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**What it Will Take for the Successful Implementation of Produce Prescription
Programs in Connecticut: A Qualitative Analysis**

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Maternal and Child Health Promotion Track

A thesis submitted in partial fulfillment of the requirements for the degree of
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Abstract

Background: The Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health was released in September 2022, a result of the second-ever White House Conference on Hunger, Nutrition, and Health. Produce prescription programs were included in this strategy and identified as a mechanism for preventing or managing diet-related diseases and addressing food security. Food security is a key social determinant promoting health. Food security allows for the adequate nutrition needed to promote health and prevent and treat diet-related diseases. This study aims to identify the key considerations for implementing and scaling up a state-wide produce prescription program in Connecticut to translate the national strategy.

Methods: This qualitative study was based on in-depth interviews with nine key informants working in the areas of hunger, nutrition, health, policy, and/or produce prescription programs. The interview guide was developed based on the Stages Model - a heuristic policy conceptual framework. Thematic analysis was used to analyze the interview transcripts following an inductive coding approach.

Results: Key informant interviews revealed four main themes that provided key insights for the potential implementation and scale-up of produce prescription programs in Connecticut. These specific themes were: engage community, consider aspects of implementation, understand the importance of produce prescription programs, and garner advocates' and decision-makers' support.

Conclusion: A community-engaged multi-level strategy will be needed to successfully implement and scale-up produce prescription programs in Connecticut.

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Introduction

In Connecticut, nearly half a million people struggle with hunger and food insecurity, including more than 131,000 children [1]. Throughout the life course, access to healthy and safe nutrient-dense foods is essential for health. High-quality nutrition is key for health promotion and disease prevention [2]. Indeed, eating a healthful diet can reduce the risk of developing highly prevalent chronic diseases such as obesity, cardiovascular disease, type 2 diabetes, and some cancers [2]. Adequate nutrition also plays an essential role in helping people to manage and treat diseases [2]. Approximately 57% of the total population in Connecticut experiences one or more chronic diseases [3]. Hence, improving food security is critical to reducing the burden of diet-related non-communicable diseases (NCDs).

The Second White House Conference on Hunger, Nutrition, and Health took place on September 28, 2022. This was only the second White House conference on this topic, with the first occurring over 50 years ago, in 1969. The first conference was very influential in launching the modern era of food assistance programs. It led to the launch of the Supplemental Nutrition Assistance Program (SNAP), the School Breakfast Program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and also led to the Dietary Guidelines for Americans [4]. Given how impactful the first White House Conference was, it is critical to understand how the Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health can be considered for improving food security in Connecticut.

The White House National Strategy rests on five pillars, with the second pillar focused on integrating nutrition and health [5]. This pillar discusses the implementation of “food is medicine” interventions such as produce prescriptions [5]. This pillar calls for the creation of state-funded produce prescription programs for people who are low-income [5]. It also calls for

health insurance companies to consider providing/expanding coverage for produce prescriptions [5]. For this reason, this thesis focuses on understanding key considerations in order to translate the strategy into a state-wide produce prescription program in Connecticut. In this thesis, produce prescription programs are defined as programs where people are prescribed fruits and vegetables to support their health [6]. These prescription programs aim to increase access to and consumption of produce, as a means to improve food security and improve health [6].

The primary aim of this qualitative research study was to identify key factors for implementing and scaling up produce prescription programs in Connecticut, in order to benefit from the national strategy recently recommended by the White House.

Findings from this study are expected to inform multiple parties in Connecticut interested in the link between food systems and health care systems including legislators, decision-makers, practitioners, and advocates. Findings are also expected to help practitioners, researchers, and program evaluators understand how they can effectively incorporate produce prescription programs in their work in Connecticut.

Methods

Study Design

Individual key informant interviews were conducted using an interview guide specifically developed for this study (see Appendix A). The interview guide was developed by framing questions that related to the topics of interest and the components included in the Stages Model, described below in the *Policy Framework* section. The lead researcher (Olivia Rua) developed the interview guide with support from the primary adviser (Rafael Pérez-Escamilla). Key informants were identified using a convenience snowball sampling approach. (This process is further described in the *Key Informants* section.) The purpose of these interviews was to gain

insights and perspectives, understand experiences, and learn about the points of view of key informants. The following produce prescription program related factors were explored during the interviews: political will, implementation opportunities and challenges, feasibility, funding, sustainability, and evaluation. The selection of these factors was informed by the Stages Model structure and the experience of the thesis mentors with produce prescription programs in Connecticut. The questions asked respondents about their opinions on what is needed to prepare the state for strengthening the link between the food system and the health care system and to developing a state-wide produce prescription policy and corresponding programs. A thematic analysis, using inductive coding and the creation of a codebook (see Appendix B), was conducted by one coder (OR) using NVivo to identify ideas that were emphasized by each participant. These codes were then categorized into the main themes. This study (IRB Protocol ID: 2000034306) was granted an exemption from Yale's Human Research Protection Program Institutional Review Board on December 30, 2022.

Policy Framework

The heuristic approach to policy, also known as the Stages Model, was the conceptual framework used to guide this work. When an issue needs to be addressed through policy, this framework includes the five following components: (1) agenda setting, (2) policy formulation, (3) adoption/ decision-making, (4) implementation, and (5) evaluation [7]. This framework was used to help guide the creation of the interview guide. Questions related to each of these components were included in the developed interview guide.

Key Informants

The key informants of interest included people working in areas related to hunger, nutrition, health, policy, and/or produce prescription programs. A convenience snowball

sampling approach was used to identify key informants. With support from the primary adviser (RPE), the lead researcher (OR) developed a list of people working in the areas of interest. The primary adviser (RPE) connected the lead researcher (OR) with several of these people. At the end of each interview, the key informants were asked to recommend additional people working in the areas of interest. Recommendations from these individuals were essential for the lead researcher (OR) to then connect with other potential key informants. Fourteen people were contacted about serving as key informants. Nine agreed to serve as key informants and be interviewed. Of those that did not serve as key informants, one person connected the lead researcher (OR) with their organization's consultant. This consultant was not interviewed but referred the lead researcher (OR) to potential key informants. Two people indicated that their expertise was not specifically relevant to the topic of produce prescription programs. Of these two, one person referred the lead researcher (OR) to a potential organization to connect with. Two people did not respond.

People affiliated with the following organizations were contacted: 1,000 Days Organization (USA chapter), Community Health Network of Connecticut, Connecticut Department of Agriculture, Connecticut Department of Public Health - WIC, Connecticut General Assembly - House of Representatives, End Hunger Connecticut, Food Corps, Hartford Food Policy Commission, Hispanic Health Council, International Fresh Produce Association, and Wholesome Wave. A total of nine interviews were conducted based on the availability and willingness of invited key informants to participate. It was anticipated that 15 interviews would be needed for information saturation. The project timeline was a key factor in determining the finalization of conducting interviews, but the key informants represented a range of sectors,

organizations, and perspectives. Thus, it is likely that information saturation was reached with the number of interviews conducted.

Data Collection

Key informant interviews were conducted between February and March of 2023. Interviews were conducted at a single session for each participant via Zoom and lasted up to 60 minutes. Participants were reminded that they may skip any questions and/or request to stop the interview at any time. Verbal informed consent was obtained at the start of each interview. Upon receiving consent, interviews were recorded. The interview guide (see Appendix A) was used to facilitate the interview, but the interviewer (OR) adapted the order and content of the questions that were asked based on the flow of each conversation. The recorded audio was transcribed, verbatim, by the rev max automated transcription software. The interviewer (OR) re-listened to each interview and made edits to each transcript, as needed, to ensure transcript verbatim accuracy before beginning data analysis. Filler words/phrases, such as “um” and “like”, and repeated words were omitted from the quotes used in this report to enhance clarity and readability.

Data Analysis

The qualitative data were analyzed using thematic analysis and inductive coding. Each transcript was analyzed for common ideas and inductively coded by one individual (OR). The codebook (see Appendix B) was developed as each transcript was analyzed. Codes were created based on the content of each interview and were not predetermined. The thoughts conveyed by each key informant were labeled with codes (i.e., words and short phrases) that aimed to capture the meaning of what was being said. Any codes developed from previously analyzed interviews were applied to subsequent interviews as they were analyzed. New codes were added to the

codebook, as needed. The coding of all interviews was reviewed with the finalized codebook. The NVivo qualitative data analysis software was used to add codes to each transcript and to support the thematic analysis. In NVivo, the codes were then categorized into the four main themes that emerged.

Results

Nine key informant interviews were conducted and analyzed. The key informants' areas of work included: Connecticut Department of Public Health - WIC, Connecticut General Assembly - House of Representatives, End Hunger Connecticut, Hartford Food Policy Commission, Hispanic Health Council, International Fresh Produce Association, and Wholesome Wave.

Four major themes related to produce prescription programs were identified from thematic analysis via the coding methodology. The following are the four major themes identified as key factors to consider prior to implementing and scaling up produce prescription policies and programs in Connecticut: engage community, consider aspects of implementation, understand the importance of produce prescription programs, and garner advocates' and decision-makers' support.

Engage Community

Community engagement was addressed in various ways by the key informants who discussed how collaboration with community members is essential for the implementation of produce prescription programs.

When thinking about the planning phase, the key informants specifically addressed how the community should be involved from the very beginning, in the co-design of produce

prescription programs. The quote below reveals how this engagement can support the planning and implementation of produce prescription programs:

...so [clients] can tell you what would work well, what they want, what they don't, and therefore that can be built into planning. So if there's a regular group of community advisors that can be involved throughout, what do they tell you about the beginnings of it, how to plan it... (key_informant_05)

This involvement with clients was also thought to be important to learn about shopping behaviors and what barriers people currently face to accessing fresh produce. As illustrated by one key informant's quote, "*...it has to also be addressed where people shop and how people shop, you know because...if you can't access the grocery store you can have a benefit card but if you can't get to the place or if it's not accessible to you*" (key_informant_03).

The above points were linked with produce accessibility concerns. This also links with how redemption methods of the produce prescription will differ on an individual level. For example, key informants expressed that conversations with community representatives are needed to understand the best method for an individual to redeem the produce prescription. It was also noted that there is a "*...need to talk more directly to the community to see if what is being planned is what the community really wants or...[if] it will be something that they will take advantage [of]*" (key_informant_04). These findings can help improve the co-design and implementation of produce prescription programs and how they serve the needs and wants of the target participants. The following illustrative quote captures how some key informants felt about how providers should engage with clients of produce prescription programs:

...they could say, we want to put you on a produce prescription. We have these three options, which is best for you...? And they'll be like, oh, I shop at Walmart. That's my store, that's in my neighborhood. I would like that. Or man, I really love seasonal farmer's markets and it's about to be spring or summer, I want to pick a farmer's market. Or I'm very busy, I work all the time, I can never get to the grocery store. Having a box of food delivered to the house sounds pretty great. So...letting the patient decide how they

get their produce prescription...should be standard best practice here in order to have the most success. (key_informant_01)

Building on these community-engagement considerations for improving program implementation, another subtheme included the idea of providing nutrition counseling to clients to support behavior change. Key informants indicated that counseling sessions should include nutritional advice and motivational techniques to facilitate increased consumption of fruits and vegetables among clients participating in produce prescription programs. The feedback on nutrition education and counseling included practical learning opportunities such as clients learning how to cook and store produce items. It was specifically recommended to provide clients with recipes and tasting samples to help clients feel more comfortable preparing or cooking fruits and vegetables and becoming willing to try fruits and vegetables they may not have been familiar with before the program. One key informant described how these approaches can end up leading to the desired behavior change “...to immerse [clients] in exposure so people can understand that yes, I can access the [produce], I like it, I can make it easily” (key_informant_05). Cultural acceptance of the foods being provided as part of produce prescriptions was also addressed. A key informant explained, “...for certain communities there are different considerations in terms of healthy fruits and vegetables, nutrient-dense foods that are culturally appropriate and relevant” (key_informant_08).

For produce prescription programs to be sustainable and effective, the importance of listening to clients and learning from them was emphasized. This type of dialogue was underscored as being influential to make changes to improve the delivery of produce prescription programs. The following quote highlights the importance of community engagement:

...one of the things that I think is critically important...is CBPR, community-based participatory research, it's in that frame. And so what you get is you get the opportunity to engage the community at the beginning. So to even help to envision what the produce

prescription program will look like and who [and] what are the redemption sites, all of those sorts of considerations. (key_informant_08)

Also, having conversations about barriers and facilitators to engaging clients with produce prescription programs and perspectives on program functioning and impact were highlighted. Continual dialogue with community members that a program aims to serve (i.e., the clients) was deemed to be critical for the rollout of produce prescription programs.

Consider Aspects of Implementation

Implementation considerations included factors related to feasibility, sustainability, funding, and evaluation. Key informants shared their perspectives on how various aspects related to these components need to be taken into account to be successful with the implementation of produce prescription programs.

As detailed above, a recurring notion was the value that the community voice, heard through community engagement, brings to the co-design. As illustrated by the following quote, key informants emphasized this value:

Well, I think developing [produce prescription programs] with community input will be very important. So to make sure that it's going to work as in the way that the community really takes advantage of... (key_informant_04)

Regarding the engagement of key partners, networking with others in the field was also deemed essential. Effective and thoughtful collaborations with key partners, including the clients, other community members, health care providers, insurers, and other organizations were regarded as critical for the successful implementation of produce prescription programs.

Key informants identified the importance of integrating produce prescription programs within existing health care systems' structures. They highlighted how this involves adapting individual produce prescription programs to fit well within the infrastructure of different health care systems. Hence, being mindful of the specific health care contexts when planning to

implement a produce prescription program was underscored. The quote below highlights these points:

What I found was not telling a health care system how to run a [produce prescription] program...that doesn't work. Telling them...you have to change your system now and you have to do it this way and not the way you've been doing it doesn't work. So what I learned was the onus was on me to figure out how to work it into their existing processes...And what I was able to do is break down the functions into kind of simple terms...to make it all work well together. To me, that was one of the biggest challenges, and that's where I've seen and heard a lot of programs failing because they try to force the health care system to do things they're not comfortable doing or not used to doing. (key_informant_07)

Implementing produce prescription programs in a way to make them function as a standard health care practice, similar to the prescription of medical drugs was also addressed. A key informant identified that “...the closer you can align [produce prescription programs] to the prescription drug delivery, the better off you are likely to have success” (key_informant_01). The need to make produce prescription programs easy for clients to engage with was emphasized. With that, the concept of merging technology with other government assistance programs onto one system that would include produce prescription benefits was mentioned.

When thinking about funding for produce prescription programs, it was noted that relying on grant funding is not sustainable. It was also mentioned that “...if a program is to be scaled-up and sustained, it cannot operate on piecemeal grant funding. It's too vulnerable that way” (key_informant_05). For sustainable operations, key informants shared the significance of produce prescriptions becoming fully covered through government funding mechanisms, with programs such as Medicaid. This next quote illustrates the importance of funding through Medicaid:

Well, that's the whole point of enacting it in policy. The state can continue to pursue GusNIP grants, and they will affect only the target population of that grant for the period that it's funded. But creating a sustainable funding mechanism like Medicaid makes it

sustained in perpetuity for as long as those Medicaid laws exist the way that they are.
(key_informant_02)

Key informants highlighted the importance of various types of evaluations and the need for process and outcome assessments, as well as continuous quality improvement. The incorporation of pre/post analyses for tracking health outcomes was underscored by some. This included reference to baseline and follow-up comparisons for the following biometrics: blood pressure, body mass index, hemoglobin A1C, and weight. Additional measures such as redemption rate of produce benefits, change in produce consumption, change in food security, program acceptability, and change in health care costs were also emphasized as important factors in evaluating program effectiveness. It was noted that nationally representative data could be used to determine how the implementation of a produce prescription program affects key long-term outcomes such as food security and the prevalence of diet-related non-communicable diseases. The importance of feedback from clients, health care providers, and other involved staff regarding experience and satisfaction with the program was mentioned. Considering these points, the significance of continually examining these factors and making real-time adjustments to programs was deemed to be crucial. Periodic long-term follow-up and reaching out to those who are not using their benefits were highlighted as other meaningful factors for improving program effectiveness.

Understand the Importance of Produce Prescription Programs

Key informants fully recognized the importance of produce prescription programs. They specifically acknowledged the potential impact that they can have in improving the food security and health of people. Key informants also identified the populations that can benefit from them.

When thinking about who would benefit from produce prescription programs, key informants mentioned a wide range of people. Those in critical life stages were referenced as

populations that could benefit. This included an emphasis on those of reproductive age, pregnant populations, lactating populations, those in infancy and early childhood, and aging populations. It was described that populations to benefit “...*would be people at critical stages of the life cycle, therefore pregnancy, lactation, infancy, [and] early childhood, where again, good diet is extremely important...*” (key_informant_05). Key informants described how produce prescription programs can be significant for these populations to support human development. One key informant suggested how influential it could be to work with this population through extended follow-up:

A brilliant study would be to enroll pregnant populations into the [produce prescription] program...and then two years after childbirth maybe, continue the produce prescription and then do some health assessments on the child and the mother in year 5, in year 10, in year 25...you know, all the research says the earlier you make a change the better. If we find out that a change in diet at this early age leads to sustained change throughout life, that is well worth the investment from a congress that is paying the whole bill for seniors' health. (key_informant_01)

In addition to the importance of produce prescription programs in supporting the human life cycle, there was discussion of how populations who are low-income, such as those eligible for Medicaid, and those experiencing food insecurity would also benefit. Key informants suggested that black, indigenous, and people of color (BIPOC) communities could benefit. Supporting people from rural communities and communities with limited access to food was noted. The importance of produce prescription programs functioning to benefit those at risk of developing and those experiencing diet-related diseases was emphasized. It was underlined that “...*an easy place for a lot of medical care settings to start with this is kind of like, what are the patient populations that have conditions that are most clearly associated with diet-related factors*” (key_informant_06). Specifically, key informants mentioned the following diet-related

diseases: cardiovascular diseases such as stroke, diabetes, food allergies, hypertension, obesity, overweight, and some cancers.

Key informants described a variety of potential health benefits of produce prescription programs. The common idea was that “...*there's definitely an awareness that...produce prescription programs can be a really powerful tool to address diet-related diseases, either as prevention or treatment or both*” (key_informant_08). As this illustrative quote shows, some key informants reported that the health benefits for people engaging with produce prescription programs would be related to both the prevention and treatment mechanisms for addressing diet-related non-communicable diseases. With that, key informants underscored the value of tracking changes in biometrics, such as blood pressure, body mass index, hemoglobin A1C, and weight. The key informants also noted how these programs would end up leading to increases in access to and consumption of fruits and vegetables.

Furthermore, other positive impacts such as health care cost savings, support to partners, and better patient-provider care were noted by key informants. Some specifically mentioned how produce prescription programs can generate health care cost savings. It was also addressed how produce prescription programs have the potential to not only support clients but can also support or provide incentives to food store vendors, wholesale food distributors, health insurance plans, and health care providers. Considering the health benefits, key informants spoke about how produce prescriptions can become an effective tool for providers to better promote health and prevent disease among their clients. The quote below exemplifies the important role of produce prescription programs for providers:

But I also think for physicians [produce prescription programs are] critically important because it gives the physicians another tool in their toolkit when they're working with patients. I've had many doctors say to me, I love these programs because, in the past, I know when I've told patients, you know, you really need to add more fruits and vegetables

in your diet to be healthier and help your enter diagnosis here, diabetes, heart disease, obesity, whatever it is, the doctors say, I know that they're on Medicaid or uninsured, and I know that they're not going to be able to do that. So they're nodding their head and smiling at me, but they can't just do that. And so having this program allows me to be able to give this opportunity to patients so that they can truly follow through on this.
(key_informant_07)

Several key informants reported participating in conversations where people from diverse fields have recognized the impact and importance of produce prescription programs. This acknowledgment has come from people in fields such as academic institutions, advocates, community-based organizations, food assistance programs, funders, legislators, and public health nutrition. Importantly, the impact and importance of produce prescription programs were also acknowledged by the key informants representing: Connecticut Department of Public Health - WIC, Connecticut General Assembly - House of Representatives, End Hunger Connecticut, Hartford Food Policy Commission, Hispanic Health Council, International Fresh Produce Association, and Wholesome Wave.

Garner Advocates' and Decision-makers' Support

For produce prescription programs to be viable, key informants noted the important role of garnering support from legislators. Various aspects may influence legislators' decisions to either support or oppose policy for a state-wide produce prescription program. Specifically, key informants mentioned the need to identify the following: cost of the program, competing priorities, and knowledge of the impact of produce prescription programs.

Key informants discussed how cost plays a critical role in a legislator's decision to support or oppose produce prescription programs. People are typically hesitant to add costs to health care and the cost-effectiveness of produce prescription programs tends to be more long-term. With that, a key informant brought up that fiscal notes for bills do not consider expected savings, rather they only include how much a bill would cost. Demonstrating the

cost-effectiveness and return on investment of produce prescription programs could be a significant factor that influences buy-in. Specifically, the following quote illustrates how influential it can be to show that money spent on produce prescription programs can reduce the total amount of money that taxpayers spend:

And so to be able to show that by spending taxpayer dollars on preventative efforts that we actually reduce the overall spend I think that that's kind of the holy grail in terms of making that case [to support produce prescription programs]. Because if you can show wherever you are in the ideological spectrum that by investing [in produce prescription programs], we actually reduce the overall spend to taxpayers, that's a pretty compelling argument. (key_informant_08)

A variety of competing priorities affect whether someone chooses to support or oppose a produce prescription program. Key informants emphasized how there is often limited capacity and with that, legislators have to make choices on what gets prioritized for funding and implementation. One key informant legislator shared that they've "...met very few people who don't support [produce prescription programs] in concept. It's about whether or not funding something like this outranks other things competing for funding" (key_informant_02).

Disseminating knowledge and research on the impact that produce prescription programs can have was deemed critical in garnering support for them. Key informants shared how there is a lack of clinical trial level data, but of the data that exists, a better emphasis is needed on spreading the knowledge of the impact of produce prescription programs that current data highlights. This was determined to be necessary so that the public can access this information in an understandable way to learn about what makes these programs worth it. Specifically, the idea of educating policymakers and the public about the evidence that exists, through open-source streams such as infographics and media campaigns, to promote the importance of produce prescription programs was noted. The following quote demonstrates the current challenges with sharing this information:

The problem is [data] gets published in a peer-review journal that is then behind a paywall and policymakers never have access to that stuff. And it's not like, if you're not looking for it, you don't know where to find it. And so there need to be one-page infographics saying, the state of the science right now says these programs are cost-effective, they offer benefits, you know, whatever it is. (key_informant_02)

Discussion

This innovative and timely study was conducted soon after the release of the Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health, in September 2022. This study's findings underscore the current perceptions of the key factors to consider for the implementation and scale-up of a state-wide produce prescription program in Connecticut. These factors are prioritized based on the Food is Medicine programs as part of the new White House National Strategy. Through key informant interviews, four areas of focus were identified in order to support understanding considerations for the implementation and scale-up of produce prescription programs in Connecticut. The themes included the following: engage community, consider aspects of implementation, understand the importance of produce prescription programs, and garner advocates' and decision-makers' support. Through this study, insights and perspectives were gained from key informants. Within each of the identified themes, the key informants emphasized an assortment of factors that should be considered when implementing produce prescription programs. These factors should be thought about when contemplating how to best develop and scale-up produce prescription programs. Understanding the factors addressed by key informants should play a significant role in creating a state-wide program in Connecticut.

As mentioned before, the heuristic policy conceptual framework guided this study. The components of this framework include: (1) agenda setting, (2) policy formulation, (3) adoption/ decision-making, (4) implementation, and (5) evaluation [7]. The findings of this study can be mapped out to the components of the heuristic policy conceptual framework.

Considering agenda setting, the acknowledgment of the impact and importance of produce prescription programs in improving health was addressed. The discussion of who would benefit from these programs included a focus on pregnant and lactating women and young children, as these are critical time periods for influencing health. Furthermore, those at risk of developing and those experiencing diet-related diseases were also emphasized as important populations. Advocacy plays an essential role in agenda setting. Key informants described how effective displays of the data supporting produce prescription programs are needed for the widespread distribution of the evidence that exists to influence policymakers and the public to support these programs.

Policy formulation and adoption/decision-making are important for determining the approaches that will be used to address the issue of improving food security and health outcomes through produce prescription programs. To these points, key informants expressed how various factors influence the decision of policymakers to support or oppose produce prescription programs. Influential factors discussed included the financial aspect of produce prescription programs. In addition, disseminating knowledge and research about the impact of produce prescription programs was considered to be fundamental, as described above. It was deemed critical to be able to show the cost-effectiveness and significance of produce prescription programs for them to be considered a priority for funding and implementation.

Implementation considerations were addressed by key informants. Community engagement and effective partnerships were identified as important factors to promote the successful implementation of produce prescription programs. The integration of produce prescription programs with health care systems was considered essential for program

functioning. Additionally, government funding, such as Medicaid, was thought to be necessary for program sustainability.

Evaluation efforts included collecting feedback about experiences and satisfaction from those involved, including clients, health care providers, and other partners. Key informants described the importance of pre/post analyses to evaluate various health outcomes, such as hemoglobin A1C. It was also indicated that program indicators, such as the redemption rate of produce benefits should be evaluated. With evaluation efforts, making adjustments, as needed, and long-term follow-up were emphasized as necessary approaches to enhance program success.

One limitation of this study is that the data analysis relied on a single coder, which may have introduced potential biases. Having more than one coder would have allowed for a discussion to occur regarding the codebook and data analysis, which could have enhanced validity. Another limitation is the small sample size. Key informant recruitment occurred through a convenience snowball sampling approach. The recruitment methodology resulted in a total of nine key informants. Participant availability, willingness to participate, and the study timeline played a role in the total number of key informants that were interviewed. However, despite only having nine key informants, people with a wide range of backgrounds served as key informants and shared their perspectives regarding important considerations for produce prescription programs in Connecticut. Furthermore, following data analysis, no new themes emerged in the later interviews and the later interviews mainly reiterated themes identified from the prior interviews, suggesting information saturation was reached.

Conclusion

The primary aim of this qualitative research study was to identify key considerations for implementing and scaling up produce prescription programs in Connecticut. This study emphasized the important perspectives of those working in fields related to hunger, nutrition, health, policy, and/or produce prescription programs. Four important considerations for the implementation and scale-up of a state-wide produce prescription program in Connecticut were identified. These specific findings indicate that community-engaged multi-level strategies will be needed for the successful implementation and scale-up of state-wide produce prescription programs. At the time of this writing, bill H.B. No. 6857 is being debated in the legislature to achieve this aim [8].

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Appendix

Appendix A: Interview Guide

→ **Starting the interview:** Thank you very much for taking the time and agreeing to talk with me. As we spoke before, through this project I want to gain insights into the potential for implementation of produce prescription programs in Connecticut based on the new White House National Strategy on Hunger, Nutrition, and Health. As a reminder, you can choose to skip any questions you don't want to answer and you may request to stop the interview at any time. Before we start, do I have your consent to record this interview? Only the audio portion would be saved for transcription purposes.

◆ *Will record if consent is provided.*

◆ *If unwilling to be recorded, only notes will be taken during the interview.*

Questions Relating to Agenda Setting Stage:

- How has the importance of Produce Prescription Programs and their impact on the prevention of diet-related non-communicable diseases been acknowledged?
- Who do you think would benefit from Produce Prescription Programs?
 - Are there discussions on the advantages of these programs for women, infants, and children, specifically considering the first 1,000 days of life (gestation and the first two years of life)?
- Are the impacts of unhealthy diets on diseases in vulnerable population sub-groups, such as women, infants, and children, known?
- Is there political will for designing, implementing, and sustaining Produce Prescription Programs in Connecticut? Please explain.

Questions Relating to Policy Formulation Stage:

- Are there discussions happening in the state about ways to reduce the prevalence of diet-related non-communicable diseases through improved access to healthy foods?
 - Who are the target populations of interest in these discussions?
 - Is there any special focus on women, infants, and children?
- Are Produce Prescription Programs being considered for the prevention of obesity and other non-communicable diseases? If so, by whom, how, and for which age groups?
- Are the feasibility and long-term sustainability of Produce Prescription Programs being considered in policy discussions?
- Do you believe that Produce Prescription Programs can improve the health of the public at large? If no, why? If yes, how so?
- Which organizations or groups, if any, have been advocating for Produce Prescription Programs in CT?
- Would Produce Prescription Programs be related to the work you do? If so, how?

Questions Relating to Policy Adoption/Decision-Making Stage:

- What factors do you think would influence the decision of policymakers in the state to support or not support Produce Prescription Programs?
 - How would each of these factors influence policy adoption?

Questions Relating to Implementation Stage:

- What would it take to reach consensus on a state-wide policy supporting Produce Prescription Programs?
- What factors should be considered for the successful implementation of this type of policy?
- Are the needed resources in place to facilitate the implementation of Produce Prescription Programs across Connecticut? How so?
- What do you think would help enhance the sustainability of a Produce Prescription Program initiative throughout Connecticut?

Questions Relating to Policy Evaluation Stage:

- If implemented, how would you hope that such a policy be evaluated?
- **Wrapping up the interview:** Is there anything else you would like to add that relates to the topic?
- **Snowball sampling:** Would you be willing to connect me with anyone else who may be interested in serving as a key informant for this project?
- **Ending the interview:** It was great talking with you today. I appreciate you sharing your thoughts with me. Thank you for your time!

Appendix B: Codebook

Code	Description
Acknowledgment	Comments about how produce prescription program impact &/or importance has been acknowledged by others
Buy-in / Influences	Comments about what influences policymakers &/or other professionals to support/not support produce prescription programs
Community Engagement	Comments about engaging with communities for produce prescription program considerations
Evaluation	Comments about how the success of produce prescription programs can be assessed
Feasibility	Comments about how easily produce prescription programs can be achieved
Federal-level Example	Comments about federal-level examples of produce prescription programs
Funding	Comments about considerations related to sourcing money for produce prescription programs
Impact	Comments about potential effects of produce prescription programs
Implementation	Comments about considerations for putting policy/programs related to produce prescription programs into action
Medicaid	Comments relating to Medicaid's involvement with produce prescription programs
Political Will	Comments relating to garnering support from policymakers
Populations to Benefit	Comments about who would benefit from produce prescription programs
State-level Example	Comments about state-level examples of produce prescription programs
Sustainability	Comments about how produce prescription programs can be maintained