CENTER *for* HEALTH LAW
and POLICY INNOVATION
HARVARD LAW SCHOOL

September 16, 2020

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Massachusetts State House
24 Beacon Street, Boston MA 02115

Senator Julian Cyr
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Esp. Deputy CEO and General
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Representative Chynah Tyler
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Task Force Co-Chair Dr. Assaad Sayah
CEO, Cambridge Health Alliance;
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Dear Senator Sonia Chang-Diaz, Senator Julian Cyr, Representative Chynah Tyler, Representative José F. Tosado, Task Force Co-Chair Michael Curry, Task Force Co-Chair Dr. Assaad Sayah and other appointees of the State Legislature's Health Equity Task Force,

On behalf of the Center for Health Law & Policy Innovation of Harvard Law School (CHLPI) and the undersigned organizations and individuals, we are grateful for the opportunity to provide testimony on recommendations that address health disparities for underserved and underrepresented populations during the COVID-19 pandemic.

CHLPI advocates for legal, regulatory, and policy reforms to improve the health of underserved populations with a focus on the needs of low-income people living with chronic illnesses. CHLPI, together with Community Servings, co-leads the Food is Medicine Massachusetts, a multi-sector coalition comprised of over 70 organizations representing nutrition programs, patient and advocacy groups, health care providers, health insurers, academics, and professional associations, all committee to implementing the goals of the State Plan.

We are writing to request that the appointees and members of the State Legislature's Health Equity Task Force include improving access to food is medicine services within their interim report describing initial recommendations and issues requiring further study. The COVID-19 pandemic has illustrated that neither risk nor outcome associated with the virus is equitably distributed, leaving communities of color most vulnerable due to historical injustices, poor resource distribution, and systemic racism.[1,2] Black, Latinx, and indigenous individuals, as well as foreign-born non-citizens, are overrepresented in COVID-19 caseload data.[3] Unsurprisingly, these populations also suffer from higher rates of food insecurity and diet-related chronic conditions that increases their risk of serious complications from COVID-19.[4,5] Improving access to food is medicine programs may help combat health disparities during the COVID-19

pandemic by addressing the specific food and nutrition needs of these individuals. Specifically, food is medicine services can assist by:

1. Decreasing food insecurity within underserved and underrepresented populations;
2. Assisting in preventing and managing diet-related chronic diseases; and
3. Minimizing exposure for those at risk for, sick with, or recovering from COVID-19.

What is Food is Medicine?

Food is Medicine refers to a spectrum of services and health interventions that recognize and respond to the specific needs of individuals living with or at risk for serious health conditions affected by diet.[6] These services focus on chronic disease prevention, management, and treatment and include, but are not limited to:

I. Medically Tailored Meals developed to address the dietary needs of an individual's medical condition by a Registered Dietitian Nutritionist (RDN). Individuals are referred by a health care provider or plan.

II. Medically Tailored Food Packages that include a selection of minimally prepared grocery items selected by a RDN or other qualified nutrition professional as part of a treatment plan for an individual with a defined medical diagnosis. The recipient of medically tailored food is typically capable of shopping for and picking up the food and preparing it at home, and is referred by a health care provider or plan.

III. Nutritious Food Referrals that provide funds for free or discounted nutritious foods. Individuals must receive referrals from health care providers or plans after being identified as having or being at risk for diet-related diseases.

IV. Population Level Healthy Food Programs which provide nutritious foods for a population that currently has or is at risk for developing food insecurity or chronic disease.[7,8]

A growing body of evidence indicates that connecting low-income individuals with diet-related diseases to Food is Medicine interventions may be an effective, low-cost strategy to improve health outcomes, decrease use of expensive health care services, and improve patient quality of life.[9] Services that keep Massachusetts residents healthy, resilient, and out of the hospital are an essential part of managing COVID-19. Unfortunately, despite the evidence and new opportunities through the MassHealth Flexible Services Program, broad, equitable access to Food is Medicine interventions remains limited across our state and within communities most impacted by COVID-19.[10]

Improving Access to Food is Medicine Interventions Will Decrease Food Insecurity within Underserved and Underrepresented populations

The COVID-19 crisis has raised household food insecurity levels to the highest rates ever recorded in the US.[11] Changes to food access and severe job losses have led to food insecurity rates hovering between 14-23% this summer in Massachusetts.[12] This dramatic increase from

9.3% in 2018 has disproportionally impacted Black and Latinx communities who experienced rates as high as 26% and 27.9%, respectively, in June.[13] Simultaneously, the average food insecurity rate for Black and Latinx households with children was 32.2% and 28.5%, respectively.[14]

Individuals experiencing food insecurity often have lower quality diets, including lower intake of produce, than their food secure counterparts, contributing to poorer health outcomes.[15] While the explicit relationship between food insecurity and COVID-19 has yet to be analyzed, studies indicate that malnourishment is associated with a greater risk for various bacterial, viral, and other infections.[16] Additionally, food insecure families frequently mitigate limited financial resources by adopting health-harming coping strategies such as delaying or forgoing medical care;[17, 18] engaging in cost-related medication underuse;[19-21] choosing between food and other basic needs such as utilities;[22, 23] opting to consume low-cost, energy-dense foods;[24-26] and/or forgoing food needed for special medical diets.[27] The dual health and economic crisis that we are experiencing now exacerbates the strain on resources and further complicates the complex strategies families use to feed themselves and make ends meet.[28]

The number of SNAP applicants has been consistently growing and Massachusetts food providers continue to report extremely high levels of demand, sometimes requiring waiting lists for services.[29] Yet, many of these services are inadequate to address the food and nutrition needs of at-risk populations, especially those with underlying health conditions who are at greater risk. Improving access to food is medicine programs through the health care system such as produce prescription programs or medically tailored food packages could broaden the reach of our strained emergency food system to alleviate food insecurity. The Fresh Box program, a program that delivered fresh fruits and vegetables to individuals identified as high-risk by health care providers, for example, proved to be a vital resource both for individuals struggling to access healthy food throughout the summer and for providers looking to keep their low-income patients well-nourished outside hospital walls. Demand for the program was extremely high, but resources constrained the number of patients the organization could enroll and limited the delivery area to select neighborhoods in Boston. The Health Equity Task Force could advocate for an expansion of that program model across the state.

Improving Access to Food is Medicine Interventions Will Assist in Preventing and Managing Diet-Related Chronic Diseases

One of the greatest predictors of COVID-19 hospitalization and death is poor cardiometabolic health,[30-39] which includes obesity, diabetes, hypertension and cardiovascular disease, all of which are primarily preventable, and better managed, through improved diet and healthier food systems.[40-42] Unfortunately, low income populations, and in particular low-income individuals of color, are at the highest risk of suffering from these comorbidities, food insecurity, and COVID-19 mortality due to systemic inequities and structural racism.[43-45]

Emerging research on COVID -19 and diet-related, chronic disease includes the following:

- An early study of COVID -19 hospitalization in New York City found the odds of hospitalization among those diagnosed with COVID-19 were up to 6.2 times greater for

patients with obesity, 4.3 times greater for patients with heart failure, and 2.8 times greater for patients with diabetes.[4]

- An estimated 85% of people with Type 2 diabetes are also coping with overweight or obesity and most individuals with diabetes eventually die of heart failure.[7] Interpreting the above results from the New York City study, this means a patient with obesity, diabetes, and heart failure is *13.3 times more likely to be hospitalized* for COVID-19 than a healthy, non-obese individual of the same age.

- A study of patients hospitalized with COVID-19 in the US showed that approximately 40% had diabetes or uncontrolled hyperglycemia on admission, and death rates were more than four times higher among those with diabetes or hyperglycemia (28.8%) than those without either condition (6.2%).[17]

- As compared to other countries with major outbreaks, the US has a much higher rate of obesity, making the general population more susceptible to COVID -19 hospitalization and death. For example, the prevalence of obesity is in the US is around 40%, versus a prevalence of 6% in China, 20% in Italy, and 24% in Spain.[3]

- Research from John Hopkins suggests that hospitalizations of younger patients in the US may be largely driven by higher obesity rates in the US as compared to other countries.[3 9]

Medically Tailored Meals, Medically Tailored Food Packages, Nutritious Food Referrals, and Population Level Healthy Food Programs may help prevent, manage, and treat many of the cardiometabolic diseases associated with COVID-19 that disproportionately impact communities of color. Studies show, for example, that medically tailored meals are associated with reductions in Emergency Department visits, inpatient admissions, emergency transports, admissions into skilled nursing facilities, and total health care costs,[46,47.] Similarly, pilot studies of medically tailored food packages and nutritious food referral programs have found improvements in key health indicators such as HbA1c for individuals living with diabetes,[48, 49] fruit and vegetable intake,[50] self-efficacy, [51] and medication adherence.[52]

<u>Improving Access to Food is Medicine Interventions Will Minimizing Risk of Exposure for those at Risk for, Sick with, or Recovering from COVID-19</u>

As our state moves forward in navigating this pandemic, we must recognize the need for services that keep individuals at risk for, sick with, or recovering from COVID-19 safe, supported, and cared for at home. Food insecurity alone increases the likelihood of an individual requiring inpatient care, emergency care, and surgeries.[53,54] Addressing food insecurity and properly managing chronic disease with diet can limit an individual's risk of exposure and the need for in-person medical care.

Throughout the COVID-19 crisis, Food is Medicine providers across the state have dedicated a significant amount of time and resources to ensuring a delivery option for patients who must quarantine in their homes throughout the crisis. Health care providers have expressed extreme gratitude for the clinical-community partnerships that have formed to meet the food and nutrition

needs of COVID-19 patients, some of which might require specialized diets. Many health care centers in Eastern Massachusetts, such as Boston Medical Center and Cambridge Health Alliance, have been able to enroll high-risk individuals and COVID-19 patients in Food is Medicine programs throughout the COVID-19 crisis. Amy Smith from Cambridge Health Alliance has expressed that food deliveries "can help stop the spread of disease in high-risk populations, many of whom may be undocumented and therefore unable to access federal benefits such as SNAP."[55]

While some of these partnerships have formal agreements through the Flexible Services Program, others have been created by provider champions out of sheer need.[56] However, these clinical-community partnerships with Food is Medicine providers are limited by infrastructure, funding, program location and program capacity. In Eastern Massachusetts, for example, high-risk and COVID-19 patients may have a higher likelihood of getting connected to Food is Medicine services such as medically tailored meals, medically tailored food packages, or nutritious food referrals through their health care provider due to the higher number of organizations in the region compared to central or Western Massachusetts.[57-61] Differences in access to vital food and nutrition services for vulnerable individuals told to quarantine at home may result in disparate outcomes from COVID-19 or increased chances of community spread.

"The coordination of health providers and community-based food programs creates a 'perfect scenario', expressed Eric Rimm, and epidemiologist at Harvard University, "patients get more comprehensive support while bringing down the overall cost of health care."[62]

Conclusion

Funding remains a critical barrier to scaling Food is Medicine interventions to meet current need during COVID-19. In surveys conducted to develop the State Plan, almost half of responding nutrition service organizations identified lack of funding as a barrier to providing Food is Medicine interventions. Furthermore, only 18% of these respondents said they received any funding through contracts with health insurers or health care partners, leaving the vast majority of these organizations reliant on donations and grants to support their Food is Medicine programs. These services have proven to be a critical part of our state-wide COVID-19 response, yet the majority of Food is Medicine providers continue to be excluded from reliable, sustainable funding streams that often prioritize pantries and food banks.

A recent editorial in the Lancet, one of the world's leading medical journals said: "with COVID-19, we have not just been fighting a communicable disease alone but also a growing backdrop of non-communicable diseases, such as diabetes and obesity, that have needlessly raised the death toll. In the aftermath of this pandemic, with the possibility of a global recession, mass unemployment, and a financial deficit that could impact the world for decades, it is perhaps naïve to think that additional resources will be available to improve metabolic health and reduce the burden of chronic disease. But that is exactly what needs to happen."[63]

Improving access to Food is Medicine interventions must be accelerated in the wake of COVID-19 as national organizations like the American Diabetes Association and American Heart Association acknowledge the toll COVID-19 is taking on the lives of individuals with poor

cardio-metabolic health, highlighting the life-saving role of proper nutrition. Fortunately, healthy foods can rapidly improve metabolic health within 3-6 weeks in controlled intervention studies,[64,65] plus Food is Medicine interventions can be leveraged to help local farmers and the Massachusetts economy through increased sales of Massachusetts foods.

Black, Latinx, and indigenous individuals, as well as foreign-born non-citizens, have the greatest risk of contracting and dying from COVID-19 both across the United States and in Massachusetts, especially those who are low-income and have diet-related chronic diseases.[66,67,68,69] Improving access to Food is Medicine services is essential to addressing health disparities for underserved or underrepresented populations during the COVID-19 pandemic.

Thank you for your support of improving access to food is medicine interventions to address health disparities surrounding COVID-19 in Massachusetts.

Sincerely,

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