

## SAVINGS OF SOCIAL SERVICES

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Recent health system innovations provide encouraging evidence that greater coordination of medical and social services can improve health outcomes and reduce health care expenditures. This study evaluated the savings associated with a managed care organization's social service referral program (called the CommUnity Impact model) that aimed to assist participants address their social needs, such as homelessness, transportation barriers, and food insecurity.

### Study Methodology

The evaluation study linked social service referral data with health care claims to analyze expenditures in two annual periods, before and after the first social service referral. Secondary data analysis estimated the change in mean expenditures over two annual periods using Generalized Estimating Equations regression analysis with the identity link. The study compared the change in mean health care expenditures for the second year for those reporting social needs met versus the group whose needs remained unmet. By comparing the difference between the first and second year mean expenditures for both groups, the study estimated the associated savings of social services, after controlling for group differences.

### Study Design

This retrospective, secondary data analysis examined the association between met social needs and health care expenditures. The study compared the change in mean health care expenditures for two groups of participants – all social needs met versus no social needs met – in the year before the social service referral and year after social service referral.

The study sample included participants insured through Medicare Advantage or Medicaid managed care in 14 states who called WellCare's CommUnity Assistance Line between January 1, 2014 and March 1, 2016 seeking referrals to a broad array of community-based public assistance programs, such as housing services and utility assistance. Participants learned of the referral program through health plan materials (e.g., provider directories), advertisements, health care service providers, and the MCO customer service and case management units. The MCO program's database contained hundreds of organizations offering over 70 categories of social services. All study participants identified at least one type of unmet social need and received at least one referral to a social service organization. Program representatives provided contact information of the organization to participants who were responsible for contacting and utilizing the referred service.

Program representatives followed up with all participants, usually within two weeks of the referral, to track whether the participant reported each of their identified social needs as met or not met. For example, if a participant received three referrals—one food bank, one utility assistance, and one transportation service—and subsequently reported that they had each of the three identified social service needs met, then that participant had “all of their needs met.” The group of participants who reported that they had all of their identified needs met were compared to those who reported that none of their identified needs were met.

The researchers excluded participants who reported that only some of the referred services met their identified social needs in the primary analysis but included their information in the sensitivity analysis. The researcher also excluded participants with following limitations from all analyses:

- Unconfirmed social service use,
- Incomplete socio-demographic data,
- Without continuous enrollment with the MCO during the two-year study period.

## Outcome Measures

The researchers connected the social service referral tracking data to medical claims for each participant with records between January 1, 2014 and March 1, 2017. The outcome measures were the change in mean health care expenditures from the 12 months before the index referral to 12 months after. The earliest referral date where the social needs were met or the earliest referral date where the social needs were not met define the index dates for each 12-month period.

The sum of the fee-for-service expenditures paid by the MCO in unadjusted U.S. dollars 12 months before and after the referral index date reflect the mean total health care expenditures for all participants. Expenditures were grouped by health service type, including professional (office-based physician, ED-based physician, and laboratory), inpatient, outpatient (hospital-based, skilled nursing facility, ambulatory surgery center, and urgent care clinic), emergency department (facility only), and prescription drugs.

## Results

These results showed that for the group of participants who reported all social needs met, the decrease in second year mean expenditures was \$2,443 (10%) less than the decrease in mean expenditures in the second year for the group with no social needs met, after controlling for group differences.