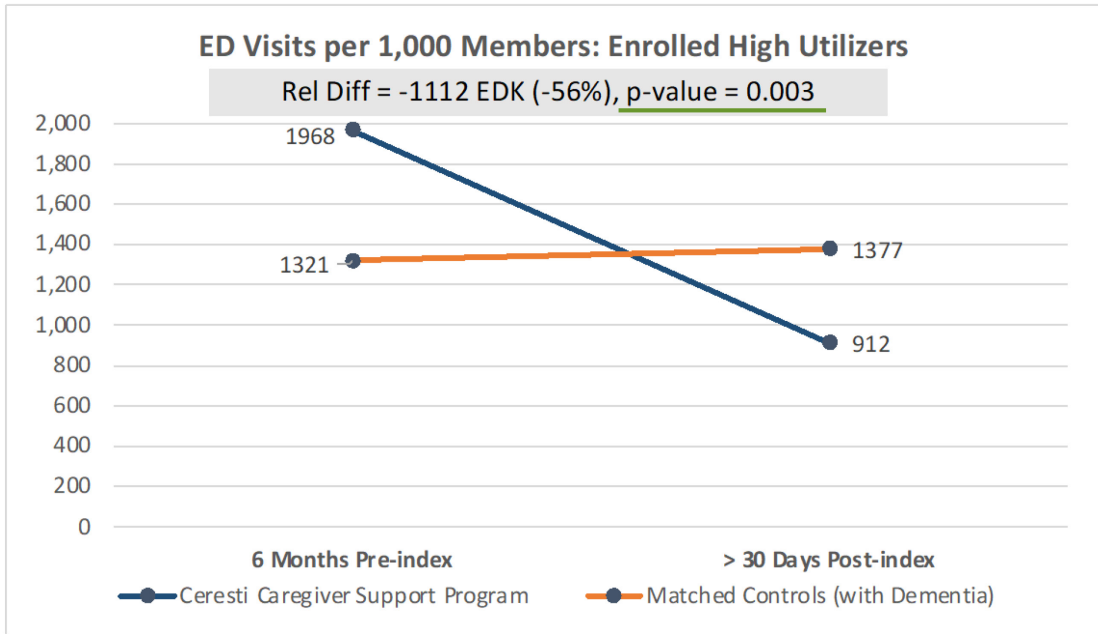
ED Visits Decreased by 424 EDK* (-42%)

N = 131



3:1 propensity matching was used to evaluate the impact of the Ceresti program on all **enrolled members**

N = 62

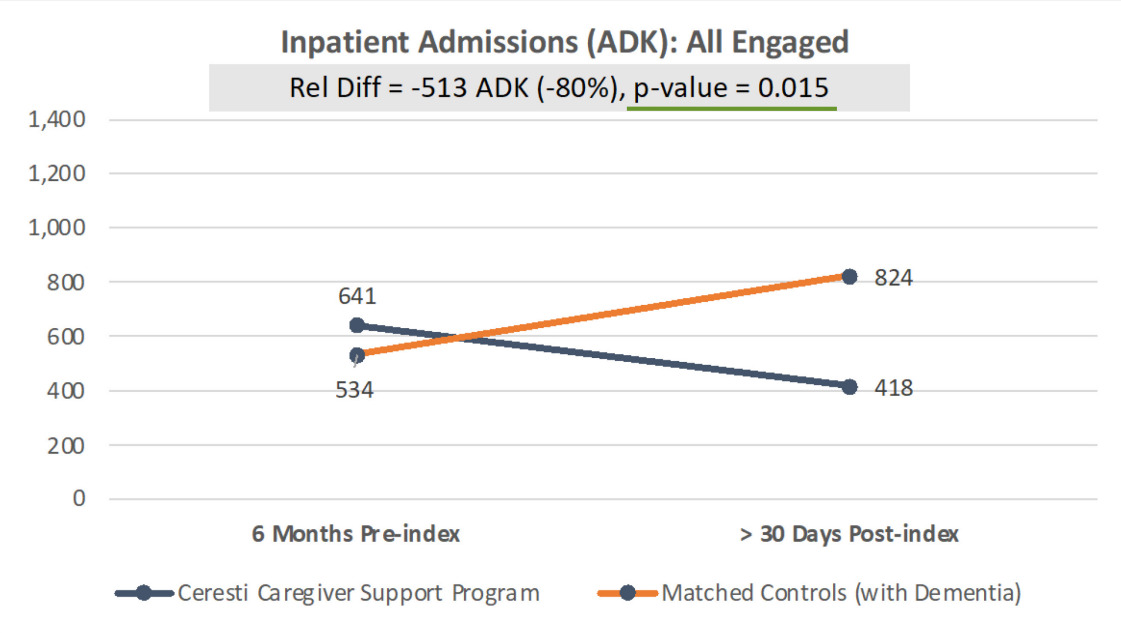


3:1 propensity matching was used to evaluate the impact of the Ceresti program on **enrolled members that are high utilizers** (>1 ED visits or >0 hospitalizations in prior 2 years)

*EDK = ED Visits per 1,000 Members

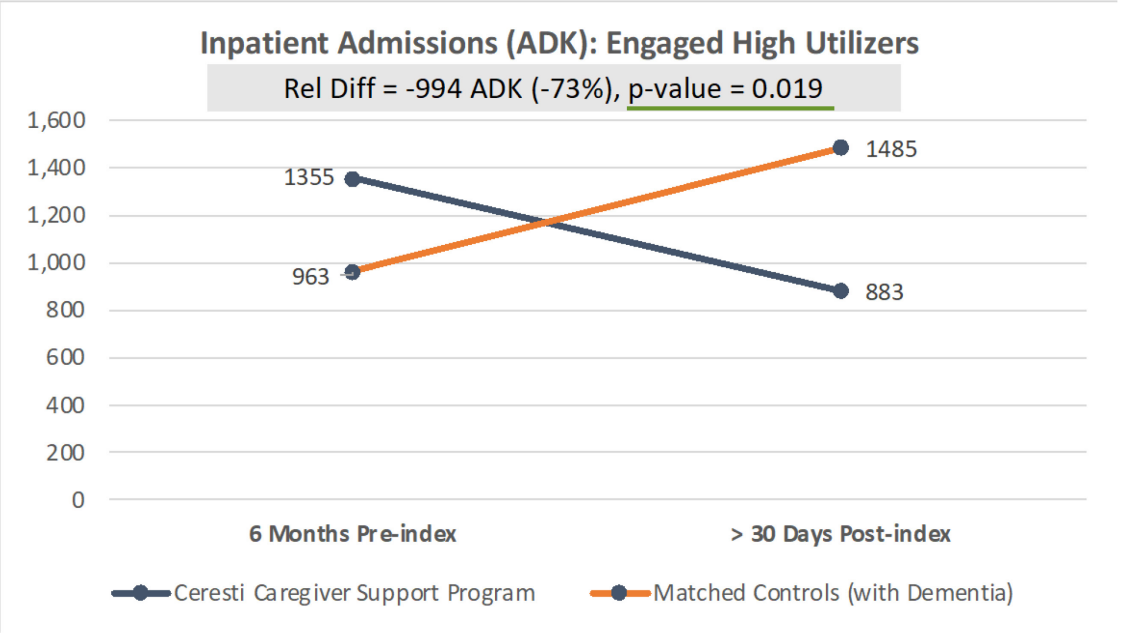
Inpatient Admissions Decreased by 513 ADK* (-80%)

N = 131



3:1 propensity matching was used to evaluate the impact of the Ceresti program on all **enrolled members**

N = 62



3:1 propensity matching was used to evaluate the impact of the Ceresti program on **enrolled members that are high utilizers** (>1 ED visits or >0 hospitalizations in prior 2 years)

*ADK = Admissions per 1,000 Members