



Pilot Performance Summary

A Social Needs Intervention in a Bundled Payment Environment

January 2019

Program Background

The impact of social determinants of health (SDOH) as drivers of medical utilization, cost, and health outcomes is widely researched and acknowledged. The influence of SDOH is particularly pronounced in higher risk and older patient populations. As payments in healthcare shift from volume to value, a growing number of providers and payers are taking steps to understand and address the social determinants of their patients' and members' health through social needs services.

The Next Step Program is a community resource navigation and non-medical services coordination model designed by teams from Boulder Community Health (BCH) and the Boulder County Area Agency on Aging (BCAAA) to improve performance in a value-based environment. Using the Medicare Comprehensive Care for Joint Replacement (CJR) bundled payment model as that environment, the teams developed and integrated social risk screenings and non-medical service coordination to see if such interventions would improve patient outcomes, expand patient awareness of available non-medical resources, reduce 30- and 90-day readmissions, and encourage reductions in post-acute care (PAC) utilization.

Program Design

BCAAA's resource navigators received automated patient referrals from BCH and met with each patient prior to their discharge from the hospital. Patients were introduced to the program, took social risk and readiness screenings, and were offered recovery planning support. Navigators targeted "independent" patients who were being discharged to home without transitional nurse care or home health services - more than half of the total patient population in the program. Navigators helped patients identify and coordinate non-medical services to encourage their recoveries, including transportation, home preparation, grocery deliveries, assistive devices, chores, personal care, and family caregiver support. BCAA's resource navigators were available to every Medicare CJR patient for the duration of their 90-day episode of care, for the pilot period January - June 2018.

1 Resource Navigator meets with patient in hospital:

- Intro to program
- Social risk screening
- Schedule follow-up as needed

2 Navigator guides patient to available resources:

- Home visit / check-in
- Resource nav & coordination
- Schedule follow-up as needed

3 Navigator checks in with patient on status & needs:

- Check-in
- Resource nav & coordination
- Stability assurance

90-Day Episode of Care (Bundled Payment Program)

Resource Navigation & Coordination of Services (Next Step Program)



Engaging Aging for Over 25 Years

303-441-3570

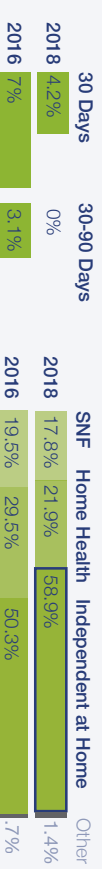
www.BoulderCountyAging.org

Program Results

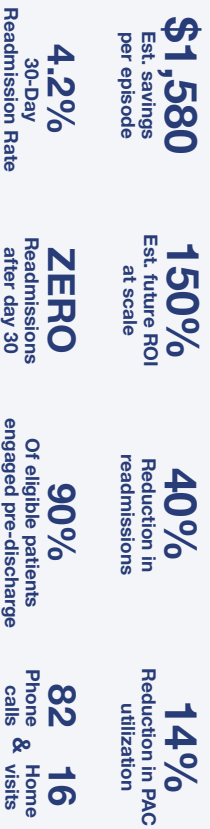
Pilot performance data was pulled from BCH's electronic medical records (EMR) system 90 days following each patient's discharge from the hospital; from BCAA's cloud-based case management system, which included digitized social risk screening results; and from BCAA's cloud-based records system for public and privately-funded services. Pilot outcomes were compared against BCH's 2016 Medicare CJR performance figures, the most recent data available.

Performance metrics were collected on patients who live only in zip codes that fall within BCH's catchment area, which comprises 72% of the total number of patients engaged in the pilot. Estimated savings are calculated based on publicly available Medicare payment and penalty figures for readmissions, skilled nursing facilities, and home health care services, and on publicly available CJR bundled payment program performance. Estimated ROI at scale is determined by factoring BCAA's case management and estimated number of targeted higher risk patients against episodic cost savings and subsequent rewards to a prospective year of bundled payment program activity.

Readmissions



Post-Acute Care Utilization



Patient Population in Program

Patients in this program consisted of Medicare beneficiaries who had an inpatient hospitalization for a hip or knee replacement, the most common inpatient surgical procedure for Medicare beneficiaries. While the program included planned and unplanned procedures, nearly all were planned.

Beneficiaries undergoing hip and knee replacements are, on average, younger, healthier, and lower risk when compared with the general Medicare population - nearly half of the cohort in this pilot were 65-70 years of age. Despite the younger cohort, a quarter of the population still scored on the social risk index.



Supporting Research

The research and evidence demonstrating how social, economic, and environmental factors influence physical health has surged in the last few years. Studies are showing that lower cost "upstream" social investments like food, transportation, and housing assistance can reduce negative "downstream" health outcomes that are more costly to payers, health systems, and the public. Below are a several recent articles and white papers on the subject:

- *68% of Patients Face Social Determinants of Health Challenges*, Becker's Hospital Review, December 2018; www.beckershospitalreview.com
- *Cross-Sector Partnerships by Area Agencies on Aging: Associations with Health Care Use and Spending*; Health Affairs, January 2018; www.healthaffairs.com
- *Investing in Social Services as a Core Strategy for Healthcare Organizations*; KPMG, Government Institute, March 2018; www.kpmg.com/us/governmentinstitute
- *The Next Frontier for Population Health Management*; Optum White Paper, 2017; www.optum.com
- *Redistributing Investment in Health and Social Services - the Evolving Role of Managed Care*; JAMA, December 2018; www.jamanetwork.com
- *Social Determinants of Health: How are Hospitals and Health Systems Investing in and Addressing Social Needs?* Deloitte Development LLC, 2017; www.deloitte.com
- *Social Determinants of Health Play Growing Role in Hospital, Payer Strategies*; Managed Healthcare Executive, December 2018; www.managedhealthcareexecutive.com



Tracey Louisville (rural)

Age 81
Payer Aetna Advantage Plan
Status Widowed
Social Risk Score Moderate
PAC Home
Challenges In need of shower chair, in need of transportation to medical appointments, limited support network
Solutions Coordinated medical rides, acquired shower chair, connected with daughter for ongoing contact with navigator
Results No ED visits or readmissions

Julia Boulder
Age 93
Payer United Advantage Plan
Status Widowed
Social Risk Score High
PAC SNF -> Home
Challenges Fall, history of falls, hearing impaired
Solutions Coordinated housekeeping services with home care agency, secured new hearing aids, involved daughter in recovery plan
Results No ED visits or readmissions

Leonard Boulder
Age 69
Payer Medicaid
Status Divorced
Social Risk Score High
PAC Home
Challenges Recently relocated to new affordable apartment and hasn't unpacked, needs rides to pharmacy and doctors appointments, needs new glasses, needs personal care assistance
Solutions Chore services to help unpack boxes, coordinated transportation for medical/Rx rides, secured new eye glasses, secured personal care services
Results No ED visits or readmissions

The Boulder County Area Agency on Aging

The Boulder County Area Agency on Aging develops, funds, and delivers a broad range of community-based services for older adults and family caregivers in Boulder County. BCAA's wrap-around social services model delivers formal and informal home- and community-based solutions that improve people's health, connections, and longevity through the following areas:

HEALTH & WELLNESS COORDINATION

- Chronic Disease Management
- Diabetes Prevention Classes
- Meals & Grocery Deliveries
- Nutrition Counseling
- Falls Prevention
- Dental Services
- Friendly Visits



Older Adult

DIRECT SERVICES COORDINATION

- Resource Navigation & Wrap Around Coordination
- Personal Care & Chore Services
- Material Aid Assistance
- Social Risk Screenings
- Caregiver Respite
- Assistive Devices
- Legal Services
- Transportation

EDUCATION & ADVOCACY COORDINATION

- Caregiver Training & Support
- Public Benefits Counseling
- Self-Care Coaching
- LGBT Resources
- Rural Outreach
- Medicare 101
- Elder Rights

Partnering to Address Social Needs

As hubs of direct and contracted non-medical services, Area Agencies on Aging are viable partners in helping healthcare providers and payers better understand and address the social determinants of patient and member health. Boulder County Area Agency on Aging's tailored fee-based partnership approach allows for flexible social service integration with healthcare systems and workflows, encouraging quick and convenient referrals, closed-loop communications, and accessible performance and activity data.



Engaging Aging for Over 25 Years
303-441-3570
www.BoulderCountyAging.org