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FOOD IS MEDICINE

ADVANCING PRODUCE
PRESCRIPTIONS AT
THE STATE LEVEL

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TABLE OF CONTENTS

.....

03

EXECUTIVE SUMMARY

ACKNOWLEDGEMENTS

04

BACKGROUND

FOOD & MEDICINE

*PRODUCE PRESCRIPTIONS
AS A SOLUTION*

07

ADVANCING PRODUCE
PRESCRIPTIONS AT THE STATE
LEVEL

PROJECT GOALS

PROPOSED INTERVENTION

THEORIES OF CHANGE

*CHALLENGES &
CONSIDERATIONS*

CHOOSING A STATE

NEXT STEPS

ALTERNATIVE AVENUES

15

CONCLUSION

16

REFERENCES

EXECUTIVE SUMMARY

In this paper, we propose that access to “produce prescription” programs be expanded through the implementation of state-mandated health benefit legislation in California and Massachusetts. Produce prescription programs serve as a novel and necessary connection between food and healthcare systems, drawing on the role of healthy food access as a vital social determinant of health. Building off legislative support for similar measures that integrate medically-tailored meal programs with state welfare services, we propose the expansion of such programming to all health insurance plans within the state (with the exception of private employer-funded group plans). Not only will this reform promote health and food security, it also has the potential to provide cost savings to vendors and health insurance providers, and to support positive environmental outcomes within the broader food and agricultural system.

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BACKGROUND

FOOD & MEDICINE

Food has played a fundamental role within healthcare for centuries, and its use in both preventative and therapeutic medicine has been documented in medical texts dating as far back as the Hippocratic epoch. A quote attributed to Hippocrates himself, “let food be thy medicine, and let medicine be thy food,” further reiterates how nutrition and dietetics have been viewed persistently as key to the optimization of health since ancient times. Health itself is a dynamic state, described by the World Health Organization as one “of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.”¹ This definition provides the various facets through which we can explore the age-old link between diet and wellness, and sets the stage for an assessment of the ways food serves as a foundation for human well-being.

The foods people consume ultimately define a population’s health; dietary risk factors are one of the biggest contributors to the global burden of disease and responsible for one in five deaths worldwide.² Although the health benefits reaped by following a plant-rich diet have been documented in many ways, the “standard American diet,” which includes large quantities of meat, dairy, sugary, and processed foods, has precipitated a dramatic increase in chronic disease rates and poses a similarly dire threat to the planet.³ Research underscores these dangers: consumption of more than four servings of ultra-processed foods per day was associated with a 62% higher all-cause mortality rate than consumers of less than two portions per day, plus significantly higher rates of cardiovascular and cerebrovascular disease.⁴ Although diet is intertwined with physical health, a comprehensive change in culture and mentality is required to integrate this understanding into modern healthcare, including a shift away from the patient as a passive participant to an active advocate for their own care. Currently, compliance with health-promoting national dietary guidelines is poor. For instance, although fiber is essential for reducing incidence of and mortality from non-communicable diseases such as diverticular disease, ischemic heart disease, stroke, type 2 diabetes and colon cancer, only 9% of people currently achieve recommended levels of the macronutrient per day.⁵

A recent study which evaluates dietary factors and non-communicable diseases in 195 countries further quantifies the implications of modern food patterns on human health. It finds 11 million deaths in 2017 were due to poor diet: 10 million as a result of cardiovascular disease, the remainder from cancer deaths and type 2 diabetes.⁶ Food is thus undeniably a crucial pillar for preventative medicine. The EAT-Lancet Commission argues that it is, in fact, “the single strongest lever to optimize human health and environmental sustainability on Earth.”⁷ In contrast to pharmacotherapy alone, a balanced, whole-foods diet wields the power to not only prevent and treat, but also reverse, chronic illnesses including diabetes and high blood pressure. Even simple changes, such as reducing saturated fat, cholesterol and salt intake, and increasing dietary fiber, can have a huge impact on overall health and well-being, as well as the prevention of obesity-related disease.⁸ The emergence of the Planetary Health Diet earlier last year, a global initiative which proposes a plant-based diet as a sustainable means of feeding a population of 10

billion is a powerful move in the right direction and promises significant health and environmental benefits.⁹ By pushing food to the front line of healthcare, its potential as a tool to prevent disease and maintain human and environmental well-being can be fulfilled.

The influence of food on health, however, extends much further than our physical state to encompass mental well-being as well. Research is emerging that highlights the negative corollaries of consuming nutrient-poor, energy dense foods on brain health. Diet, among other lifestyle components, has been repeatedly identified as contributing to the genesis of mental illness, yet largely ignored in therapeutic approaches. Just as cardio-metabolic diseases depend heavily on diet for primary and secondary prevention, the same may be true for psychiatric disorders. Unsurprisingly, the most common deficiencies occurring in patients with mental disorders are precursors to neurotransmitters, including B vitamins, omega-3-fatty acids and amino acids.¹⁰ Furthermore, diets low in carbohydrates have been shown to precipitate depression in susceptible individuals, given that the production of serotonin and tryptophan are triggered by carbohydrate consumption.¹¹ Evidence thus suggests a high-carbohydrate, low-GI, plant-based diet, centered around whole grains, fruit and vegetables, results in long-lasting improvements in the mood and energy-levels of patients with mental health challenges.¹²

Other studies assessing the impact of diet as an adjunct to pharmacological and psychological treatment of depression echo the suggestion that dietary changes may be an efficacious means of managing the condition and associated with positive mental health outcomes.¹³ The close correlation between the extent of dietary change and the extent of improvement in depressive symptoms reiterates the need for further studies to assess nutrition's potential in the prevention and treatment of mental disorders, especially given the rising rates of mental illness and the stigma which continues to surround antidepressant use. Furthermore, depression incurs high societal costs and is a leading cause of disability worldwide.¹⁴ Thus, it is essential that we begin to accept nutritional medicine as “a mainstream element of psychiatric practice” as it constitutes an accessible, affordable, efficacious and side-effect free treatment strategy for the general population.¹⁵

While food in isolation is not a panacea for achieving health and longevity, together with exercise it forms the foundation for good health and constitutes one of our greatest weapons against the global epidemic of preventable chronic disease. Healthcare approaches that integrate a “food as medicine” approach have the potential to slash our burden of chronic disease and ballooning costs, so it is paramount that patients feel engaged and empowered by their healthcare providers. A balanced diet may not be as prescriptive or easy to dispense as a pill, with doses and formulations for every eventuality, but it is arguably the most powerful, accessible and affordable tool to drive global well-being that we have. We need to integrate it into health law and policy.

PRODUCE PRESCRIPTIONS AS A SOLUTION

Across the country, local partnerships between farmers' markets, community health clinics, community-based organizations, and research institutions have piloted numerous “produce prescription” programs. In these programs, physicians identify at-risk patients—either by a diagnosed diet-related health condition (such as diabetes, obesity, or celiac disease), a qualifying

income level, or both—and write “prescriptions” for the consumption of subsidized nutrient-rich foods.¹⁶ The “prescription” is typically provided in the form of a voucher, which can be used for the purchase of fresh or frozen fruits and vegetables at participating retail partners, which may include farmers’ markets, grocery chains, or corner stores. Figure 1, from the Utah Department of Public Health's Fruit and Vegetable Prescription Program (FVRx), provides an example.¹⁷

The cost of fruits and vegetables provided through the program is subsidized or fully covered by relevant stakeholder groups, such as research institutions and community-based

organizations, or through private or public grants. Patients typically redeem the prescription directly at the vendor site, and vendors receive reimbursement from the funder.

In light of the obesity epidemic, there has been growing interest in the use of financial incentives such as produce prescription programs for dietary behavior change, with a particular focus on access to nutritious food as a vital social determinant of health. According to the USDA’s 2018 annual report, 37 million Americans, including more than 11 million children, face hunger.¹⁸ Those living in food-insecure households lack consistent access to enough food for an active, healthy life, due to a lack of financial resources for food. They often lack financial resources to obtain or easily access nutrient-rich foods, such as fruits and vegetables, while energy-dense-but-nutrient-poor foods are abundant and highly marketed.

Produce prescription programs use monetary incentives to reduce the social cost of attitudinal change (by altering preferences through nutrition education) and the financial cost of behavioral change (by subsidizing healthy foods for consumers with low incomes). In the 2018 Agricultural Improvement Act, the federal government allocated \$4 million for produce prescription pilot programs for each fiscal year 2019 through 2023.¹⁹ Programs funded by these grants, depicted below and including produce prescription pilots, aim to increase fruit and vegetable purchasing among SNAP (Supplemental Nutrition Assistance Program) consumers by providing incentives that stretch their food dollar. These projects have a positive impact with the potential for a trifecta of benefits that impact: local farmers and/or grocery store owners (through an increase in sales and expansion of their customer base), consumers (through improvements in diet, food security and health), and local economies (through the benefits that accrue to the involved parties and associated public cost savings for healthcare). As seen below, 52 grants were awarded in 2019 and 2020 to implement programs that aim to increase fruit and vegetable consumption.²⁰ The awards have ranged from one-year pilot projects of up to \$100,000 to multi-year projects of more than \$500,000.

Figure 1: Utah Department of Health Fruit and Vegetable Prescription (FVRx) Program Flow

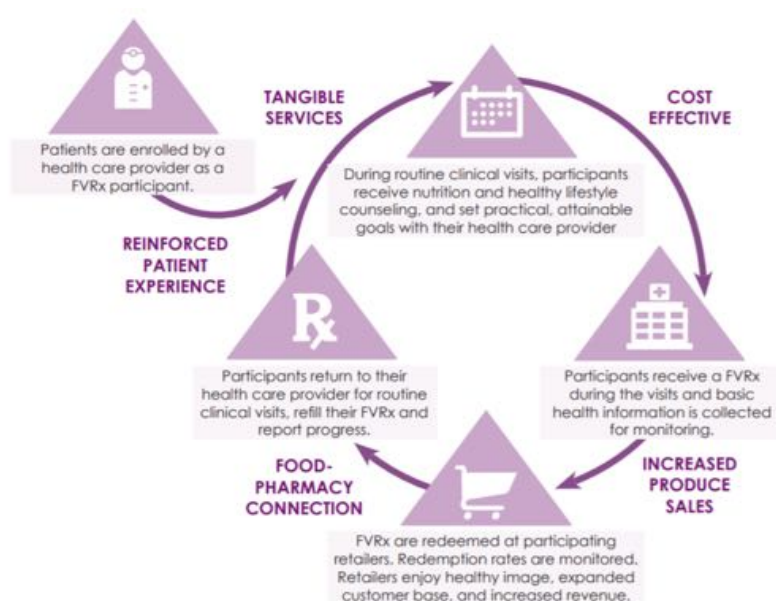
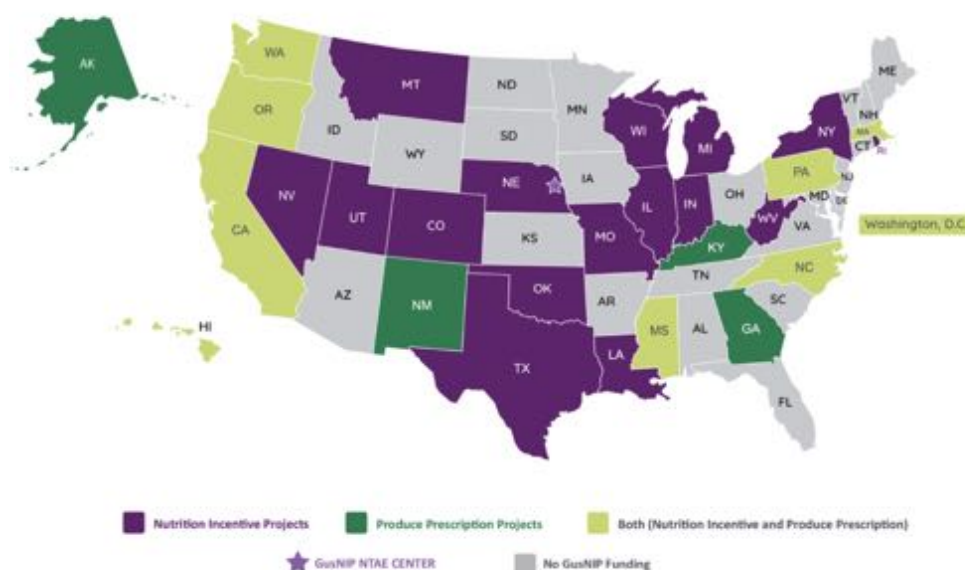


Figure 2: GusNIP 2019-2020 Grantees by Project Type



ADVANCING PRODUCE PRESCRIPTIONS AT THE STATE LEVEL

PROJECT GOALS

Our proposed intervention was designed to address three primary and three secondary (or instrumental) goals.

At the primary level, we aimed to:

1. Break down the barrier between food and medicine;
2. Promote health and food equity by addressing food insecurity and inequitable access; and
3. Replace consumption of unhealthy and unsustainable foods (meat, dairy, sugary, and processed foods) with consumption of fruits and vegetables.

Secondarily, we developed an intervention that would:

1. Provide a source of sustainable funding, thereby addressing a primary challenge for produce prescription programs;
2. Add to, rather than duplicate, existing efforts to advance produce prescriptions; and
3. Incorporate the roles of relevant stakeholders across sectors, including: patients, health care practitioners, public agencies, nonprofit partners, and private food retailers/vendors.

PROPOSED INTERVENTION

To meet these goals and integrate food and medicine, our proposed intervention is a piece of state legislation that adds produce prescriptions to the list of essential health benefits for all insurance plans offered in the state (except for employer-based group health plans). This bill would address inequities in access to healthy food, particularly for low- and middle-income individuals, and would reach groups covered by state employee health benefit plans, state Medicaid and Medicaid MCO plans, and state benchmark plans. Since access to healthy food is a vital social determinant of health, as discussed above, this intervention would advance the overall state of public health and ultimately contribute to a reduction in expenditures related to the treatment of diet-related chronic diseases. In addition to providing a sustainable funding stream for produce prescription programs in the state, the scope of the state-level health benefit mandate would create the path to cross-subsidization among participants, which is an important characteristic for the legislation's economic feasibility.

Under current policy, every state can designate a “benchmark plan” which creates a state-specific standard for health plans available on Affordable Care Act (ACA) marketplaces. Many benchmark plans simply contain the ten federal minimum Essential Health Benefits (EHBs, see Figure 5 on page 12) as specified in the ACA, but states are able to build on the federal minimum to provide additional benefits. States are required to fund any additional health benefits that are added in excess of the federal minimum EHB requirement. Changes to the EHB legislation in 2019 further permitted states to build their own set of benefits, in addition to the ten EHBs mandated by the ACA (see Figure 5). Health plans that contain added state-mandated benefits, such as a healthy food benefit, have the potential to become designated as a state benchmark plan.²¹

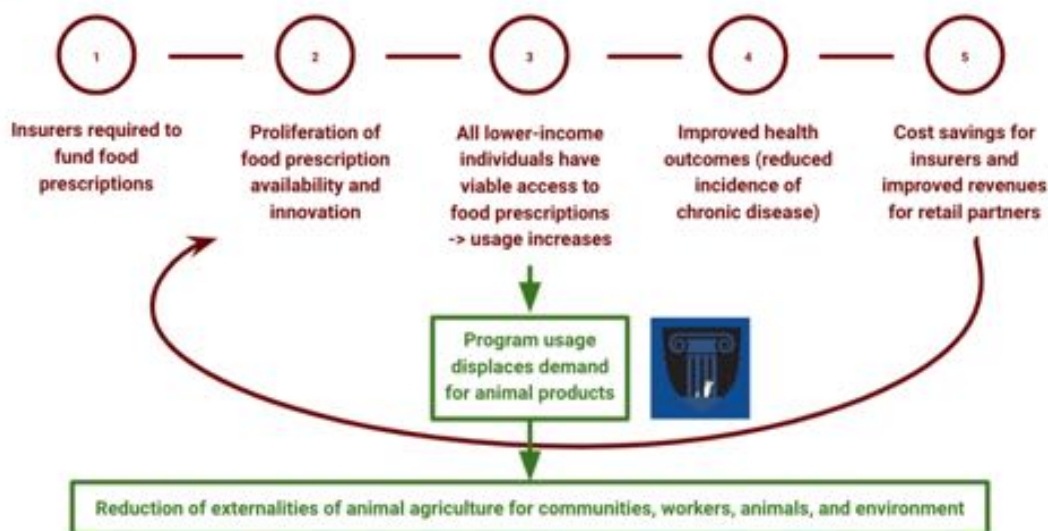
The 2019 update to these regulations creates the opportunity to add food prescription coverage to a state's benchmark plan, which would encourage or require other ACA marketplace plans in the state also to cover that benefit. However, an intervention that targets plans on the ACA marketplace only would disincentivize an already limited pool of insurers from listing their insurance plans on the ACA exchanges at all. Additionally, an intervention that solely addresses ACA marketplace plans would impact a small portion of residents in a state, as only around 11.4 million total Americans enrolled through an ACA exchange during the 2020 open enrollment period.²² For this reason, the proposed intervention targets all insurance plans offered in the state, rather than plans available on the ACA marketplace only.

As Legislation at the state-level may also run into preemption challenges with the Employee Retirement Income Security Act (ERISA), which regulates private employee benefit programs, but does not comprehensively regulate group health insurance plans in states. Preemption challenges from ERISA at the state-level may apply to a number of different types of health plans. For example, companies that self-insure are exempt from state-mandated benefit laws under ERISA.²³ For these reasons, we decided to focus our proposed legislation on state-mandated health benefits.

THEORIES OF CHANGE

The core argument for this intervention can be seen in the first theory of change below:

Figure 3: Theory of Change I, "Micro" Level



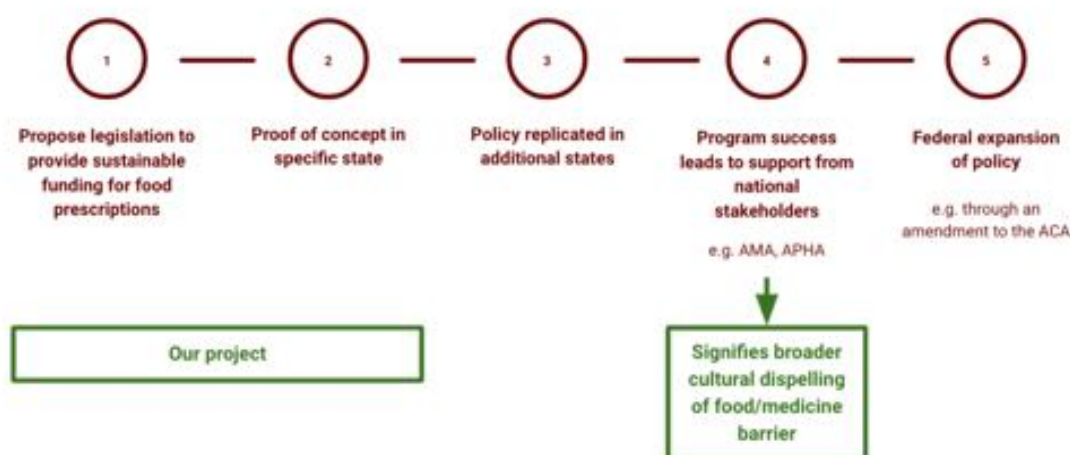
The theory of change is that the mandate for insurance plans will trigger a proliferation of produce prescription programs in the state. The use of the programs will lead to improved health outcomes over time, and in particular a reduction in diet-related chronic disease, which will in turn improve economic outcomes for insurers and the state in the form of lower expenditures for the treatment of these chronic diseases. Participating vendor partners will also obtain the benefit of improved revenues as the ultimate beneficiary of the subsidy. One of the most exciting aspects of the intervention is that these improved outcomes for all stakeholders will drive a positive feedback loop, or “flywheel,” in which the economic benefits will feed back into greater investment in and expansion of the programs themselves, which will in turn lead to greater participation, improved health outcomes, and further economic benefits. It is a virtuous circle.

Additionally, as these programs are deployed, the prescriptions will act as a form of subsidy for fruits and vegetables. In theory, the resulting increase in demand for fruits and vegetables among participants would displace some demand for animal products, and thus—on net—reduce the negative externalities associated with the production of animal products (including justice issues for workers, animals, and the environment.) The expectation of these additional positive externalities is only theoretical and relies on the core assumption of displaced demand. Since the primary focus of existing produce prescription programs is the health outcomes for participants, extant research has focused primarily on health benefits and not on the intersection with these other justice areas. We strongly recommend a concurrent research agenda that takes this broader view to determine how produce prescription programs impact demand for animal products, if at all, as the results have important ramifications for the overall net impact of the legislation on these intersecting justice interests. If they do displace demand, they could be an unusually non-controversial avenue through which to

decrease the influence of industrial animal agriculture. If, however, such research were to show that the subsidy results in higher demand for animal products (which is theoretically possible if, for example, participants choose to spend any savings from the voucher on more animal-based foods), the intervention would certainly need to be revisited. Overall, we believe that providing this form of private “subsidy” for plant-based foods (which are publicly subsidized at a much lower rate than animal-based foods: “the U.S. government spends up to \$38 billion each year to subsidize the meat and dairy industries, with less than one percent of that sum allocated to aiding the production of fruits and vegetables”) will be likely to create additional positive externalities for human, animal, and environmental health.²⁴

In addition to the first theory of change, which applies within a single state, there is a broader theory of change associated with the scalability of this intervention and its impact on the cultural understanding of the relationship between food and medicine:

Figure 4: Theory of Change II, “Macro” Level



The implementation of this intervention within a single state could be used to prove the concept and demonstrate the existence of the positive feedback loop identified in the first theory of change, above. If successful, we would then expect to see similar approaches to sustainably funding produce prescriptions via a health benefit mandate in other states, as well as public approval and support from national stakeholders such as the American Public Health Association and American Medical Association—a development that would powerfully symbolize the dissolution of the cultural barrier between food and medicine. This kind of acceptance would pave the way for further federal support of similar legislation. While this is obviously a long road, it will begin with the willingness of a single state to make a broader bet on a significant and sustainable funding source for produce prescription programs.

CHALLENGES & CONSIDERATIONS

There are several important challenges and considerations to explore in depth when determining the feasibility and formal structure of this intervention. The first is the economic feasibility of the proposed legislation: *Will it achieve the expected cost savings?* In support of the program's viability, there is existing preliminary research that supports the cost effectiveness of produce prescription programs, including a study that predicts \$39.7B in formal savings from a 30% produce subsidy program.²⁵ That said, there is a "chicken and egg" dynamic between research and implementation, and the model cited above relies on many assumptions that need to be verified in practice. A 2016 study of the nine-county produce prescription program in Washington state revealed that "most survey respondents (88.2%) reported eating more fruits and vegetables than previously as a result of the prescription"²⁶ and, as discussed below, the passage of food-as-medicine and medically-tailored meal legislation in Massachusetts, New York, and California will provide additional ongoing opportunities for frontier research.²⁷ We recommend that research partners also be included in the implementation of our proposed intervention to confirm the theory of change and improve on the efficacy of the program design over time. To the degree that the lack of highly-targeted research proves to be a political barrier, our intervention could in theory be amended into the form of a pilot project. That said, as discussed above, some of the feasibility relies on the statewide scale, which creates a more legitimate opportunity for cross-subsidization.

The second important consideration is logistical: *Will vendors get on board?* The cross-sectoral nature of produce prescription programs often requires private sector collaboration from food retailers to ensure that participants have convenient access to "fulfill" the prescriptions. Because private retailers have distribution expertise, it makes sense to leverage existing retail infrastructure, rather than attempt to recreate the wheel. This is particularly true given that individuals have limited time and it may be difficult to insert another location into patient shopping patterns. The importance of retailer involvement was borne out in our interviews, in which practitioners on the ground cited the presence or lack of a champion within the partner corporations as an essential factor for success.²⁸ While there are no clear "sticks" that can be used to guarantee retailer involvement, we recommend the use of a "carrot" instead: specifically, the creation of a pool of available grant funds or tax breaks that positively incentivize participation. In states that already have existing appropriations to produce prescription programming, these funds could simply be shifted over, since the intervention itself moves costs covered by those original appropriations onto the health plans.

A third challenge, also logistical in nature, is the question: *Who will administer and enforce the legislation?* While the exact answer will depend most heavily on the context of the specific state in which the intervention is deployed, it is likely to involve a combination of the state and federal Department of Health and Human Services or Department of Public Health (HHS), which will provide the relevant substantive expertise, and the state Insurance Commission or Bureau, for formal oversight of the legislation itself.

A fourth concern for this proposed intervention, and perhaps the most significant, is its legislative feasibility and the question: *What is the likelihood of preemption?* As would be true for any state-level intervention, a full preemption analysis of relevant federal laws is necessary. In particular, any state-level attempt to mandate a food prescription benefit should not conflict with the Patient Protection and Affordable Care Act (ACA). The ACA created, among many of its other provisions, online marketplace exchanges for people with qualifying incomes to purchase small group and individual insurance plans. Within these

Figure 5: Ten Essential Health Benefits (EHBs) of Affordable Care Act Exchanges

Ambulatory patient services
Emergency services
Hospitalization
Pregnancy, maternity, newborn care
Mental health and substance use disorder services
Prescription drugs
Rehabilitative services
Laboratory services
Preventive and wellness services, chronic disease management
Pediatric services, including oral and vision care

exchanges, the ACA mandates ten federal “essential health benefits” (EHB) that must be covered by any plan listed on the marketplace (see Figure 5, above).²⁹ These ten benefits set the minimum requirements for a health insurance plan listed on any state or federal ACA marketplace website.

Separate from federal EHB requirements, state-mandated health benefits are also common. These laws typically fall into one of three varieties: healthcare services that must be covered, healthcare providers (other than physicians) that must be covered, and dependent persons (or other relatives) that must be covered by insurance plans within the state. Typical mandated healthcare services include contraception, substance abuse treatment, prescription drugs, and smoking cessation programs. We are particularly interested in the mandated coverage for preventive health services, as this legislation would be the most similar to the preventive nature of a required food prescription benefit. Legislation for state-mandated coverage for preventive healthcare has the potential to garner bipartisan support. One recent example of this is a bipartisan 2017 law that mandates coverage for all FDA approved “tobacco cessation medicines and services” in Kentucky.³⁰ As mandated by law, this coverage applies to all health benefit plans, Kentucky’s Medicaid plan, and any Managed Care Organization (MCO) that contracts with Kentucky’s Medicaid to provide health insurance. If such a law is feasible in Kentucky, we believe this proposed legislative intervention should be able to function without federal preemption.

A fifth and final concern is the political feasibility of this legislative intervention. We considered the question: *Is legislation the ideal avenue for advancing produce prescription programs?* Legislation may not be the best path in states that do not support increases in healthcare spending, thus it is important that we carefully select states that would welcome legislation for a state-mandated food benefit. As this intervention centers around the concept of food as medicine, it is essential that we choose a state that readily accepts public health interventions that address social, cultural, and environmental determinants of health, in addition to individual-level determinants such as one’s lifestyle, diet, and exercise.

CHOOSING A STATE

Given the criticism that health benefit mandates may increase the cost of healthcare and health insurance, it is important that this intervention be piloted in a state(s) where resistance to the legislation will be minimal. After careful consideration, we decided this intervention would prove most effective if implemented in California or Massachusetts. Per the “macro-level” theory of change above, we believe implementing a mandated food benefit in a pilot state will lead to proof of concept and support expansion of the intervention over time.

The strongest potential states for this intervention are states with a robust history of food prescription programs that have ideally been funded with state appropriations in the past. States that have a strong history of food prescription programs are likely to have substantive expertise on implementation and vendor partnerships; consulting with the leaders of current programs could facilitate the implementation of a state-mandated food prescription health benefit. Additionally, the Medicaid delivery infrastructure determined the potential impact of the intervention in each state. Preferably, this health benefit mandate would apply to a state which contracts with private Managed Care Organizations (MCOs) to provide its Medicaid services to individuals. This would push the cost of the program onto the private MCO insurance providers, as opposed to a state which provides its own public Medicaid program. Though the implementation costs of mandating coverage of produce prescription programs may be high, there is evidence that these programs are cost-effective and could save money for private and public insurers alike.³¹ It would be important to prove this concept to private MCO insurers, and not just state Medicaid providers that deliver insurance solely through public means. Third, states which have a demonstrated attention towards addressing the social determinants of health were prioritized for the intervention. Social determinants of health are defined as “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”³²

States with previous legislation, either introduced or passed, regarding the funding of produce prescription programs and/or medically-tailored meals would be ideal for this intervention. In the past couple of years, New York, California, and Massachusetts have all passed legislation which funds medically-tailored meals for their respective Medicaid programs or through their list of covered social services.³³ In these states, there is bipartisan support towards the allocation of state funds towards produce prescriptions. This narrowed the focus to these three states in particular, as the state legislators who sponsored the medically-tailored meal legislation are likely to be proponents and might be willing to collaborate on the proposed intervention. The final criteria that influenced the choice of state was the ballot initiative infrastructure within each state. If the proposed legislation were to become politically infeasible, an alternative path to a state mandate could be through a ballot initiative. Given that produce prescription programs are thought to be a win-win scenario for patients, healthcare systems, and food retailers, we assume that this intervention has the potential to be supported widely by the public. Obtaining public support for a ballot initiative could be a viable means of achieving this intervention in states where it may not be widely supported by the governor or state legislature. Massachusetts and California are both known for their strong history of ballot initiatives.



Of the above criteria, California and Massachusetts stand out as the most viable venues for deploying this intervention. California meets all criteria and Massachusetts meets all but the first, as it does not yet have many robust existing produce prescription programs throughout the state.

NEXT STEPS

State-level power mapping should be performed in both California and Massachusetts. In each state, current practitioners of food prescription programs should be connected with state legislators who might be willing to sponsor our proposed legislation, and the power mapping should determine the ideal governing body to enforce the mandate. Each state's Department of Public Health, Department of Health and Human Services (which typically oversees state Medicaid programming), and Insurance Commission or Bureau will need to be involved.

In addition to power mapping, a full preemption analysis should be performed. In each state, we recommend consulting with a legislative attorney to ensure our proposed legislation is not preempted by existing federal legislation, including the ACA or ERISA. A preemption analysis would also give insight into how best to achieve regulatory compliance among health plans which are subject to the state-mandated benefit. We also recommend a review of the current state health insurance statutes. The proposed legislation may have to amend or supplement a current state insurance statute, or alter the state definition of a "health plan". More simply, it might be possible to integrate food prescriptions directly into the list of state-mandated health benefits that insurance plans are required to cover.

ALTERNATIVE AVENUES

Aside from our recommended state-level health benefit mandate, produce prescription programs have the potential to be expanded through linkage with existing welfare programs, public insurance options, and through innovative funding mechanisms. There remain many viable alternatives to our proposed legislative intervention at the federal, state, and local levels.

Federal avenues to expand produce prescriptions include the integration of a food benefit to patients covered by Medicare and Veteran's Affairs health plans. Another federally funded option to expand produce prescriptions would be to offer greater access to these programs through welfare programs that target food insecurity, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The Harvard Center for Health Law and

Policy Innovation recently authored a report, “Mainstreaming Produce Prescriptions,” which focuses on potential federal-level avenues for expanding access to produce prescription programs and provides twenty specific recommendations to advance this work.³⁴

Another federal intervention may address the way in which the U.S. Department of Health and Human Services (HHS) defines “health plans.” In current regulations, a health plan is an insurance plan that pays for the cost of healthcare services.³⁵ However, the HHS has clarified in the past that supplemental nutrition programs, such as the SNAP food stamp program, are exempted from their definition of a “health plan” because they are not principally focused on paying for the cost of healthcare services, but rather provide nutrition to low income families.³⁶ Despite the HHS distinction between food and healthcare, which has been in place since the year 2000, we believe there is evidence that its removal would prove not only cost-effective but also beneficial for long-term health outcomes.

At the state level, access to produce prescription programming may be expanded through Medicaid’s Section 1115 waivers for low-income residents. Even at the local level, produce prescription programs can obtain sustainable funding sources through local taxes, such as a sugary beverage or an unhealthy foods tax. San Francisco is currently using funding from a tax on sugar-sweetened beverages to bolster its health promotion and produce prescription programming.³⁷ This funding model could be easily scaled to other comparable cities.

CONCLUSION

The food we consume is an essential component of our health, yet the therapeutic effects of a healthy, nutrient-dense diet are not often thought of as an essential component of our healthcare. The consumption of a diet rich in whole fruits and vegetables has the potential to maintain physical and mental health and prevent obesity, cancer, and countless other diet-related illnesses. We are in need of systems-based solutions that radically reimagine the link between food and medicine and the role that subsidized produce programs have in preventive healthcare. We therefore propose a legislative intervention to implement a state-mandated health insurance benefit that covers produce prescriptions in California and Massachusetts as an interdisciplinary approach to improve food security, human health, and environmental well-being.

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