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CURRENT ISSUES

Sustainability of Social Needs Resolution Interventions: A Call to Consider Cost

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CHALLENGE OF PROGRAMMATIC SUSTAINABILITY

There is growing attention among health systems to advancing health equity spurred, in part, by increased recognition of how social determinants of health at the community-level (e.g., cost and availability of housing) shape individual-level social needs inextricably linked to health outcomes (e.g., housing instability). Health system-based social needs screening programs have proliferated as a result, but interventions that address social needs have struggled in scale and sustainability, partly due to misalignment in financing mechanisms.[1] As social needs resolution interventions are developed and implemented, careful attention is owed towards programmatic sustainability, with an orientation to long-term financing via public and private payors. Expanding evaluation efforts to include cost analysis can contribute to the sustainability of effective interventions by helping payers better understand the upfront, ongoing, and return on investment. This *Current Issues* manuscript aims to (1) review evidence of effectiveness for social needs resolution interventions, (2) discuss the need for enumerating cost alongside program effectiveness, and (3) survey the policy landscape, identifying areas of opportunity to sustain the momentum behind effective social needs resolution interventions.

EVIDENCE OF EFFECTIVENESS

Recent evaluations have demonstrated effectiveness in modifying outcomes closely associated with cost savings, including reduced emergency department visits,[2] cost-related medication underuse,[3] transportation barriers,[3] and social needs reported by patients.[2] However, the majority of social needs intervention studies address discrete components within the complicated, multi-step sequence from screenings to referrals to resolution, resulting in scant evidence for effective interventions that address the full spectrum of social needs in an integrated manner. Instead, extant literature has focused on best practices for comprehensive social needs *screening* as opposed to *interventions*.[4,5] Other research has focused on standalone interventions that address a single social need (e.g., food insecurity), producing evidence of effectiveness for these targeted approaches.[6]

Evaluation of comprehensive social needs screening and resolution interventions are limited and have yielded mixed results. One randomized controlled trial found that connecting eligible patients to community resources via navigation programs did not significantly

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improve social needs resolution, relative to a control group.[7] Insufficient community resources were cited as prominent barriers in connecting patients to services, and the authors concluded that investments in community resources are required before implementing referral systems within health systems.[7] Others have cited similar challenges with connecting patients to resources, including inadequate staff time and training.[8] Key facilitators to uptake of navigation services include collaborations with community organizations, supportive leadership, established relationships with the patient community, and comprehensiveness of social needs resolution interventions.[9]

METHODOLOGIC GAPS

The two approaches − targeted interventions that address a single social need versus comprehensive social need programs − require a different level of resource intensity and investment. As evidence of effectiveness emerges, healthcare administrators, insurance providers, and policymakers inevitably ask, 'What does it cost?' In order to assess cost, however, an outcome must be identified, requiring critical consideration of what constitutes "resolution," particularly when social needs arise from structurally oppressive forces that operate at multiple levels: from policy to cultural norms to individual- and institutional-level practices.[10] Policymakers, health system leaders, and researchers may debate appropriate outcomes, considering the role of health systems in achieving such outcomes and the risks of such involvement.[11,12] The appropriate resolution outcome measure should be defined from the patient's perspective and consider the social impact of the intervention, adding additional complexities to costing studies.[13]

Understanding the costs of these interventions will be instrumental in selecting programs for replication and securing funding for successful long-term interventions, yet there is a dearth of evidence on program costs—and the cost to scale program reach. It remains poorly understood which programs are most effective, how programs can be implemented in a pilot setting, and how programs can be effectively scaled.

Evaluations of these programs remain challenging, and there is little relevant work to date.[3] These challenges emerge from the complexity of programs whose sequences of action cross organizational and sectoral boundaries. Careful and innovative economic evaluation methodologies capable of measuring economic outcomes of compartmental interventions within the spectrum of tasks are needed to effect downstream change. Methods gaps and application of "wrong" methods may fail to capture potential economic effects of social needs interventions.

To address this gap, experts have used innovative methodologies, such as cash benchmarking, an approach in which one study arm receives some intervention (e.g., referral to social needs resolution program), and the other receives the monetary value of the intervention in cash—to estimate the value of integrated care.[14] Others have used microsimulation methods to estimate the cost of providing evidence-based interventions to address social needs, which was estimated at $60 per-patient monthly ($720/patient annually).[15] Such estimates are dependent on assumptions about patient and provider decision-making, and thus, must be validated with implementation research. Importantly, these estimates may not capture other sizable expenses incurred at implementation, including workforce development and electronic health record integration, both of which were cited as notable cost drivers in an implementation study across four federally-qualified health centers in North Carolina.[16] Additionally, per-patient costs may vary significantly according to patient need, as annual estimates in the North Carolina study ranged from $9.76/patient to $47.98/patient.[16] These estimates may have implications for managed care organizations' monthly per-member payments should they consider social needs in patient risk stratification.

The limited number and scope of studies underscores the need for further studies of not only cost, but also cost-effectiveness. Social needs resolution interventions often involve cross-sector partnerships, making it difficult to ascertain and attribute costs.[17] Considering the costs of social needs resolution interventions must include a variety of perspectives, including funders, health systems, community-based organizations, and patients themselves. Accounting for these diverse perspectives will help to develop funding models that properly align incentives and allow different stakeholders to share in costs—and savings. Cost-effectiveness evaluations of social needs resolution interventions may require longer study durations given the entrenched nature of the issues they aim to address. This timeline may be problematic for funders that operate on a shorter time horizon, creating a mismatch between the urgency of funding decisions and the intricate, time-intensive nature of comprehensively assessing the costs and cost-effectiveness of these complex interventions.

CURRENT POLICY LANDSCAPE

The urgent question that must be asked after identifying cost-effective programs is how to sustain them so that they can be integrated reliably into workflows.

Currently, there are discussions around how to pay for these programs,[18] but the lack of costing data makes it difficult to consider the long-term investment required. Fortunately, research funders, including the National Institutes of Health, have created new funding mechanisms to support implementation research (including cost analyses), which would inform how to administer these programs most effectively in healthcare settings.

The Centers for Medicare and Medicaid Services (CMS) have released new reporting requirements that will be foundational to costing studies of health systems' social needs programs. Beginning in 2024, hospitals are required to report (a) the number of individuals screened for housing instability, transportation needs, utility difficulties, and interpersonal safety, relative to the total number of patients admitted to the hospital (i.e., proportion of patients screened for social needs) and (b) the number of individuals that screened positive for social needs, relative to the total number of patients screened (i.e., proportion of patients with social needs identified through screening). State Medicaid programs will complement the efforts of CMS in exploring payment mechanisms for social needs resolution interventions through Section 1115 waivers, in which states can test different strategies to effectively address enrollees' unmet social needs. CMS will consider state requests to cover evidence-based services for mitigating the negative health impacts of unmet social needs.[19] As of 2023, 18 states have received CMS approval for waivers relating to broadly defined social needs, and four states (Arizona, Arkansas, Massachusetts, and Oregon) have received waivers focused on services for food and housing insecurity.[19] Unlike basic healthcare services covered by Medicaid, CMS caps social needs waiver funding, making costing analyses critical to the selection and sustainability of social needs initiatives.

In addition to Section 1115 waivers, in 2016, CMS revised its regulations relating to Medicaid Managed Care in ways that extend flexibility for plans covering nontraditional services that address social needs (e.g., home-delivered meals following a hospital discharge). Previously, plans were financially discouraged from providing nonclinical services that addressed social needs; these services were not covered by the plans' contracts with state Medicaid agencies and counted as administrative services when calculating plans' medical loss ratios (i.e., the percent of revenue not spent on medical expenditures). Revisions in 2016 rendered many non-clinical services as medical services, partially removing plans' disincentives from pursuing population health-oriented initiatives. While plans now count non-traditional services in their favor when calculating required medical loss ratios, these services remain excluded from the rate setting process and cannot be included in their capitated rates charged to state Medicaid agencies.[20] Future revisions to the Section 1115 waivers may seek to incorporate non-traditional services in the rate setting process, ultimately helping to ensure sustained financing for these programs.

Private and non-profit payers, too, have established social needs resolution interventions. Kaiser Permanente, for example, began its "Food for Life" initiative to connect more eligible patients to existing food security resources (e.g., the Supplemental Nutrition Assistance Program) while also piloting a medically tailored meal program and collaborating with partners to create formal channels for social need referrals. In multiple states, Blue Cross Blue Shield partnered with community organizations to address food insecurity via food boxes, nutrition education, and community health worker programs. In some cases, these programs are funded by the foundational arm of the payer's operation (e.g., Cigna's grant-based investment in a suite of child-centric programs). To be truly sustainable, costs paid by a foundational arm need to be incorporated in the capitated rate, but existing restrictions prohibit including these expenditures in rate calculations. In other cases, the private investment is targeted specifically to align with public payer priorities (e.g., Humana's Healthy Horizons program for Medicaid recipients).

IMPLEMENTATION RESEARCH AND EVALUATION

As other scholars have aptly noted, addressing people's social needs effectively in a lasting way will require more resources. Investments should be informed by rigorous implementation research studies that build cross-sector partnerships to sustainably address patients' social needs.[11] One such example is the ongoing LINK study testing the effect of a combination of produce provision, diabetes and culinary skills training, and a social needs screening, navigation, and resolution intervention on hemoglobin A1c levels in individuals with type 2 diabetes. Importantly, this study has used an inclusive process to identify relevant costs for the intervention,[17] where representatives from each intervention convened through a workgroup to detail their organization's workflow and identify the direct and indirect costs associated with providing services to participants. Cost savings were not considered in this process. The end-product of the co-produced cost diagram is shown in Figure 1. The LINK study is an example of one social needs resolution intervention, but others are sorely needed. Research should carefully consider (a) costs of scaling programs, (b) sources of cost variability across programs, and (c)

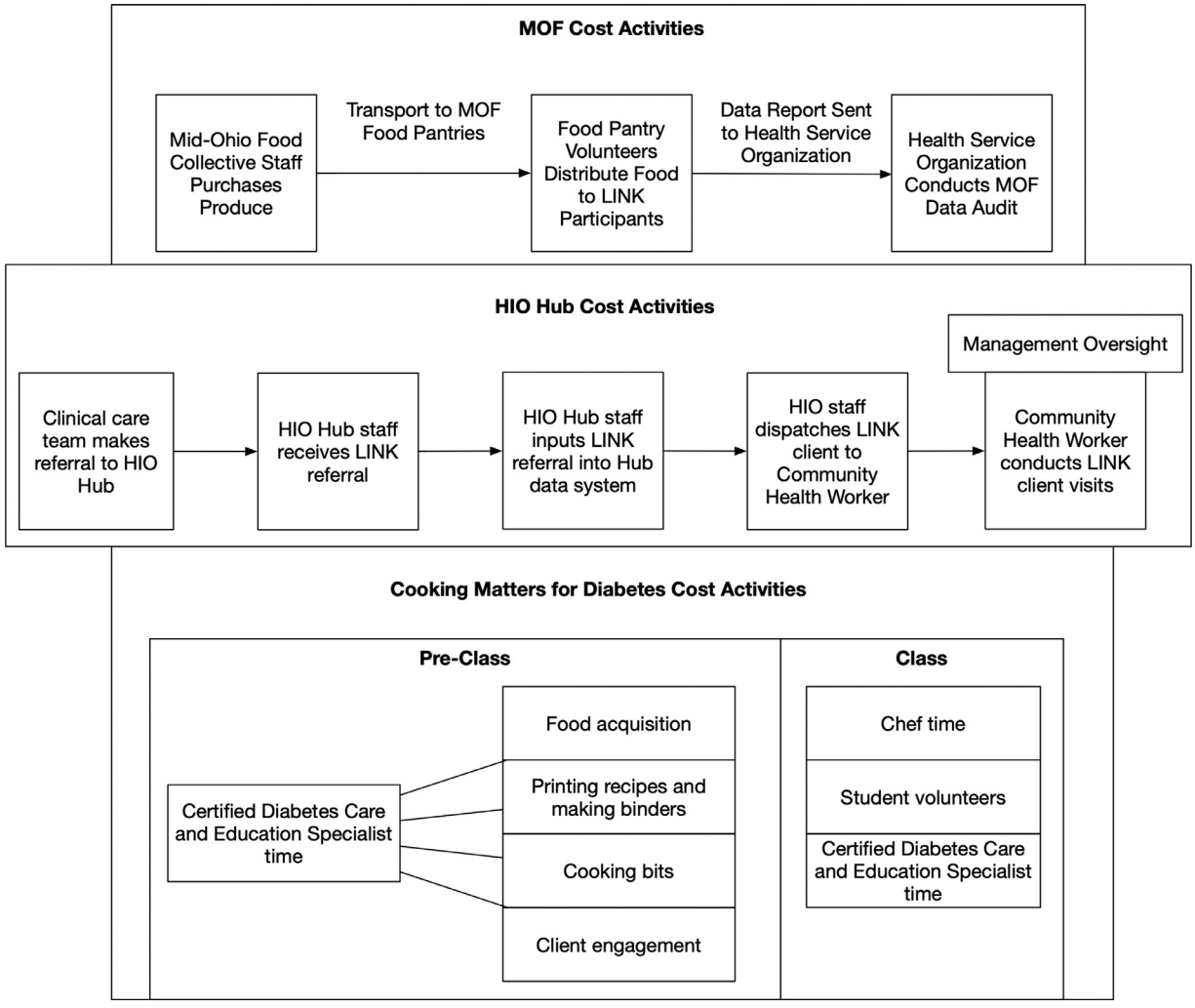

Figure 1. Co-created costing diagram from the LINK study. This diagram was developed with representatives from each of the three interventions to identify relevant costs for participants. MOF = Mid-Ohio Farmacy; HIO Hub = Health Impact Ohio Central Ohio Pathways Hub

cost benefits associated with the intervention's health and social impact.

The current landscape of funding models for social needs resolution interventions is incredibly varied. Public, private, and non-profit funders are actively experimenting with differing approaches to investing in social needs resolution while also balancing other core priorities. This creativity creates a ripe opportunity for the evaluation of these models with consideration not only of program reach and impact, but also of costs and efficiency (i.e., cost-effectiveness). Moving forward, considering costs when evaluating interventions is essential to developing scalable programs and sustainable financing solutions.

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