



# Research and Evaluation for Medicaid Food Strategies

May 8<sup>th</sup>, 2025

**Medicaid Food Security Network Summit 2025** 

#### **Session Facilitator**





Sarah Mills
Senior Manager, Health
Systems
Share Our Strength

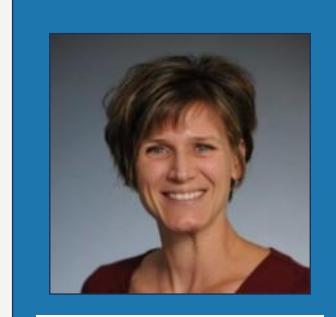


#### **Session Speakers**





**Dr. Caroline Fichtenberg**Co- Director, UCSF Siren
Project



**Dr. Jenefer Jedele**Health Economist, BCBS
of North Carolina



#### Agenda

- Introduction to facilitator and panelists
- Panelist Q&A
- Call to action







#### **Evaluation of Food Insecurity Interventions**

Caroline Fichtenberg, PhD Co-Director



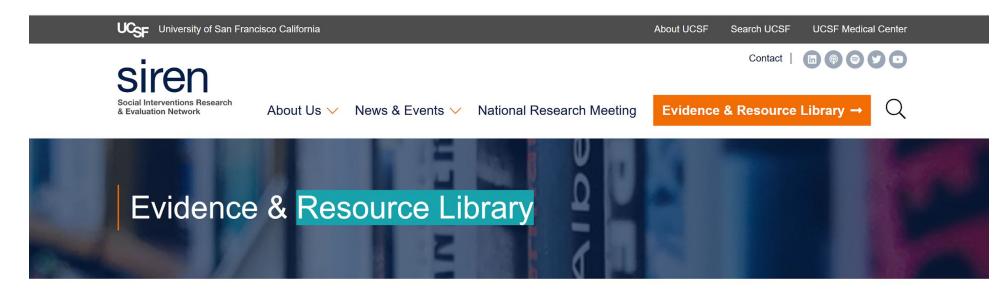




Social Interventions Research & Evaluation Network



#### **SIREN Evidence and Resource Library**



- Searchable database of research and implementation tools about healthcare-based SDOH interventions.
- Includes 3800 resources; updated monthly.
- Available at <a href="https://sirenetwork.ucsf.edu/tools/evidence-library">https://sirenetwork.ucsf.edu/tools/evidence-library</a>





#### Search Resource

Type Keyword

**Filters** 

Expand all

Resource Type ?

Select All

- Peer Reviewed Research
- Issue Briefs & Reports
- Commentaries & Blogs
- Tools & Toolkits
- Presentations & Webinars

Study Design ?

- Randomized Controlled Trial (RCT)
- Pre-post with Comparison Group

Displaying 1 - 9 of 3834



3 4 5 6 7 8 9 ... →

Produce prescription benefits redemption and activity in an observational study of 2680 Massachusetts Medicaid members

Ridberg RA, Sharib JR, Mozaffarian D Am J Clin Nutr

**Publication** year

2025

Resource type

Peer Reviewed

Research

Hospital-based violence intervention programs: An analysis of costs and key components

O'Toole MJ, Schnippel K, Larson B J Trauma Acute Care Surg

Publication year

2025

Resource type

Peer Reviewed

Research

Increasing a hospital-based violence intervention program's referrals for children and families in a pediatric emergency department

Khan NI, Chinta SS, Cheaton BM, Nimmer M, Levas MN Inj Epidemiol

**Publication** year

2025

Resource type

Peer Reviewed

Research

Racial, ethnic, and sex differences in need and receipt of support for social needs among veterans

Frank DA Duggell E Drosorio CT Lodor CM McCov II Lombo C

**Publication year** 2025

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☐ Public Benefits							

#### ← Back to Evidence & Resource Library

#### Screening tools comparison tables

Y. Cartier, C. Fichtenberg, L. Gottlieb

SIREN has compiled information from several of the most widely used social needs screening tools for stakeholders interested in comparing these instruments. The summary tables include information on intended population or setting, domains/topics covered, and number of questions dedicated to each domain.

Screening tools (adults and/or all populations).

Screening tools developed specifically for pediatric settings.

https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison-tables

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2					
3	Food insecurity	Within the past 12 months, the	Have you applied for or do you receive food stamps (SNAP) benefits? Yes/ No	Within the past 12 months, you worried that your food would run out before you got money to buy more.  Often true Sometimes true Never true  Within the past 12 months, the food you bought just didn't last and you didn't have money to get more.  Often true Sometimes true Never true	Within the past 12 mor you worried whether y food would run out be you got money to buy to Often True  • Sometimes True  • Never True  Within the past 12 mor food you bought just d last and you didn't have money to get more  • Often True  • Sometimes True  • Never True  Do you need help getti for this week?  • Yes  • No

#### Stay up to date with SIREN's monthly newsletter

#### siren

Social Interventions Research & Evaluation Network

May 2024 News

#### Highlights



Upcoming SIREN Webinar: Where should healthcare invest in food security interventions? Lessons from recent research

Evidence is mounting about the impacts of interventions such as medically tailored meals and produce prescriptions on diet-related health conditions, fueling interest in these interventions among healthcare organizations and payers. Join us for a webinar on June 5th at 9am PT/12pm ET to hear experts discuss the latest research in this area. Panelists will include researchers Drs. Kurt Hager, Hilary Seligman, and Ariana Thompson-Lastad in a discussion moderated by Dr. Monica Soni, Chief Medical Officer of Covered California.

Register here

Below is a list of recently published research related to integrating social and medical care (and in some cases we have provided summaries of the results). See more articles like these in the searchable <u>SIREN Evidence Library</u>. As always, if you are aware of resources you think should be added to the Evidence Library, please send them our way!

Peer-Reviewed Articles

#### **Awareness**

Screening Tools to Address Social Determinants of Health in the United States: A Systematic Review Neshan M, Padmanaban V, Tsilimigras DI, Obeng-Gyasi S, Fareed N, Pawlik TM | Journal of Clinical and Translational Science

A Family-Centered Approach to Social Needs Awareness in the Pediatric Emergency Department Assaf RR, Padlipsky PS, Young KDA | *PEC Innovation* 

<u>Unpacking Patient Perspectives on Social Needs Screening: A Mixed Methods Study in Western Colorado Primary Care Practices</u> Broaddus-Shea ET, Jimenez-Zambrano A, Holliman BD, Connelly L, Huebschmann AG, Nederveld A | *Patient Education and Counseling* 

Incorporating Social Determinants of Health into Patient Care Workflows Within a Health System Specialty Pharmacy Han J, Tilkens M, Marciniak MW, Rhodes LA | Journal of the American Pharmacists Association

Screening for Social Determinants of Health Among Populations at Risk for MASLD: a Scoping Review Kim RG, Ballantyne A, Conroy MB, Price JC, Inadomi JM | Frontiers in Public Health

Evaluating Screening to Assess Endorsement of Food Insecurity in the Inpatient Setting Tepe KA, Auger KA, Rodas Marquez S, Atarama D, Sauers-Ford HS | Hospital Pediatrics

<u>Understanding Social Needs Screening and Demographic Data Collection in Primary Care Practices Serving Maryland Medicare Patients</u> Starling CM, Smith M, Kazi S, et al. | *BMC Health Services Research* 







#### Key recent Medicaid evaluation results

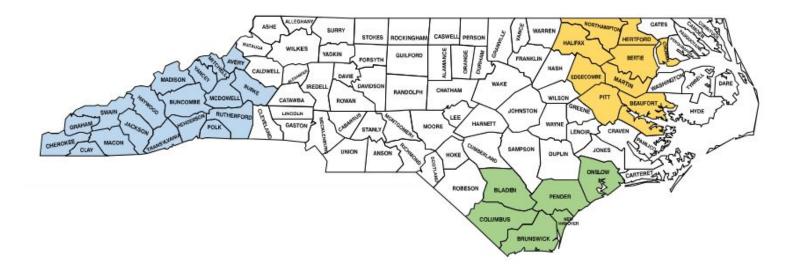
North Carolina Healthy Opportunities Pilots

Massachusetts Flexible Services Program nutritional services



#### NC Healthy Opportunities Pilots

- 3 regions in NC
- Began March 2022
- Services:
  - Food
  - Housing
  - Transportation
  - Interpersonal violence/Toxic stress







#### NC Healthy Opportunities Pilots

- 3 regions in NC
- Began March 2022
- Services:
  - Food
  - Housing
  - Transportation
  - Interpersonal violence/Toxic stress
- March 2022 November 2023:
  - 13,000 members enrolled
  - 200,000 services provided, food services = 85% (first service to be provided)

Nutrition education

**Diabetes Prevention Program** 

Fruit & veggies prescriptions

Food boxes

Healthy meals

Medically tailored meals





# NC Healthy Opportunities Pilots Interim Evaluation Findings

Between March 2022 and November 2023:

- Reduced total number of social needs
- Reduced emergency dept. utilization: -6 ED visits/1000 member-months
- Reduced hospitalizations: -2 admissions per month per 1000 members
- Reduced costs (counting health care and social service costs):
  - -\$85 per member per month

https://www.ncdhhs.gov/documents/healthy-opportunities-pilots-interim-evaluation-report-summary/open





#### MA Medicaid nutritional services

- Statewide
- Started January 2020
- Implemented through accountable care organizations in partnership with social service organizations
- Included:
  - Medically tailored meals
  - Home-delivered meals
  - Food boxes/groceries
  - Produce prescriptions, food vouchers, gift cards
  - Kitchen supplies
  - Connection to food pantries and SNAP/WIC application assistance
  - Nutrition education





#### RESEARCH ARTICLE FOOD

**HEALTH AFFAIRS > VOL. 44, NO. 4**: FOOD, NUTRITION & HEALTH

#### Medicaid Nutrition Supports Associated With Reductions In Hospitalizations And ED Visits In Massachusetts, 2020–23

Kurt Hager, Meagan Sabatino, Jeffrey Williams, Arlene S. Ash, Yara Halasa-Rappel, Julie M. Flahive, Hye Sung Min, Gary Sing, Stephanie Buckler, Allison Rich, Jessica Bowman, ... See all authors

AFFILIATIONS V



DETAILS

**EXHI** 

Gundersen C, Kurdya household food inse costs. CMAJ. 2015; Medline, Google Sch

Palakshappa D, Ip El Foley KL, Miller DP J food insecurity is as cardiovascular disea 2021;10(22):e02190 Google Scholar

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Coker TR, Gootman Addressing the long pandemic on childre (DC): National Acad Canala Cabalar

## MA Medicaid nutritional services evaluation results

- From January 2020 March 2023
- 20,403 program participants compared to 2,108 eligible nonparticipants (propensity score weighted)
- •13% reduction in emergency dept visits
- •23% reduction in hospitalizations
- No statistically significant changes in primary care visits or total costs for the full sample
  - Costs \$2,502 lower among adults enrolled > 90days; net savings: \$210/person
- For 22-23 (after COVID): ED visits: -21%, Hosp: -47%, Costs: \$1,721
- No impacts in children

https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2024.01409





# **Current SIREN studies**

#### • Nutrition interventions:

- Food boxes
- Produce prescriptions
- Medically tailored meals
- Medically tailored meals assessments
- Nutrition education
- Fruit and vegetable benefit
- Pantry stocking and meals

(also housing and extreme weather supports)

"Flexible Health-Related Services (HRS)" Since 2017

"Health-Related Social Needs (HRSN) Benefit" Since Jan 2025

"Health-Related Social Needs (HRSN) Benefit" Not yet implemented





#### Nutrition interventions:

- Food boxes
- Produce prescriptions
- Medically tailored meals
- Medically tailored meals assessments
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(also housing and extreme weather supports)

How easy/hard is it to deliver these services?

What impacts do these have on health outcomes and health care utilization?





#### Nutrition interventions:

- Food boxes
- Produce prescriptions
- Medically tailored meals
- Medically tailored meals assessments
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(also housing and extreme weather supports)

- Outcomes we will study:
  - Control of chronic conditions (e.g., diabetes, high blood pressure, and hyperlipidemia)
  - Chronic disease risk factors (e.g., tobacco use, BMI)
  - Receipt of preventive care (e.g., cancer preventive screening)
  - Healthcare utilization (e.g., ED visits, hospitalizations)
- Using EHR and claims data





- Nutrition interventions:
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Initial Results in Spring 2027

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#### Study 2: Evaluation of a grocery card program

- Covered CA (CA exchange)
- Members <250% FPL w/ chronic conditions and food insecurity</li>
- •\$80/month benefit (increasing with family size)
- Any food store
- •12 months: Feb 2025 Jan 2026
- •~7,000 members enrolled
- Randomized controlled trial (control group gets lump sum at end of year)



#### Study 2: Evaluation of a grocery card

#### **Outcomes**

- Food insecurity
- Nutrition insecurity
- Fruit and vegetable consumption
- Other health-related social needs (housing, transportation, utilities)
- Delaying medical care because of cost
- Access to primary and acute care
- Missed medications and difficulty paying for medications

- Self-efficacy (confidence in one's own ability to solve one's problems)
- Stress
- Self reported mental and physical health
- Likelihood to recommend health plan to others
- Satisfaction with the card program
- Health care utilization (e.g. ED visits, hospitalizations, primary care)





#### Study 2: Evaluation of a grocery card

#### Methods:

- Pre, 6-month, and 12-month surveys
- Qualitative interviews with participants
- Analysis of claims data



#### Study 2: Evaluation of a grocery card

#### Methods:

- Pre, 6-month and 12-month surveys
- Qualita
- Analysi

Initial Results in Spring 2026





Reach out!

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sirenetwork.ucsf.edu



# Partnering with Community Based Organizations in Evaluating Food is Medicine Programs

Jenefer M. Jedele, PhD MSc

Health Economist

Drivers of Health

Blue Cross and Blue Shield of North Carolina

May 8, 2025

Medicaid Food Security Network Summit

Washington DC



#### Food is Medicine Strategy and Approach



#### Corporate Social Responsibility – Drivers of Health Strategy Team

"To improve the health and well-being of our customers and communities – we won't stop until health care is better for all."

- Development of a multi-year strategy based on 5-years of test and learn
  - Payer perspective
  - Available levers
  - Purpose driven
- Disease management v. Food/Nutrition Insecurity Program
  - State of the science
  - Business Case
  - Correlation

Proprietary & Confidential 33

#### Food Is Medicine Test and Learn Models



- Test and Learn pipeline Funding as to not impact member premiums
  - Implement
  - Evaluate
  - Scale/Refine/Retire

- Menu of approaches to support members with food and nutrition needs
  - Food delivery and health coaching program\*
  - Produce prescription supporting members in purchasing healthy produce
  - Federal food program application assistance\*

Proprietary & Confidential

#### Food Delivery & Health Coaching



☐ Improved health outcomes and reduced medical expenses for members with Type 2

#### diabetes



#### Program Overview

#### **Program Components**

- Food Delivery: \$60 worth of shelf staple groceries were delivered to members' homes 2x per month for 6 months
- Weekly Health Coaching: supported participants in identifying and working toward health goals based on member-specific needs
- Enrollment January 2021-December 2021

#### **Eligible Members:**

- Commercial Active ACA, Individual Under 65 and Group Underwritten Adult members (i.e., age 18+)
- Identified as Food Insecure using income as a proxy (100 150% FPL) OR screened positive for food insecurity (referrals)
- One or more claims since 2019 with a Type 2 Diabetes diagnosis

Program Cost: \$194.94 PMPM (\$120 PMPM food delivery; \$21.00 PMPM delivery fee; \$53.94 PMPM coaching)

Participants: 1,114 (565 completed 6 months; 342 completed 3-5 months; 207 completed less than 3 months)

Experience	Expense	Growth	Outcomes
<ul><li>7% enrollment</li><li>77% engagement</li><li>87% satisfied with BCNC</li><li>69 NPS</li></ul>	Program Completion (6-months):  • \$160 PMPM lower TCOC  • Benefit-Cost-Ratio: \$1.64  Partial Program (3-5 months):  • \$123 PMPM lower TCOC  • BCR: \$1.89	<ul> <li>93% likely to renew because of participating</li> <li>44% expect health insurance company to offer a benefit like this</li> </ul>	<ul> <li>Food insecurity reduced: 38% to 20%</li> <li>Obesity reduced: 72% to 61%</li> <li>Increased diabetic control: 17% to 19%</li> <li>Increased Rx costs suggest potential for increased medication adherence.</li> </ul>

### Engaging CBOs in Collaborative Research: Practical Points



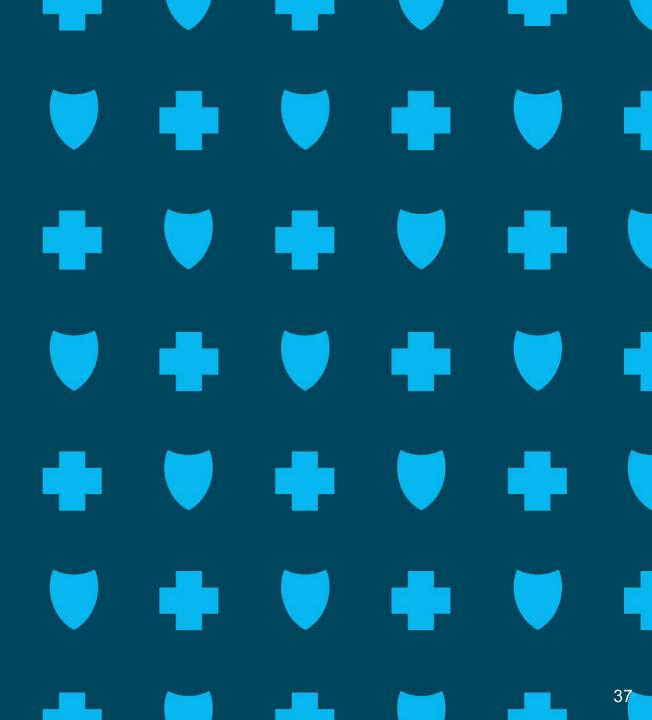
- Vendor selection intentionally emphasize local, non-profit first
  - Engage early and often from design through evaluation
  - Establish relationships BEFORE a project is identified
- Minimize burden by working within current workflows
  - Data should be additive rather than substitutive
    - Leverage what is already collected
    - Facilitate data exchange -- cloud/virtual options for sharing data
  - Rigor v. Reality core components are what matters
- Capacity building and knowledge transfer embedded and intentionally bi-directional
  - Tools, resources "owned" by the CBO



#### Thank you!

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# Q&A with Panelists

# THANKYOU

Your feedback is important to us, please take a moment to fill out our survey. The first 10 respondents get a \$10 e-gift card, and you can submit the survey multiple times if you think of more to share.



