

Supplemental materials for

Greenwood-Ericksen M, DeJonckheere M, Syed F, Choudhury N, Cohen AJ, Tipirneni R. Implementation of health-related social needs screening at Michigan health centers: a qualitative study. *Ann Fam Med.* 2021;19(4):310-317.

Supplemental Appendices 1 and 2, and Supplemental Table 1

Supplemental Appendix 1. Context and Setting.

Michigan FQHCs have been leaders in screening and addressing patient’s social needs with several grant-funded programs supporting expansion of social needs screening efforts in the state. However, these programs have different funding sources, different target patient populations, and use different screening tools. In 2016, the Linking Clinical Care with Community Supports (Linkages) Project was funded through an endowment to hire, train, and integrate community health workers (CHWs) to screen for social needs in patients with chronic disease, depression, and anxiety in 16 FQHC primary care teams throughout Michigan.⁴¹ Concurrently, the Centers for Medicare and Medicaid Innovation Center (CMMI) funded the Michigan Pathways to Better Health (Pathways) program,⁴² forming a partnership between the Michigan Public Health Institute, Michigan Department of Health and Human Services, and local community agencies to deploy CHWs to high-need counties through a hub-and-spoke system. Building on this work, Community Health Innovation Regions (CHIRs) were established and further supported by subsequent funding from the Michigan’s State Innovation Model;⁴³ the multi-stakeholder CHIRs were developed to build community capacity to improve population health.²² Our study occurred after implementation of the Linkages and Pathways programs, and concurrently with ongoing SIM efforts, allowing us to explore the various ways these programs that were designed to standardize and enhance social needs screening influenced screening efforts. Thus, four of the five study sites had previously or were currently participating in at least one state demonstration program (e.g., Linkages, Pathways, SIM), with the remaining site participating in a medical condition-specific grant funded project. All of these programs promoted social needs screening during the study period.

Supplemental Appendix 2. Interview Guide (“Screener” Script)

I. Introduction

Thank you for agreeing to talk with me today.

My name is _____. I am a _____ at the University of Michigan. I am part of a research team at the University of Michigan that is hoping to learn about how health centers make decisions around screening for social determinants of health. I’m going to be asking you a series of questions to make sure we understand your experience in detail. We are going to record this conversation to make sure we capture everything but will only be heard by our study team here at the University and your name will be kept entirely confidential outside of this team.

Do you have any questions for me before we start?

II. Ice-breaker

Okay, great. I’d like to start by asking you what you think are the greatest unmet social needs or challenges facing the patients you serve? Have these needs changed over the last few years?

PROBE: Are there certain patient populations targeted for screening or are all patients screened? If targeted, which populations/what factors targeted?

III. Process Questions

- A. Who is screened?
- PROBE: If targeted, which populations/what factors targeted? How were these populations selected for targeting?
- B. What screening tools do you use?
- How were they selected?
 - PROBE: Were they selected based on an external set of best practices (WHO, consensus guidelines, etc) or tailored for your population?
- C. What is the role of each team member in the SDOH screening process?

IV. Implementation Questions

- A. Imagine a scenario where a patient walks into your clinic for an appointment. Walk us through how and where a patient might get screened for SDH.
- PROBE: How is the screening delivered?
 - On paper, verbally, or electronically
 - PROBE: How is it administered?
 - Do you go through questions together or allow the participant to answer in privacy, and then review key questions together?
- B. Who else besides you delivers screening?
- PROBE: How did your health center decide that XYZ people should be the ones delivering the screening? Was there any formal training?
 - PROBE: Which team member(s) do you think is best to do the SDOH screening? Why?
- C. What happens to information once someone gets screened?
- a. Is there a specific place it is entered or person it is shared with?
- PROBE: How are the findings recorded?
 - PROBE: Are they ever aggregated for population-level data?
 - PROBE: Who are the findings communicated to?
 - i. For example, Providers, SW, case managers, etc

V. Value Questions

- A. What resources does your health center already have to meet the social needs of your patients?
- B. What resources do you wish your health center had?
- PROBE: Who in your health center do you need buy-in from to fully implement SDOH screening?

VI. Closing

Lastly, I want to make sure we didn't miss something that you wanted to tell us about.

- A. What didn't we ask you that you think is important for understanding SDOH screening at your health center?
- B. Is it okay if we contact you again as we continue the evaluation?
If YES, what is the best way we could contact you? Email? Backup phone number?

Thank you very much for your time today.

Supplemental Table 1. Overview of Themes and Participant Experiences

Theme	Participant Experiences
<p><i>Theme 1: Statewide initiatives and local leadership drove variation in screening practices</i></p>	<ul style="list-style-type: none"> • Statewide initiatives, including Linkages, influenced FQHCs’ decisions related to screening populations, standardization of screening practices, and composition of care team members in screening. • These initiatives drove perceived standardization of screening practices, but also drove variation between sites. • Additionally, screening variation was often driven by local leadership’s decisions to tailor screening practices to the community.
<p><i>Theme 2: As CHWs played an integral role in identifying patients’ needs, their roles often shifted from that of screener to implementer.</i></p>	<ul style="list-style-type: none"> • Participants in all care team roles described the role of CHWs to help identify patients with social needs, and their strong relationships within the community. • As CHWs’ roles became more integral to identifying patient needs, many participants reported that CHWs were used not only for identifying patients with social needs, but also finding and linking to resources.
<p><i>Theme 3: Social needs screening data was variably integrated into electronic health records and infrequently used for population health management.</i></p>	<ul style="list-style-type: none"> • Each site had a different process for incorporating screening results into their EHR. • Some sites scanned paper screening tools and entered data manually into their EHR. • These results were generally used to identify patients with social needs, but not for analysis of the aggregate data for more global population health management efforts was not a focus.
<p><i>Theme 4: Sites experienced barriers to social needs screening that limited the perceived impact and sustainability</i></p>	<ul style="list-style-type: none"> • Several barriers to social needs screening were identified by study participants. Concerns included resource availability, resource utilization, and social needs screening efforts.
<p>Legend. CHW = Community Health Worker; RN = Registered Nurse; ED = Emergency Department; MA = Medical Assistant; NextGen = Electronic Health Record product developed by the National Community Health Centers; SIM = State Innovation Model program; NextGen = Electronic Health Record product; NextGen = Electronic Health Record product that captures patient data with use of a digital pen; EHR = Electronic Health Records.</p>	