

# Dissertation Defense

Presented by  
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*“Linking Community and Clinical Care:  
Assessing Implementation of Social Needs  
Screening, Referral, and Tracking  
Technology”*

**Wednesday, April 5<sup>th</sup>, 2023**

**1:30 p.m.**

**Virtually via [WebEx](#)**

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## Abstract

There is a growing recognition that only about 20% of health outcomes can be attributed to clinical care and that the remaining 80% depend on health behaviors and upstream social and economic determinants. In response, healthcare organizations (HCOs) are increasingly implementing initiatives to screen patients for social needs (e.g., food, housing, or transportation) and refer those with positive screens to community-based organizations (CBOs) that provide such services. To facilitate this process, several technology companies have developed electronic platforms for use by HCOs and CBOs to screen, refer, and track the status of referrals for patients with social needs. Such platforms are relatively new, and little is known about 1) HCO and CBO staff's perspectives on the facilitators and barriers of successful platform implementation, 2) patients' perspectives on the process of screening, referral, and linkage to CBOs via such platforms, and 3) their impact on referral uptake, i.e., patients' receipt of the service(s) for which they were referred. This dissertation addresses these research gaps through three studies using qualitative and quantitative methods.

Study 1 applied the Consolidated Framework for Implementation Research to examine determinants of successful platform implementation. Fifteen semi-structured interviews were conducted with HCO and CBO staff. Thematic analysis revealed that participants' assessment of electronic screening, referral, and tracking platforms depended on the specific context of their organizations, including whether or not an organization already has existing systems for tracking referrals that it makes and receives; whether or not it already has strong working relationships with other organizations in the area; and whether or not there is a critical mass of local organizations that have signed onto the platform.

Study 2 applied the Health Equity Implementation Framework to examine patients' experiences with social needs screening and referral processes that use an electronic platform. Ten semi-structured interviews were conducted with patients who received one or more referrals. Analysis showed that a patient-provider interaction characterized by respect and professionalism is key to the success of the social needs screening process. The data also revealed that services to which patients are referred often meet their immediate needs but fall short of offering long-term solutions or addressing the underlying issues that have led to the need.

Study 3 analyzed quantitative data from three sources: the HCO's electronic medical record data on social needs screening for 2,182 patients, referral uptake data for 83 patients from the electronic referral tracking platform, and survey data from 59 patients who received one or more referrals through the platform. The study found that electronic

screening, referral, and tracking platforms can yield high referral uptake. The study also found that patient demographic characteristics and type of social need are associated with screening and referral outcomes.

Taken together, the findings from the three studies highlight both the promise and limitations of electronic screening, referral, and tracking technology as a tool to facilitate efforts seeking to address patients' social needs. Efforts to address patients' social needs should not only focus on improving the screening, referral, and tracking process but should be coupled with policy and advocacy to address the underlying social and economic conditions that contribute to these needs.

**Keywords:** clinical community linkages; social need screening, referral, and tracking; referral uptake; social determinants of health; implementation science, health equity