

Robust analysis drives successful program optimization

The Challenge: Evaluate and optimize heart failure care management program

By any measure, congestive heart failure is an expensive and increasingly frequent chronic condition. The annual median cost per patient is \$24,383, and it climbs to more than \$100,000 when all-cause readmissions are included. The American Heart Association projects a 46 percent increase in prevalence by 2030.

That's why a regional health plan had a long-standing program to provide enhanced care management for Medicare Advantage members with congestive heart failure (CHF.) Supported by a nurse, members who chose to enroll created personalized care plans to promote self-management and optimal outcomes and spend. Nurses regularly contacted participating members to gauge progress and recommend additional actions.

The health plan selected NextHealth Technologies to:

- (1) Measure the impact of its CHF care management program, and
- (2) Identify opportunities to optimize costs and health outcomes.



6.9 million
Americans ages
20 and older have
congestive heart
failure.



The annual median cost per patient to treat congestive heart failure is \$24,383

Source: https://link.springer. com/article/10.1007%2 Fs40273-020-00952-0

30 KPIs measured in two weeks

The NextHealth platform performed a retrospective cohort analysis to determine how the plan's CHF care management program impacted the total cost of care. The well-matched control group was identified using propensity score matching, a process that evaluated 200 variables.

The platform measured 30 key performance indicators (KPIs), including costs for avoidable ER visits, inpatient hospitalizations and specialty prescriptions, preventive cancer screenings, and diabetes and angina diagnoses. This robust analysis led to the discovery of an unexpected increase in musculoskeletal costs, and the ultimate determination that the lifestyle modification program led some participants to do too much exercise.



\$143 PMPM savings in total cost of care

Results

Participating members cost \$143 PMPM less Optimization delivered an additional \$42 PMPM

The NextHealth analysis showed a positive ROI for members enrolled in the CHF care management program:



Total cost of care: \$143 PMPM
Inpatient cost: \$21 PMPM

Prescription cost: \$52 PMPM

To mitigate the unexpected increase in musculoskeletal (MSK) costs, the plan embedded NextHealth's MSK predictive model into their care management workflow. Nurses were alerted to coach members at high risk for MSK utilization to use the appropriate level of care and to reduce exercise intensity. NextHealth's subsequent analysis found the behavior change and program optimization led to an additional \$42 PMPM.

The optimization efforts worked as intended. Participating members changed their behavior, and within six months, the platform demonstrated a \$42 PMPM decline, a 63 percent improvement.



\$21 PMPM savings in inpatient cost



\$52 PMPM savings in prescription costs



Behavior change and program optimization delivered an additional \$42 PMPM saving within 6 months

"The NextHealth platform's machine learning effectively identified which intervention had an impact – and which didn't."

