VEGGIE RX IN THE 2018 FARM BILL



GEORGIA FOOD FOR HEALTH PROGRAM

INSERT GF4H SITE NAME

| GF4H ID#: Issue | |
|--|----------------|
| Exp. Date (1 month after issue): Circle weekly amount based on participant's ho | usehold size: |
| \$14/family of 1 \$14/family of 2 \$ <mark>21/family of 3</mark> \$ | 28/family of 4 |
| \$35/family of 5 \$42/family of 6 \$49/family of 7 \$ | 56/family of 8 |
| # of people: amount/week: | |
| Prescriber name (please print): Prescriber signature: | |
| This prescription can be redeemed at: INSERT ELIGIBLE MARKETS AND FARMS HERE | |



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Cover image adapted from: Wholesome Wave Georgia

EXECUTIVE SUMMARY

In recent years, produce prescription programs, also known colloquially as "veggie scripts" or "veggie Rx," have emerged as practical public health interventions that aim to help increase fruit and vegetable consumption, reduce food insecurity, and decrease healthcare costs. Produce prescription programs typically involve a healthcare professional who identifies patients who could benefit from increased consumption of, and access to, produce, either by income level, diagnosis or risk of a diet-related illness, or food insecure status. The purpose of this study is to determine how funding for a produce prescription program came to be included in the 2018 Farm Bill. The author found that the concept of dedicating federal funding in support of such a program stems from the healthy eating incentive programs which were first proposed in the 2002 Farm Bill. Despite low expectations among some elected officials and nonprofit organizations that a produce prescription program would ultimately be included in the final version of the 2018 Farm Bill, funding was indeed incorporated as part of the Gus Schumacher Nutrition Incentives Program (GusNIP), formerly known as the Food Insecurity Nutrition Incentives (FINI) program. Specifically, the Produce Prescription Program funds pilot projects for nonprofit organizations or state/local agencies to partner with healthcare providers to provide fresh fruits and vegetables to low-income individuals suffering from or at risk of developing diet-related health conditions and to evaluate the impact of these types of projects on dietary health, food security, and healthcare use and costs. Previously, eligible projects were funded through FINI. Dedicated funding for Produce Prescription Program projects is capped at 10 percent of the GusNIP mandated funds. The key factors that contributed to this accomplishment include the past success of produce prescription projects funded by FINI, strategic placement of the funding within GusNIP, the efforts of a small but passionate group of members of Congress who actively promoted the idea, and the existing research on nutrition incentives and produce prescriptions. Throughout the five-year period of the current Farm Bill (2018) funding, valuable data, programmatic insights, and increased political support will likely inform future directions of produce prescription interventions and funding sources.

INTRODUCTION

The objective of this report was to determine how funding for a produce prescription program came to be included in the 2018 Farm Bill. The concept of dedicating federal funds for a program that supports produce prescription projects grew out of the healthy eating incentive programs that were first proposed in the 2002 Farm Bill. Despite the concerns of some elected officials and nonprofit organizations that funding for produce prescription projects was unlikely to be included in the final version of the 2018 Farm Bill, it in fact made the cut. The key factors that contributed to this accomplishment include the past success of produce prescription projects funded by FINI, strategic placement of the funding within GusNIP, the efforts of a small but passionate group of members of Congress who actively promoted the idea, and the existing research available to members of Congress that highlighted the effectiveness of nutrition incentives and produce prescriptions. A pilot program for produce prescriptions was included in a marker bill in the Senate and House of Representatives prior to the 2018 Farm Bill. Throughout the 2018 Farm Bill development process, the produce prescription program concept evolved and was strategically embedded within the broadly supported Gus Schumacher Nutrition Incentives Program. In addition to securing funding, the process of advocating for produce prescriptions leading up to the 2018 Farm Bill also brought "food as medicine" interventions to the attention of many members of Congress.

Semi-structured interviews were the source of primary data collection for this report. Nine semi-structured interviews were conducted in-person or over the phone with individuals and organizations who are involved in produce prescription programs, as well as food as medicine initiatives more broadly. Four respondents asked to remain anonymous. In addition to interviews, a review of academic and non-academic literature on produce prescriptions was conducted. Relevant documents were reviewed and analyzed to help inform interviews and report analysis.

BACKGROUND

Diet & Health

The 2015-2020 Dietary Guidelines for Americans recommend consuming 2.5 cup-equivalents^a of vegetables and 2 cup-equivalents of fruit per day.⁽¹⁾ However, according to the dietary interview component of the National Health and Nutrition Examination Survey (NHANES), "What We Eat in America", Americans ate, on average, only 1.4 cup-equivalents of vegetables and 0.9 cup-equivalents of fruit per day

Simultaneously, about half of American adults have one or more diet-related chronic disease... in 2015-2016, 0.9 and 1.1 cup-equivalents of vegetables and fruit less than the recommended values.⁽²⁾ Simultaneously, about half of American adults have one or more diet-related chronic disease, including cardiovascular disease, type 2 diabetes, overweight, and

obesity.⁽¹⁾ In addition, nearly 12 percent of United States (U.S.) households experienced food insecurity in 2017.⁽³⁾ Food insecurity is associated with a variety of poor health outcomes across the lifespan including increased risk of birth defects, impaired cognitive development, depression, and hypertension, among others.⁽⁴⁾

The healthcare costs of obesity and diabetes are significant and have increased in re-

...nearly 12 percent of United States (U.S.) households experienced food insecurity in 2017.

cent decades.⁽⁵⁾ The total cost of obesity and overweight, including related cancers, diabetes, cardiovascular disease, and other obesity-related conditions, is estimated to be \$1.72 trillion per year, which equates to over nine percent of

the United States' gross domestic product (GDP).⁽⁶⁾ The American Diabetes Association estimates that \$237 billion was spent on healthcare for diabetes patients in 2017, an increase of 26 percent since 2012.⁽⁷⁾

a. "Within a food group, foods can come in many forms and are not created equal in terms of what counts as a cup or an ounce. Some foods are more concentrated, and some are more airy or contain more water. Cup- and ounce-equivalents identify the amounts of foods from each food group with similar nutritional content." ⁽¹⁾



A growing body of literature has found that vegetarian and plant rich diets are associated with lower risk of ischemic heart disease, type 2 diabetes, cancer, and other conditions associated with poor diets and obesity.^(8,9) Most recently, a systematic analysis published in April 2019 found that "suboptimal diets," those high in salt and low in fruits, vegetables and whole grains, lead to higher rates of mortality

than any other risk factor, including smoking.⁽¹⁰⁾ The strong link between diet and health is clear.

Produce Prescription Programs

Although dedicated federal funding for produce prescription projects was not created until the 2018 Farm Bill, over the past 15 years, produce prescription "suboptimal diets," those high in salt and low in fruits, vegetables and whole grains, lead to higher rates of mortality than any other risk factor, including smoking.

projects have emerged as an intervention to address the public health challenges outlined above. These programs are designed to increase fruit and vegetable consumption, reduce food insecurity, and decrease healthcare costs.⁽¹¹⁾ These interventions are also known as fruit and vegetable prescriptions, veggie scripts, FVRxTM, PRx, Wholesome RxTM, Veggie Rx, and food for health, among other terms.⁽¹¹⁻¹⁴⁾

Produce prescription projects vary but typically involve a healthcare professional who identifies patients who could benefit from increased consumption of, and access to, produce, either by income level, diagnosis or risk of a diet-related illness, or food insecure status.^(11,15) After determining eligibility, the healthcare provider writes a "prescription" for fruits and vegetables. The prescription is typically provided via a coupon or voucher that can be redeemed at a specified retail location such as a grocery store or nearby farmers market. The produce prescriptions subsidize a portion or all of the cost to purchase produce. Voucher amounts vary from program to program. Some projects may also include nutrition education for participating patients. ⁽¹¹⁾ Most produce prescription programs involve a partnership between healthcare providers and supporting organizations that may include farmers markets, nonprofits, university researchers, or cooperative extension.⁽¹⁵⁾

The produce prescription model attempts to change dietary patterns by reducing financial barriers to purchasing fruits and vegetables.⁽¹¹⁾ Unlike other healthy eating incentive programs (for example, farmers markets doubling the value of Supplemental Nutrition Assistance Program (SNAP) benefits to purchase healthy food), produce prescriptions are unique due to the involvement of a healthcare professional. Research has shown that advice from doctors and other healthcare providers can be an impetus for sustained behavior change.^(16,17) Therefore, in addition to reducing financial barriers to purchasing fruits and vegetables, produce prescription programs may be particularly effective at changing dietary patterns due to healthcare providers' involvement in the program model.

Example programs

Washington State Produce Prescription Program

Eligibility: Only for Supplemental Nutrition Assistance Program (SNAP) participants

Structure:

- Fresh Bucks Rx: Healthcare professionals give patients \$20 or \$40 in Fresh Bucks Rx to spend on fruits and vegetables at eligible farmers markets in Seattle
- 2) Complete Eats Rx: Healthcare professionals, local health advocates, and nutritionists give Complete Eat Rx which provides \$10 to spend on vegetables at Safeway grocery stores across Washington
- Small Steps: Providers at a network of Federally Qualified Health Centers and WIC clinics provide patients \$10 vouchers to use to purchase fruits and vegetables at eligible farmers markets

Nutrition education: Varying based on program, some include grocery store tours

Impact: Since 2015, 45 markets and 103 grocery stores have received \$172,088 in produce prescription vouchers. 419 participants used Fresh Bucks Rx and 2,274 Safeway Club Card holders participated in Complete Eats Rx. In September 2017, a patient survey was launched to collect additional data about knowledge, attitudes, and produce purchasing and consumption.⁽²⁰⁾

Wholesome Wave Georgia's Food for Health Program (formerly known as FVRx)

Eligibility: Based on income and risk factors for diet-related disease

Structure: Currently operating in partnership with three healthcare sites in Georgia (Good Samaritan Health Center Atlanta, Grady Hospital, Harrisburg Family Health Care Clinic). For six months, healthcare providers give participants vouchers to redeem at participating farmers markets. Vouchers vary based on size of family: \$1/day for each member of the family. Participants have monthly visits with healthcare provider where weight and blood pressure are measured.

Nutrition education: All participants receive nutrition education and cooking classes throughout the six-month program period. Some sites also have exercise classes.

Impact: In 2018, 653 people participated and \$58,400 in produce vouchers were provided across all program sites. Participants self-reported an increase in knowledge of fruit and vegetable preparation, where to buy produce, and the importance of fruit and vegetable consumption. Program participation was associated with statistically significant reductions in BMI and diastolic blood pressure and an increase in consumption of fruits and vegetables.^(14,21)

Food as Medicine

Produce prescription programs are one component of a larger "food as medicine" movement. Although there is not a set definition of "food as medicine," many organizations, including the Food as Medicine Coalition and Center for Health Law and Policy Innovation of Harvard Law School (CHLPI), use a pyramid diagram to describe the scope of food as medicine interventions (see Figure 1). Interventions range from broad prevention programs, including "healthy food for those who are malnourished or food insecure" at the base of the pyramid, while treatment programs, like medically tailored meals, are at the top.⁽²²⁾ Depending on the particular program model, produce prescription programs may fall in either the prevention or treatment levels of the pyramid. Policymakers and food system advocates have discussed produce prescriptions within the larger "food as medicine" movement, as noted later in this report.



Figure 1: Food is medicine pyramid⁽²²⁾

Existing Produce Prescription Research

To the author's knowledge, the first peer-reviewed article on produce prescriptions was published in 2005, Mainstreaming Prevention: Prescribing Fruit and Vegetables as a Brief Intervention in Primary Care by Kearney et al.⁽²³⁾ Since then, limited research has been conducted on the effectiveness on produce prescription programs. Existing research has measured a variety of health outcomes and found varying, sometimes contradictory results. To the author's knowledge, no randomized control trial has been conducted on produce prescription programs.

Several studies have found positive outcomes associated with produce prescription programs, including:

- ▶ Reduction in household food insecurity^(24,25)
- ▶ Reduction in body mass index (BMI) and/or weight^(12,26)

- ▶ Increase in fruit and vegetable consumption⁽²⁷⁻²⁹⁾
- ▶ Decrease in hemoglobin A1C levels⁽²⁷⁾
- ▶ Improved blood sugar control for diabetic patients⁽²⁶⁾

Additional positive outcomes found include:

- Increased opportunity for healthcare providers to discuss diet and prevention with their patients^(23,30)
- ▶ Greater awareness of farmers markets by patients⁽³⁰⁾
- ▶ Increased patient knowledge of appropriate serving sizes⁽³¹⁾

These studies, however, assessed a wide variety of patient populations with different produce prescription project models, so at this time, it is not possible to make broad generalizations across patient populations about the success of produce prescriptions. In addition, other studies have found contradicting results including no change in produce consumption and no change in BMI.^(27,31) Therefore, additional research is likely needed in order to determine health outcomes associated with use of produce prescription programs.

To the author's knowledge, there is no published literature on healthcare cost savings associated with an implemented produce prescription program. A 2019 study, however, simulated the impact on healthcare costs associated with providing a financial subsidy for 30 percent of the cost of fruit and vegetables for all Medicare and Medicaid patients in the U.S. The model demonstrated that over a lifetime, this intervention would save \$39.7 billion in direct healthcare costs and would be more cost-effective than several existing drug treatments for cardiovascular disease and diabetes.⁽³²⁾

PATH TOWARD PRODUCE PRESCRIPTIONS IN 2018 FARM BILL

Funding for existing produce prescription projects in the United States has come from a variety of sources, including philanthropic, government, and hospital community benefit funding.^(11,20,33) The 2018 Farm Bill, however, is the first time that funding for produce prescriptions has been specifically included in a Farm Bill.^b ⁽³⁴⁾

Healthy Incentives Pilot (HIP)

Federal government efforts and thinking that led to the inclusion of produce prescription funding in the 2018 Farm Bill originated around the 2002 Farm Bill, formally known as the <u>Farm Security and Rural Investment Act of 2002</u>. Produce incentive programs were first proposed as a mechanism for improving the health of low-income Americans in this Farm Bill. During the 2002 Farm Bill development process, public health advocates pushed for a program that would provide financial incentives for food stamp^c recipients to purchase fruits and vegetables. This proposed program was included in the Senate Agriculture Committee draft of the Farm Bill, the <u>Agriculture, Conservation, and Rural Enhancement Act of 2001</u>, but did not make it into the final version of the bill. In response, advocates requested that the U.S. Department of Agriculture (USDA) pilot an incentive model to gather data on effectiveness of the produce prescription concept.⁽³⁶⁾ A pilot program was

b. An overview of the Farm Bill is available at <u>http://sustainableagriculture.net/our-work/</u> <u>campaigns/fbcampaign/what-is-the-farm-bill/</u>

c. Now called Supplemental Nutrition Assistance Program (SNAP)⁽³⁵⁾

not launched in the 2002 Farm Bill but the conversations continued in the 2008 Farm Bill development process.

Leading up to the 2008 Farm Bill, the U.S. Senate Agriculture Committee requested that the Government Accountability Office (GAO) research possible interventions to increase healthy food purchases by low-income Americans.⁽³⁷⁾ The GAO's 2008 report found that financial incentives are an effective strategy to increase fruit and vege-table consumption in low-income households.⁽³⁸⁾ Based on this report, among other factors, funding for a pilot produce incentives program, the Healthy Incentives Pilot (HIP), was included in the 2008 Farm Bill, formally known as the Food, Nutrition and Conservation Act of 2008.⁽³⁹⁾

Using HIP funding, in 2011-2012, a random group of 7,500 households with Supplemental Nutrition Assistance Program (SNAP) benefits in Hampden County, Massachusetts, received a 30 percent rebate on select fruits and vegetables. The other 47,595 households with SNAP benefits in the county were

``(F) encouraging consumption of fruit and vegetables by developing a cost-effective system for providing discounts for purchases of fruit and vegetables made through use of electronic benefit transfer cards;

Figure 2: Proposed fruit and vegetable incentive program in the Senate draft of the 2002 Farm Bill

the control group and continued to receive traditional SNAP benefits.⁽⁴⁰⁾ This study found that HIP participants increased fruit and vegetable spending by 8.5 percent. At the end of the study, consumption of targeted fruits and vegetables was 0.24 cup-equivalents higher in study participants than in the control group.⁽⁴¹⁾ The HIP pilot showed that produce incentives can impact consumption of fruit and vegetables and produce incentive programs remained on the federal policy agenda.

Local Farms, Food and Jobs Act of 2013

Expanding upon the results of HIP, in April 2013, Representative Chellie Pingree (D-ME) introduced a marker bill^d, <u>H.R. 1414, the Local Farms, Food and Jobs Act of 2013,</u> to the U.S. House of Representatives with 26 Democratic cosponsors. An additional 49 Representatives signed on as cosponsors between April 2013 and January 2014 (H.R. 1414, 2013). An identical marker bill, <u>S.679</u>, was introduced by Senator Sherrod Brown (D-OH) in April 2013 with ten cosponsors and gained an additional ten cosponsors through May 2013.⁽⁴³⁾ The Local Farms, Food, and Jobs Act included provisions for local food promotion, research, infrastructure for local food processing and distribution, and improving access to local foods.^(43,44)

This marker bill also proposed a new program to incentivize fruit and vegetable purchases by SNAP recipients, the Hunger-Free Communities Incentive Grant.^(43,44) This marker bill did not specifically reference produce prescriptions. Prior to completion of the 2014 Farm Bill, however, the National Institute of Food and Agriculture (NIFA) conducted research to gather input on this proposed program. Wholesome Wave, a national nonprofit that works to increase access to healthy food, was included in this feedback process and collected the questions, concerns, and suggestions from nearly

d. Marker bills are not meant to be passed as individual bills. Instead, members of Congress introduce marker bills to show support for specific issues. Marker bills are intended to be included within larger bills, like the Farm Bill.⁽⁴²⁾

40 of their program partners across the country⁽³³⁾. One suggestion from the Wholesome Wave network was to enable produce incentive funding to be used for produce prescription programs (M. Nischan, personal communication, January 31, 2019).

Food Insecurity Nutrition Incentives (FINI) Program

The Hunger-Free Communities Incentive Grant program which incentivized fruit and vegetable purchases by SNAP recipients proposed in the proposed Local Farms, Food and Jobs Act of 2013 was included in the final version of the <u>Agricultural Act of 2014</u>, commonly known as the 2014 Farm Bill. This newly created grant program was renamed the Food Insecurity Nutrition Incentives (FINI) program in the 2014 Farm Bill. FINI provided \$100 million in mandatory funding over five years for the newly created grant program. FINI incentivizes SNAP participants to purchase local produce. FINI is jointly managed by the USDA's Food and Nutrition Service (FNS) and NIFA.⁽⁴⁵⁾

Although the FINI Request for Proposals (RFP) did not specifically describe that produce prescriptions were eligible for FINI funding, the RFP had flexible language. This flexibility allowed for FINI funding to be used for produce prescription projects, as requested by Wholesome Wave. An interim FINI evaluation report with data from 2015 to 2017 found that five of the 47 FINI grantees were implementing produce prescriptions programs and four additional grantees were planning to start produce prescription programs in 2018. These programs were carried out in collaboration with 150 grocery stores, 27 farmers markets and one direct marketing farmer. These five grantees distributed \$344,910 in produce prescription incentives.⁽⁴⁶⁾



Local FARMS Act

Since 2014, FINI has gained significant support from members of Congress (Anonymous, personal communication, January 28, 2019). In order to garner this support, Michel Nischan, co-founder and former Chief Executive Officer of Wholesome Wave, stressed the importance of communicating the success of FINI grant funds, "sharing the good stories from the ground," to build support for FINI in between the 2014 and 2018 Farm Bills (M. Nischan, personal communication, January 31, 2019).

As the 2018 Farm Bill development process began, several members of Congress wanted to build upon the success and broad support for FINI in the next Farm Bill. Similar to the 2014 Farm Bill, Representative Pingree planned to introduce a marker bill with a strong emphasis on local food. Representative Pingree's office worked with the National Sustainable Agriculture Coalition (NSAC) and Wholesome Wave, among other organizations and constituents, to seek input on what innovative ideas should be prioritized in the next Farm Bill. Through these conversations, produce prescrip-



tions emerged as a potential policy option (Anonymous, personal communication, January 28, 2019). Wes King, Senior Policy Specialist at NSAC, noted that produce prescriptions are not a new model for many food systems practitioners, but are a new concept for most members of Congress. "It is something that people [who] are living and breathing food systems issues, [and] healthcare issues, have recognized, this growing power of food as medicine as a concept for organizing and implementing actual program work, and she [Representative Pingree] wanted to bring that to D.C... People engaged in this food systems work, it's not a new concept to them but for members of Congress, it was" (W. King, personal communication, January 1, 2019).

On the Senate side, several Senators were also working on an identical marker bill. Both Senators Sherrod Brown (D-OH) and Debbie Stabenow (D-MI) had been in discussion with constituents about their experiences with produce incentive programs and wanted to use this new marker bill, in part, to implement lessons learned from these experiences and develop the next phase of produce incentives (Anonymous, personal communication, January 28, 2019). Constituents expressed that produce prescription programs are unique compared to other produce incentives because of medical providers' involvement and that they wanted the Farm Bill to recognize the unique aspects of produce prescription programs. This feedback helped shape these senators' strategy to specifically include produce prescriptions in the marker bill leading up to the 2018 Farm Bill (Anonymous, personal communication, January 28, 2019).

Produce prescriptions were seen as a logical extension to build upon the decade of produce incentive programs. Additionally, produce prescriptions could serve as a valuable bridge for integrating agriculture and food into more healthcare-oriented efforts with a focus on improving health and reducing healthcare expenditures (Anonymous, personal communication, January 28, 2019). A Congressional staff member made similar comments about leveraging produce prescription programs to build upon the support and success of existing produce incentive programs. "We've seen that FINI worked over the past five years. We want to do the same thing over the next five years with produce prescriptions" (Anonymous, personal communication, January 28, 2019).

Two identical marker bills, <u>S. 1947</u> and <u>H.R. 3941</u>, titled the Local Food and Regional Market Supply (FARMS) Act were introduced in October 2017. In the House of Representatives, Representative Pingree introduced the Local FARMS Act with co-sponsors Representative Fortenberry (R-NE) and Representative Maloney (D-NY).⁽⁴⁷⁾ In the Senate, S. 1947, was introduced by Senator Brown.⁽⁴⁸⁾ The Local FARMS Act included renewed and increased funding for FINI, along with the Harvesting Health program, a new pilot program to fund and evaluate fruit and vegetable prescription programs.^(47,48)

The proposed Harvesting Health pilot program in the Local FARMS Act would provide grants for pilot programs "to demonstrate and evaluate the impact of produce prescription programs for low-income individuals and households." The Local FARMS Act called for \$10 million in mandatory funding and \$10 million in discretionary funding per year for the Harvesting Health pilot.^(47,48) Evaluation would assess how the pro-

gram's impact on food insecurity, agricultural and economic development, consumption of produce, and healthcare use and costs.

A Congressional staff member noted that produce prescriptions were a feasible policy ask because of the data available from Wholesome Wave's produce prescription program. "They [Wholesome Wave's produce prescription program] have a ton of data. They're highly successful. They've already proven the concept. It was much less of a risky policy ask because they've already been doing this for a few years" (Anonymous, personal communication, January 28, 2019).

An additional purpose of the Harvesting Health pilot in the marker bill was to bring attention to food as medicine issues, not necessarily aiming for produce prescription funding to be included in the final version of the 2018 Farm Bill. Produce prescriptions were included in the marker bill, not only with the hope that they would be included in the Farm Bill, but as a mechanism to raise awareness and start conversations about food as medicine interventions in Congress (W. King, personal communication, January 1, 2019).

The National Sustainable Agriculture Coalition worked with their network of member organizations to advocate for the Local FARMS Act to be included in the 2018 Farm Bill. They noted that there were many small, grassroot organizations that lobbied members of Congress about produce prescriptions, but no organization, to their knowledge, had produce prescriptions as their top legislative priority leading up to the 2018 Farm Bill (W. King, personal communication, January 1, 2019).

Food as Medicine Working Group

During the same time as the development of the 2018 Farm Bill, a bipartisan Food as Medicine working group was formed within the House Hunger Caucus. Chaired by Representative Pingree, the working group also included Representatives Jim Mc-Govern (D-MA), Roger Marshall (R-KS), and Lynn Jenkins (R-KS).⁽⁴⁹⁾ The goal of the working group was to convene members of the House of Representatives interested in food as medicine while also raising awareness of food as medicine with other members of Congress (Anonymous, personal communication, January 28, 2019). Wholesome Wave was invited to participate in working group briefings and presented on a variety of produce prescription models and case studies (M. Nischan, personal communication, January 31, 2019). The creation of this working group signifies a recognition that federal policymakers should have a role in strengthening the connection between food and health in policy and programs.

2018 FARM BILL

Dedicated Produce Prescription Funding

The <u>Agricultural Improvement Act of 2018</u>, also known as the 2018 Farm Bill, was signed into law by President Trump on December 20, 2018. It includes permanent funding, \$250 million over five years, for the newly named FINI program, the Gus Schumacher Nutrition Incentives Program (GusNIP), in honor of former Undersecretary of Agriculture and Wholesome Wave co-founder, Gus Schumacher.^(34,50) Although initially proposed in the Local FARMS Act as the Harvesting Health Pilot program, the final version of the 2018 Farm Bill included produce prescriptions within Gus-



NIP. Within this funding, a maximum of 10 percent of funding or \$25 million over five years, can be used specifically for produce prescription programs. Eligible entities will apply for grant funds to implement produce prescription programs.⁽³⁴⁾

The 2018 Farm Bill outlines that produce prescription funding must be used to "demonstrate and evaluate" produce prescriptions' impact on three outcomes:

- 1) Improved health by increasing consumption of fruits and vegetables
- 2) Decreased food insecurity
- 3) Decreased use of healthcare and therefore decreased healthcare costs

Grant recipients are required to evaluate their program impact on these three outcomes. Additionally, they must prescribe fresh produce to participants and collaborate with a healthcare provider to implement the program. The Farm Bill includes several optional components for grantees to implement, including providing incentives to buy fresh produce, sharing nutrition education resources, and developing accessible outlets for participants to purchase fresh produce.⁽³⁴⁾

The decision to include produce prescriptions within GusNIP was a strategic move to build support and ensure smooth program implementation. A Congressional staffer noted that "for strategic purposes, it was more feasible to get it in under the umbrella of FINI because FINI is such a bipartisan, win-win program that everyone recognizes should continue so it was easier to take on something that everyone was sure would be in, then to include it as its own thing in its own realm" (Anonymous, personal communication, January 28, 2019).

Barriers to the Inclusion of Produce Prescription Programs in the 2018 Farm Bill

Produce prescription funding overcame several barriers prior to inclusion in the 2018 Farm Bill. An anonymous Congressional staffer heard some opposition from members of Congress in terms of costs for a produce prescription and the challenge of determining the true costs and potential savings of programs like these. According to this staffer, the Congressional Budget Office will not score the health impacts related to nutrition or take into account the potential health savings from a nutrition-related policy. As a result, these programs look much more expensive than they potentially are because they do not consider cost savings (Anonymous, personal communication, January 28, 2019).

An anonymous respondent associated with a U.S. Senator shared that some opposition to produce prescriptions was expressed due to a concern that this program was crossing the line into a healthcare program and the Farm Bill was not an appropriate source of funding for healthcare-related programs (Anonymous, personal communication, January 28, 2019). On a similar note, Monique Van Blaricom with The Root Cause Coalition noted that healthcare organizations who are partnering with community-based organizations have indicated caution on using the term 'prescriptions' in this manner. According to Monique, by using the term 'prescription' it could potentially open the community-based organization up to more rigourous Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliance requirements. "As more and more health systems are embarking on cross-sector collaborations with community-based organizations through the creation of interventions like a produce prescription program, it is going to be crucial for community-based organizations to understand the specific health care regulatory requirements to ensure that they and the health system are not opened up to liability issues" (M. Van Blaricom, personal communication, January 18, 2019). Although not mentioned by other respondents, using the term "prescription" may be a challenge that produce prescription programs face in the future and implementing organizations may want to consider using alternative language to avoid liability.

FUTURE OF PRODUCE PRESCRIPTIONS

Funding Mechanisms

Several respondents shared that including produce prescriptions in the Farm Bill was part of a larger strategy to bring attention to the potential for food as medicine interventions to work towards long-term funding from other sources. An anonymous Congressional staffer noted, "there could be opportunity in the next few years with a Democratic led House to do healthcare policy reform. And making sure that people understand the benefits of why produce prescriptions or other food is medicine policies getting into that would be beneficial long-term" (Anonymous, personal communication, January 28, 2019).

Several respondents felt strongly that funding should extend beyond the Farm Bill to include more health-oriented funding streams. An anonymous Congressional staffer expressed that this funding should not be under USDA for the long-term and instead should originate from Health and Human Services due to their ability to influence Medicare and Medicaid policy (Anonymous, personal communication, January 28, 2019). Another Congressional staffer echoed this opinion for future funding of produce prescriptions. "I think the real impact would be to influence federal healthcare policy. If we could get fruit and vegetable prescriptions somehow incorporated into Medicare and Medicaid, or [get] certain foods reimbursed through Medicare, Medicaid, I think that's where the big broad impact would be" (Anonymous, personal communication, January 28, 2019).

Similarly, Wholesome Wave hopes to work towards funding for produce prescriptions from other federal revenue streams, including Medicare and Medicaid. "Being able to use ag money for things like produce prescriptions, that's great but when you look at the size of Medicare and Medicaid and you think of the notion of being able to have Medicare and Medicaid code fruits and vegetables as reimbursable because they're preventive, imagine what that would do to local and regional farm economies...Our big hope...is that a federally funded pilot could get the attention of folks on the health committees" (M. Nischan, personal communication, January 31, 2019).

Wes King described a hope for insurance companies to fund these programs as a strategy to reduce costs and improve patient health by investing up front to support healthy diets. He was quick to note, however, that sound evaluation and research is needed to make this funding possible (W. King, personal communication, January 1, 2019).

The strategy to use the Farm Bill funding to raise awareness in Congress and build the evidence to support produce prescriptions is also reflected in academic literature. In



Mozzafarian's 2019 article on the Farm Bill's public health impacts, it is noted that the funding to evaluate produce prescription programs has the potential to produce the data necessary to transition these programs into Medicare and Medicaid.⁽⁵²⁾

Challenges: Implementation

Although produce prescriptions offer some promise to improve health, reduce food insecurity, and reduce healthcare costs, there are also potential challenges with implementation and effectiveness.

Challenges can be gleaned from the FINI evaluation interim report for 2015-2017 FINI grantees released in May 2019. Seventy-six percent of produce prescriptions were redeemed at authorized retailer locations. The lack of full redemption may be due to customers being required to bring prescription vouchers to the retail location and the prescription could be "easily lost or misplaced." Across all FINI programs, however, grantees reported that redemption rates increased after the first year of participation.⁽⁴⁶⁾

In 2014, approximately 13 percent of Americans under 65 did not have access to health insurance, and in 2012, 23 percent of Americans did not have a regular primary care provider. For both of these statistics, there are disparities by "sex, race and ethnicity, education, and family income."⁽⁵³⁾ Because the produce prescription program model originates from a healthcare provider and many Americans either do not regularly see a doctor or have access to healthcare, these people cannot access produce prescription programs.

If people do have access to healthcare, this program model relies heavily on the healthcare provider to implement the program effectively. Based on research conducted in Massachusetts for the Food is Medicine State Plan, Kristin Sukys shared that providers need more nutrition education and education about what programs and resources are available (K. Sukys, personal communication, February 4, 2019). For food as medicine interventions overall, provider education is a major barrier. Ken Kaplan, a senior health systems advisor at the Massachusetts Institute of Technology, echoed Kristin Sukys' concern about educational barriers. "One of the hurdles [to food as medicine] is medical practice. I think that everything I've heard and understand is that nutrition is not something taught very much in medical school. It is way down the totem pole of their toolkit...The problem in medicine, is that they tend not to think about what happens when you leave the hospital" (K. Kaplan, personal communication, January 18, 2019).

Additionally, Secretary of Agriculture Sonny Perdue recently announced that the National Institute of Food and Agriculture (NIFA), the agency that manages Gus-NIP funding, will be relocated to Kansas City in September 2019.⁽⁵⁴⁾ The Wash-ington Post reports that more than half of NIFA employees plan to leave their positions and not relocate to Kansas City.⁽⁵⁵⁾ The loss of institutional knowledge for administering and managing nutrition incentive grants may become a challenge for GusNIP implementation.



Challenges: Evaluation

The 2018 Farm Bill clearly articulates the purpose of produce prescription funding is to "demonstrate and evaluate the impact of the projects on the improvement of dietary health through increased consumption of fruits and vegetables; the reduction of individual and household food insecurity; and the reduction in healthcare use and associated costs."⁽³⁴⁾ Evaluating these outcomes across various produce prescription programs is expected to be particularly challenging for a variety of reasons. First, produce prescription programs vary significantly across the U.S. and the 2018 Farm Bill includes limited requirements to create consistency nationwide. Programs may vary based on inclusion criteria for participation, amount of funding provided in each

"If we could get to a place where we are all measuring for the same metrics, we would be able to make a compelling case on the need for and success of programs like this" prescription, the location and type of venues that accept prescriptions, presence of nutrition education, and other factors. This variation will lead to difficulty in consistently comparing program outcomes. In a study of produce prescription programs' effectiveness in reducing food insecurity in six states, Ridberg et al hypothesized that variation in outcomes may be due to location of participating markets, clinical

staff capacity to implement the program, and format of nutrition education, among other variables. Based on this study, Ridberg et al recommends that future research includes more "robustly controlled trials" to determine causality and "comparative effective studies" to determine impacts of produce incentives versus nutrition education.⁽²⁴⁾ Previous research has also found that it is difficult to accurately measure fruit and vegetable consumption for a variety of reasons.⁽⁵⁶⁾ This may make it difficult to accurately track levels of produce consumption associated with participation in a produce prescription program.

Existing evaluations of produce prescription programs have also measured a variety of health outcomes, as noted in the introduction. The 2018 Farm Bill notes "improvement of dietary health" and "reduction in healthcare uses and associated cost" as the goals of the produce prescription funding but does not provide details on what specific health outcomes should be measured. Monique Van Blaricom with the Root Cause Coalition echoed this sentiment on the need to have consistent measurements. "If we could get to a place where we are all measuring for the same metrics, we would be able to make a compelling case on the need for and success of programs like this" (M. Brigham, personal communication, January 18, 2019). Respondents consistently noted that the diversity of produce prescription program models make evaluation particularly challenging.

In terms of healthcare savings, no study, to the author's knowledge, has evaluated this aspect of produce prescriptions. As noted in the introduction, one modeling study has shown cost savings on healthcare associated with subsidizing the costs of fruits and vegetables, but no study has measured healthcare cost savings associated with an actual produce prescription program.⁽³²⁾

It is likely that robust cost savings data on the impact of produce prescriptions will be needed in order to expand funding to additional healthcare-focused sources, like Medicaid, Medicare, or private insurance companies. In order to effectively collect and analyze this financial information, data sharing agreements between healthcare providers and produce prescription program implementers will be necessary.⁽⁵⁷⁾ The evaluation challenges noted above could limit the ability to build the evidence base to expand funding sources.

POLICY & RESEARCH RECOMMENDATIONS

Based on the findings of this report, we propose several policy and research recommendations for the future of produce prescription programs.

- Produce prescription programs will likely face evaluation challenges due to the wide array of program models across the United States. While this poses numerous challenges, there are also benefits to having a flexible program that can adapt to local contexts and needs (e.g., working in collaboration with grocery stores vs. farmers markets). USDA should carefully consider these tradeoffs when creating evaluation requirements for produce prescription grantees. USDA should assess if additional technical assistance is needed for grantees to conduct robust program evaluations. In the final FINI evaluation for existing grants and for future GusNIP grantees, evaluators should assess the level of nutrition education of healthcare providers writing produce prescriptions and attempt to determine if level of provider knowledge impacts patient outcomes. Evaluations should also explore reasons for high versus low prescription voucher redemption rates.⁽³⁰⁾
- As produce prescriptions and food as medicine interventions continue to gain support, policymakers, along with food systems and health advocates, will likely explore opportunities for funding future produce prescription programs via healthcare funding streams, such as Medicare, Medicaid, and private insurers. If available, evaluation data on cost effectiveness and health outcomes will likely support these funding efforts. The Centers for Medicare and Medicaid Services (SMS) should pilot produce prescription programs with targeted Medicare and Medicaid populations in order to assess healthcare cost savings.
- Conduct thorough research to determine if produce prescription programs can legally be called "prescriptions." Not all healthcare providers who participate in produce prescription programs have the authority to prescribe medication. For example, nutritionists in Washington serve as the healthcare provider who "prescribes" produce prescriptions, but nutritionists are not authorized to prescribe medications.^(20,58) If research determines that using the term "prescription" creates liability or concern, USDA should alter the language in the GusNIP program materials and advise all grantees accordingly. As produce prescription programs gain popularity, however, it may be confusing to community members and participants to change names due to existing brand recognition.
- Private insurance companies should explore participating in produce prescription programs and if possible, partner with USDA and other federal agencies to share data and program evaluation results. To encourage more participation from private insurers, the National Association of Insurance Commissioners

(NAIC) should consider crafting consistent state-level model legislation and/or regulation to support produce prescription programs nationwide.

The extent to which produce prescriptions can help to increase fruit and vegetable consumption, reduce food insecurity, and decrease healthcare costs needs to be better understood. Throughout the 2018 Farm Bill funding cycle, valuable data, programmatic insights, and political support will likely inform future directions of produce prescriptions interventions and funding sources.

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