Medicaid Learning Lab

April 7, 2023

2:00 pm to 3:30 pm ET

Introductions

Melody Danko-Holsomback, Vice President of Education, NAACOS

Melody Danko-Holsomback, MSN, CRNP is the Vice President of Education for NAACOS. She has over 11 years of population health experience and was the CAO and Director of Keystone ACO prior to her current role. She has over 28 years of experience in nursing, including positions in outpatient and inpatient care, as a CRNP healthcare provider and as an IT analysts and performance consultant. mdholsomback@naacos.com

Emily Perron, Education Manager

Emily is the education manager at NAACOS where she works directly with the director of operations on tasks related to the day-to-day running of the organization and with the vice president of education on the boot camp and the two annual conferences along with overseeing marketing and registration. Before starting at NAACOS, she previously worked at Police and Firemen's Insurance Association (PFIA) in new business where she handled all incoming new life and disability insurance plans. While at PFIA, she obtained two Life Office Management Association (LOMA) certificates. She received her bachelors of science in elementary education from Liberty University. eperron@naacos.com

Housekeeping Items

- The learning lab is meant to be a classroom type of setting
- We request that participants be on camera whenever possible. This helps keep you engaged in the meeting material and place faces with names of participants.
- Questions are not only welcomed, but they are also imperative to enhance everyone's learning experience.
- We may call on you at any time for your opinion on the current topic of discussion
- Please mute your microphone when not speaking and unmute when speaking.

Learning Lab Documents

- Agenda
- Learning Lab Educational Plan
- Learning Lab Note Template
- Monthly Presentations – will be distributed after each meeting
- Meeting recordings and documents found on Learning Lab webpage on the NAACOS website

Featured Presenter

Dr. Bill Mills Senior Vice President for Medical Affairs for BrightSpring Health Services

Dr. Mills completed his baccalaureate degree at University of Rochester, New York, received his M.D. from Case Western Reserve University, then completed his internal medicine residency and a physician-scientist fellowship at Case Western Reserve University / MetroHealth under Dr. David S. Rosenbaum in Cleveland, Ohio. Dr. Mills has served of CEO of four healthcare businesses from founding to acquisition and has had a senior officer role at Kindred Healthcare, which was the largest publicly-traded, diversified healthcare company in the U.S. during his tenure. He's been on the active medical staff for Cleveland Clinic and University Hospitals of Cleveland and is an experienced medical group and post-acute care medical director. At BrightSpring, Mills has headed the organization's Outbreak Committee throughout the entirety of the COVID-19 pandemic, whose efforts led the 50,000 employee organization to sustain an infection rate less than one-third of the U.S. general population rate throughout the pandemic, while ensuring business continuity. BrightSpring's COVID response received recognition from a number of organizations for these efforts, including the World Health Organization, the London School for Economics and Modern Healthcare, among others. Mills has also led the BrightSpring's community-based outcome measure development and reporting, and together, this work has led to 27 peer-reviewed publications and presentations at BrightSpring, resulting in 83 citations in the medical literature since 2020. A past Director of the American Academy of Home Care Medicine, Mills has personally made over 20,000 medical house calls in his career, and he feels fortunate that he and his group have provided expert, compassionate care for thousands of patients of the Greatest Generation, among others.

BRIGHTSPRING
HEALTH SERVICES

The Emergence of Value-based Care in the Field of Intellectual and/or Developmental Disability

April 7, 2023

National Association of ACOs
Medicaid Learning Lab

William Mills, M.D.

Learning Objectives

The goal of this session is to familiarize the audience with clinical challenges faced by people with intellectual and developmental disabilities (IDD), and to discuss how the use of value-based outcome measures and home-based primary care (HBPC) may improve outcomes in this vulnerable population.

The session will be divided into four main sections:

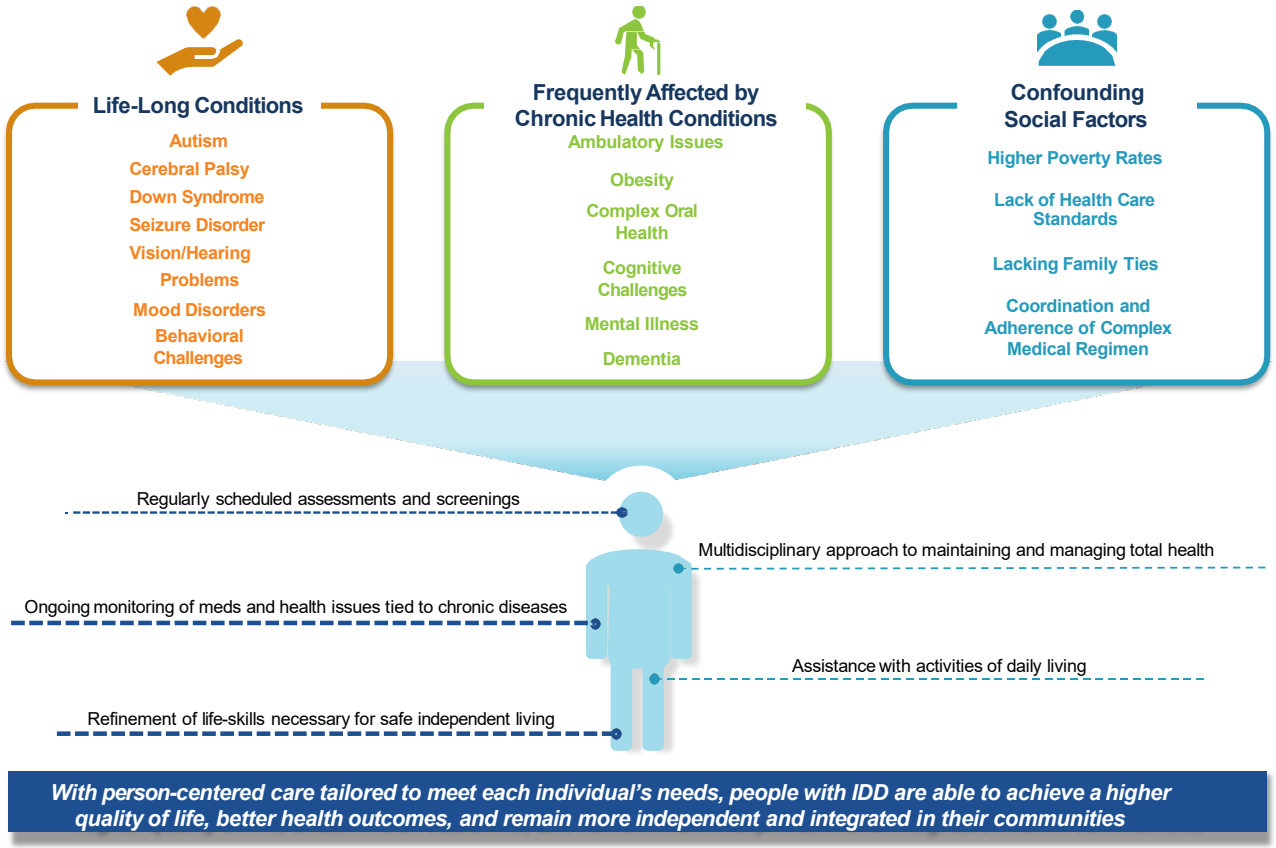
- An overview of some of the characteristics of the IDD population will be shared.
- Emerging value-based outcome measures in IDD: Hospitalization rate and days spent at home will be defined and data illustrating these metrics will be shared.
- The HBPC model will be explained, along with data illustrating its effect on care.
- Data comparing outcomes in people with IDD served by HBPC to those receiving traditional primary care will be presented.

Learning Objectives:

- Describe the clinical conditions that people with IDD face.
- Define and describe emerging value-based outcomes measures in populations of individuals with intellectual and developmental disabilities (IDD).
- Describe how a home-based primary care model works.
- Develop an understanding of home-based primary care's effect on clinical outcomes among individuals with IDD.

Conditions and Factors Affecting People with IDD

BrightSpring Health Services



With person-centered care tailored to meet each individual's needs, people with IDD are able to achieve a higher quality of life, better health outcomes, and remain more independent and integrated in their communities

People with IDD Represent a Large and Underserved Population

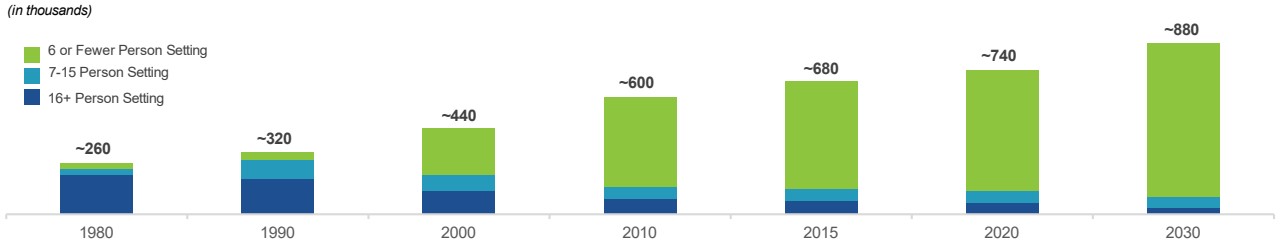
Key Statistics

- **$70B** — IDD healthcare and support service market in the U.S.
- **~8M** — population with IDD in the U.S. (3% of the total population)
- **17%** — population with IDD lives with caregivers over age 60
- **57%** — have three or more chronic conditions
- **10%** — growth in HCBS within ~$200B LTSS market(1)

Population Overview

- Population characterized as "must-serve" and requires life-long care; viewed as "first-in-line" when compared with other Medicaid participants
- Population with IDD characterized by large waitlists with many patients aging out of parental care, further fueling periodic services growth as well
  - Individuals with IDD comprise ~70% of total waitlist participants for HCBS in 40 states
- Large ROI of community-based services with a stable payor base and strong advocacy support: average group home cost of ~$107k annually vs. institutional average of ~$210k
- Highly fragmented and outdated market of IDD providers with opportunity for innovation and efficiency
- Community / residential care represents the lowest cost and patient preferred care setting

Growing Number of Community-Based Utilizers



Source: The State of the States in Intellectual and Developmental Disabilities Project. Kaiser Family Foundation, CMS, PubMed.

(1) Represents Medicaid LTSS spend.

IDD Care Dynamics and Trends

History and Overview

IDD Care Settings

- Historically, IDD patients primarily received care in institutional facilities, where they lived in large groups with round-the-clock care in a provider-controlled residence
- Over the years, given long waitlists and high cost of care for institutional settings, states have increasingly shifted towards shared living and home and community-based care settings that foster independence
  - These care settings can offer higher quality of care in smaller groups and is often more cost effective – the average group home costs ~$107k annually vs. institutional average of ~$210k
- Within HCBS, IDD care settings are highly fragmented with opportunity for improved efficiency and few providers of scale who innovate

Key Services

- People with IDD rely on a broad range of services and supports that vary among individuals and across the lifespan, including:
  - Activities of Daily Living (ADLs), such as bathing and dressing,
  - Instrumental Activities of Daily Living (IADLs), such as life skills, diet / food, and transportation, and
  - Other services such as employment-related services, social engagement, positive behavior supports, and supervision and cueing to complete tasks
- IDD services continue to evolve and move toward full community integration and individualized supports

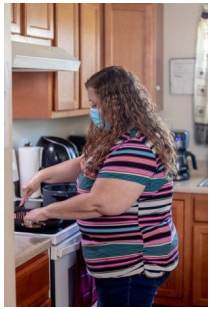
Regulatory Dynamics

Regulatory Policies:

- States use a combination of federal Medicaid authorities and state-only funding to operate programs for people with IDD, reflecting a wide range of policy decisions related to financing and services offered
  - Over 75% of IDD spend is funded by Federal-State Medicaid programs, although this can vary significantly by state
- An array of policies has expanded provision of LTSS ("Long-Term Services and Support") for people with IDD in home and community- based settings over the past four decades as part of a growing de-institutionalization movement

Reimbursement Dynamics

- Providers are reimbursed by payors (primarily Federal-State Medicaid) for various services, and the HCBS waiver program has emerged as the principal Medicaid program for IDD long-term care
- Reimbursement is typically based on per person per diem rates and can vary by state and by service type
- States are allowed to "waive" certain CMS / Federal ICF regulations and requirements to provide person-centered services and increased independent living for those with IDD



(1) CMS, Multiple Chronic Conditions: State Level.

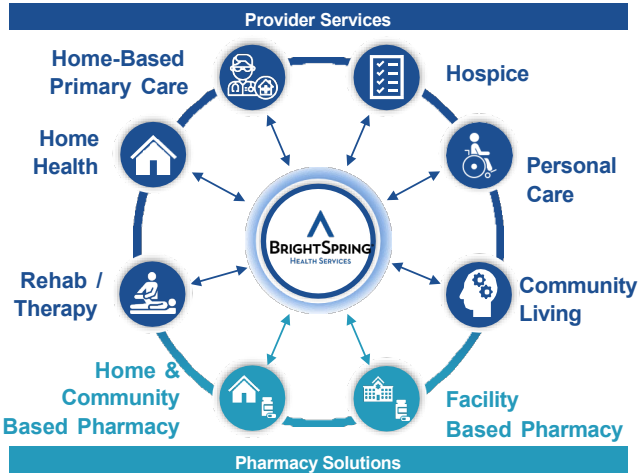
Source: Braddock, David. "The State of the States in Intellectual and Development Disabilities", *Kaiser Family Foundation*. CMS. Office of the Actuary.

BRIGHTSPRING AT-A-GLANCE

Company Overview

- BrightSpring Health Services ("BrightSpring", "BHS") is a 50-state home and community-based healthcare services organization, providing complementary pharmacy and provider services.
- BrightSpring serves over 350,000 patients through approximately 10,000 clinical providers / pharmacists and more than 35,000 total employees. Headquarters in Louisville, KY.
- Community Living is BrightSpring's IDD segment with a 40+ year track record, operating 2,000 homes in 26 states, with 80% 24/7 homes and the rest mainly foster care.
- ICF facilities are typically supported group homes of 4-8 individuals. ICF providers are paid by Medicaid on an all-inclusive, per-diem basis for service.
- Waiver facilities are typically supported group homes of 3-6 individuals. States are allowed to "waive" certain CMS / Federal ICF regulations and requirement to provide person-centered services for individuals with IDD.

Business Lines



BrightSpring Platform[1]

Provider Services

Provides essential clinical services and supportive care to complex patients in the home and community

125 million *Hours of Care*

>4 million *Service Days*

Pharmacy Solutions

Manages critical medication therapy solutions to complex patients in the home and community as well as facilities

33 million *Prescriptions*

99.99% *Order Accuracy*

(1) Metrics as of 2021.

COMMUNITY-BASED RESIDENTIAL HOMES

BRIGHTSPRING HEALTH SERVICES

> *We have observed each staff member treat [our daughter] with such loving care, gentleness, and respect – it warms our heart. This is the only time since she has been in a group home in the last 25 years that we can say this*

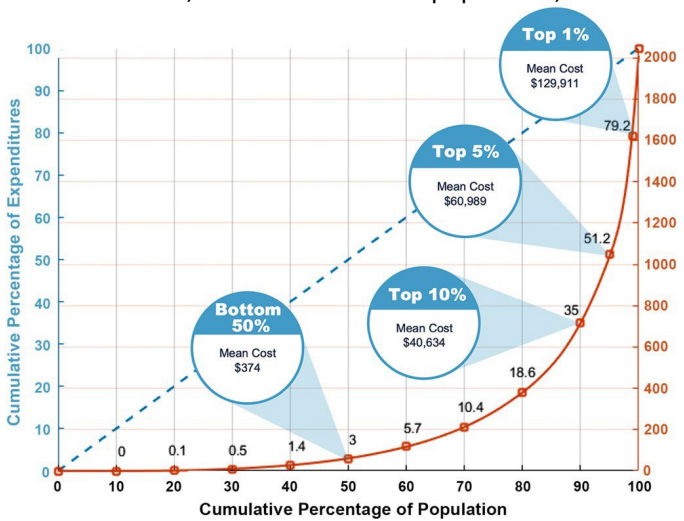
> *As a parent of a disabled child, there is no better feeling than the assurance that your child is in good hands. I value and highly respect your team for the time and commitment they put in to ensure my daughter is safe and cared for…*

> *Community Alternatives Nebraska has been such a blessing to our family! Their staff are so supportive and have years of experience along with compassion and integrity. My family has trusted them for 10 years to serve our child with special needs!*

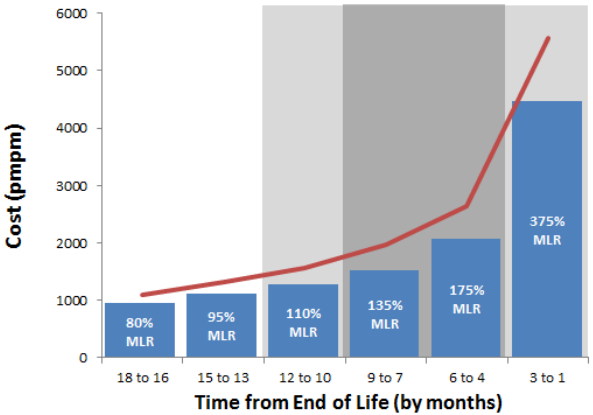
> *Our daughter has lived happily and successfully in the community for the last three years supported by CLS…it has been a huge relief to us as parents and guardians to be so worry free and pleased with our daughter's life. She loves her home and life!*

Healthcare Utilization in the U.S. is Highly Concentrated and Accelerates Near End-Of-Life

Concentration curve of healthcare expenditures, U.S. civilian, noninstitutionalized population, 2019



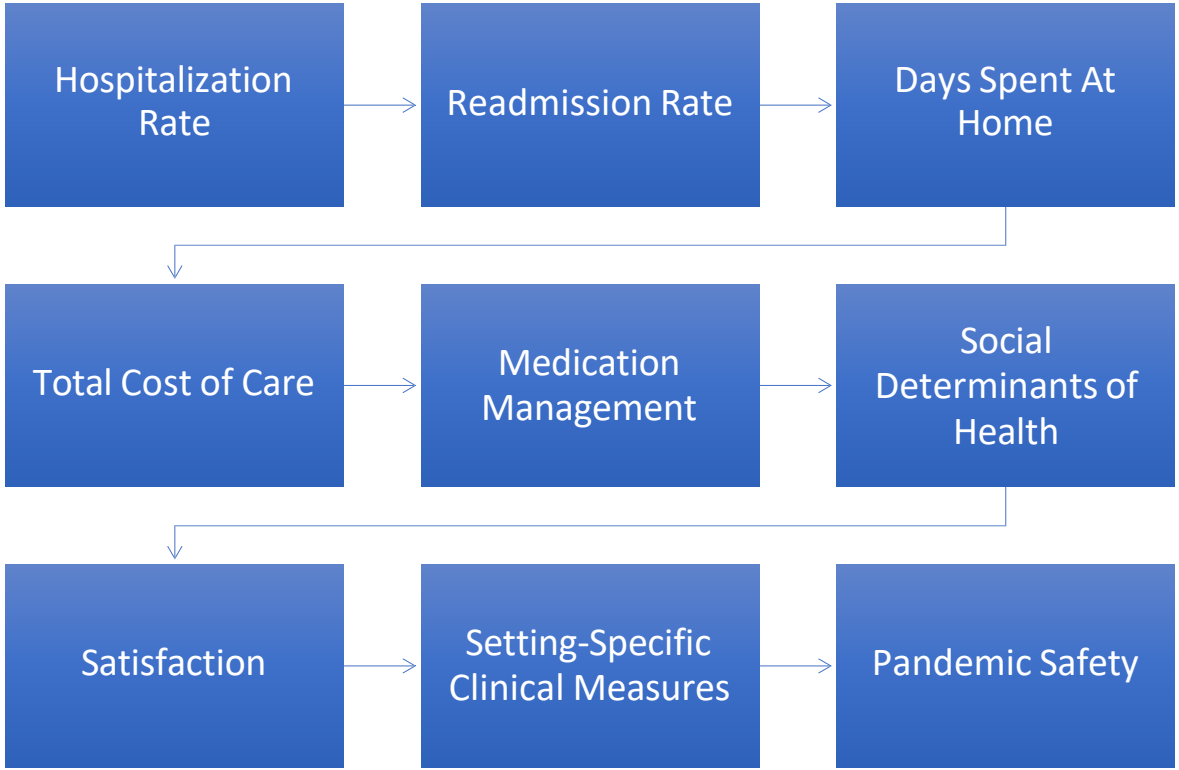
Medicare Advantage Cost Curve
Last 18 Months of Life



Evidence shows that Age, IDD, Frailty, Chronic Disease Load and ADL Dependency are predictive of mortality, hospitalization, institutionalization and total cost

Emerging Value-Based Outcomes Measures In IDD

Emerging Value-Based Outcome Measures



Can Algorithms be Built to Operationalize VBC Outcomes in IDD?

- There has been increased usage of value-based care (VBC) outcome measures in many population health initiatives in the U.S.
- There is little research about which standards should be used for long term services and supports (LTSS) for people with intellectual and developmental disabilities (IDD).
- **Hospitalization rate** is an outcome measure that is being used as a reportable measure in many value-based payment models.
- **Days spent at home** is a person-centered outcome measure that can measure the time people with chronic and serious conditions spend in the community, and outside of hospitals and nursing homes.
- We sought to build an algorithm to determine the annual hospitalization rate and mean days spent at home by the population of people with IDD who are enrolled in community-based residential waiver programs, as value-based outcome measures for people with IDD.

Friedman, C. (2018). Building The Framework For IDD Quality Measures. Towson, Chicago, and Omaha: The Council on Quality and Leadership, the Institute for Public Policy for People with Disabilities, and Mosaic.

Sayer C. "Time Spent at Home" – A Patient-Defined Outcome. New England Journal of Medicine Catalyst, April 26, 2016. https://catalyst.nejm.org/time-spent-at-home-a-patient-defined-outcome/

Application of Value-Based Outcome Measures: Study Methods

- Between October 1, 2018 and September 30, 2019, our IDD residential waiver programs provided continuous person-centered support and medically-necessary services to a cohort of individuals living in community-based settings.
- Each individual's whereabouts each day was entered into a database (HCS Interactant®, Wall Township, NJ), recording whether the individual was at home, in the community receiving supportive services from our organization, or in other settings (hospital, nursing home, or on other leave) that day.
- We performed a retrospective review of this internal census tracking and length of stay database.
- Total managed days was calculated as the days an individual we served was utilizing our services minus days that the individual was on therapeutic leave, or incarcerated.
- Hospitalization rate per 1,000 was calculated as (Admissions/(Managed Months/1,000)) x 12).
- Inpatient days per 1,000 per person served (the number of inpatient days that are used in a year for each thousand people served) was calculated as: inpatient days /managed client months) x 1000 clients x 12 months.
- Days spent at home was calculated as total managed days minus days spent in hospitals or nursing homes.

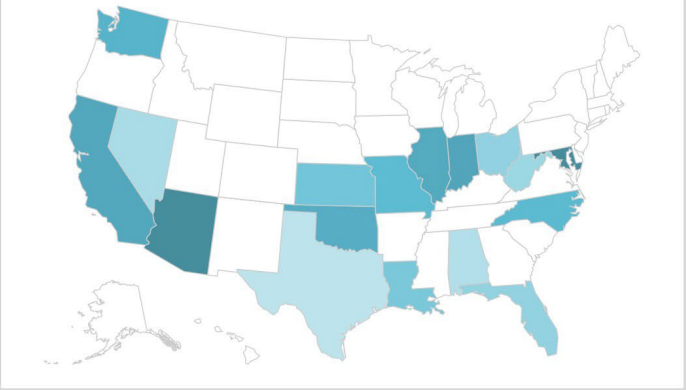
McCall N, Geonnotti K. Utilization Measures Worksheet. Mathematica Policy Research 2015.

Groff AC, Colla CH, Lee TH. Days Spent at Home – A Patient-Centered Goal and Outcome. N Engl J Med 2016; 375: 1610-12.

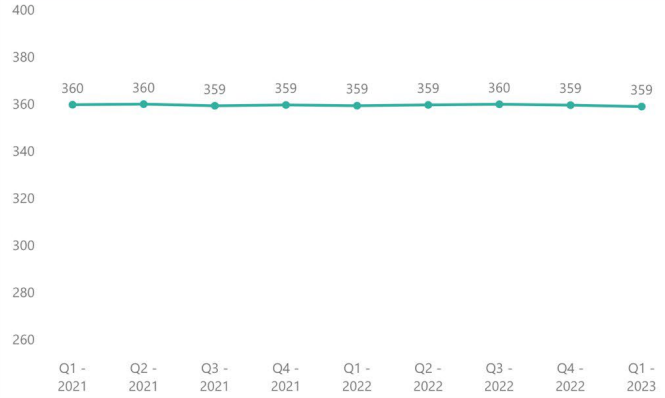
DEVELOPMENT OF DATA-RICH CLINICAL OUTCOMES DASHBOARDS

BRIGHTSPRING HEALTH SERVICES

MEAN DAYS AT HOME BY STATE



MEAN DAYS AT HOME TRENDS



MEAN DAYS AT HOME & HOSPITALIZATION DETAILS

StateCode	Distinct Patients	Days At Home	Mean Days At Home	Percent Days At Home	Hospital Stays	Managed Days	Any Hospital Days	All Home Days	Percent Hospitalized
TX	2,417	1,358,679	356	97.66	1797	1,391,300	797	1,620	32.97
AL	50	22,340	357	97.79	43	22,844	17	33	34.00
NV	39	22,762	357	97.90	50	23,251	21	18	53.85
WV	367	193,267	358	98.07	401	197,071	173	194	47.14
FL	115	66,293	358	98.19	214	67,517	60	55	52.17
OH	624	347,013	358	98.20	571	353,372	252	372	40.38
LA	436	273,721	359	98.47	472	277,983	150	286	34.40
KS	528	327,146	360	98.54	346	331,980	155	373	29.36
MO	69	35,502	361	98.84	52	35,917	24	45	34.78
Total	**7,400**	**4,281,564**	**359**	**98.47**	**5614**	**4,347,929**	**2,476**	**4,924**	**33.46**

RESULTS

BRIGHTSPRING HEALTH SERVICES

INDIVIDUALS SERVED

2,388 INDIVIDUALS SERVED
FOR 745,957 MANAGED DAYS

AGE

46.6 YEARS
MOST WITH IDD + MEDICAL DX

INDIVIDUALS HOSPITALIZED

20% HOSPITALIZED
LENGTH OF STAY (1-229 DAYS)

HOSPITALIZATION RATE

240
PER 1,000 MANAGED PERSON YRS

INPATIENT DAYS

5,243/1,000 PER YR
29 total LOS >100 days

DAYS SPENT AT HOME

360 Days Per Year (98.5%)
MANAGED DAYS SPENT AT HOME PER YEAR

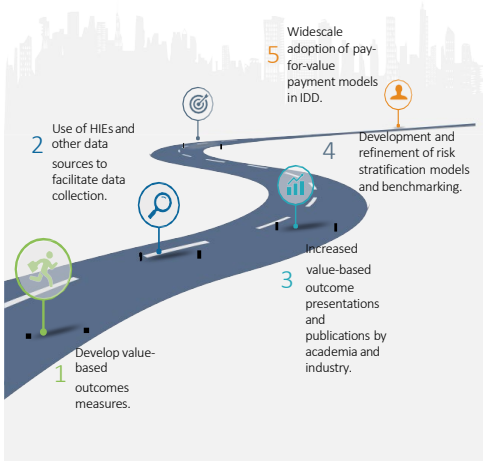
Mills WR. Days Spent At Home As An Outcome Measure For People With Intellectual And Developmental Disability American Association on Intellectual and Developmental Disabilities 2020 National Meeting (Presented virtually).

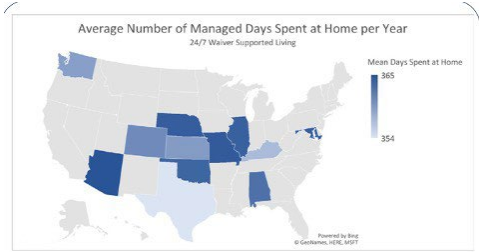
VALUE-BASED OUTCOME MEASURES IN IDD

DATA

- Hospitalization rate and days spent at home may be emerging value-based outcome measures in IDD
- Individuals in residential waiver programs were hospitalized at a rate of **240/1000** per year
- Individuals in residential waiver programs spent an average of **360** days at home per year
- While most individuals were not hospitalized during the year, a subset had long lengths of stay, most of which were related to behavioral diagnoses refractory to routine outpatient treatment

ROAD MAP

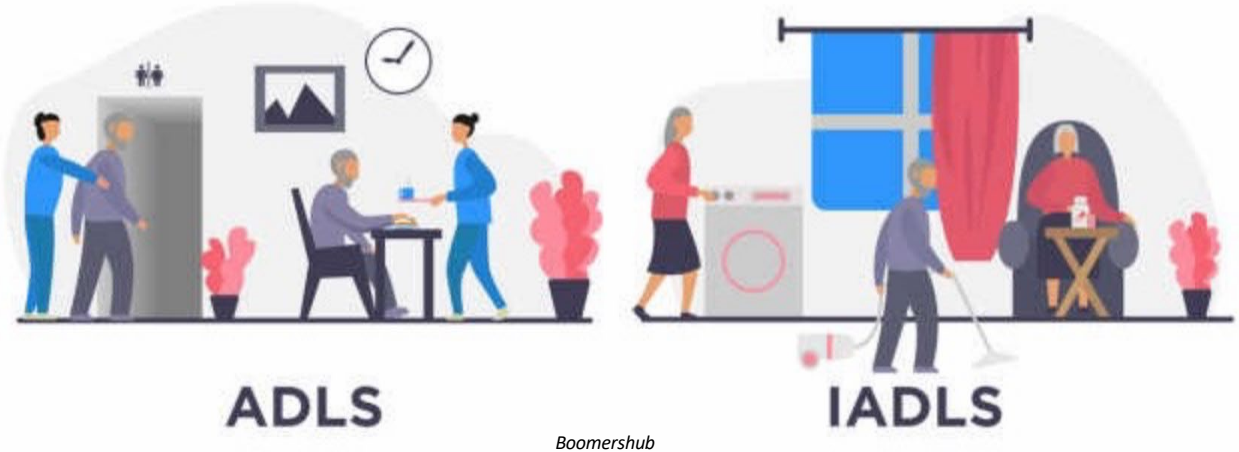




FUTURE DIRECTIONS

- Studies of new models of support and care for people with IDD in which augmented outpatient behavioral health supports are available are needed.
- These studies should evaluate whether providing more intensive community-based medical and behavioral health resources may decrease hospitalization rate and inpatient days per 1,000.
- Studies of enablers of optimizing hospitalization rate and days spent at home
  - Access to care
  - Care management
  - Medication management
  - Care coordination
- Hosp. Rate, and days spent at home are simple metrics that may promote provisioning of appropriate resources for IDD waiver programs, as well as for managed care payers.

INNOVATION OPPORTUNITY



Boomershub

NEEDS PEOPLE HAVE AS THEY AGE, IN THEIR OWN WORDS

- *“The stairs are getting so hard to climb.”*
- *"Since my wife died, I just open a can of soup for dinner.*
- *"I've lived here 40 years. No other place will seem like home.*
- *”I’ve had more trouble getting around.”*
- *”I’ve had a couple of falls – not too bad though.”*

A Claims-Based Method of Segmenting Patients into Actionable Cohorts

Contents lists available at ScienceDirect

Healthcare

journal homepage: www.elsevier.com/locate/hjdsi

Original research

Segmenting high-cost Medicare patients into potentially actionable cohorts

Karen E. Joynt[a,e], Jose F. Figueroa[a,d], Nancy Beaulieu[b], Robert C. Wild[b], E. John Orav[c], Ashish K. Jha[a,f,e]

Indicator	Number of beneficiaries with indicator	% of beneficiaries with indicator
Abnormality of gait	272,654	10.5%
Protein-calorie malnutrition	51,300	2.0%
Adult failure to thrive	26,029	1.0%
Cachexia	6,730	0.3%
Debility	84,760	3.3%
Difficulty in walking	201,979	7.7%
Fall	112,413	4.3%
Muscular wasting and disuse atrophy	42,649	1.6%
Muscle weakness	263,343	10.1%
Decubitus ulcer of skin	49,784	1.9%
Senility without mention of psychosis	7,370	0.3%
Durable Medical Equipment (DME) (cane, walker, bath equipment, and commode)	115,575	4.4%

Assignment of Patients to Cohorts / Phenotypes

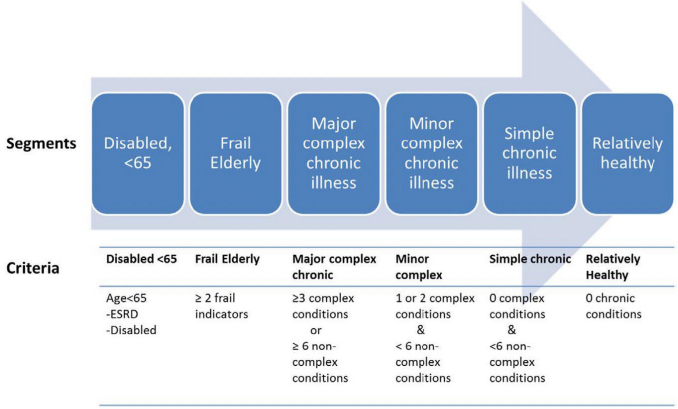


Fig. 1. Segments were assigned in a waterfall fashion in the order shown, such that the groups are mutually exclusive. First, the under 65 population was assigned to a group (< 65). Then, of remaining beneficiaries, those with more than two frailty indicators were assigned to a group ("frail elderly"). Then, based on the number of chronic conditions present, the remaining beneficiaries were divided into the four remaining groups shown.

Number of Frailty Indicators	Number of patients	% of beneficiaries
0	2,007,390	77.0%
1	277,827	10.7%
2	148,429	5.7%
3	86,909	3.3%
4	48,807	1.9%
5	23,077	0.9%
6	9,306	0.4%
7	3,187	0.1%
8	975	0.0%
9	237	0.0%
10	45	0.0%
11	3	0.0%
12	0	0.0%

Prevalence of High-Cost Status within Each Segment and Type of Spending

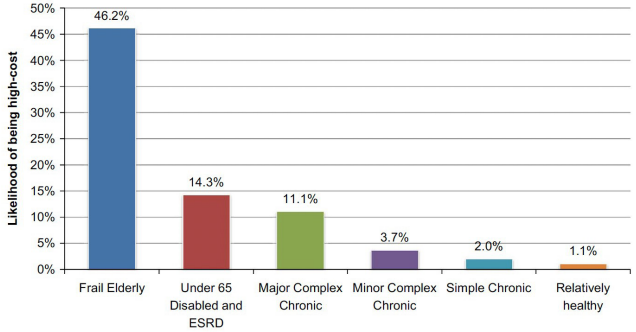


Fig. 2. Prevalence of High-Cost Status Within Each Segment. ESRD=end-stage renal disease. High-cost status was defined as the top 10% of spending, so if the likelihood of being a high-cost patient was equivalent across segments, we would expect 10% of the patients in each group to receive this designation.

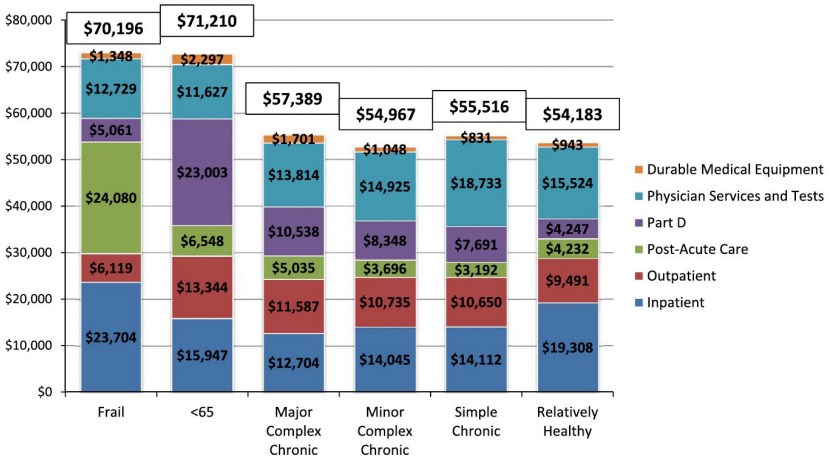


Fig. 3. Total and Type of Spending Across High-Cost Patients by Segments. The boxes atop each bar represent total spending in each group.

Top 10% of Medicare Beneficiaries: Clinical Phenotypes

BrightSpring Health Services

	Disabled < 65 	Frail Elderly 	Major Complex Chronic Illness 	Minor Complex Chronic Illness 	Simple Chronic Illness 	Relatively Healthy 
Criterion 1	Age < 65	Age ≥ 65	≥ 3 complex conditions OR	1 or 2 complex conditions AND	0 complex conditions AND	0 chronic conditions
Criterion 2	Disabled or EDRD	≥ 2 frailty indicators	≥ 6 non-complex conditions	< 6 non-complex conditions	< 6 non-complex conditions	
Total Cost of Care	$70,196	$71,210	$57,389	$54,967	$55,516	$54,183
Measures on which to Focus our Impact	Medication cost*; SDOH, hospitalization rate * Part D cost not included in MSSP cost calculation	Hosp. rate (affects inpatient cost and post-acute utilization), SDOH	Hospitalization rate	Hospitalization rate	Hospitalization rate	Preventive Health (USPTF screenings)
Top Services needed to Impact Focus Measures	Expert medical care; Polypharmacy reduction, cost-effective med subs, care and med mgt, IADL/ADL support	Expert visiting medical care, care and med management, exercise prescription, advance care planning; IADL/ADL support	Expert medical care, care and med management, advance care planning	Expert medical care	Expert medical care	Expert medical care

The Value of Care in the Home Setting

Over 15 million Americans receive health services in the home setting every year

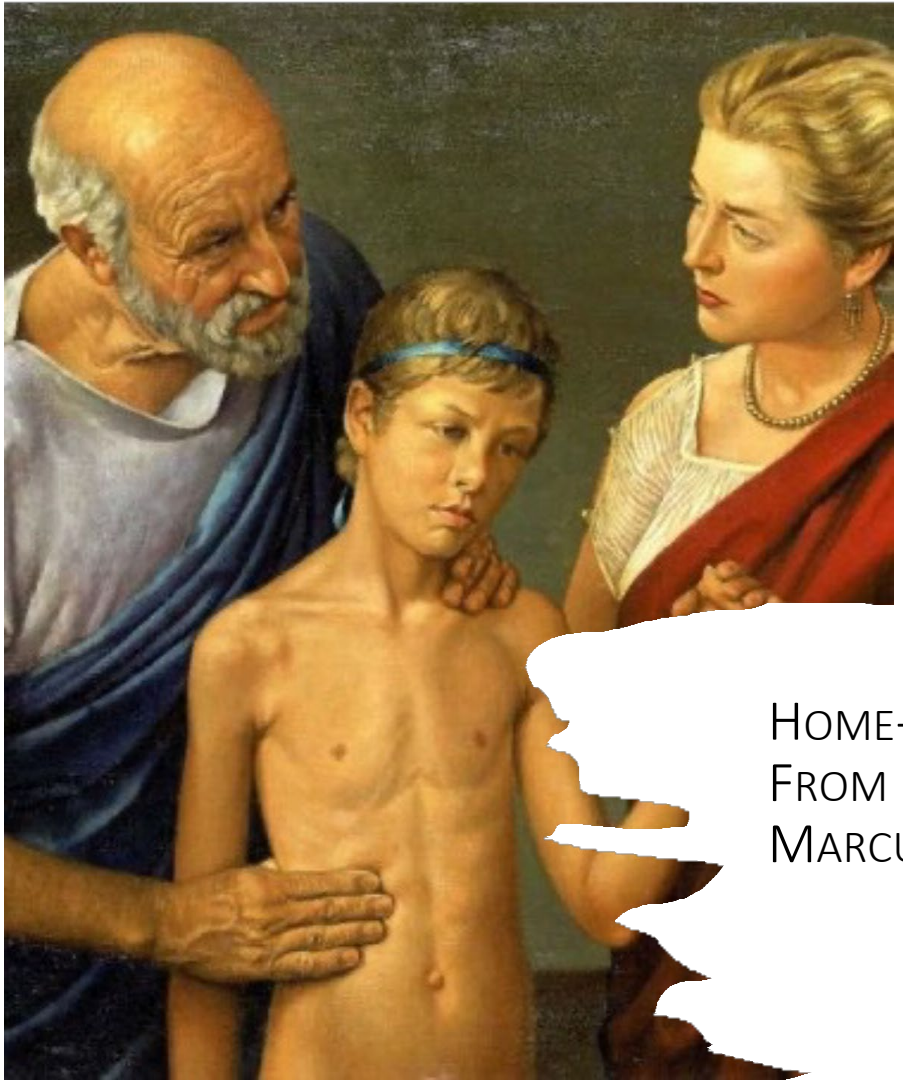
2 million caregivers travel over 7 billion miles each year to provide care for patients in their homes

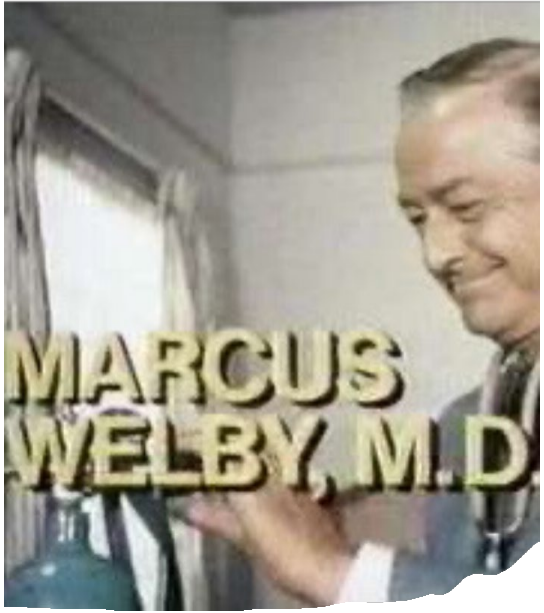
Care in the home brings proven cost savings

Promotes better patient outcomes

The latest therapies and medical technologies can be provided in the home

Home is a preferred setting for care





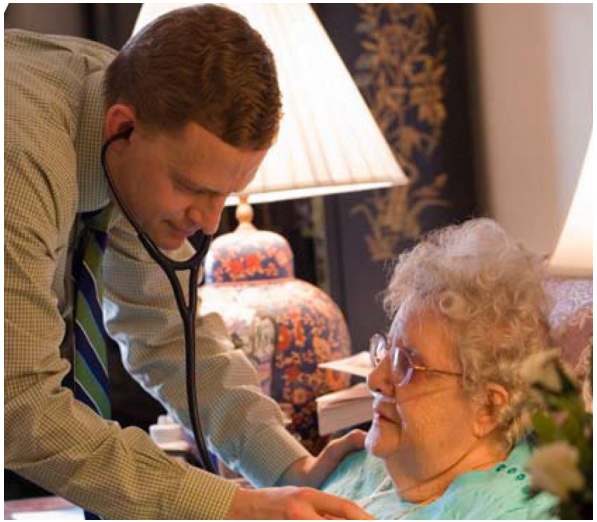
Home-Based Primary Care: From Hippocrates to Marcus Welby to Today

HOME-BASED PRIMARY CARE: BACK TO THE FUTURE

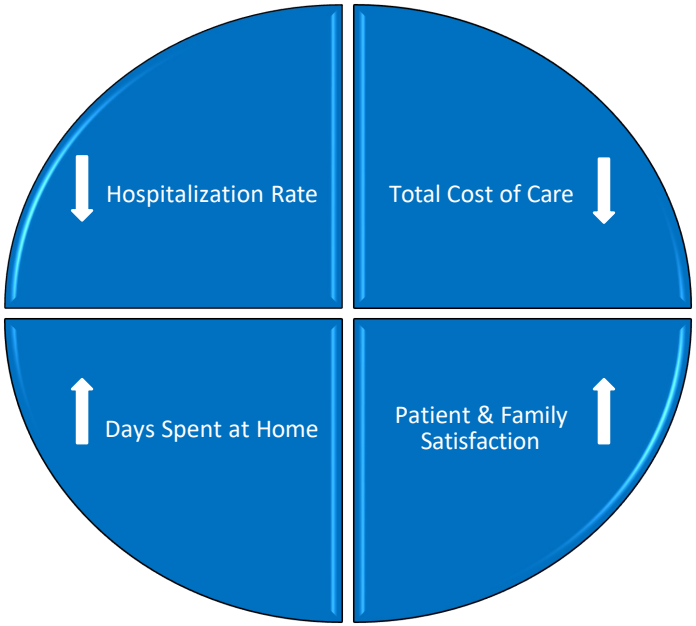
HOME BASED PRIMARY CARE BY THE NUMBERS

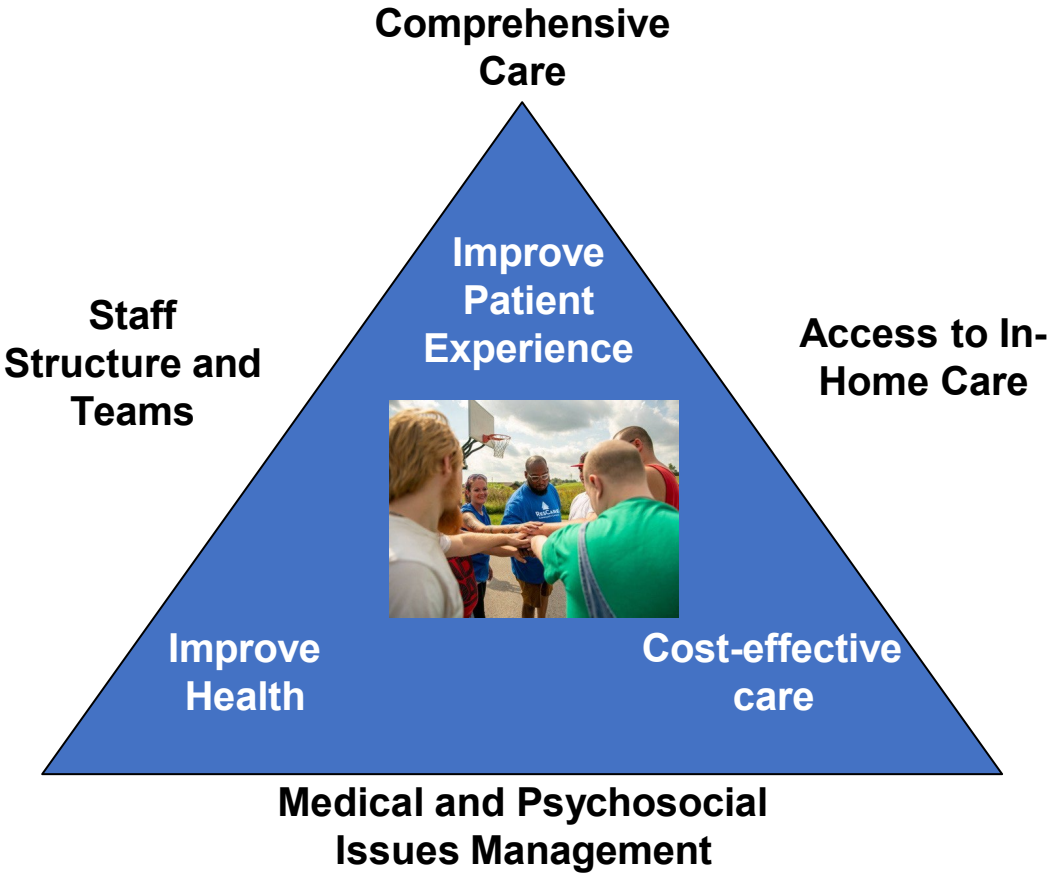
50 MILLION INDIVIDUALS IN THE U.S. THAT WILL BE 75 OR OLDER BY 2050	**2 MILLION** MEDICARE BENEFICIARIES WITH MULTIPLE CHRONIC CONDITIONS COULD BENEFIT FROM HBPC	**81%** OF PEOPLE 65 AND OLDER THAT HAVE MULTIPLE CHRONIC CONDITIONS
50% AMOUNT HBPC CUT HEART FAILURE READMISSIONS	**$4,000** ANNUAL HBPC SAVINGS/PATIENT	**30-40%** RISK-SHARING HOME BASED PRIMARY CARE PROGRAM REDUCES AVOIDABLE UTILIZATION
40% OF PATIENTS VISITS WERE IN-HOME IN 1930	**70/30%** OF AMERICANS THAT PREFER TO DIE AT HOME VERSUS THOSE THAT DO	**5/39%** TOP 5% OF PEOPLE ARE RESPONSIBLE FOR 39% OF HEALTH SPENDING

Sources: HCCI: Home-Based Primary Care's Perfect Storm; AAHOM: Home-Based Primary Care

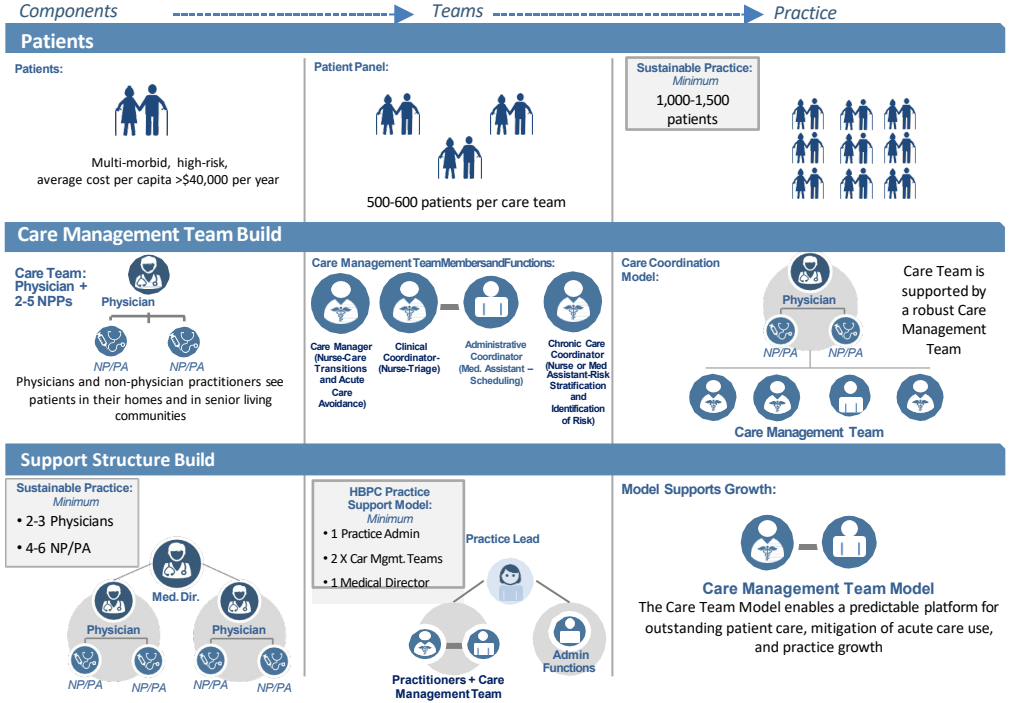


Primary HBPC Outcome Measures: Aligning Patient, Practice And Payer Goals




Comprehensive Care
Improve Patient Experience
Staff Structure and Teams
Access to In-Home Care
Improve Health
Cost-effective care
Medical and Psychosocial Issues Management

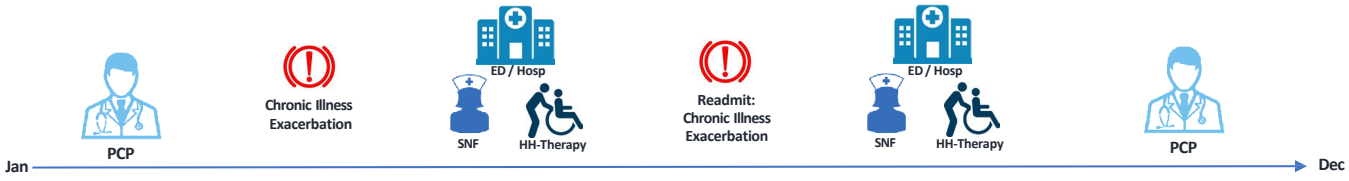
HOME-BASED PRIMARY CARE DELIVERY MODEL



An "In-Between Visit" Care Management Model for Complex Patients with IDD

BrightSpring Health Services

TRADITIONAL HEALTHCARE : MINIMAL IN-BETWEEN VISIT CARE MANAGEMENT



INTEGRATED MEDICAL CARE AND IN-BETWEEN VISIT MANAGEMENT

Care Management

- Falls, Frailty, Mortality and other evidence-based assessments
- Comprehensive Care Planning
- Tight Communication Linkage between practice and care manager
- Quality Measure Attainment
- Coordination of community resources

Comprehensive Medication Management

- Access to Right Meds
- Regular Med Reconciliation
- Medication Adherence
- Polypharmacy reduction

Patient /Caregiver Engagement

- Practitioner Engagement
- Access Care Plan
- Disease Education Materials
- Advanced Directive Education
- Aligning expectations

The Chronic Care Management Intervention

POPULATION HEALTH MANAGEMENT
Volume 23, Number 2, 2020
Mary Ann Liebert, Inc.
DOI: 10.1089/pop.2019.0053

Original Articles

A Platform and Clinical Model to Enable Medicare's Chronic Care Management Program

William R. Mills, MD,[1] Dimitri Poltavski, PhD,[2] Mark Douglas, MFin,[1] Lisa Owens, RN,[1]
Andrea King, LPN,[1] Jamie Roosa, MA, LPN,[1] Jacqueline Pridham, BA,[1]
Daniel Dzina, BS,[1] and David Weber, PA, RN, RRT, MBA[1]

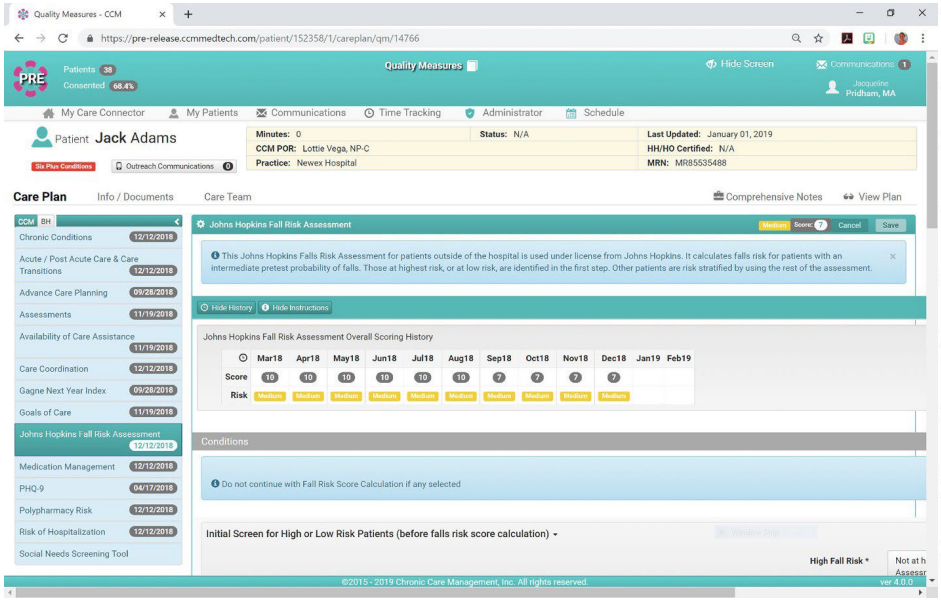


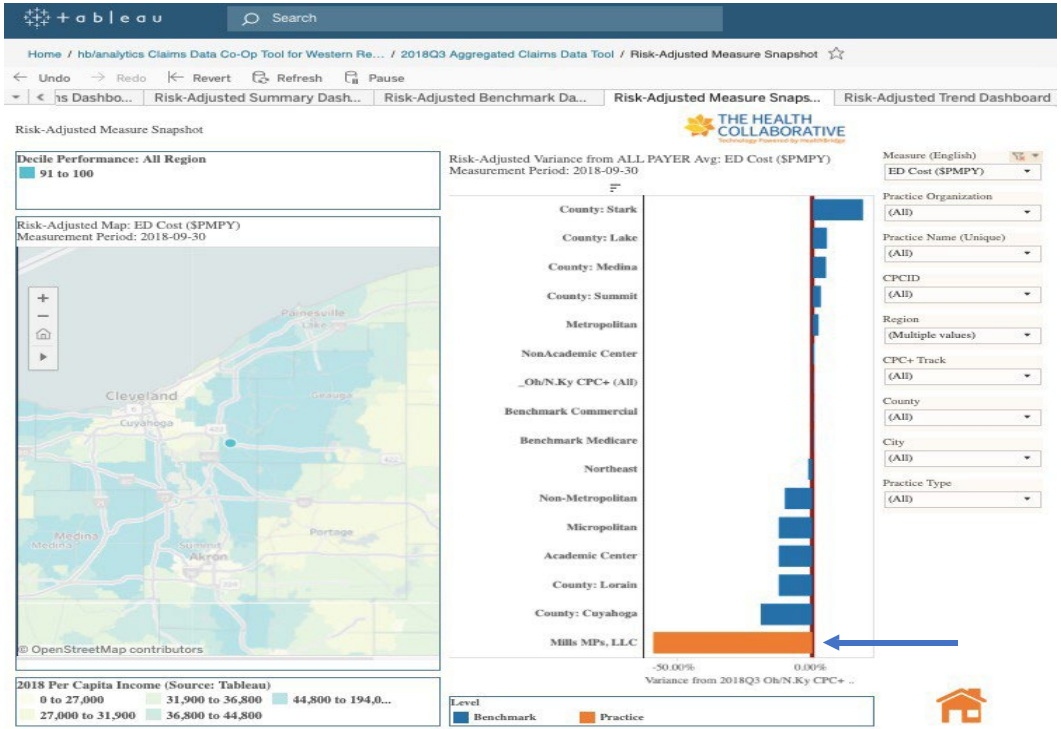
Table 2. Characteristics of Patients Receiving Chronic Care Management Services Using Study Platform Between January 1, 2018, and December 31, 2018

Patients, n	26,500
Type of Residence, n	
Private Home or Senior Living	25,346 (95.6)
Nursing Home	1175 (4.4)
Age, y	
Mean (SD)	75 (13)
Median (25th, 75th percentile)	76 (68, 85)
Sex, n	
Male (%)	9799 (37.0)
Female(%)	16,701 (63.0)
Number of chronic conditions	
2–5 chronic conditions, n (%)	8474 (32.0)
≥6 chronic conditions, n (%)	18,032 (68.0)
CCM patient months	174,612
Number of CCM episodes	
Mean (SD)	6.6 (3.9)
Range	1 – 12
Ambulatory status, n	
Ambulates without assistance (%)	19,052 (71.9)
Ambulates with assistance or nonambulatory (%)	7458 (28.1)
ACP or DNR instructions, n	
Present	15,117 (57.0)
Absent	11,404 (43.0)
Risk of hospitalization risk flag, n	
Low or Medium Risk (%)	22,496 (84.8)
High Risk (%)	4015 (15.1)
John Hopkins Falls Risk Assessment, n	
Low Risk (%)	7813 (32.8)
Medium Risk (%)	6375 (26.8)
High Risk (%)	9600 (40.4)
Polypharmacy risk, n	
Low Risk (%)	1123 (4.5)
Medium Risk (%)	4216 (16.9)
High Risk (%)	19,619 (78.6)
Gagne 1-year mortality risk (n = 20,965)	
Mean (SD)	7.% (7%)
Range	2%–47%
Flacker 1-year mortality risk (n = 796)	
Mean (SD)	23% (15%)
Range	7%–86%
Hospitalizations in 2018, n	2679
Number of hospitalizations in a year	
Mean	0.13 (0.42)
Range	0–6
Hospitalization Rate[a]	184

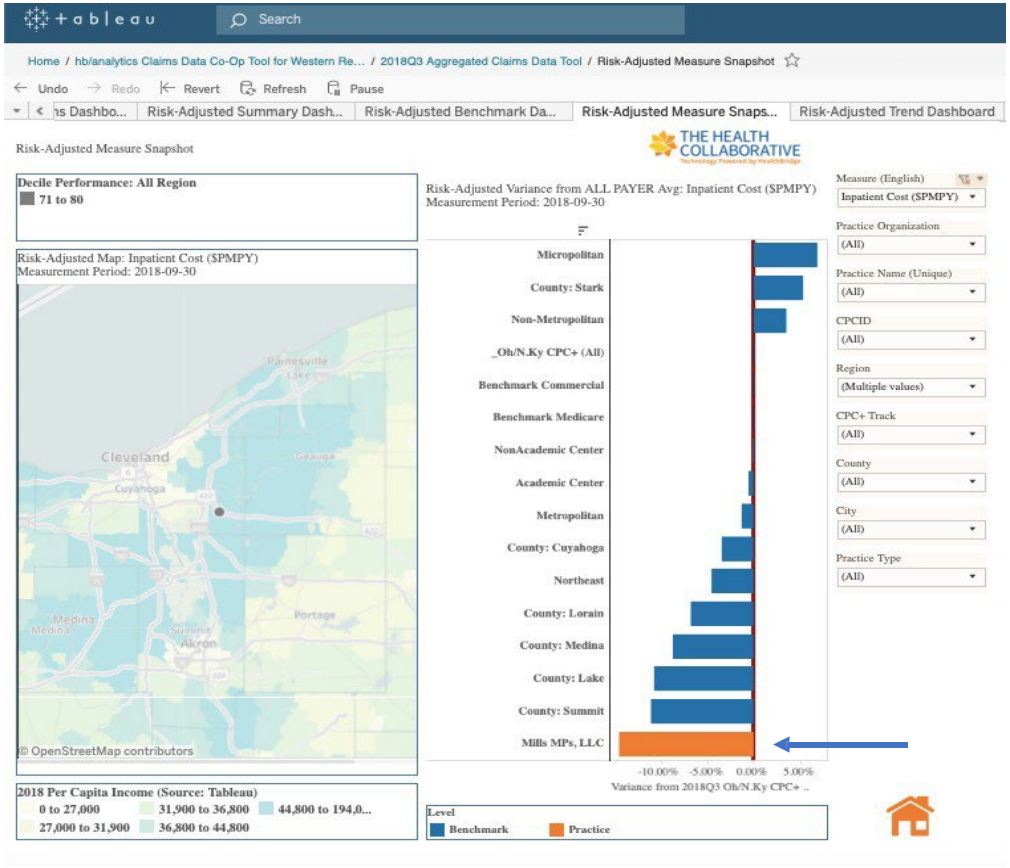
[a]Hospitalization rate is expressed as number of hospital admissions per 1000 CCM patient months per year.

ACP, advance care plan; CCM, chronic care management; DNR, do not resuscitate; SD, standard deviation.

HOME-BASED PRIMARY CARE: LOWERING EMERGENCY DEPARTMENT COST

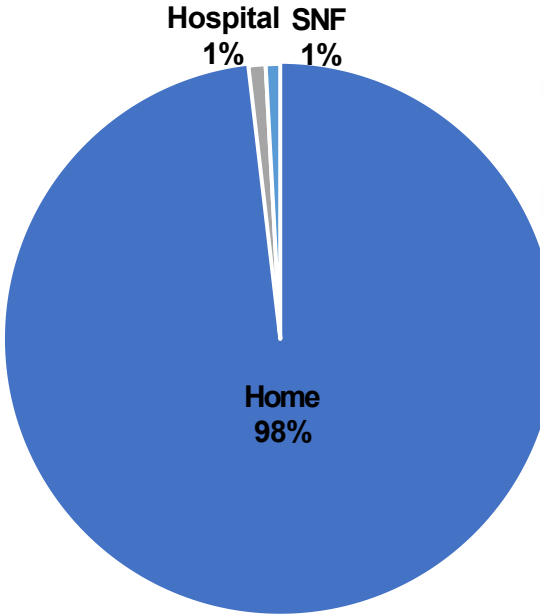


HOME-BASED PRIMARY CARE: LOWERING INPATIENT HOSPITAL COST



HOME-BASED PRIMARY CARE DELIVERS MORE DAYS SPENT AT HOME FOR COMPLEX PATIENTS

Home-based primary care is enabling complex, high-risk populations to spend
98% of their days at home, in the community – and outside hospitals and nursing homes



JOURNAL OF THE AMERICAN GERIATRICS SOCIETY

AGS Geriatrics Healthcare Professionals

BrightSpring Study Abstract Published in Journal of the American Geriatrics Society

Chief Medical Officer Bill Mills, MD, and members of the Western Reserve Medical Group team (Janet Buccola, Lisa Lemin, Lynn Cappelli, Jamie Roosa, Kathy Lewis and Belinda Schraer) gained attention for their study "Variation in Hospitalization Rates Among Senior Living Communities Served by a Home-Based Primary Care Practice" in the April 2020 issue.

Can The Provision Of Home-based Primary Care Lead To An Improvement In Value-Based Outcomes In People With IDD?

BRIGHTSPRING HEALTH SERVICES

WesternReserve MEDICAL GROUP

ResCare

Pharmacy Alternatives

Primary Outcome Measures

- Hospitalization Rate
- Days Spent at Home
- Total Cost of Care
- Advance Care Planning
- Readmission Rate
- Medication Adherence
- Satisfaction

IDD Integrated Care Model: Patient Case Example

Before home-based primary care

- Individual had four emergency room visits within two months due to hyperglycemia

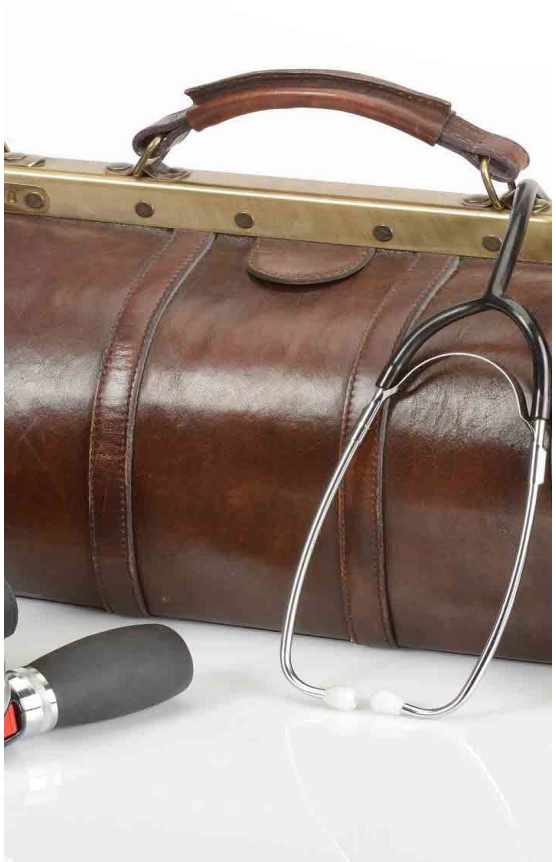
With home-based primary care

- MD visited with patient and adjusted treatment plan, most recent Hb A1C 6.8% (down from 10.5% in 3 months). No emergency room or hospital visits in six months

- In the HBPC model, the physician or nurse practitioner has regular in-person contact, and focuses on communication, coordination and goal-directed, preemptive care

- Getting to know the living setting is important in helping an individual do well clinically

Is Provision of Home-Based Primary Care to Individuals with IDD Associated with a Lower Hospitalization Rate than a Traditional Primary Care Model?



- The objective of this study was to determine if providing HBPC to individuals with IDD was associated with fewer hospitalizations than a control group receiving traditional primary care
- Individuals with IDD living in supported residential settings in Ohio were offered HBPC
- Individuals electing HBPC made up the intervention group, and those who did not opt for HBPC continued to receive traditional primary care services and made up the control group
- Hospitalizations were tracked in both groups
- The 757 study participants had IDD diagnoses and received residential support services throughout the study period
- Annualized hospitalization rate was determined in both groups and was compared using generalized estimating equations while controlling for patients' age and hospitalization rate in the year prior to the study

RESULTS

JAMDA

journal homepage: www.jamda.com

Original Study - Brief Report

Provision of Home-Based Primary Care to Individuals With Intellectual and/or Developmental Disability Is Associated With a Lower Hospitalization Rate Than a Traditional Primary Care Model

William R. Mills MD[a,*], Miranda M. Huffman MD[a], Jamie Roosa MA[a], Krystal Pitzen MA[a], Ronald Boyd BS[a], Belinda Schraer BS[a], Dmitri Poltavski PhD[b]

[a] BrightSpring Health Services, Louisville, KY, USA
[b] University of North Dakota, Grand Forks, ND, USA

Frequencies and χ^2 Test Comparisons Between the Control and HBPC Groups on Categorical Variables With Bootstrapping

	Control, % (n)	HBPC-Receiving, % (n)	$\chi^{2,*}$	Two-Sided *P*
Sex				
Females	39.8 (219)	42.0 (87)	0.58	.62
Males	60.2 (331)	58.0 (120)		
Primary diagnostic category				
Mild ID	41.6 (229)	40.6 (84)	1.93	.59
Moderate ID	27.3 (150)	31.9 (66)		
Severe ID	12.9 (71)	10.6 (22)		
Profound ID	18.2 (100)	16.9 (35)		

*After adjusting for statistical bias via bootstrapping based on 1000 samples.

Parameter Estimates for Fixed Effects and Covariates in Generalized Estimating Equations Predicting Individual Hospitalization Rate

Parameter	β	SE	95% Wald CI	Odds Ratio	Wald χ^2	*P*
Female	−0.25	0.20	−0.65, 0.15	0.78	1.53	.22
Control group	0.75	0.17	0.42, 1.08	2.12	20.71	<.010
Age	0.003	0.005	−0.07, 0.01	1.00	0.29	.59
Hospitalization rate for the year prior to study	0.03	0.03	−0.02, 0.08	1.03	1.17	.28

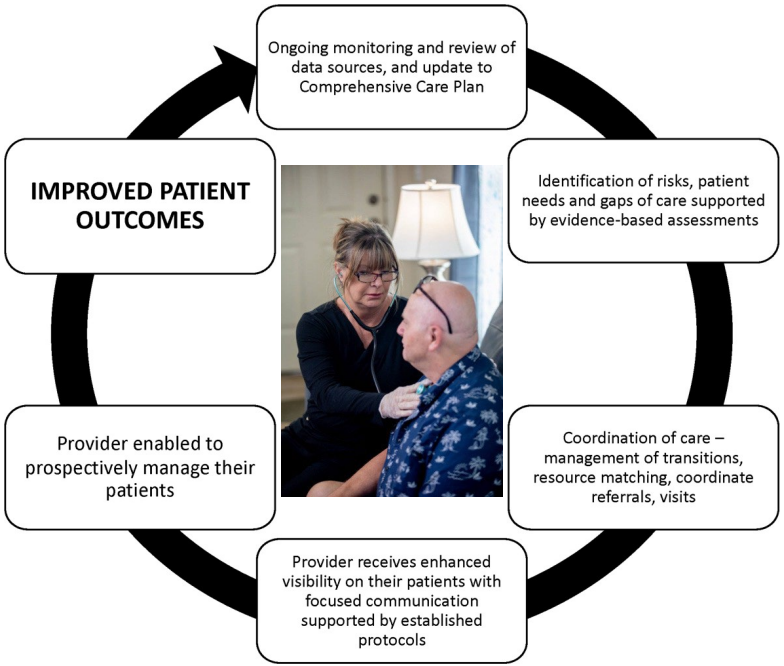
Home-Based Primary Care Was Associated with a Lower Hospitalization Rate: Discussion

- We found that individuals with IDD receiving HBPC were hospitalized less often than those not receiving HBPC

- Contributors to the HBPC group's lower hospitalization rate may have included:
  - availability of 24/7 medical triage for all HBPC patients
  - early recognition and management of new acute diseases and exacerbation of chronic conditions at frequent visits
  - a heightened focus on goal-directed care and advance care planning due the intrenchment of these facets in the group's care model
  - better management of the patient due to more intimate knowledge of the care setting in which the patient resides

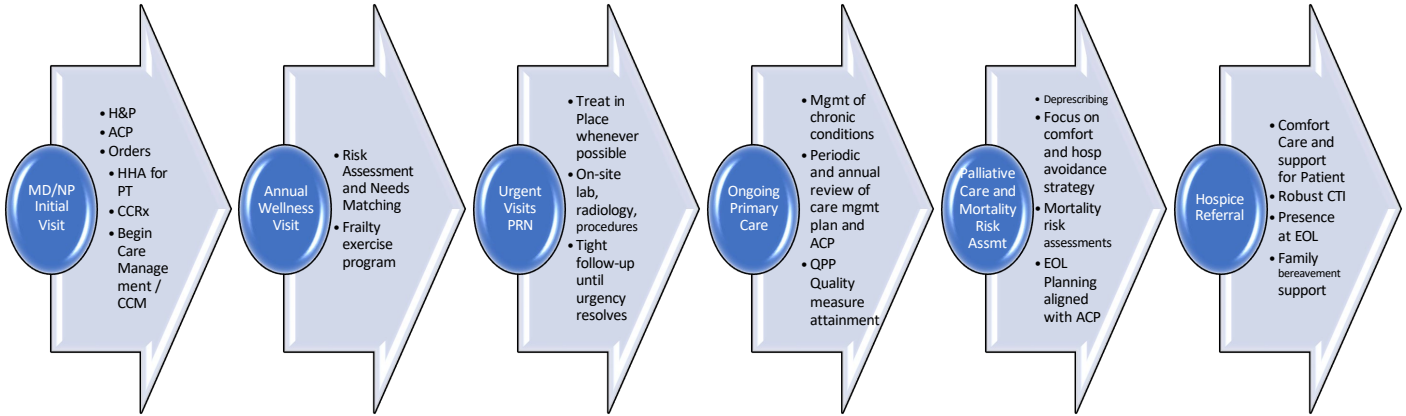
- Expanding access to HBPC may be a worthwhile priority for organizations that support individuals with IDD

A Care Management Methodology for People with IDD



Mills WR et al. A Platform and Clinical Model to Enable Medicare's Chronic Care Management Program. Popul Health Manag. 2020 Apr;23(2):107-114.

Putting it All Together: Comprehensive Care of People with IDD at Home



Quarterback of care is a full-service home-based primary care practice for all common medical conditions including (in most circumstances) home-based treatment of the following conditions, which otherwise commonly require hospitalization:

- Deep Venous Thrombosis (DVT: blood clot)
- Congestive Heart Failure (CHF) exacerbation
- Chronic Obstructive Pulmonary Disease (COPD) exacerbation
- Cellulitis (soft tissue infection)
- Pneumonia
- COVID-19

High Quality **Home-Based** **Compassionate** **Cost-Effective**

ADVANCEMENT OF IDD CARE AND SUPPORT MODEL

BRIGHTSPRING HEALTH SERVICES

Hospitalization

Home-based primary care (HBPC) has been shown to reduce ER visits, hospitalizations, rehospitalizations, and skilled nursing facility placements and improve patient and caregiver satisfaction

ResCare reported an individual **hospitalization rate** that was **50 percent less** than that of a similar population

Days Spent At Home

Despite increased usage of quality measures and standards, there is little research about which standards should be used for long term services and supports (LTSS) for the IDD population

ResCare clients spent on average **359 days-at-home per year** from 2019-2022, which is **over 25 days more** than those in a benchmark population

COVID

People with IDD living in congregate care settings can benefit from a coordinated approach to infection control, case identification and cohorting, as evidenced by the low relative case rate reported

COVID case rate at ResCare is **one-third** of the USA general population infection rate and **one-seventh** of the congregate care infection rate

Sources: Hospitalization Rate and Days Spent at Home as Value-Based Outcome Measures for People with Intellectual and Developmental Disability, Supporting individuals with intellectual and developmental disability during the first 100 days of the COVID-19 outbreak in the USA. Journal of Intellectual Disability Research 2020.

CONCLUSIONS

- Emerging value-based outcomes measures such as hospitalization rate and days spent at home are increasingly being used to describe quality and utilization in populations of people with IDD
- Home-based primary care is a time-tested model that is associated with high patient and family satisfaction, high quality, and reduced costs
- Home-based primary care is starting to be provided to individuals with IDD, and we are seeing lower hospitalization rates, decreases in 30-day readmission rates, and an increased number of days spent at home (and outside of hospitals)
- Organizations that provide care and support for people with IDD may find it beneficial to work to increase access to HBPC to help individuals

Thank You for Attending! Q&A

William.Mills@BrightSpringHealth.com

NAACOS Upcoming Events

Spring Conference seats are filling fast!

Register here!

Summer Boot Camp registration is open!

Join us in Denver Colorado June 15-16, 2023, as we dive into data and analytics for MSSP and ACO REACH ACOs. For more information and to register

NAACOS Upcoming Events

- **Webinar Title:** Utilizing MSSP's 4th quarter files and the CMS benchmark estimator tool
  Date / Time: April 19th 2023, 12:30 PM - 01:30 PM (Eastern)
- This webinar will provide an overview of the information found in the MSSP 4th Quarter Files and how to utilize them. These files along with the CMS estimator tool can be used to provide ACOs with the best possible prediction of your MSSP yearly final results. Join us to learn from Jimmy Johnson, Director of IT and Analytics, and Dr. Mike Romano, and Jennifer Leazzo, Vice President of Analytics for Duly Health and Care how they utilized these files to not only predict yearly outcomes but also to define clinical improvement.
- Register Here!

Thank you!

Appendix

Education Project Plan Document

Project Overview:

- The Medicaid Learning Lab will provide NAACOS ACO members the time and platform to explore and learn about topics related to Medicaid value-based contracting and patient care models that include a focus of issues compounded by the socio-economic factors of the Medicaid population. The learning lab meetings will occur virtually each month for 90-minute sessions and will last for a minimum of 12 months and continue until objectives are completed. Additional in-person sessions may also occur at biannual conferences, if warranted.

Standards:

- Participants are asked to be engaged active participants in monthly meetings
- Participants are asked to share best practices and lessons learn from experiences with like populations, care model or topic of discussion
- Participants are expected to actively participate in surveys and document review to better enhance your learning experience and help staff understand your learning needs.
- Please be on camera and ready to participate in each meeting you attend.
- No question, thought, or example is a bad one. Learning is found in all examples weather a success or failure in the past.

Learning Lab Objectives

- Learn about Medicaid contracting throughout the states
- Learn about care models to support your contract populations and networks
- Learn about various care settings to address population needs
- Learn workflow options for value-based care related to primary care, SDOH, BH and high needs people
- Learn how to improve quality in the Medicaid population
- Learn how to enhance patient engagement in the Medicaid population

Education Project Plan Document

Requirements/Task(s):

- Attend a minimum of 75% of the meetings to receive CEUs
- Actively participate in topic discussions where appropriate
- Develop a draft plan of what your Medicaid ACO looks likes including participants, Geographics and Medicaid population you are serving or would look like if planning a new contract. Then outline a 2-year strategic plan on how you will include at least 2 to 3 new initiatives based on information gathered during participation in the NAACOS Medicaid Learning Lab. (Turn completed plan in to NAACOS for Completion Certificate)

Record your notes/research here:

- Use this section to note which initiative you may want to include in your strategic plan

Education Project Plan Document

Outline the steps/plan for your project:

- Use monthly meeting note templates to document your notes and options for your final strategic plan
- Start your project outline from the beginning of the learning lab to prevent an additional large time commitment at the end of the learning lab series to complete your strategic plan.
- Meet with others from your ACO throughout the project to get their input, suggestions, and support for possible implementation of learnings.
- Complete your strategic plan after the final meeting, you will have one month to complete and submit to NAACOS Education staff to receive your NAACOS Medicaid Learning Lab completion certificate. (This will be separate from CEUs for participation in live meetings)
- Your final plan will be reviewed by the NAACOS team and Education Committee for presentation and possible award at a future NAACOS event.
- The strategic plan completion is not a requirement to participate in the learning lab monthly session or to receive CEUs, but will provide tangible materials from your participation that have potential for future ACO improvement efforts.
- To Receive the Event CEUs, you must be present and actively participate in a minimum of 75% of the monthly meetings.
- This event is only open to NAACOS Members.

Group Discussion

Note Template questions:

1. What problem does the topic address?
2. What population of patients could benefit from this?
3. What didn't I know or haven't thought about trying in my ACO?
4. Could any of this presentation work in your ACO or CIN?
5. If yes, how? If no, why not?

Take 10 to 15 minutes and create a paragraph describing what your next steps would be to investigate the use of presented material in one or more ACO processes.