South Carolina Food is Medicine Landscape Assessment Findings and Proposed Actions

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1. Motivations for conducting a Food is Medicine landscape assessment in 2022 and 2023

Food is Medicine SC (FiMSC) was established in 2021 as a committee of the SC Food Policy Council to 1) improve coordination among organizations working to advance healthy food access within health care settings and 2) identify and facilitate the adoption of state-level Food is Medicine (FiM) policy and system changes. Made up of over 100 members from diverse sectors, FiMSC determined that to achieve these 2 aims, the first step required a robust landscape assessment and evaluation to understand the current landscape of FiM initiatives across SC. Organizations were working in a mix of coordinated and independent efforts and it remained unknown where and how FiM programs were being implemented in local geographies and across the state.

By identifying successful implementations along with challenges and opportunities, a more coordinated and unified approach can be undertaken to expand and improve FiM initiatives state-wide. FiM programs constitute a critical health resource as 550,000 South Carolinians (11% of population) lacked consistent and dependable access to enough food for active, healthy living in 2020 and SC now ranks 5 in the nation for the highest rate of food insecurity and 1 for very low food security. Ultimately, the landscape assessment aimed to engage healthcare, food-based, and state-level organizations to understand what is needed to scale and sustain FiM interventions state-wide. This work contributes to national-level discussions about the critical nature of federal support for FIM initiatives and best practices in local delivery and implementation experience.

FiMSC is one of sixteen known statewide coalitions or committees across the United States intentionally working to create, scale, and sustain opportunities to increase access to healthy foods within the healthcare system. As we continue to develop local and state partnerships, we have also continued to learn from, collaborate with, and share our learnings with other state and national partners. We have unique strengths and perspectives that make us a critical voice not just in our work in and for our state, but in the national conversation. As a southeastern state within our political context, rural realities, diverse population, and healthcare infrastructure, we provide a critical view into what FiM efforts could and should look like in settings with the most need but without the same policy and system levers as other FiM state collaboratives. We also are integrated with our state's larger food system transformation efforts, local food efforts, and more global work related to food and nutrition security. We are intentionally integrated into the SC Food Policy Council and remain committed to working with multisector partners to grow opportunities for access to healthy, local food for all South Carolinians.

2. What we did to conduct the Food is Medicine landscape assessment

In partnership with the SC Hospital Association, SC Primary Health Care Association, SC Office of Rural Health, and SC Free Clinic Association, 66 healthcare organizations (HCOs) completed a survey on their FiM efforts between December 2022 and August 2023 (Table 1) and follow-up, in-depth interviews were conducted with 13 survey respondents, aiming for variability in HCO type and FiM strategies implemented, to:

Table 1. Food is Medicine Survey Responses by Healthcare Organization Type

Type	*#*	*% of total sample*	*% of total HCOs in SC*
Free clinics	32	48	91
Health systems/hospitals	20	30	70
Federally Qualified Health Centers	8	12	33
Rural health clinics	4	6	4
Other	2	3	Unknown

- Determine where food insecurity screenings and referrals, produce prescription programs, and health care system interventions focused on improving food access are taking place.
- Identify specific tools, systems, and processes being used within these interventions.
- Understand current capacity and capacity building needs for initial adoption and future sustainability and scalability of interventions.
- Highlight funding mechanisms to support these programs.

Additional interviews were conducted with 7 food-based organizations (FBOs) and 2 other types of partners to understand their motivations and capacities for engaging with HCOs, and 12 state-level organizations to learn about their initiatives working at the intersection of food and healthcare and perspectives on scaling and sustaining FiM interventions state-wide. An additional interview was conducted with a representative of the National Nutrition Incentive Program Training, Technical Assistance, Evaluation and Information Center (NTAE) to gain perspective on the national FiM landscape and seek guidance on how a similar coordinating center could be conceptualized at a state level. Interviews were conducted between June and September 2023.

3. What we learned from conducting the Food is Medicine landscape assessment

The FiM landscape assessment focused on three key areas: 1) knowledge, interest, planning, and drivers for FiM interventions, 2) the current state of FiM interventions, and 3) capacity and capabilities to scale and sustain FiM interventions across SC.

3.1. Knowledge, interest, planning, and drivers for Food is Medicine (FiM) interventions. Most survey respondents (74%) said they were either very or somewhat familiar with FiM strategies, while 88% said that addressing food insecurity among patients was either very or somewhat important. Sixty-five percent of respondents said their HCO currently has plans or initiatives in place to address patient food insecurity (Table 2).

Table 2. Plans or Initiatives Currently in Place to Address Food Insecurity Among Patients

	# of respondents	*% of total HCO type in sample*
Overall	43	*65*
Free clinics	20	63
Health systems/hospitals	12	60
Federally Qualified Health Centers	8	100
Rural health clinics	2	50
Other	1	50

Of those HCOs without current plans or initiatives in place (n=13), 62% said that developing plans was either very or somewhat important while the remaining 38% were neutral.

Interviewees thought that there had been an increase in FiM interventions overall across SC in the previous 1 to 3 years. This was attributed to: (1) increased attention on food insecurity during the COVID-19 pandemic; (2) greater understanding and efforts to address Social Determinants of Health (SDOH) including at a national level through the Centers for Medicare and Medicaid Services (CMS); and (3) more conversations and coordination (e.g., facilitated by the FiMSC committee) and funding (e.g., BCBSF funding and three different entities receiving federal Gus Shumacher Nutrition Incentive Program (GusNIP) grants for produce prescription programs) for FiM in SC. Rural communities were perceived to not have experienced the increase in FiM interventions in comparison to other areas

due to inequities in staff capacity within rural health clinics; a lack of value-based reimbursement options available to other HCO types; and limited FBO resources available for partnerships with HCOs.

HCO capacity concerns not only surfaced in rural contexts but also more generally in origin stories for active partnerships between HCOs and FBOs for implementing FiM interventions. Although an understanding of the connection between food and health was said to be mostly universally understood among HCOs, concerns included having the people, time, funding, and either the existence or knowledge of existing FBOs with which to partner. Interviewees spoke of numerous strategies used to overcome initial concerns (Table 3).

Table 3. Strategies used to successfully overcome initial hesitancy within healthcare organizations to implement Food is Medicine interventions
• demonstrating how interventions will save money in the long run/align with value-based care model • using data to show the prevalence of food insecurity among patients or explaining the importance of collecting this data through screening as a first step • illustrating how SDOHs connect to patient health, including using real world case examples • not requiring screening for all SDOHs or at every patient visit • ensuring care teams had resource information to provide directly to patients • getting HCO staff out into the community • perseverance

Overwhelmingly, interviewees reported no patient involvement in deciding upon implementing FiM interventions or in planning for implementation.

Key findings on the knowledge, interest, planning, and drivers for FiM interventions

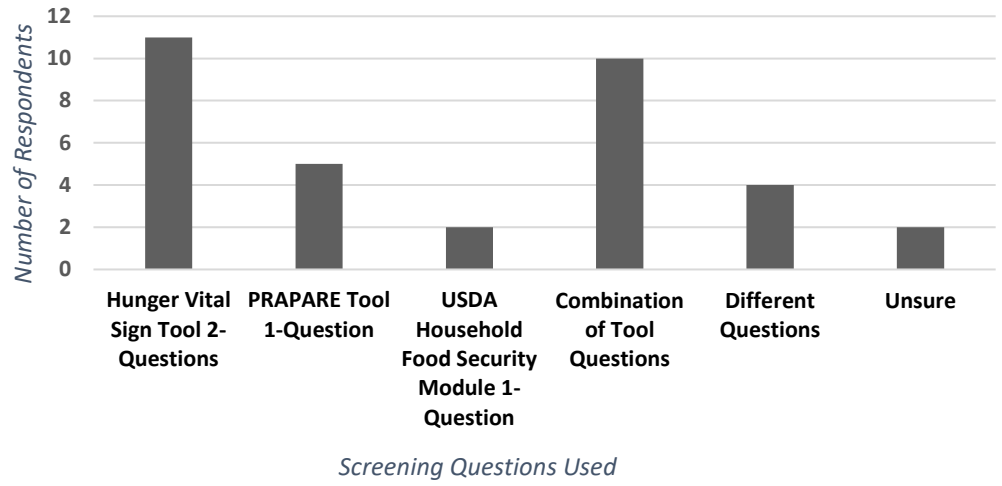
- 88% of HCOs said addressing food insecurity was important; yet, only 74% of HCOs were knowledgeable about FIM interventions
- Most HCOs without current plans or initiatives in place to address food insecurity among patients thought developing these plans or initiatives was important.
- FiM interventions were said to have increased over the past 1-3 years, driven by efforts at the national and state levels, though, increases were perceived as not as common in rural communities.
- Numerous strategies have been used to successfully overcome initial hesitancies within HCOs to implement FiM interventions.
- Patient involvement in decision-making about FiM interventions is very limited.

3.2. Current state of Food is Medicine interventions. The landscape assessment explored the existence and implementation of the following FiM interventions: 1) screening for food insecurity, 2) making external referrals to food resources, and 3) produce prescription programs. The integration of assessing and addressing food insecurity through Community Health Needs Assessments and Community Benefit Programs within non-profit hospitals was also examined.

3.2.1. Screening for food insecurity. A little more than half of the survey respondents (53%) said their healthcare organization routinely screened patients for food insecurity. Only 29% reported screening at every patient visit and 23% reported that some, not all,

patients are screened. Screening questions used varied across respondents, as well as within some individual HCOs (Figure 1).

Figure 1. Screening Questions Used Among Heathcare Organizations



The most common method used for screening was for patients to be asked the question(s) directly from someone in the office (86%). The person(s) asking the questions was most commonly nurses (63%), then community health workers and social workers (both 40%, respectively). The second most common method for screening was for patients to complete the question(s) themselves on an intake form (40%). Most HCOs reported recording the screening results in Electronic Medical Records (EMRs) (63%), though, only 55% of those recording results subsequently applied a diagnostic code. Overwhelmingly, HCOs planned to screen patients indefinitely (83%) while the rest were unsure how long their HCO would continue screenings (17%). *(Detailed tables for these and all other survey questions can be found in the appendix.)*

In HCOs not routinely screening for food insecurity (38%), Table 4 lists reasons supplied regarding why screening was not taking place.

Table 4. Most common reasons healthcare organizations are not screening patients for food insecurity
• in the planning stages (48%) • food insecurity screening not built into electronic health records (EHRs) (40%) • not having the capacity to follow-up and meet patient needs if screen positive (36%) • not being sure how to integrate screenings into clinical workflow (32%) • not being sure what to do if patient screens positive (32%) • not being sure what tools to use/questions to ask to screen patients (32%)

Most organizations (including the 9% of HCOs reporting being unsure if screening was taking place) were interested in receiving guidance, training, and technical assistance in food insecurity screenings (73%) and were already screening for at least one other social need (89%).

3.2.2. Referring to external food resources. Of HCOs routinely screening for food insecurity, more than half (60%) were referring patients to external food resources. The most common health care team member making referrals were community health workers (62%), nurses and nurse practitioners (57%), and social workers (48%). To connect patients with referral organizations, most (71%) provided patients with a handout or flyer with contact information and 43% called referral organizations on behalf of patients. Most HCOs making referrals recorded the referral results in EMRs (67%) and most of those who recorded referral results did not attach a diagnostic code to the referral (53%). The most common (62%) method used to determine if patients accessed the referral resource was to follow-up with patients at their next appointment. Overwhelmingly, HCOs planned to refer patients to resources indefinitely (81%) and reported receiving no funding for making referrals (80%). *(Detailed tables for these and all other survey questions can be found in the appendix.)*

Table 5 lists reasons supplied by HCOs who said referrals were not currently taking place (40%) as to why this was the case. Most of these respondents were both interested in receiving guidance, training, and technical assistance (79%) and already referring for at least one other social need (69%).

Table 5. Most common reasons healthcare organizations are not referring to external food resources
• providing enough resources on site (31%) • not being sure how to integrate referrals into the current clinic/hospital workflow (23%)

3.2.3. Providing prescriptions for produce or other healthy foods. Fewer respondents (14%) said their HCO was providing prescriptions to patients for produce or other healthy foods; of these, only 1 was providing prescriptions to all patients and the additional 8 were providing them to patients diagnosed with diabetes with some also including prediabetes and screening positive for food insecurity or risk of food insecurity as eligibility criteria.

Table 6 lists the reasons supplied among those HCOs currently not providing prescriptions (80%). Most of these respondents, combined with those who were currently unsure if these prescriptions were being offered (6%), were interested in receiving guidance, training, and technical assistance on this approach (74%).

Table 6. Most common reasons healthcare organizations are not providing produce or other healthy food prescriptions
• not being sure how to integrate produce/healthy food prescriptions into clinic/hospital workflow (46%) • not knowing organizations to partner with on providing produce/healthy food prescriptions (42%) • never having heard of these types of prescriptions (35%)

3.2.4. Non-Profit Hospital Needs Assessments and Improvement Plans. With the implementation of the Affordable Care Act, non-profit health systems are required to conduct a Community Health Needs Assessment (CHNA) and complementary Community

Health Improvement Plan (CHIP) to address community needs identified in the assessment. The purpose of this assessment and planning process is to align healthcare system efforts with local public health and community-based efforts to improve health and well-being, and to inform strategic investment of funding and resources through Community Benefit efforts. Of health system respondents representing non-profit hospitals, most (81%) said they include questions about food insecurity and/or healthy food access in their CHNA and the rest (19%) were unsure if this was happening. Only 2 respondent2 said their hospital provided access to nutrition interventions as part of their Community Benefit Program, while most were not sure (75%). This indicates a clear opportunity to continue federal and state support for FiM initiatives while providing technical assistance and support to local communities and healthcare systems to leverage concern about food insecurity into meaningful local investment and action.

Key Findings on the current state of FiM interventions in South Carolina

- A little more than half of those surveyed reported screening for food insecurity across their healthcare organizations and 60% of these organizations were making patient referrals to external food resources.
- There was high variability in which screening questions were used across and within healthcare organizations.
- Screening and referral results were often recorded, with no diagnostic code applied to screenings or referrals that would allow for data tracking and reimbursement opportunities.
- Produce prescription programming was much less commonly implemented (14% of the overall study sample), and the eligibility criteria for patients to be able to receive these prescriptions was limited.
- Not knowing how to integrate interventions into workflows was a common reason reported among those not currently implementing produce prescriptions.
- There was high interest in receiving guidance, training, and technical assistance on screening, referrals, and food prescriptions.

3.3. Scaling and sustaining Food is Medicine interventions state-wide. Findings regarding the ability to scale and sustain FiM interventions across SC had the following components: motivation and capacity building; funding; guidance, training, and technical assistance; and data needs.

3.3.1. Motivation and capacity building. Interviewees spoke of numerous ways to motivate and build capacity for HCOs and FBOs to implement, scale, and sustain FiM interventions (Table 7).

Table 7. What will motivate and build capacity for healthcare and food-based organizations to implement, scale, and sustain Food is Medicine interventions
• recognition and understanding of the need among HCOs • community-level data to make the case internally of the need and food insecurity screening and referral data to identify FBO resource gaps • funding • staffing, including those with specific knowledge and skills supportive of setting up or implementing interventions (social workers, community health workers, information technology staff) • existence of closed-loop referral systems • transportation for patients to get to FBOs • increasing retention of patients in produce prescription programs by centering patient needs in implementation (e.g., delivery models, cooking education, patient choice, culturally meaningful foods) • infrastructure of multiple, and not solely emergency based, food options available, especially in rural communities, and that options are known about among healthcare organization staff • buy-in and leadership from internal workgroups and external community networks • adaptable models to replicate with details on getting started, workflows, and lessons learned

3.3.2. Funding. Funding was a key resource required to implement FiM interventions among interviewees; the primary way organizations determined how many patients could be included in FiM interventions; and the main driver reported regarding future sustainability of interventions. Interviewees described the need for braided and blended funding with a clear recognition of the benefits and gaps that different funding opportunities and partnerships bring as we work toward sustainable and systemic scale. Currently, most FiM interventions in the state, including produce prescription programs, are funded philanthropically or with federal USDA funding through GusNIP. While there have been successes in building investment and leveraging aligned resources, there are still opportunities to ensure sustainable and equitable funding and support. For example, respondents viewed DHHS and MCO investments as critical opportunities for long-term scale and sustainability, as well as a need for a combination of incentive and mandate-based approaches. From a health equity perspective, it is important to note that blended funding across all of these streams– philanthropy, federal funding, reimbursement – is critical in ensuring that FiM efforts meet the needs of all patients who would benefit from participation, regardless of health care coverage or eligibility for programs like SNAP.

Table 8 shows the cost categories reported for HCOs and FBOs to implement FiM interventions.

Table 8. Cost categories for implementing Food is Medicine interventions	
HCOs	• staffing – especially social workers and community health workers – for doing screening, referrals, receiving training, and pulling reports • modifications to EHRs for making referrals and data tracking • coordinated care systems for making closed-loop referrals and data tracking • costs associated with implementing produce prescription programming (e.g., vouchers, transportation service for getting patients to the grocery store)
FBOs	• staffing • space • food costs, especially for produce prescription programming • promotional and packaging materials • transportation

Some, not all, FBOs knew the cost per patient for implementing interventions (e.g., approximately $312 for a 6-month produce prescription program) or per individual meal kit provided to a patient through HCOs (e.g., $15 to $25). Most HCOs had not determined implementation costs. Both organization types wanted to determine cost per patient and some desired guidance.

3.3.3. Guidance, training, and technical assistance. Table 9 lists the kinds of guidance, training, and technical assistance needs and recommendations supplied by interviewees by organization type.

Table 9. Types of guidance, training, and technical assistance needs and recommendations to scale and sustain Food is Medicine interventions	
Healthcare organizations	• workflow integration • operationalizing interventions into system-wide change/policy • food safety for handling food boxes/other food • how to identify patients needing food • how to ask patients screening questions in a culturally competent way • FBO resources available and how to help patients get to resources
Food-based organizations	• understanding HCO workflows • understanding health insurance billing and coding opportunities • referral systems • volunteer recruitment and retention • making sure food is culturally relevant
Both organization types	• common definitions of what qualifies as a FiM intervention • aligned evaluation/data tracking across HCO and FBOs • costs involved with FiM programs • existing models/best practices in FiM • ongoing quality improvement of FiM interventions • implementation of FiM with limited capacity or in rural settings

Interviewees spoke of the need for a coordinated structure for developing and delivering guidance, training, and technical assistance. Ensuring that the *right* people (e.g., HCO and FBO peers or associations, patients, external content experts) are involved and compensated in developing, delivering, and receiving the support was considered critical. Different formats suggested for delivery are included in Table 10.

Table 10. Formats recommended for delivering guidance, training, and technical assistance on Food is Medicine interventions
• state-wide summit/conferences • peer sharing and learning/learning collaborative model • webinars/smaller time blocks/e-learning modules • case study examples • one-on-one and group formats

3.3.4. Data Needs. Interviewees described the types of data they thought should be collected to demonstrate outcomes of FiM interventions (Table 11), recognizing the importance of this data to make the case for program sustainability within HCOs – especially to executive leadership – and with potential partners, funders, and policy makers about the value associated with these program to patients, the health system, and the community. Types of data and outcomes most commonly being collected currently were process, individual-patient focused, and qualitative in nature, while healthcare use and resource data were especially desired to be collected. The need to also determine food system outcomes associated with FiM interventions was mentioned. Challenges for collecting desired data included data sharing between HCOs, FBOs, and researchers/evaluators, especially in compliance with HIPAA; pulling data, especially from EHRs; getting complete (lack of missingness), enough (volume), or high-quality data; and having the time to collect and analyze data.

Table 11. Types of data to collect to demonstrate outcomes of Food is Medicine interventions	
Type category	
Process	• number of patients screened/% of patients screened/% screened positive by demographics • number of patients referred/type of referral/referral resource gaps • first time versus repeat patients receiving resources/patients continuing to access resources after intervention • poundage/types of food distributed or purchased • number of food boxes distributed • documenting challenges
Individual-patient focused	• food security status • nutrition security status • dietary intake • cooking skills • A1C • blood pressure • BMI

	• outcomes specific to disease/health condition (e.g., different types of cancer) • medication usage • quality of life • quality of care • demographics (e.g. gender, age, race/ethnicity)
Qualitative	• patient feedback on intervention satisfaction and outcomes • client stories • HCO feedback on intervention satisfaction and outcomes
Healthcare use and resource	• cost savings • utilization (especially ED visits and readmissions) • return on investment
Food system	• impacts on local food economy

Using a patient human-centered design approach in developing evaluation studies and integrating the collection of patient stories in the data collection and sharing process was viewed as critical. Additionally, the need to collectively define what successful results look like was also discussed. The shared produce prescription evaluation conducted by USC, as another component of this planning grant, in collaboration with the FiMSC produce prescription community of practice, was viewed as an important starting point for collecting needed data. This evaluation was considered as something that should continue and expand recognizing the limited capacity of program implementers to conduct evaluations.

Key findings on scaling and sustaining FiM interventions statewide

- Numerous ways to motivate and build capacity for FiM interventions were shared related to increasing knowledge, skills, abilities, funding, and other types resources.
- Time-limited grants were the most common funding type for FiM interventions currently.
- Funding was the most common method used for determining how many patients can be served through FiM interventions and determining capacity for future sustainability of interventions.
- A wide range of guidance, training, and technical assistance needs were identified, especially related to the integration of FiM interventions into current HCO workflows and existing, adaptable models.
- Delivering guidance, training, and technical assistance using multiple formats and through multiple channels and providing stipends/compensation for developing, delivering, and participating in training and technical assistance opportunities was viewed as critical.
- Process, individual-patient focused, and qualitative data were the most commonly collected data currently for FiM interventions, while healthcare cost savings, utilization, and return on investment data were viewed as the most important to collect to make the case to policy makers and funders.

4. Proposed actions based on the Food is Medicine landscape assessment

The proposed actions based on the landscape assessment to advance scale and sustainability of FiM interventions state-wide include training, technical assistance, evaluation, convening, and program funding components. The approach adapts the Nutrition Incentive Program Training, Technical

Assistance, Evaluation, and Information Center (NTAE) model, supported by the Gus Schumacher Nutrition Incentive Program, to a state-level context and application.

- Develop guidance, training, and technical assistance materials and processes:
    - Engage and fund healthcare professionals, food-based organization staff, and external experts in developing training and technical assistance materials.
    - Engage patients in the development and finalization of materials through meaningful community and patient engagement approaches (e.g., Patient Engagement Studio of expert patients).
    - Develop case studies and standards of practice contextually to SC, with a particular focus on workflow integration, systems change, food system partners, successes, and lessons learned.
- Provide ongoing training and technical assistance, with a particular focus on workflow integration and quality improvement post-implementation offered through a variety of formats and opportunities
    - Utilize group and one-on-one formats for specific support needs and training.
    - Host an annual statewide symposium as an opportunity for training, information sharing, engaging, and aligning with groups focused on working towards systems change to address social needs more broadly through healthcare (e.g., Roadmap for Addressing Social Determinants of Health).
    - Integrate FiM approaches within existing statewide initiatives and collaboratives working to improve healthcare access and quality (e.g., Birth Outcomes Initiative, the Chronic Conditions Care Collaborative (4C), the SC Office of Rural Health Center for Practice Transformation, AccessHealth, the Quality Through Technology and Innovation in Pediatrics (QTIP) Program, the Center for Rural and Primary Healthcare).
    - Inform policy and system change approaches that support scale, sustainability, and increased effectiveness of FiM approaches.
- Continue and expand shared evaluation processes:
    - Continue to use shared data collection measures and processes across FiM interventions.
    - Continue to fund external evaluators to support data collection and analyses.
    - Develop annual evaluation reports at a state level.
    - Build the capacity of program implementers to collect and use their own data for quality improvement and seeking funding to sustain programs.
- Continue and expand participation in the produce prescription community of practice as new produce prescription programs develop.
- Expand the reach of produce prescription and other FiM programs across the state:
    - Prioritize funding programs that:
        - Address gaps not covered by other funding sources (e.g., GusNIP only funds produce prescriptions for people enrolled in Medicaid or eligible/enrolled in SNAP).
        - Intentionally address inequities in nutrition security and health outcomes, including rural communities.
        - Address transportation challenges in ability to access food resources.

        - Work to ensure a continuum of nutrition support after the produce prescription intervention period.
    - Ensure model diversification contextual to community needs and assets, including:
        - Participation from different patient populations and health outcomes of focus, specifically pregnancy and pediatrics.
        - Emphasizing diabetes prevention in addition to treatment.
        - Testing different implementation facilitators that have the potential to improve program efficacy (e.g., patient choice models, vendor options, delivery opportunities, integration with diabetes prevention programs and other existing clinical contexts).

Appendix. South Carolina Food is Medicine Landscape Assessment Survey Data Tables

Part 1. General Healthcare Organization Questions

Table 1. Healthcare Organization Type (n=66)	#	%
Federally Qualified Health Center	8	12%
Free Medical Clinic	32	48%
Health System/Hospital	20	30%
Rural Health Clinic	4	6%
Other	2	3%

Table 2. Patient Populations Served (n=66) *(Select all that apply)*	#	%
Older adults (65 years of age or older)	43	65%
Adults (22-64 years of age)	64	97%
Pediatrics/Youth (0-21 years of age)	37	56%
Uninsured	61	92%
Underinsured	37	56%
Medicaid	32	48%
Medicare	31	47%
Privately insured	30	45%
Other patient characteristics	11	17%

Part 2. Familiarity with Food is Medicine Strategies and Importance of and Plans/Initiatives for Addressing Food Insecurity Among Patients

Table 3. Familiarity with Food is Medicine Strategies (n=66)	#	%
Very familiar	18	27%
Somewhat familiar	31	47%
Neutral	5	8%
Somewhat not familiar	6	9%
Not at all familiar	6	9%

Table 4. Importance of Addressing Food Insecurity Among Patients (n=66)	#	%
Very important	44	67%
Somewhat important	14	21%
Neutral	7	11%
Somewhat not important	1	2%
Not at all important	0	0%

Table 5. Plans or Initiatives in Place to Address Food Insecurity (n=66)	#	%
Yes	43	65%
No	13	20%
Other	7	11%
Unsure	3	5%

Table 6. Importance of Developing Plans or Initiatives to Address Food Insecurity (n=13) **Only reporting on those who said there were NO plans in place in previous question*	#	%
Very important	4	31%
Somewhat important	4	31%
Neutral	5	38%
Somewhat not important	0	0%
Not at all important	0	0%

Part 3. Screening for Food Insecurity

Table 7. Screening for Food Insecurity (n=66)	#	%
Yes	35	53%
No, but some individual practitioners choose to screen	17	26%
No	8	12%
Unsure	6	9%

Part 3a. Responses for Those *Not Screening* for Food Insecurity

Table 8. Reasons Why Not Screening for Food Insecurity (n=25) *(Select all that apply)*	#	%
In the planning stage of screening patients for food insecurity	12	48%
Food insecurity screenings are not built into EMR	10	40%
Don't have the capacity to follow-up and meet patients needs if they screen positive	9	36%
Don't know what tools to use/questions to ask to screen patients	8	32%
Don't know what to do if a patient screens positive	8	32%
Not sure how to integrate screenings into the current clinic/hospital workflow	8	32%
Don't know where to refer patients if they screen positive	6	24%
Lack of institutional buy-in or champions	5	20%
Please specify any other reasons here	5	20%
Not sure who to screen	4	16%
Takes too much time	4	16%
Lack of pay/reimbursement for the time it takes to screen patients	3	12%
Discomfort asking patients questions about food insecurity	3	12%
Addressing food insecurity is not a priority	2	8%
Never heard of screening patients for food insecurity	1	4%

Table 9. Interest in Receiving Guidance, Training, and Technical Assistance on Screening for Food Insecurity (n=30)

**Includes those who were unsure if HCO is screening for FI*	#	%
Yes	22	73%
No	1	3%
Unsure	7	23%

Table 10. Food Insecurity Built into Electronic Medical Records (n=30)

**Includes those who were unsure if HCO is screening for FI*	#	%
Yes	7	23%
No	14	47%
Unsure	7	23%
N/A because HCO does not have EMR	2	7%

Table 11. Screening for Other Social Needs (n=28) *(Select all that apply)*

**Includes those who were unsure if HCO is screening for FI*	#	%
Housing instability	13	46%
Exposure to violence	13	46%
Transportation	15	54%
Utility needs	9	32%
Financial resource strain	17	61%
Other	6	21%
Unsure	3	11%
None of these	0	0%

Table 12. Referring for Other Social Needs (n=29) *(Select all that apply)*

**Includes those who were unsure if HCO is screening for FI*	#	%
Housing instability	16	55%
Exposure to violence	15	52%
Transportation	20	69%
Utility needs	13	45%
Financial resource strain	17	59%
Other	4	14%
Unsure	5	17%
None of these	0	0%

Part 3b. Responses for Those *Screening* for Food Insecurity

Table 13. Screening for Other Social Needs (n=33) *(Select all that apply)*	#	%
Housing instability	29	88%
Exposure to violence	26	79%
Transportation	31	94%
Utility needs	18	55%
Financial resource strain	25	76%
Other	4	12%
Unsure	0	0%
None of these	0	0%

Table 14. Screening for Food Insecurity at all Clinic/Service Locations or Units (n=35)	#	%
Yes	23	66%
No	5	14%
Unsure	1	3%
N/A due to only 1 location	6	17%

Table 15. Food Insecurity Screening Questions Used (n=34)	#	%
Hunger Vital Sign Tool 2-Questions	11	46%
PRAPARE Tool 1-Question	5	21%
USDA Household Food Security Module 1-Question	2	8%
Combination of Tool Questions	10	42%
Different Questions	4	17%
Unsure	2	8%

Table 16. Frequency of Screening for Food Insecurity (n=35) *(Select all that apply)*	#	%
At every patient visit	10	29%
Only during all appointments with existing patients	1	3%
Only during some appointments with existing patients	3	9%
Only during first appointments with all new patients	8	23%
Only during first appointments with some new patients	2	6%
Once per year per patient at any type of appointment	8	23%
On an as needed basis, specific to each individual patient's needs	4	11%
Depends on the practice, clinical setting	6	17%
Other	10	29%

Table 17. Which Patients are Screened for Food Insecurity (n=35)	#	%
All	27	77%
Only certain patients	8	23%

Table 18. Method for Screening for Food Insecurity (n=35) *(Select all that apply)*	#	%
Patient answers the screening questions on an intake form	14	40%
Patients answers screening questions via MyChart or other EMR-based format prior to appointment	4	11%
Patient answers the screening questions via a kiosk, tablet, or other electronic format in office	4	11%
Patient is asked the questions directly from a person in office	30	86%

Table 19. Person(s) Who Conducts the Food Insecurity Screening (n=30) *(Select all that apply)* **Only asked of those who said patients are asked the questions from someone in the office*	#	%
Physician/Physician Assistant	8	27%
Resident/Intern	5	17%
Nurse practitioner	10	33%
Nurse/Nurse navigator	19	63%
Community health worker	12	40%
Dietician	6	20%
Social worker	12	40%
Other	7	23%

Table 20. Recording Food Insecurity Screening Results (n=35)	#	%
Not recorded	5	14%
Recorded in EMR	22	63%
Recorded in paper medical charts	3	9%
Recorded somewhere else	4	11%
Unsure	1	3%

Table 21. Diagnostic Code Used When Recording Food Insecurity Screening Results (n=29) **Only asked of those who affirmed recording screening results in previous question*	#	%
No	16	55%
Yes	7	24%
Unsure	6	21%

Table 22. Funding for Food Insecurity Screening (n=25)

(Fill in the blank question to include any number of responses)	#	%
None	12	48%
Unsure	4	16%
Healthcare organization general funds	3	12%
Grant funding	3	12%
Food-based organization partnerships	3	12%
Private donors	1	4%

Table 23. Length of Time Planning to Screen for Food Insecurity (n=35)	#	%
Less than a year	0	0%
1 to 2 years	0	0%
3 to 5 years	0	0%
Indefinitely	29	83%
Unsure	6	17%

Part 4. Making External Patient Referrals to Food Resources

Table 24. Next Step After Patient Screens Positive for Food Insecurity (n=35)

(Select all that apply)	#	%
Not aware of a standard protocol for the "next step"	1	3%
Patient is connected to on-site food resources (e.g. on-site food pantry, etc.)	12	34%
Patient is referred to external food resources (e.g. food bank, meals providers, etc.)	21	60%
Patient is connected to a professional who can assist them (e.g. social worker, etc.)	15	43%
Patient is provided with information about nutrition assistance programs (e.g., SNAP, WIC, etc.)	21	60%
Patient is provided with information about food resources (e.g., food bank, produce box program, etc.)	26	74%
Patient is provided with a prescription for produce or other foods	4	11%

Part 4a. Responses for Those *Not Making* External Patient Referrals to Food Resources

Table 25. Reasons for Not Making External Referrals for Food Insecurity (n=13) *(Select all that apply)*

	#	%
In the process of developing referral systems	2	15%
Never heard of making patient referrals for food insecurity	0	0%
Don't know where to refer patients	2	15%
There are no organizations to refer patients in our geographic area	2	15%
Not sure how to integrate referrals into the current clinic/hospital workflow	3	23%
Lack of pay/reimbursement for the time it takes to refer patients	2	15%
Takes too much time	1	8%
Don't have a referral/coordinated care management system for making referrals	2	15%
Don't have anyone on staff to do the referrals	1	8%
Making referrals is not a priority	0	0%
Patients lack transportation or would experience other barriers to be able to access external resources if referred	1	8%
Provide enough resources on-site	4	31%
Other reason	3	23%

Table 26. Interest in Receiving Guidance, Training, and Technical Assistance on Making External Referrals to Food Resources (n=14)

	#	%
Yes	11	79%
No	2	14%
Unsure	1	7%

Table 27. Referring for Other Social Needs (n=13) *(Select all that apply)*

	#	%
Housing instability	6	46%
Exposure to violence	5	38%
Transportation	6	46%
Utility needs	6	46%
Financial resource strain	4	31%
Other	4	31%
Unsure	1	8%
None of these	0	0%

Part 4b. Responses for Those *Making* External Patient Referrals to Food Resources

Table 28. Person Who Provides the Referral (n=21) *(Select all that apply)*	#	%
Physician/Physician Assistant	8	38%
Resident/Intern	5	24%
Nurse practitioner	12	57%
Nurse	12	57%
Community health worker	13	62%
Dietician	4	19%
Social worker	10	48%
Other	4	19%

Table 29. Method for Making External Referrals to Food Resources (n=21) *(Select all that apply)*	#	%
The patient is given a handout/flyer with contact information (e.g., phone number)	15	71%
Our healthcare organization calls on behalf of the patient to hand off the referral	9	43%
A referral is made in a referral/care coordination platform and the referral organization calls the patient	3	14%
Other	2	10%

Table 30. Follow-Up Made After Referral (n=21) *(Select all that apply)*	#	%
No follow-up is done	3	14%
The healthcare organization follows up with the referred organization to see if the patient accessed the resource	5	24%
The healthcare organization follows up with the patient to see if they accessed the resource	8	38%
The referral organization signifies in a care coordination platform whether or not the patient used the referral	3	14%
The patient is asked if they accessed the resource at their next appointment	13	62%
Unsure	1	5%

Table 31. Recording Referral Results (n=21)	#	%
Not recorded	4	19%
Recorded in EMR	14	67%
Recorded in paper medical charts	1	5%
Recorded somewhere else	0	0%
Unsure	2	10%

Table 32. Diagnostic Code Used When Recording Referral (n=15)

**Only asked of those who affirmed recording referral results in previous question*	#	%
No	8	53%
Yes	2	13%
Unsure	4	27%

Table 33. Funding Source for Referral (n=15)

(Fill in the blank question to include any number of responses)	#	%
None	12	80%
Unsure	1	7%
Healthcare organization general funds	1	7%
Grant funding	2	13%

Table 34. Length of Time Planning to Refer for Food Insecurity (n=21)	#	%
Less than a year	0	0%
1 to 2 years	0	0%
3 to 5 years	1	5%
Indefinitely	17	81%
Unsure	3	14%

Table 35. Referring for Other Social Needs (n=21) ***(Select all that apply)***	#	%
Housing instability	17	81%
Exposure to violence	15	71%
Transportation	16	76%
Utility needs	17	81%
Financial resource strain	15	71%
Other	3	14%

Part 5. Providing Produce or Other Food Prescriptions

Table 36. Providing Produce or Other Food Prescriptions (n=66)	#	%
Yes	9	14%
No	53	80%
Unsure	4	6%

Part 5a. Responses for Those *Not Providing* Produce or Other Food Prescriptions

Table 37. Reasons for Not Providing Produce or Other Food Prescriptions (n=52) *(Select all that apply)*

	#	%
In the planning stage of offering produce or healthy food prescriptions	7	13%
Never heard of produce or healthy food prescriptions	18	35%
Don't know organizations to partner with on providing these prescriptions	22	42%
Not sure how to integrate these prescriptions into the current clinic/hospital workflow	24	46%
Lack of pay/reimbursement for the time it takes to provide these prescriptions to patients	6	12%
Takes too much time	4	8%
Providing these prescriptions is not a priority	3	6%
Patients lack transportation or would experience other barriers to be able to access the resource if provided with a prescription	5	10%
Provide enough resources on-site	3	6%
Other barriers	6	12%

Table 38. Interest in Receiving Guidance, Training, and Technical Assistance on Providing Produce or Other Food Prescriptions (n=57)

**Includes those unsure if prescriptions are provided currently*

	#	%
Yes	42	74%
No	2	4%
Unsure	11	19%
Other	2	4%

Part 5b. Responses for Those *Providing* Produce or Other Food Prescriptions

Table 39. Produce/Food Prescriptions Provided at All Service/Clinic Locations or Units (n=9)

	#	%
Yes	5	56%
No	2	22%
N/A due to only having one location	1	11%
Other	1	11%

Table 40. Patients Provided with Produce/Food Prescriptions (n=9) *(Select all that apply)*

	#	%
All patients	1	11%
Patients who screen positive for food insecurity/risk of food insecurity	3	33%
Patients who have diabetes	8	89%
Patients with prediabetes	4	44%
Other criteria	3	33%

Table 41. Number of Produce/Food Prescriptions Provided to Individual Patients (n=9)

	#	%
1 prescription	4	44%
2-4 prescriptions	0	0%
5-7 prescriptions	1	11%
8-10 prescriptions	0	0%
More than 10 prescriptions	0	0%
Other	1	11%
Unsure	3	33%

Table 42. Length of Time Patients Have to Use Produce/Food Prescriptions (n=8)

	#	%
Less than 1 month	1	13%
1 to 3 months	1	13%
4 to 6 months	1	13%
More than 6 months	3	38%
Unsure	2	25%

Table 43. Length of Time Planning to Provide Produce/Food Prescriptions (n=8)

	#	%
Less than a year	0	0%
1 to 2 years	0	0%
3 to 5 years	1	13%
Indefinitely	3	38%
Unsure	3	38%
Other	1	13%

Part 6. Non-Profit Hospital Community Health Needs Assessments (CHNA) and Community Benefit Programs

Table 44. Non-Profit Hospitals Including Questions about Food Insecurity and/or Healthy Food Access in CHNA (n=16)

	#	%
Yes	13	81%
No	0	0%
Unsure	3	19%

Table 45. Non-Profit Hospitals that Provide Access to Nutrition Interventions as a Part of Community Benefit Program (n=16)

	#	%
Yes	2	13%
No	2	13%
Unsure	12	75%