



Exploring Food & Nutrition Security's Impact on Medication Use Quality

Webinar Logistics

- **Send us your questions.** Use the “Q&A” feature at the bottom of the screen to send speakers your questions throughout today’s presentation.
- **Today’s forum is being recorded.** A copy of the slides and recording will be shared with PQA members within a week. The recording will also be posted on PQA’s YouTube channel.
- **Give us your feedback.** A quick survey will launch at the end of today’s webinar.

National Strategy and Call to Action

- More than \$8 billion in commitments to accelerate progress to end hunger, improve nutrition and physical activity and reduce disparities.



WHITE HOUSE
CONFERENCE ON
**HUNGER,
NUTRITION,
& HEALTH**

Impact on Medication Use Quality

- Individuals without reliable access to affordable, nutritious food are **more likely to be non-adherent** to medications.
- Food insecure individuals often **choose between buying medication and food** and are more likely to report getting sick because they cannot afford medications.
- Food and nutrition security affect chronic disease management, as nutrition **impacts disease status and medication effectiveness**.

Today's Presenters



Catherine Macpherson, MS, RDN
Senior Vice President of Healthcare Strategy and
Development, Chief Nutrition Officer
Mom's Meals



James Kirby, PharmD, BCPS, FAPhA
Chief Commercial Officer
Kroger Health



HOME DELIVERED NUTRITION & MED ADHERENCE

July 2023

Mom's Meals®, A PurFoods® Company
MomsMeals.com | 1.866.716.3257

Confidential and Proprietary



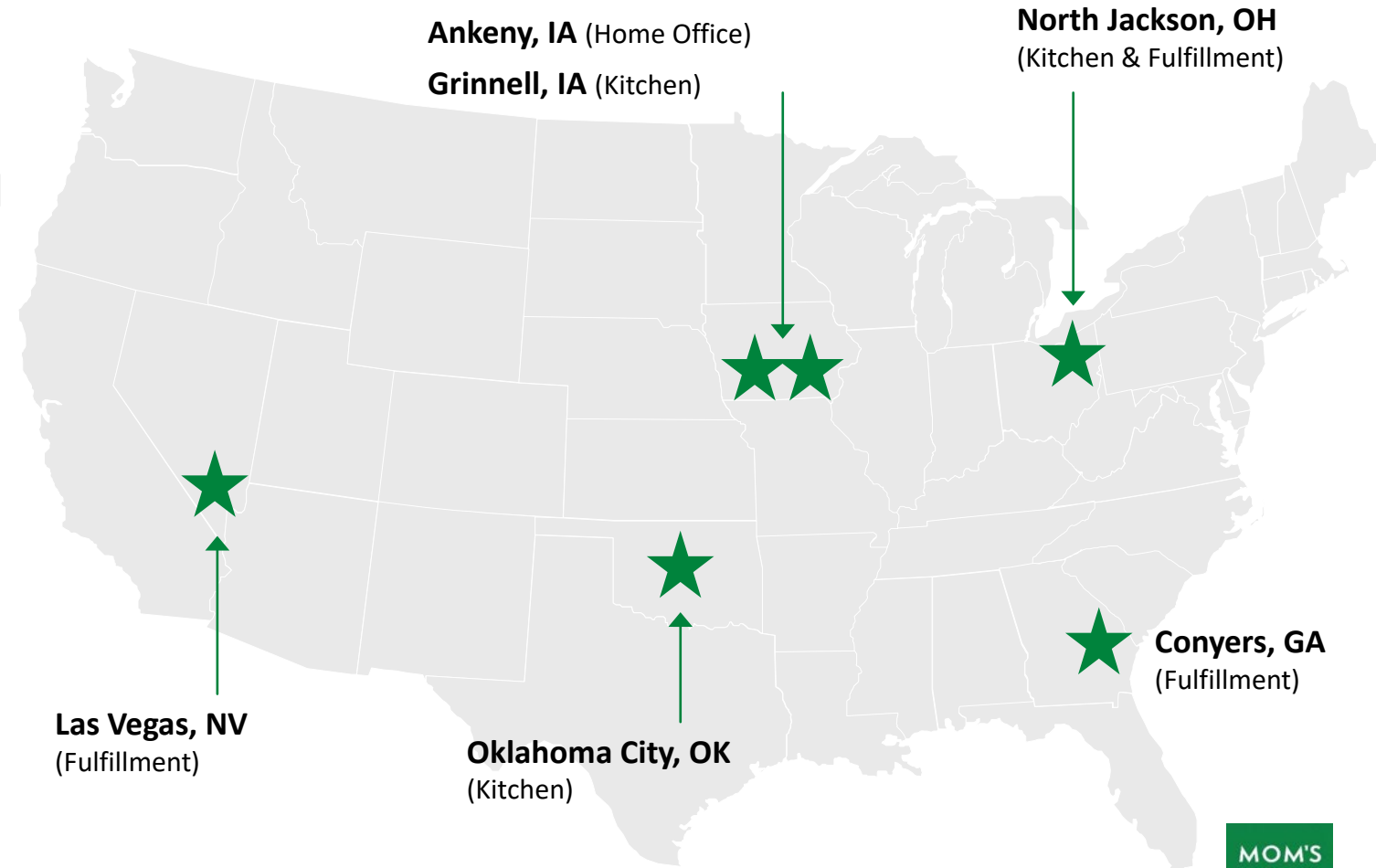


MISSION

**Improving life through
better nutrition at home.**

LEADING NUTRITION SOLUTIONS COMPANY

- Founded in 1999, headquartered in Ankeny, Iowa
- National Provider of home delivered meal programs
- 2,200+ employees, senior management with deep food and healthcare industry experience
- 60+M meals delivered annually



IMPORTANCE OF NUTRITION ACROSS POPULATIONS

Program Types:

- Long Term Care Support
- Post-Discharge
- Hospital at Home
- Chronic Condition Management
- Maternal Health
- Child Health
- Food Insecurity

1,000+ Contracts Nationwide to Provide Meals for:

- Medicaid LTSS/HCBS Waivers
- Medicaid Managed Care
- Medicare Advantage
- Dual Eligibles
- Hospitals, Health Systems
- Other Government Funded
- Self-Pay

Current partners include all major national and regional health plans:



REFRIGERATED MEDICALLY TAILORED MEALS

Crafted by chefs and registered dietitians, our meals taste great and nutritionally support most common chronic conditions.

Options Available

- ✓ General Wellness Meets dietary guidelines to support overall wellness
- ⊕ Diabetes Friendly Carbs: <67g/meal, complete meal <110g
- ↓ Lower Sodium Sodium <600mg
- ♥ Heart-Friendly Sodium <800mg, fat <30%, sat fat <10%
- 👤 Renal-Friendly Sodium <700mg, potassium <833mg, phosphorus <330mg
- 🎗️ Cancer Support Calories >600, protein >25g
- 🥕 Vegetarian Includes dairy, eggs, plant protein, nuts and beans
- 🌾 Gluten Free Tested less than 20ppm, not a dedicated kitchen
- 🥣 Pureed For dysphagia patients - those with difficulty swallowing





CHOICE OF EVERY MEAL, EVERY DELIVERY

Clients select their own meals from an array of options based on their taste preferences

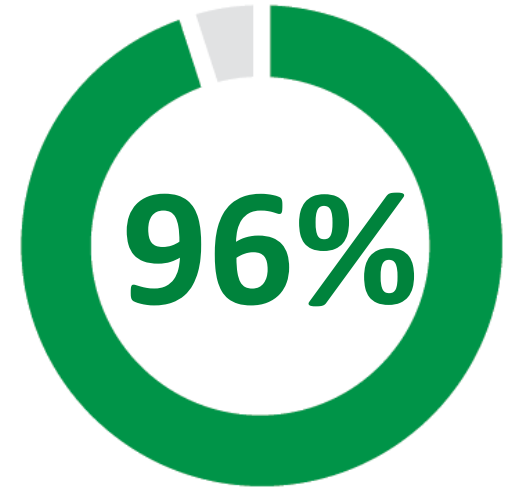
More Consumption



Less Waste



Greater Impact



of our clients
choose their meals

*Initial deliveries will have a variety of meals based on dietary preferences.

**Source: 2021 In-cooler survey >1,200 respondents



FOOD INSECURITY AND MEDICATION NON-ADHERENCE

- Studies show link between food insecurity and cost-related non-adherence (CRN), with some patient characteristics driving higher CRN
 - Low income
 - Lack of prescription drug coverage
 - Polypharmacy
 - Multiple chronic conditions
- Older adults in need of food assistance were more likely to restrict medication use due to cost

Bengle R, Sinnett S, Johnson T, et al. Food Insecurity is associated with cost-related medication non-adherence in community-dwelling older adults in Georgia. *J Nutr Elder.* 2010;29(2):170-191.

HOW MEALS MIGHT IMPACT STAR RATINGS

2023 Star Ratings – Medicare		Data Source	Star Weight
Part C	Members Whose Plan Did an Assessment of their Health Needs and Risks	Part C Plan Reporting	1
Part C	Plan Members with Diabetes whose Blood Sugar is Under Control	HEDIS	3
Part C	Controlling Blood Pressure	HEDIS	1 – new, but likely to become 3
Part C	Reducing the Risk of Falling	HEDIS/HOS	1
Part C	Member's Rating of Health Care Quality	CAHPS	4
Part C	Member's Rating of Health Plan	CAHPS	4
Part C	Improvement (if any) in the Health Plan's Performance	Star Ratings	5
Part D	Taking Diabetes Medication as Directed	Prescription Drug Event (PDE) data	3
Part D	Taking Blood Pressure Medication as Directed	(PDE) data	3
Part D	Taking Cholesterol Medication as Directed	(PDE) data	3



MOM'S MEALS HELPING TO BUILD STRONG EVIDENCE BASE

Long-Term & Chronic Care	Diabetes	 AmeriHealth Caritas District of Columbia	 HOWARD UNIVERSITY HOSPITAL	Heart Failure	 VA U.S. Department of Veterans Affairs	
	Diabetes	 AGE OPTIONS.		Arthritis	 VANDERBILT UNIVERSITY	 NIH National Institutes of Health
	Renal	 ILLINOIS		Behavioral Health	 UnitedHealthcare® Community Plan	
	Diabetes	 CareMore HEALTH		Renal	 Tufts UNIVERSITY	
	Chronic Care	 UPMC LIFE CHANGING MEDICINE		Pregnancy		
Post-Discharge	Heart Failure	 MEDICAL SCHOOL UNIVERSITY OF MICHIGAN		Heart Failure		
	Heart Failure	 NewYork-Presbyterian Columbia University Medical Center		Food Insecurity		



CASE STUDIES

PROGRAM DETAIL



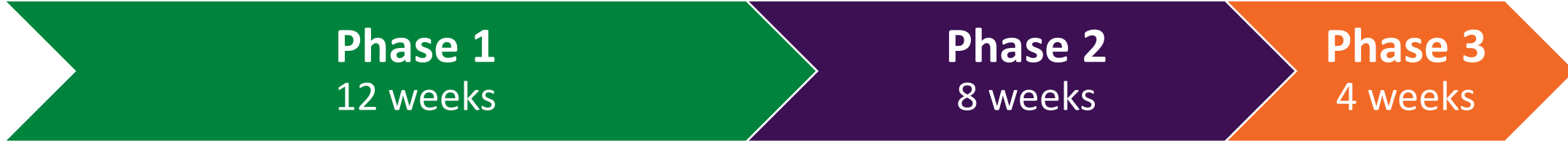
Member Qualifier
Dually-eligible
(Cal MediConnect)
members with CHF

93
Members Enrolled



- Members recruited from Riverside and San Bernardino Counties
- Started June 2021
- Initial in-person visits with CHW and nurse (via iPad)
- 6-month program of services from IEHP and Mom's Meals

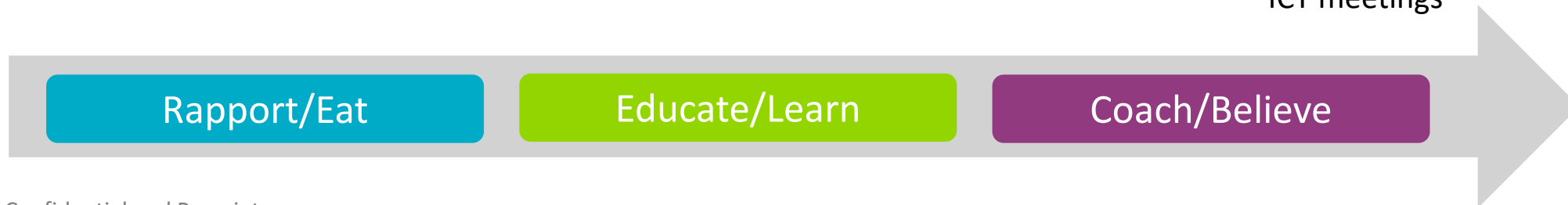
BEHAVIOR CHANGE TIMELINE



- Initial CHW visit/address social needs
- Scale set-up at home
- 3 prepared meals/day
- Driver wellness check & safety check
- RD call
- RN follow-up

- 2 prepared meals/day
- 1 box of produce/dry goods/week
- Recipe cards
- Weight monitoring
- Driver wellness check & safety check
- RD call
- CHW/RN follow-up as needed
- ICT meetings

- 1 prepared meal/day
- 1 box of produce/dry goods/week
- Recipe cards
- Weight monitoring
- Driver wellness check & safety check
- RD call
- CHW/RN follow-up based on individual needs ID'ed in ICTs
- ICT meetings



Post Pilot: Visits/Evaluation



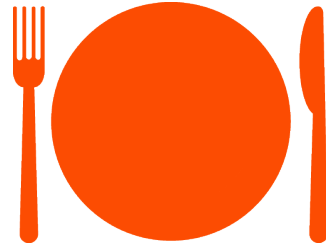


SERVICE DELIVERY



1,560

Orders delivered



28,054

Meals delivered
304 meals/member



1,131

Produce & dry good boxes
11 produce boxes/member
6 dry good boxes/member



99.7%

On-time
Delivery Record!

57

ICT sessions completed
1 session/member

318

Nutritional counseling sessions
4 sessions/member

1,829

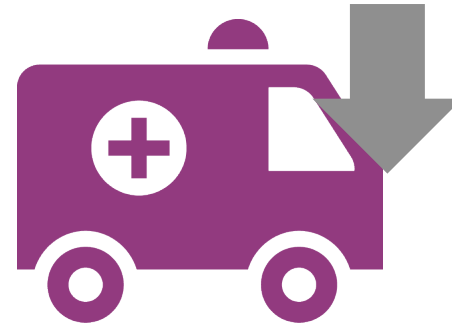
Driver surveys completed
3 wellness checks/member

UTILIZATION REDUCTION & WEIGHT LOSS



50% Reduction in Hospitalizations
211 to 105

Reduction in Annual Hospital Visits
2.3 to 1.1 visits per member per year



50% Reduction in ED Visits
400 to 200

Reduction in Annual ED Visits
4.3 to 2.1 visits per member per year

Cumulative Total Weight Loss = 339 lbs.
Average Weight Loss/Person = 5.8 lbs.



ADHERENCE & COST SAVINGS



Increase in Medication Adherence

33% to 100% proportion of days covered



Total Cost Savings

\$7.2 million to \$5.4 million

25% ↓



Annual Cost Savings

\$77,419 to \$58,064

per member per year

=

\$19,355 per year cost savings
or **\$1,613** PMPM

This was primarily from decreased hospitalizations and associated costs.

PROGRAM RATIONALE

HPN realized a need to rethink its diabetes management program to engage members and address food insecurity



Chronic Care Meals to Support Diabetes Management

Original Plan/Rationale for Change

- Original plan: 12 weeks of calls with RN
- Higher-risk members had greater needs
- Target poor control (A1c > 9%) population— Improve HEDIS performance
- Members had limited knowledge of nutrition and diabetes
- Many members with food insecurity

Pilot Plan With Mom's Meals

- Originally introduced as post-discharge program
- Needed to engage members to continue
- 4 weeks would show commitment and basic understanding of nutrition and diabetes
- Introduce portion and carb control during the 8 weeks
- 8 weeks of meals is enough time to have clinical impact on blood sugar control, continue with detailed counseling about condition and nutrition





PROGRAM DETAILS

Participants

- Program started September 2020
- 1,133 contacted
- 219 accepted
- 125 enrolled in meals (after 4 weeks of counseling)
 - Average 48 years old
 - 60% Female
 - 36% Black, 26% White, 22% Hispanic
 - Average A1c = 10.86



PROGRAM RESULTS

125 members completed the 8-week meals and counseling program



HEALTH PLAN OF NEVADA
A UnitedHealthcare Company



17.5% Avg. A1c Reduction



IMPACT: DOUBLED MEMBER CONVERSION

The addition of Mom's Meals to the Diabetes Management Program increased member engagement



 **21%**

Member call conversion rate for DM program after adding Mom's Meals. Compare to typical rate of 11%.

 **44%**

Average length of member engagement in program increased from 8 to 18 weeks once Mom's Meals were introduced.



IMPACT: SHARP COST OF CARE REDUCTION



HEALTH PLAN OF NEVADA
A UnitedHealthcare Company

↓ **32%**

Decrease of total cost of care post-period
PMPM lowered from \$1,339 to \$911

Total cost savings
(annualized)

\$427 PMPM • \$5,127 PMPY

↓ **82%**

Acute in-Hospital Stays

↓ **44%**

Observational Stays

↑ **27%**

Rx PMPM
Rx spend increased,
indicating medication
adherence

Source: Pulled claims six months before admission into program and six months post-program

25 | Confidential and Proprietary





Food As Medicine



U.S. Health Care System is Broken: Food Can Fix It

The COVID-19 pandemic brought needed attention to issues that have been impacting communities for years, including the urgent need to improve access to nutritious foods and to provide more equitable healthcare to vulnerable populations.



\$4.3 trillion

The United States spent **\$4.3 trillion** on healthcare in 2021 (CMS).



60%

60% of adults in the United States have a chronic health condition and **40%** have two (CDC).



7 in 10

Chronic diseases are responsible for **7 in 10** deaths each year which accounts for many of our nation's healthcare costs (CDC).



1 in 5

One of every five deaths across the globe is attributable to suboptimal diet, more than any other risk factor including tobacco (BMJ, 2020).



Risk Reduction

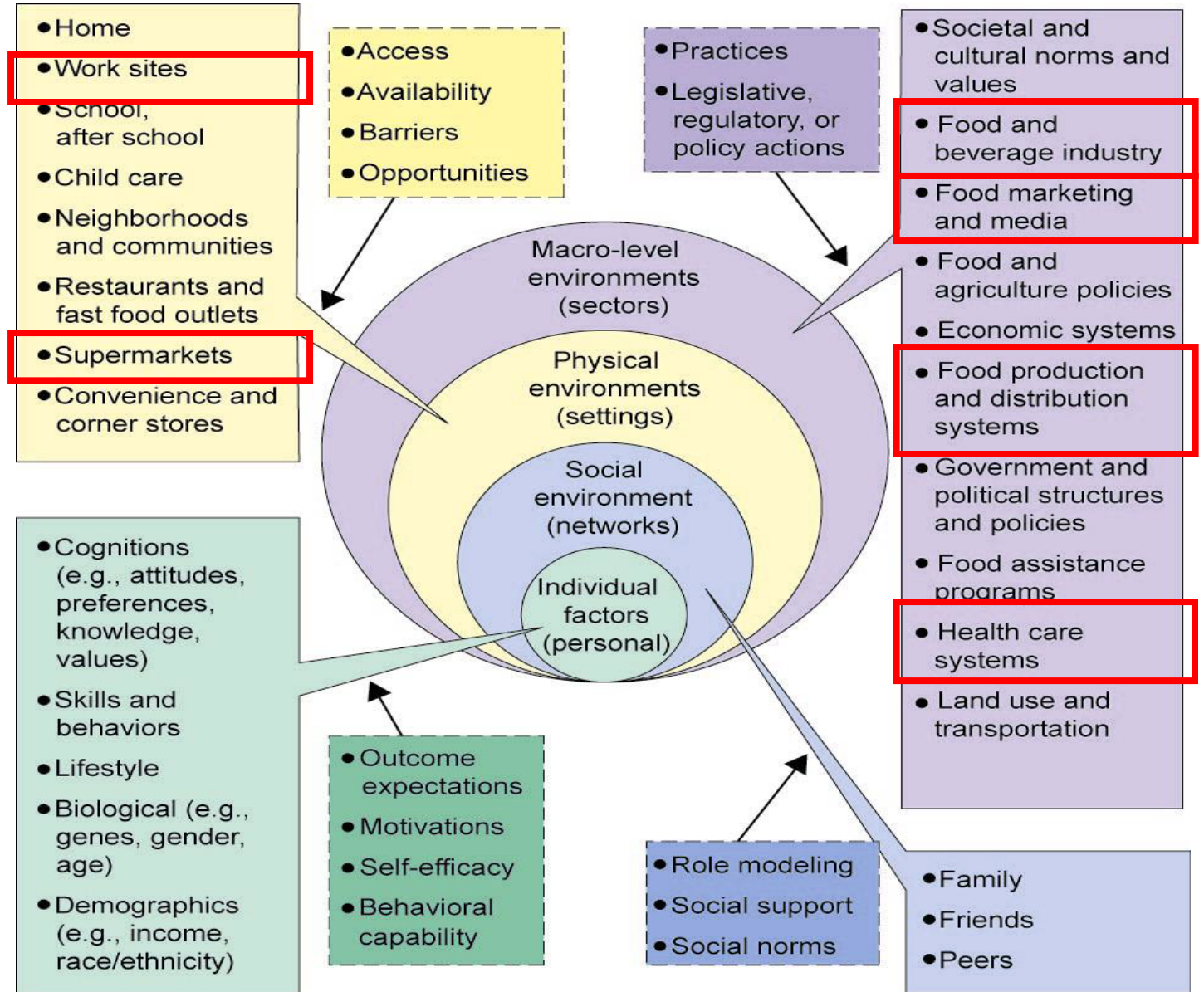
Good nutrition is essential to **reducing the risk** of chronic diseases such as obesity, heart disease, type 2 diabetes, and certain cancers.



Why Kroger?



Framework of Factors Influencing Dietary Intake and Outcomes



AR Story M, et al. 2008.
Annu. Rev. Public Health. 29:253–72

At Kroger, we believe

FOOD AS MEDICINE

means a dedicated, educated, and personalized approach to eating and enjoying food so we can live healthier lives and prevent illness before it starts.



**CUSTOMER
EXPERIENCE**



FOOD AS MEDICINE



**PATIENT
EXPERIENCE**



Consumer tool to identify healthy choices and track progress

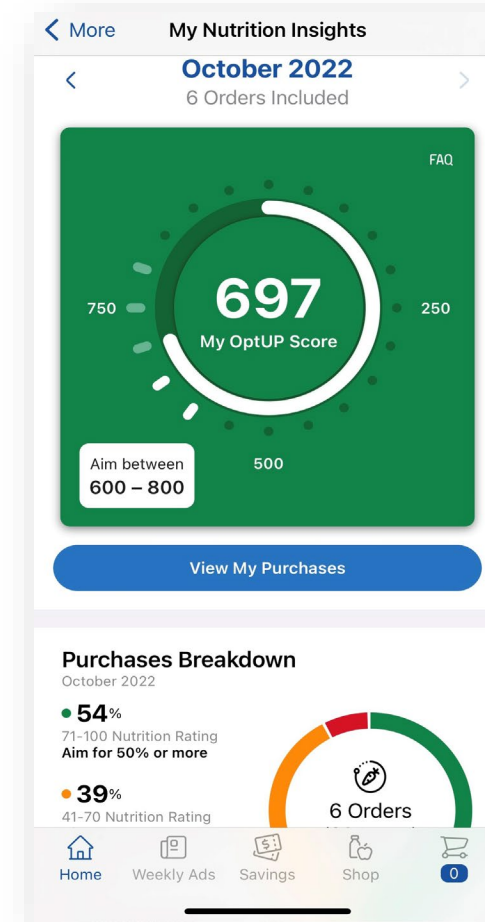


82 OptUP Nutrition Rating



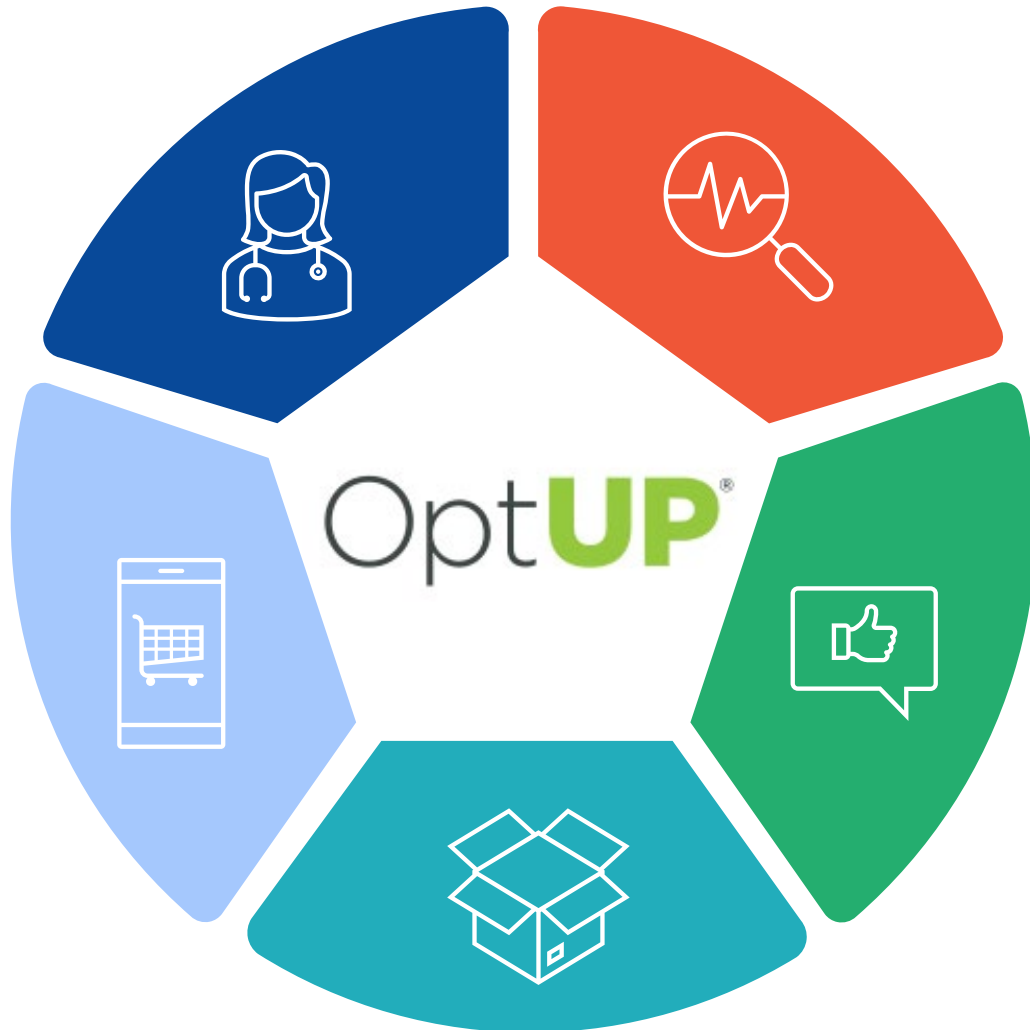
89 OptUP Nutrition Rating

OptUP nutrition ratings: helps customers gauge the healthfulness of individual items



OptUP scores: helps customers track habits over time

OptUP Ecosystem



Consumer Tool

Enables simplified shopping experience to make finding healthier products easier

Purchase Hx Vital Sign

Recognized as a grocery shopping vital sign that is incorporated into provider vernacular and health records

Supplier Innovation

Enables new and reformulated products, messaging and marketing channels to inspire better for you choices and elevate category assortment

Impact Measure

Used to inform consumers and providers on their progress and the effectiveness of interventions

Health Brand

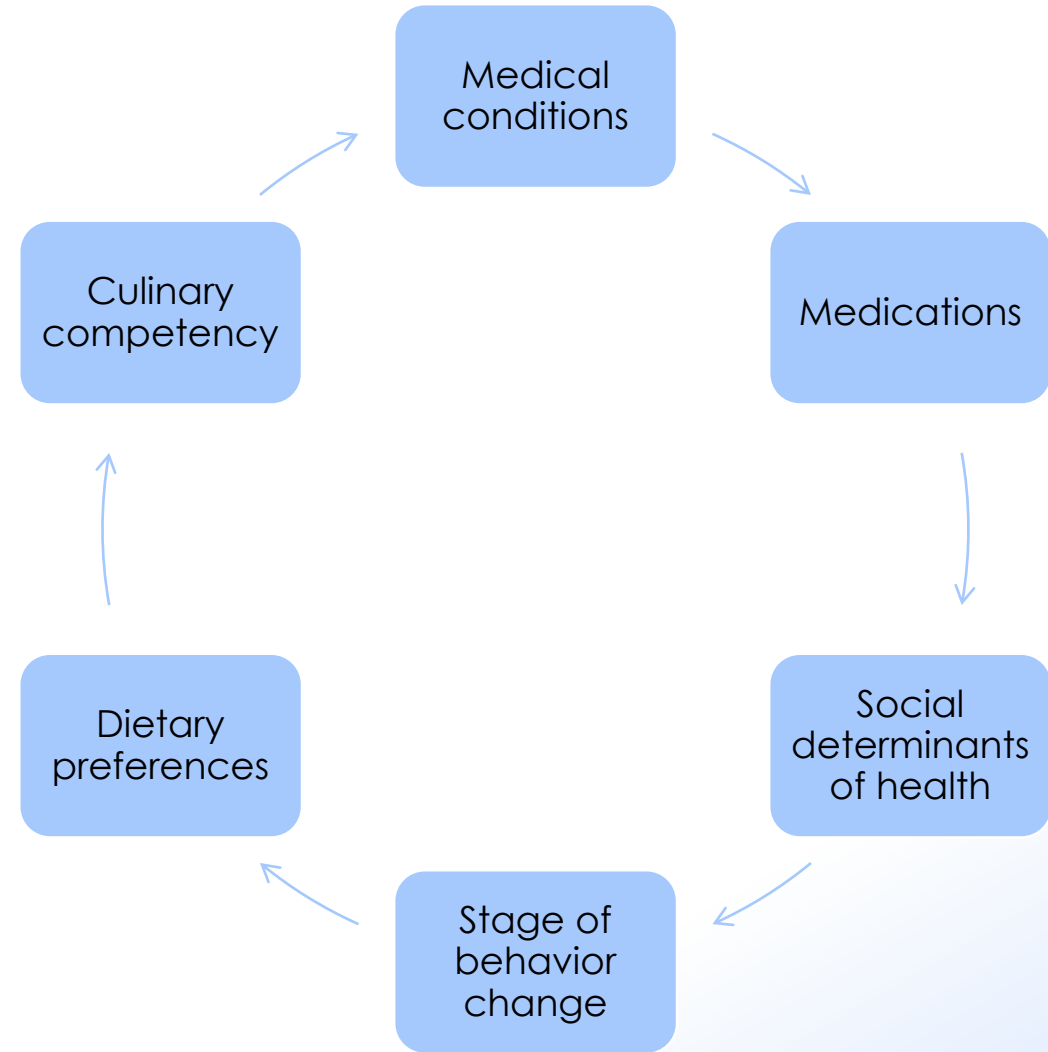
OptUP represents small changes that can help with one's health journey; can be leveraged in all marketing channels and become its own product line

Telenutrition



Medical Nutrition Therapy (MNT)

- MNT is an **evidence-based, cost-effective** therapy typically resulting in the **prevention, delay, or management of diseases or conditions**
- Provided by Kroger Health registered dietitians



Factors considered in MNT

SuperWIN: An independent randomized controlled trial¹

Primary Findings


- In-aisle teaching **significantly increased adherence to the heart-healthy Dietary Approaches to Stop Hypertension (DASH) dietary pattern** compared to traditional nutrition counseling alone (p = 0.02)
- **Adherence to the DASH dietary pattern was further improved** when in-aisle teaching was **paired with education on how to use online shopping technologies**

	Control (n=46)	Strategy 1 (n=100)	Strategy 2 (n=101)	Strategies 1 and 2 vs. Control	p-value
At baseline	45.2 (42.0, 48.4)	44.4 (42.0, 46.8)	43.2 (40.8, 45.5)		
At 3 months	51.0 (47.6, 54.4)	53.1 (50.6, 55.5)	55.6 (53.2, 58.1)		
DASH Change	+5.8 (2.5, 9.2)	+8.6 (6.4, 10.8)	+12.4 (10.3, 14.6)	+4.7 (0.9, 8.5)	0.02

A subgroup analysis of a group of patients enrolled pre-COVID-19 (n=109) showed +8.3 (3.4, 13.3) change vs. control (p<0.001)




CONTROL




Initial standard of care MNT visit with Kroger Health dietitian

STRATEGY 1



+ 6 in-aisle personalized education visits with a Kroger Health dietitian

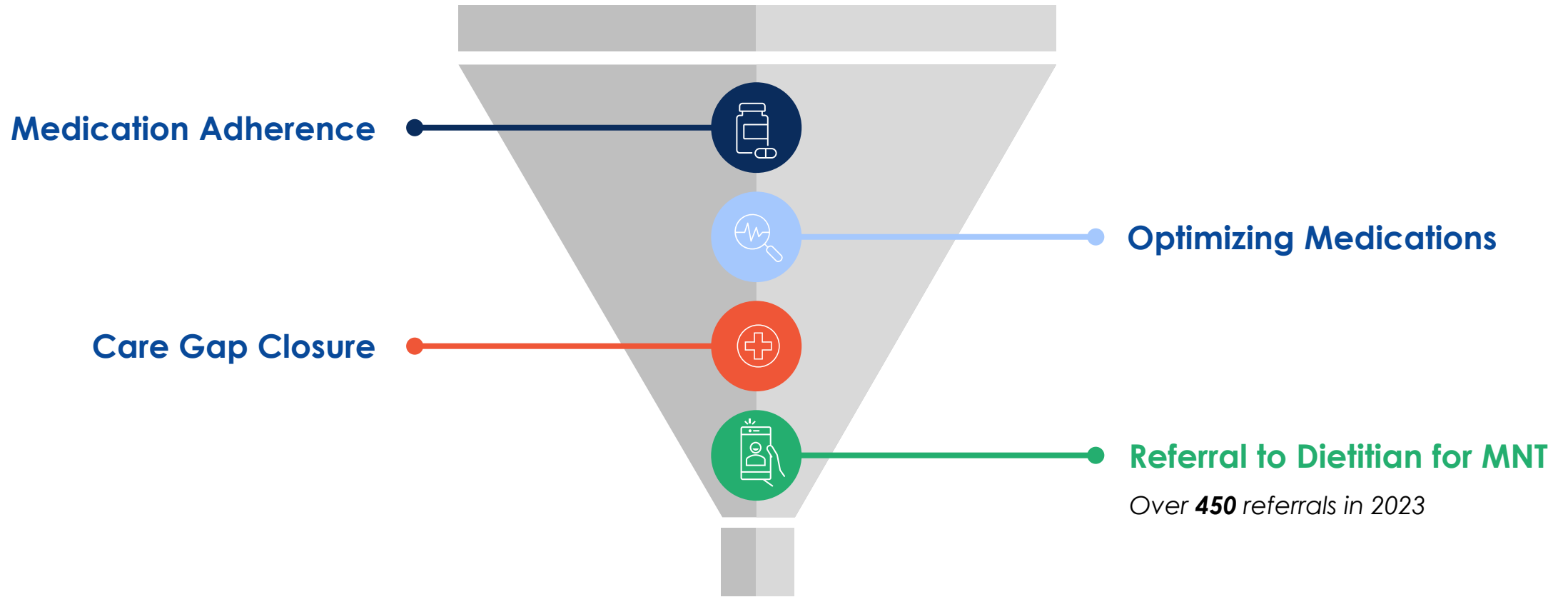
STRATEGY 2



+ Education on how to use online shopping technologies

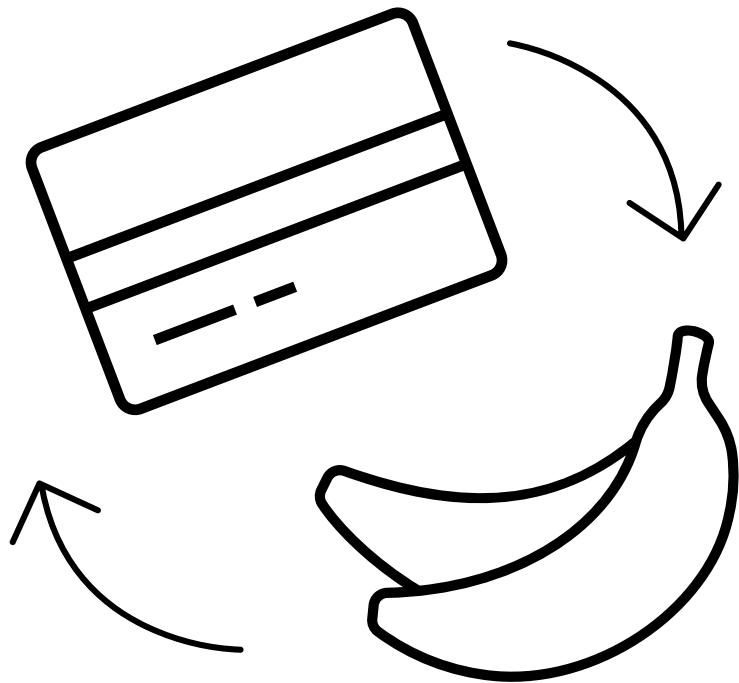
© The Kroger Co. | 2023 | CONFIDENTIAL

Interprofessional Diabetes & Hypertension Programs



Food Benefit Cards

A rapidly growing market in Medicare Advantage, Medicaid, and beyond, ripe for innovation



FBC Today	Nutrition Security Solution	
✓	✓	Payer-funded, reloadable debit cards
✗	✓	Incentivize healthful products to be spent in Kroger stores nationwide
✗	✓	Condition specific, dietitian-approved product lists
✗	✓	Multiple purses to provide funds for multiple benefits

Teaching Clinicians How to Use the Grocery Store as a Healthcare Destination



Available Now!

Free Continuing Education raising awareness about a **retail interdisciplinary model of care** to deliver accessible, personalized nutrition and related services **in a grocery store setting**



American Heart Association®
Lifelong Learning™

Activities



Leveraging Grocery Stores to Deliver Personalized Nutrition: An Interdisciplinary Model of Care in the Community

FREE

The goal of this course is to raise awareness about an interdisciplinary model of care to deliver accessible, personalized nutrition and related services in a grocery store setting, and discusses how collaboration of a RDN with the patients' physician and other community-based health professionals benefits both patients and health care providers.

Accreditation:

- 1.25 Credit(s) > ACCME > AMA PRA Category 1 Credit™
- 1.25 Contact Hour(s) > ANCC > ANCC
- 1.25 Contact Hour(s) > ACPE > ACPE
- 1.25 Credit(s) > ACCME > Attendance Credit
- 0.00 Credit(s) > AHA > AHA
- 1.25 CPEU(s) > CDR > CDR Level II

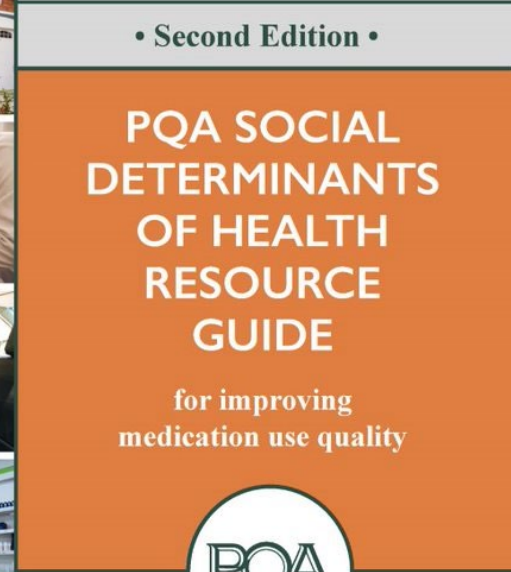
Thankyou.

Question and Answer

Please submit your questions using the Q&A feature at the bottom of your screen.

Next Steps

- PQA is continuing to assess the current food and nutrition security landscape
- PQA is looking to support organizations working on this topic
- Submit your food and nutrition security initiatives to be considered for the PQA SDOH Resource Guide by Tuesday, August 1





2023 PQA Stakeholder Advisory Meetings

Save the Date:

- **Q3 SAM: August 16, 2023, 1-1:45pm ET**
- **Q4 SAM: October 25, 2023, 1-1:45pm ET**



Thank You for Joining Us!

**Next Quality Essentials Webinar:
Thursday, September 21, 2023, 1-2 pm ET**