



Invited Commentary | Pediatrics

Improving Child Health Care Outcomes Through Social Needs Intervention—A Signal

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There is a growing empirical evidence base acknowledging that key determinants of health are often upstream of actual health care service provision yet have important impacts on health outcomes.¹ The article by Pantell et al² contributes to the social needs screening literature by demonstrating the effects of an intervention on the important health care outcome of inpatient utilization. In this secondary analysis of a previously published randomized clinical trial,³ the study team reports the health system utilization differences between an intervention group, which received up to 3 months of tailored social needs–related service navigation by trained college students, compared with a group receiving only written information on relevant local resources (active control). The authors found that the participants who received the intervention had similar utilization of the emergency department as those in the control group but were less likely to be hospitalized in the year following enrollment.

This finding represents an important step forward in the pediatric social needs screening and intervention literature. It builds on the previously published primary outcomes of the randomized clinical trial,³ ie, a decrease in the number of reported social needs and greater improvements in child health compared with controls. The present study² buttresses the initial article's demonstration of caregiver-reported outcomes with a more distal and objective measure of health system utilization. The study by Pantell et al² has many strengths: the sample size was robust, participants were randomized, the San Francisco safety-net clinic study population included non-English speakers, and most participants had family incomes less than \$20 000 per year. Based on the findings, health systems hoping to implement social needs interventions in pediatrics can claim with more certainty that social needs interventions can lead to meaningful improvements in a costly health care outcome, ie, hospitalization.

While this finding represents a clear step forward for a field in which data linking practice-based social needs screening and intervention to improved outcomes has just begun to emerge,⁴ there are several important limitations to consider. First, it is important to consider the risk of type-I error (ie, a false-positive result) given that this is an analysis of secondary study outcomes. However, the consistency of the hospitalization outcome with the primary outcomes of the study bolsters the likelihood that these findings represent a true difference. Second, the effect size is modest: hospitalization was a relatively infrequent outcome, with only approximately 8% of children in the control group and 5% in the intervention group hospitalized in the year after enrollment. Health systems looking to implement similar interventions may question whether a difference of this size warrants intervention. Although addressing social determinants of health and reducing hospitalization both reflect the goals and values of pediatrics, the study did not include a cost-effectiveness analysis to inform decision-making. Perhaps most importantly, the mechanisms by which this social needs–related navigation intervention influenced child hospitalization—and not ED visits—remain unexplained.

In childhood asthma interventions, it is not uncommon to see greater reductions in hospitalization than ED visits.⁵ This pattern may be explained by improved disease management leading to less severe exacerbations that still require care but at a lower intensity. This explanation would only apply to children with underlying special health care needs. While this proportion is not reported in the current study,² national estimates for low-income populations suggest that the rate is

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approximately 14%.⁶ However, it seems implausible that the students—volunteers, not clinical professionals—delivering the intervention would have influenced disease management, unless through improved access to primary or specialty care. Referring to Table 2 from the article describing the primary results,³ food insecurity and utilities assistance were the most common social needs encountered in both study groups. It is possible that the college student–navigators were able to connect families with food banks and utilities assistance programs, enhancing families' capacity to prioritize care for acute illnesses early in the disease course. Additionally, increased access to primary care in the intervention group may have led to emergency department referrals that did not lead to hospitalization, an association that has been observed among those with better access to care after hospitalization.⁷ While plausible, these explanations are speculative; future effectiveness and implementation research is needed to specify the pathways and conditions by which social needs identification can lead to improved health outcomes to inform whether and how best to deploy similar interventions.

The stakes for understanding these mechanisms is far beyond academic. In recent years, as Centers for Medicare & Medicaid Services and state Medicaid offices have begun incentivizing social needs screening, the subject of social determinants of health has gone from a public health discussion to an issue of practical and financial importance for health systems. Questions abound, such as which social risk screeners should be used and how tailored social needs screening should be in areas with distinct resources and needs. For example, most cities and states lack robust housing-related resources for families, whereas most have resources to preserve utilities in cold weather months, especially for participants with medical issues. Even when needs are identified, challenges exist in effectively connecting families to community resources that address them. Achieving this goal requires identifying and partnering with effective community-based organizations, developing seamless referral streams that are acceptable to families, supporting family follow-up, and, ideally, receiving audit and feedback data to determine whether the programs help and to guide refinements. The American Academy of Pediatrics Pediatric Research in Office Settings Network, in partnership with the Academic Pediatric Association's Continuity Research Network, is currently conducting a trial with a focus on how best to implement such screening in varied primary care settings.

Should health systems hire college students (or community health workers?) equipped with well-designed algorithms (or resource maps?) to help families navigate unmet social needs? What kind of support and integration with traditional staff will these new programs require? We still do not know enough about how these interventions work or can work to answer these questions. However, a necessary stakeholder must remain at the table as we move to implement these now-reimbursable services: the families we serve. We need to listen to families' concerns regarding privacy, data-sharing, and, most importantly, what level of support they think they need to make meaningful referral connections. In other words, a family with food insecurity may simply need a text from the team with local food bank information or a printed resource list. Another family in the practice may need more intensive support, such as a social work consultation or a care navigator. Families with the most intense needs may benefit most from a home visitor who can build a longitudinal relationship. As we begin to receive a signal that these types of interventions can influence health care outcomes, answers to questions of how, how much, and for whom will be needed to provide the same type of tailored and trackable referrals for social needs that are possible for traditional physical health problems.

ARTICLE INFORMATION

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