

Title: Does social prescribing improve pediatric health equity?

Background: Due to longstanding structural inequities, people from historically marginalized groups are more likely to experience social barriers to health. In response, healthcare systems have implemented social prescribing to address patients' unmet social needs. However, the health equity impacts of these programs are largely unknown.

Objective: We aimed to test whether social prescribing improves equity in well-child attendance, influenza vaccination, and acute asthma exacerbation across key equity targets: race/ethnicity, primary language, and socioeconomic status (SES).

Methods: We included pediatric patients participating in Minnesota Medicaid's accountable care organization and attributed to a clinic implementing Community Connect (CC), a representative social prescribing program, in 2018. To evaluate CC's health equity impacts, we used three multi-group, generalized structural equation models (one for each equity target) with binomial outcomes for CC participation in 2018 and subsequent well-child attendance, influenza vaccination, and asthma exacerbation within 12 months of an index well visit. Results are reported as predicted rates and rate differences.

Results: Participation in CC was higher among children of Hispanic/Latine ethnicity, Black/African American children, children whose primary language is Spanish, and those in the lowest SES quartile. CC participation had no significant effects on well-child attendance, influenza vaccination, or asthma exacerbation in the models stratified by race/ethnicity or SES. CC participation had a modest impact on well-child attendance (+3.2 percentage points (pp), $p=0.04$) and influenza vaccination (+3.6 pp, $p=0.04$) in the English-language subgroup. There was only one observable improvement in health equity; the difference in influenza vaccination between the English-speaking and Spanish-speaking subgroups decreased from 3.8 pp among non-CC participants to 1.2 pp among CC participants.

Conclusion: Disparities in ability to access social supports may explain why social prescribing did not improve pediatric health equity, despite higher rates of participation among children most impacted by adverse social determinants of health and unmet social needs.