

Using Home-Delivered Meals to Improve Care and Lower Costs for Members with Complex Care Needs



Pilot Summary Report

Background

- Without adequate nutrition, individuals with chronic conditions may struggle with condition self-management, which ultimately affects a higher overall medical spend to care for those members.¹
- Food insecurity and food insufficiency lead to poor nutritional status and low medication adherence, which contribute to poor clinical outcomes.
- By improving engagement in care and medication adherence, medically tailored meals can help to improve the effectiveness of treatment plans by providers and care managers.

Objectives

To improve the chronic care management and lower the cost of care for health plan members through a 13-week home-delivered meals intervention.

Expected Outcomes

- Reduction in total medical spend, as measured by medical claims
- Increased medication adherence, as measured by pharmacy claims

TARGET POPULATION

High-risk, chronically ill UPMC for You members with:

- Multiple co-morbidities
- Nutrition-sensitive condition(s)
- Psychosocial needs

The pilot targeted members enrolled in the UPMC Community Health Worker (CHW) Impact Program or Community Team Program who did not need housing assistance.

RECRUITMENT

CHWs and care managers determined eligibility based on:

- Food insecurity
- Household size
- Meal preparation equipment (refrigerator and/or microwave oven)

Recruited members were asked to remain engaged with the CHW or Community Team Program throughout the 13-week period. They were asked to commit to a PCP visit to obtain vital readings after 13 weeks of meals but before the 180-day period ended for the UPMC fiscal year.

ENROLLMENT (100 members)

Enrollees had a history of a high condition-based medical spend. Each member had at least one of the following conditions:

- Diabetes
- Asthma
- Coronary Artery Disease
- Heart Failure
- Chronic Obstructive Pulmonary Disease (COPD)
- Severe Persistent Mental Illness (SPMI)
- Substance Abuse Disorder

INTERVENTION

3 meals per day for a period of 13 weeks. Enrollees received weekly deliveries of fully prepared, conditionappropriate, refrigerated meals during a 3-month timeframe between October 2019 and June 2020.

Methodology

Claims data for enrollees was evaluated against a comparison group of members who met SDOH food-insecurity criteria.

The equated sample was selected based on eligibility month, age, gender, residence and co-morbidity using propensity scores.

- To account for a decrease in utilization due to COVID-19, change in cost and utilization for members receiving meals were compared to similar members not receiving meals.
- Due to small sample size, distribution and COVID-19, a nonparametric statistical analysis was conducted in regard to:
 - Total cost of care
 - 🗸 Medical costs
 - Pharmacy costs
 - ✓ Average change in ED utilization

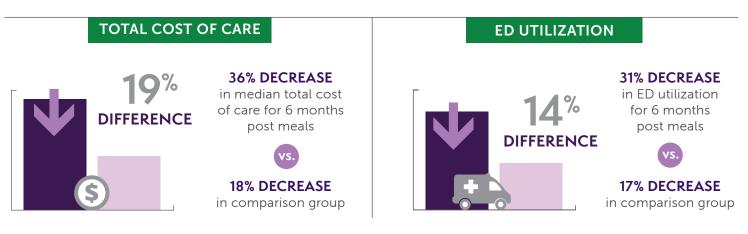
RESULTS

Outcomes Show a Positive Trend in Financial Return

Throughout the pilot, engagement remained high.



of enrollees **RECEIVED MEALS** for the 13-week period



Promising results in cost containment and reduction in avoidable unplanned care are evident.



It is important to note pilot operations coincided with COVID-19 restrictions:

- Access to non-emergent medical care decreased in 2020. It was not possible to measure PCP visit attendance and lab values (such as HbA1c, high blood pressure, etc.)
- Pennsylvania Medicaid MCOs provided 90-day refills and removed prior authorization restrictions on many medications. It was difficult to quantify medication adherence due to unprecedented changes in benefit and distribution.

Any future expansion of medically tailored meals by UPMC will measure PCP visits, lab values and pharmacy costs as key performance indicators.

¹ Berkowitz, Seth, et al. "Meal Delivery Programs Reduce The Use Of Costly Health Care In Dually Eligible Medicare And Medicaid Beneficiaries." The Physician Payments Sunshine Act, 2017, www.healthaffairs.org/doi/10.1377/hlthaff.2017.0999