Produce Rx:
Addressing Inequity and Promoting Health During the Pandemic and Beyond
AGENDA

• **Moderator**: Sarah Downer, Center for Health Law & Policy Innovation of Harvard Law School

• **Opening speaker**: Dariush Mozaffarian, Tufts Friedman School of Nutrition Science and Policy/School of Medicine

• **A spectrum of produce Rx programs**:  
  • Andrea Talhami, Produce Rx Program Manager (DC Greens – Washington, DC)  
  • Alyssa Auvinen, Project Director (Washington State Dep’t of Health)  
  • Cissie Bonini, Executive Director (Vouchers for Veggies – Eat SF, San Francisco, CA)  
  • Neal Curran, Director of Food Programs (Reinvestment Partners, North Carolina)

• **Clinician perspective on produce Rx**:  
  • Jackie Fangonilo, Registered Dietitian/Chronic Care Coordinator, Mission Neighborhood Health Center (San Francisco, CA)  
  • Ileana Vink, Clinical Dietitian, DukeWELL (Durham, NC)
AGENDA

• **Payer Perspective:**
  • Ryan R. Springer, Manager of Marketing, Communications & Health Program, Community Education, AmeriHealth Caritas District of Columbia

• **Scaling Produce Rx:**
  • **Importance of research:**
    • Corby Kummer, Executive Director, Aspen Institute Food & Society Program
  • **Scaling and Sustaining Produce Rx:**
    • Neal Curran, Director of Food Programs, Reinvestment Partners
    • Katie Garfield, Clinical Instructor, Center for Health Law & Policy Innovation of Harvard Law School

• Q & A
Produce Prescriptions: Addressing Inequity and Promoting Health During COVID-19

Dariush Mozaffarian, MD, DrPH
Dean
Jean Mayer Professor of Nutrition & Medicine

Rockefeller Foundation
June 9, 2020
Global Nutrition Challenges

Health and wellbeing

Hunger, disparities

Health care costs and access

Government budgets

Private business, economic growth

Sustainability and climate change

National security
Food and Nutrition in a COVID-19 World

- **Immunity**: Bending the curve, including decreased spread and reduced severity of infection and hospitalization from COVID-19.
- **Food Insecurity**: Addressing the tremendous rise in food insecurity from lost jobs and closed schools.
- **Co-morbid Risks**: Rapidly improving metabolic risks like diabetes and cardiovascular disease, from which the great majority of US adults suffer and major risk factors for poor outcomes from COVID-19.
- **Seniors**: Addressing hidden hunger, poor access, and nutrient deficiencies which predispose older Americans to COVID-19 infection and death.
- **Disparities**: Understanding and tackling the intersections of risk among the most vulnerable.
- **Supply Chains**: Ensuring stable production and supply chains from farm to table of nutritious and affordable foods, while reducing food waste and protecting food system workers.
- **Jobs & the Economy**: Improving the economic resilience of our farmers, rural communities, and restaurants.
- **Public Outreach & Engagement**: Developing and disseminating timely, accurate information on each of these issues through effective communications and engagement approaches.
- **Science**: Accelerating discoveries on each of the issues above.
COVID-19: Impact on Food Security

- ~40 million new unemployment claims: more than 1 in 5 working Americans
- 124,000 school closures: 55 million children
- Closed restaurants
- Closed worksite, school, university cafeterias
- Disrupted supply chains
- Food waste (milk, potatoes, onions, etc.)
Diet-Related Comorbidities: Severity of COVID-19

• Analysis from New York City:
  • Obesity (BMI 30-40 kg/m²): **4.3-fold** higher odds of hospitalization
  • Severe obesity (BMI >40 kg/m²): **6.2-fold** higher odds
  • Diabetes mellitus: **2.8-fold** higher odds
  • Heart failure: **4.3-fold** higher odds
  • Hypertension: **1.2-fold** higher odds
  • Adjusted for age, sex, race/ethnicity, smoking, high cholesterol, chronic lung disease, asthma, coronary disease, chronic kidney disease, cancer.

• Similar results in other U.S. regions, the United Kingdom, Italy, and China: Diet-related diseases linked to far higher risks of hospitalization, critical illness, and death from COVID-19.

Petrilli et al., 2020; Lighter et al., 2020; several other reports
Americans Are Sick – Really Sick

- 100+ million Americans – nearly half of all adults – have diabetes or prediabetes.

- 122 million Americans have cardiovascular disease, which causes 841,000 deaths/year – about 2,300 deaths each day.

- 3 in 4 U.S. adults are overweight or obese.

- More Americans are sick, in other words, than are healthy.

American Heart Association, *Heart Disease and Stroke Statistics*, 2018
Unsustainable Rise in Healthcare Costs

Federal Healthcare Spending

- Medicare: $672 billion
- Medicaid: $566 billion

U.S. Healthcare Costs

- 28% of the total federal budget
- 30% of total state budgets
- Top concern for U.S. businesses
- Diabetes: $335 billion per year
- CVD: $351 billion per year
- Obesity: $1.72 trillion per year

Centers for Medicare & Medicaid Services, 2018
American Heart Association, *Heart Disease and Stroke Statistics*, 2018
The Milken Institute, *America’s Obesity Crisis*, 2018
Dietary Priorities: Protective Foods

**Benefit**
- Fruits, Nuts, Fish
- Vegetables, Plant Oils
- Whole Grains, Beans, Yogurt
- Cheese
- Poultry, Milk
- Eggs, Butter

**Harm**
- Unprocessed Red Meats
- Refined Grains, Starches, Sugars
- Processed Meats, High Sodium Foods
- Industrial Trans Fat

Mozaffarian D, Circulation 2016
Food is Medicine

- Medically Tailored Meal Programs
- Medically Tailored Food Packages
- Produce Prescription Programs
- Population-Level Healthy Food Programs
- SNAP, WIC, HIP, and Emergency Food Programs

Priorities for Health Care Funding

Prevention

Treatment

@D Mozaffarian

Gerald I. and Dorothy R. Friedman School of Nutrition Science and Policy
Food is Medicine: Produce Rx for Diabetes

Meals
175,000 meals per year. $60 per meal. $2,400 per patient per year.

Clinical Results (over 18 months)
≥40% decrease in the risk of death or serious complications*
Meals: HbA1c levels dropped an average 2.1 percentage points with attendance of the Diabetes Self-Management Class

Financial Results (over 18 months)
80% drop in costs for our pilot patients
$240,000 per member to $48,000 per member per year

Percent Decrease from Baseline to Current by Measure

- A1c: 17.8%
- Glucose: 26.9%
- Cholesterol: 9.8%
- LDL: 12.2%
- Triglycerides: 16.4%

https://www.geisinger.org/freshfoodfarmacy
https://catalyst.nejm.org/prescribing-fresh-food-farmacy/
Produce Rx in Medicare/Medicaid: Cost-Effectiveness

ICER ($/QALY)

- Overall
- Medicare
- Medicaid
- Dual-eligible

Cost-Effective: <$150,000/QALY
Highly Cost-Effective: <$50,000/QALY

Duration of Incentive Program

- 5 yrs
- 10 yrs
- 20 yrs
- Lifetime

Statins Primary Prevention
(Pandya et al, JAMA 2015)

Lee et al, Plos Med 2019
www.food-price.org

$25,000
$50,000
$75,000
$100,000
$125,000
$150,000
$175,000

@DMozaffarian
Financial Rewards for Protective Foods

- **Public education**: Increase demand for greater public knowledge and understanding of the benefits and value of healthier, protective foods.

- **Healthcare**: Leverage healthcare and life insurance dollars to support effective food and nutrition interventions.

- **Tax policy**: Tax strategies and other economic incentives across sectors (agriculture, retail, manufacturing, restaurant, healthcare, wellness) for R&D, marketing, and sales of healthier, more accessible foods.

- **Opportunity zones**: Expand and encourage opportunity zone incentives for food, nutrition, and wellness investments to improve equity and reduce disparities.

- **Catalyze entrepreneurship**: Launch a new national strategy for an ecosystem of evidence-driven innovation for a healthier, equitable, sustainable food system.

- **B-corporations**: Encourage and highlight B corporation status across sectors to recognize and reward integration of social and environmental priorities.

- **Mission-driven investment vehicles**: Encourage and convene investment vehicles for food and nutrition-related companies centered on health and equity.
**Food is Medicine: Rapidly Accelerating Actions**

- **2018 Farm Bill:** $25 million to test Produce Prescription Programs
- **2018 California:** $6 million to test Medically Tailored Meals (MTMs) in Medicaid
- **2019 Kaiser Permanente:** *Food for Life*, major new focus on food insecurity (CalFresh, MTMs, community interventions)
- **2019 John Hancock:** *Aspire*, first life insurance program for patients with diabetes, partnering with Google’s Verily
- **2020 Massachusetts:** New bill *Food and Health Pilot Program*, to test MTMs, medically tailored produce, produce Rx programs
It’s time for a national “moonshot” to fix our food system. We must leverage food as medicine, incentivize and shift to real food, build a strong public health and food infrastructure, and rapidly expand critical nutrition research. “A massive campaign on diet would save lives and change the course of our nation’s health forever.”

NUTRITION.TUFTS.EDU
PRODUCE Rx

• Andrea Talhami,
  Produce Rx Program Manager (DC Greens – Washington, DC)

• Alyssa Auvinen,
  Project Director (Washington State Dep’t of Health)

• Cissie Bonini,
  Executive Director (Vouchers for Veggies – Eat SF, San Francisco, CA)

• Neal Curran,
  Director of Food Programs (Reinvestment Partners, North Carolina)
How does it work?
The Produce Rx Program allows medical professionals to prescribe fresh fruit and vegetables to patients experiencing diet-related chronic illnesses with additional support for patients living in poverty.

Patients receive a $20 coupon per week to spend on produce, as well as wrap-around nutrition education from AmeriHealth Caritas and Giant’s in-store nutritionist. Produce Rx is designed to integrate healthy food access into the healthcare system, and to strengthen clinical tools for addressing patients’ needs.
Washington’s Complete Eats Rx Program

- Program name: Complete Eats Rx
- Location: Washington state
- Eligibility criteria: Food insecurity & chronic health condition (e.g., diabetes, hypertension, obesity)
- Number of clients served per year: 2,000
- Program structure: Patients receive $250 worth of vouchers over 6 months, and redeem at any of 170 Safeway stores in Washington for fresh, canned or frozen fruit and vegetables without added salt, sugar, or fat.
- Funding source: Washington state budget (2019-21 biennium)
Vouchers 4 Veggies – EatSF
Primary Location: San Francisco, CA

Program Structure

Partner with 100+ Community-based Distribution Sites
- Clinics, Hospitals, Housing Sites, Senior Centers, WIC clinics, etc.

30+ Vendor Locations
- Corner stores, grocery stores, farmer’s markets
- Focus on food deserts & underserved neighborhoods

Reach
- 5,000 households annually (9,000+ individuals)
- $20 - $40/month for 6+ months

Eligibility

- Food insecure PLUS
- Pregnant, older adult, diet-related disease, other

Funding Sources

- San Francisco Department of Public Health
- Grants and Philanthropy
- Soda Tax

UCSF Center for Vulnerable Populations
Zuckerberg San Francisco General Hospital
Program Overview

- 42 Counties in North Carolina
- ~200 Food Lion stores
- Over 2200 participants since May 2018
- Eligibility requirements:
  - Registered patients of participating clinics
  - Active SNAP beneficiary
  - Receiving care for a targeted clinical condition
- $40/month loaded to Food Lion customer loyalty card to be redeemed for WIC-approved fruits and vegetables
- Funding sources include USDA, BCBS NC, BB&T, Rockefeller Foundation
- Recently received $2.5M in state appropriations to expand the program to ~18,000 people impacted by COVID
CLINICIAN AND PAYER PERSPECTIVE

• Jackie Fagonilo,
  Registered Dietitian/Chronic Care Coordinator,
  Mission Neighborhood Health Center (San Francisco, CA)

• Ileana Vink,
  Clinical Dietitian,
  DukeWELL (Durham, NC)

• Ryan R. Springer,
  Manager of Marketing, Communications & Health Program,
  AmeriHealth Caritas District of Columbia
Future Directions: Additional Research

• **Food is Medicine Research Priorities Action Plan:** A research roadmap to inform funders and explore the protective and preventive impact of nutrition interventions in a rapidly evolving health care system.

• **Advisory Board** of researchers, payers, program providers from across the full spectrum of interventions

• An important work stream in our report will be how to **better incorporate Produce Rx access** into new studies that will engage new partners, expand the integration of Produce Rx into Food Is Medicine interventions, and broaden geographic reach.

• Please **get in touch!** With our senior advisor [Emma.Clippinger@AspenInstitute.org](mailto:Emma.Clippinger@AspenInstitute.org), and please visit [https://www.aspeninstitute.org/programs/food-and-society-program/food-is-medicine-project/](https://www.aspeninstitute.org/programs/food-and-society-program/food-is-medicine-project/).
GusNIP 2019

• $41.4M
• 23 projects (awarded in 2019)
  • 13 SNAP Incentives
  • 9 Produce Prescription
  • 1 Nutrition Incentive Hub
About the Nutrition Incentive Hub

National coalition of partners that provides training, technical assistance, and evaluation for SNAP incentive and produce prescription programs

Our objective: Strengthen access to fruits and vegetables

• Supporting Gus Schumacher Nutrition Incentive Program (GusNIP) grantees
  • Funded through 2018 Farm Bill
  • Formerly known as the Food Insecurity Nutrition Incentive Program (FINI)

This work is supported by Gus Schumacher Nutrition Incentive Grant Program grant no. 2019-70030-30415 project accession no. 1020863 from the USDA National Institute of Food and Agriculture.
The Hub: Coalition of Partners

Gretchen Swanson Center for Nutrition
- Lead on the cooperative agreement
- Based in Omaha, Nebraska
- Providing expertise in reporting and evaluation

Fair Food Network
- Based in Michigan
- Providing technical assistance and fostering innovation
SCALING & SUSTAINING PRODUCE RX

HEALTH CARE SYSTEM OPPORTUNITIES

Katie Garfield
Center for Health Law and Policy Innovation
Harvard Law School
# Short-Term Sustainability: COVID-19 Response

<table>
<thead>
<tr>
<th>Category</th>
<th>Program</th>
<th>Details</th>
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</thead>
</table>
| **Stimulus Funding**    | Paycheck Protection Program | • Small businesses & nonprofits (<500 employees)  
◦ Loans up to **2.5x average monthly payroll costs** (up to $10 million)  
◦ Partially eligible for **forgiveness**  
◦ Apply via a designated lender |
| **Federal Emergency Funding** | FEMA                      | • Private non-profit food assistance programs may apply (as can state agencies and local governments)  
◦ Federal government pays **75%** share  
◦ Covers certain costs **directly resulting** from **declared** emergency  
◦ Find out more at www.fema.gov |
| **State Funding**       | Varies                      | • State funding received from **federal stimulus** (e.g., COVID Relief Fund)  
◦ Or standard state budgets or supplemental budgets  
◦ Funds generally administered by **state agencies** |
## Short-Term Sustainability: COVID-19 Response

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Emergency Medicaid Waivers</td>
<td>COVID-response Section 1115 Waivers</td>
<td>• Budget neutrality &amp; public comment requirements <strong>don’t</strong> apply</td>
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<tr>
<td></td>
<td></td>
<td>• Expire <strong>60 days</strong> after end of the emergency</td>
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<td></td>
<td>• States have included nutrition services in applications</td>
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<tr>
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<td></td>
<td>• But no known approvals of nutrition coverage</td>
</tr>
<tr>
<td>Section 1135 Waivers</td>
<td></td>
<td>• Allows waiver of <strong>specific</strong> requirements to ensure access to services (e.g., prior authorization requirements, licensure requirements)</td>
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<tr>
<td>Section 1915(c) Template K</td>
<td></td>
<td>• Template K allows states to <strong>expand home and community-based services</strong> programs (eligibility, benefits) in an emergency</td>
</tr>
<tr>
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<td></td>
<td>• HCBS programs <strong>have</strong> covered <strong>some</strong> nutrition services (meals)</td>
</tr>
</tbody>
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LOOKING BEYOND COVID-19: LONG-TERM SUSTAINABILITY

Health Care System
- Medicare
  - Original Medicare
  - Medicare Advantage
  - Waivers
  - Managed Care
- Medicaid
- Duals
- Private Payers

Food System
- Farm Bill
  - SNAP
  - GusNIP
- Child Nutrition Reauthorization
  - WIC
Program Focus: Elderly (65+), disabled, ESRD, ALS

Program Structure:

• **Original Medicare**: Medicare Part A (Hospital) + Part B (Medical)
  • ~ 2/3 of Medicare Enrollees
  • *No coverage* of food

• **Medicare Advantage**: Medicare Part C
  • ~1/3 of Medicare Enrollees
  • May provide *supplemental benefits*, which may include *food* in some circumstances
    • Special Supplemental Benefits for the Chronically Ill (SSBCI) and
    • Value-Based Insurance Design Model
Program Focus: Low Income

Program Structure:

• **Standard Program:**
  • **Mandatory** and **Optional** benefits established by federal statute and regulations
  • **No** explicit coverage of food interventions in these categories

• **Flexibilities Used to Cover Food:**
  • Managed Care Coverage Flexibilities
  • Medicaid Waivers/State Plan Amendments:
    • **Section 1915(c), 1915(i), 1915(k)** - Home and Community Based Services
    • **Section 1115 Waivers** – Demonstration Waivers
Critical Gaps Continue to Limit Expansion

- Variation by state, program, plan
  - Reinforced by regulatory uncertainty

- Large gaps in the coverage landscape
  - Original Medicare
  - Medicaid optional and mandatory benefits

- Untapped potential to partner with the food system