

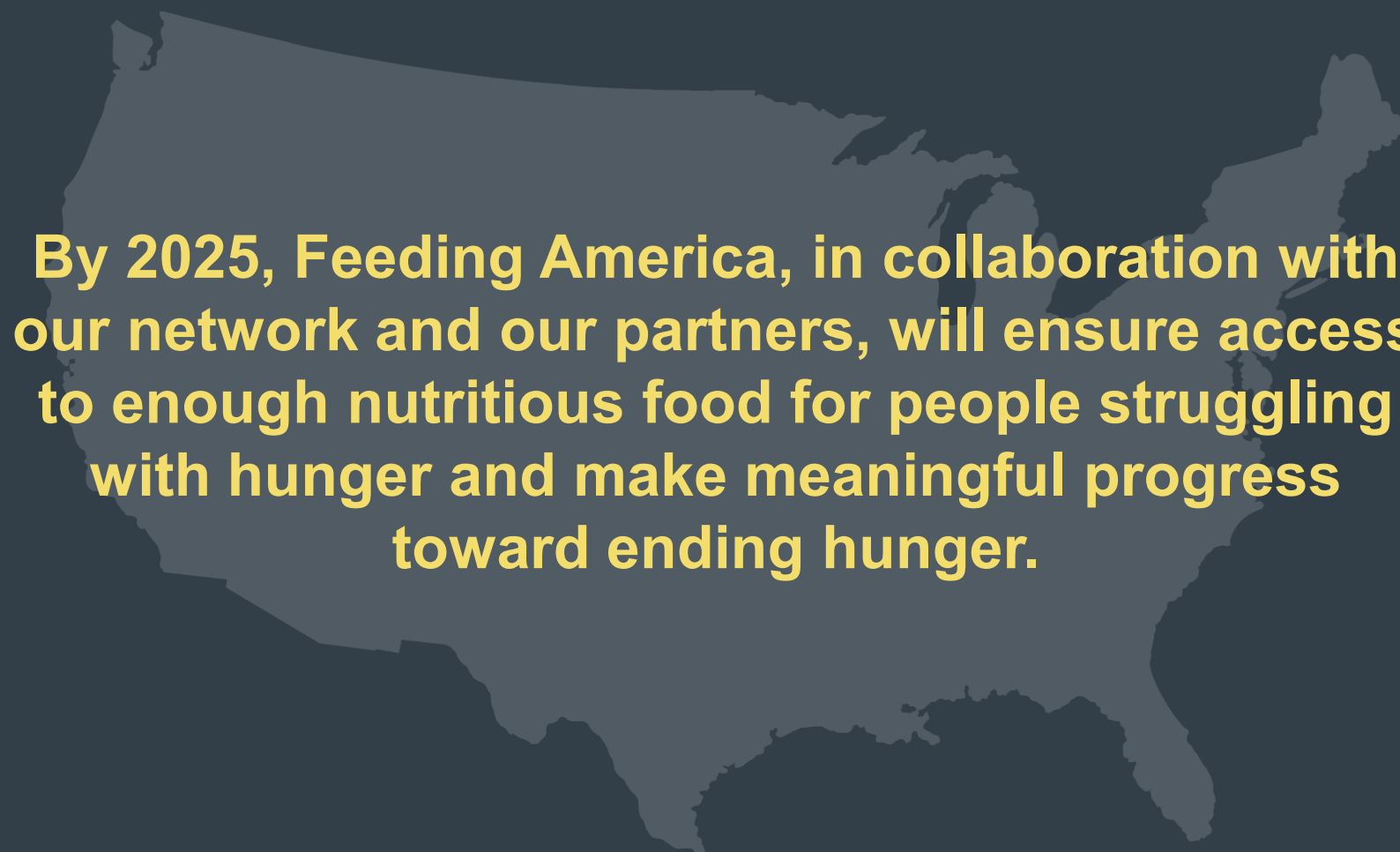


SOLVING HUNGER  
**TODAY**  
ENDING HUNGER  
**TOMORROW**

April 20, 2022 | Screening for Food  
and Nutrition Security



## Our Goal



**By 2025, Feeding America, in collaboration with our network and our partners, will ensure access to enough nutritious food for people struggling with hunger and make meaningful progress toward ending hunger.**

# The Feeding America Network



200

Food banks

+ 21 +

Statewide food bank associations

60,000

Partner agencies, food pantries and meal programs



Surplus food



Local food banks



60,000 meal programs



Tens of millions of people served

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# Hunger in America

IN 2020

# 38M

PEOPLE FACED HUNGER

THAT'S

# 1 IN 8

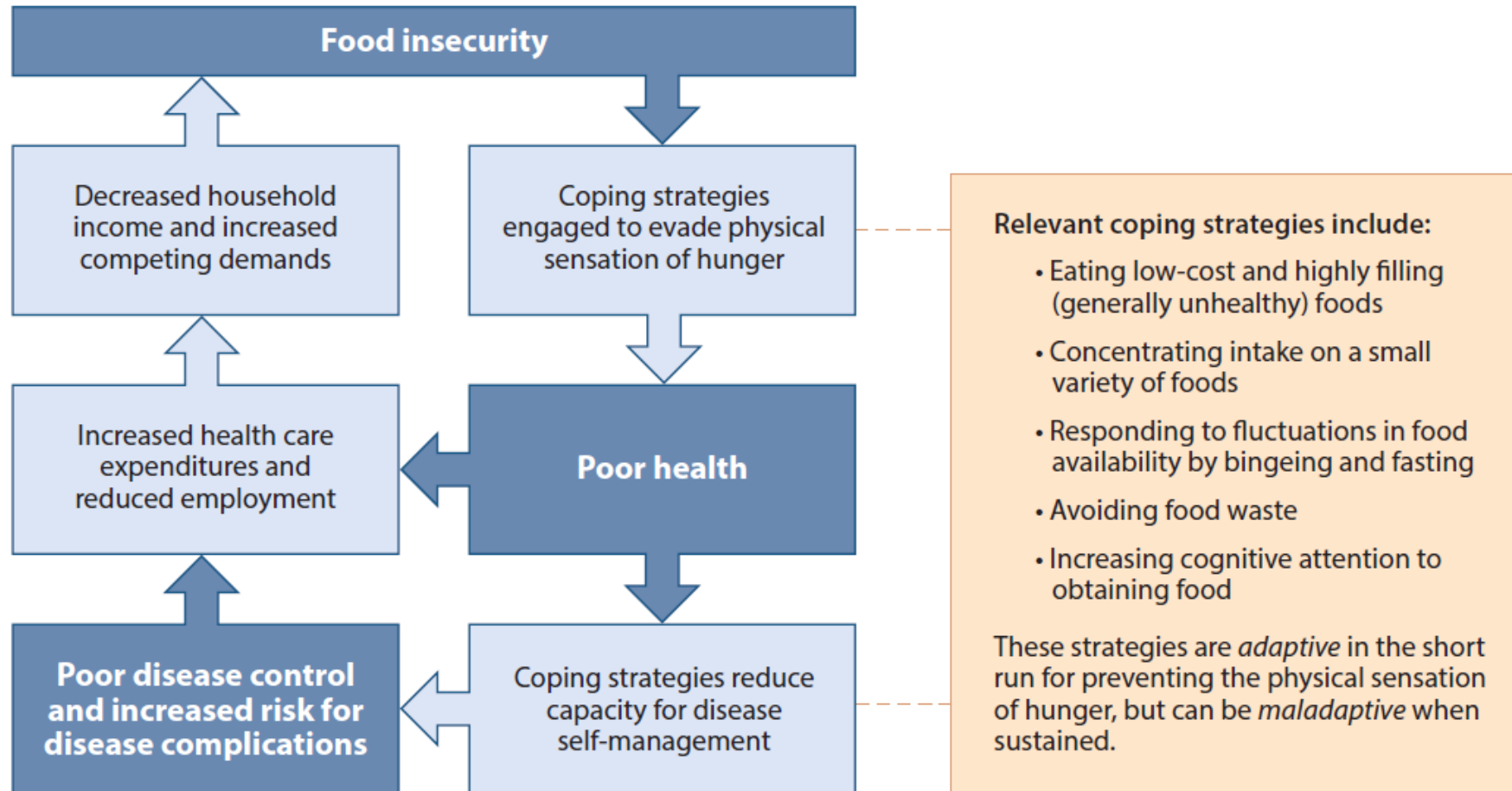
INDIVIDUALS



The USDA defines **food insecurity** as limited or uncertain access to enough food for all members of a household to live an active, healthy life.

**Nutrition security** is defined as consistent access to the safe, healthy, affordable foods essential to optimal health and well-being





**Figure 2**

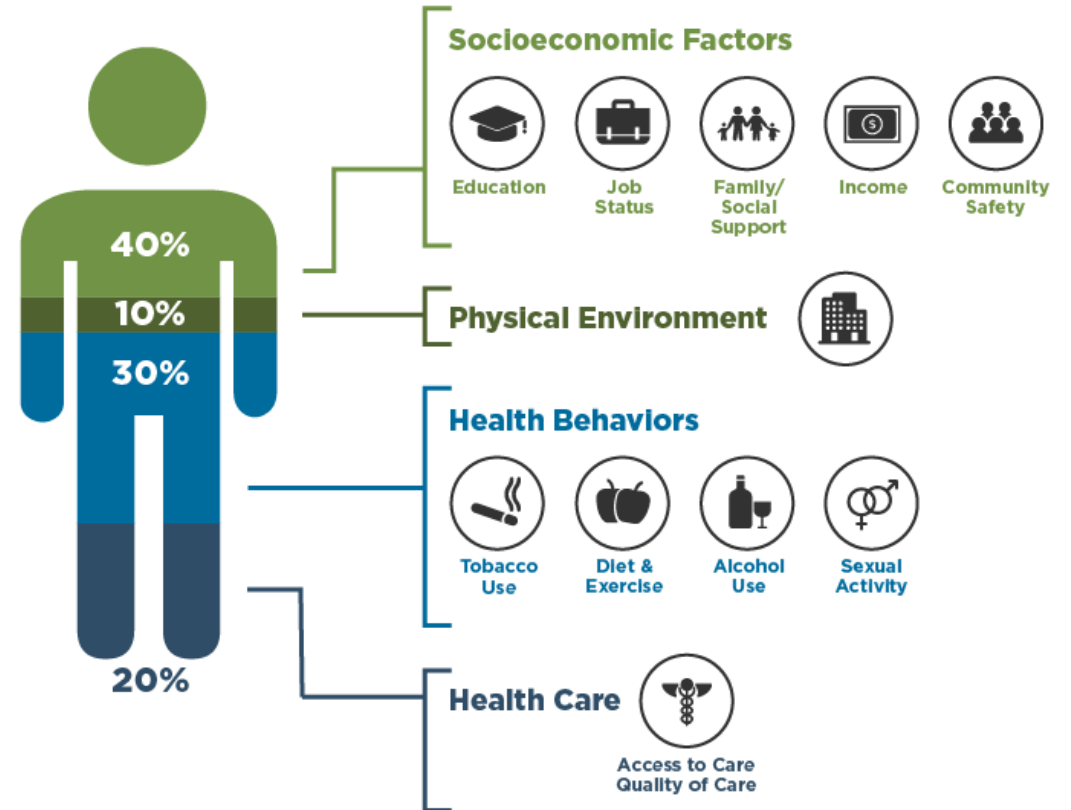
Interwoven pathways connecting food insecurity and poor health.

Seligman & Berkowitz, Aligning Programs and Policies to Support Food Security and Public Health Goals in the United States. Annual Review of Public Health, 2019.

# Why focus on nutrition and health?



## What Goes Into Your Health?



<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

Adapted from The Bridgespan Group



**\$77.5**

**billion**

additional health care  
expenditures annually



# Food Bank – Health Care Partnerships: Screen and Intervene Activities



# Food banks are addressing food and nutrition security by deeply engaging in health care partnerships.

79% (n = 158) of the network engaged in at least one health care program/partnership

41% (n = 82) food banks engaged in 3+ health care-related programs/partnerships

49% (n = 98) food banks implementing nudges in choice pantries

33% (n = 66) food banks surveying neighbors on cultural food preferences

20% (n = 40) of the network utilizing HER Nutrition Guidelines as inventory ranking system

40% (n = 80) food banks completed 2021/2022 Health Equity Training Series

47% now use health equity concepts to develop strategic plans (up from 37% at enrollment)

# Assessing Food Insecurity Through a 2-Question Validated Tool



**“ Within the past 12 months we worried whether our food would run out before we got money to buy more.”**



**“ Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”**



# Health Care Resources

**Food Banks as Partners in Health Promotion:**  
Creating Connections for Client & Community Health

CHEP CENTER for HEALTH LAW and POLICY INNOVATION  
Harvard Law School

FEEDING AMERICA

**FOOD BANKS AS PARTNERS IN HEALTH PROMOTION:**  
Navigating HIPAA

June 2020

CHEP CENTER for HEALTH LAW and POLICY INNOVATION  
Harvard Law School

Health Law Lab  
ADVISING FOR HEALTH LAW AND POLICY INNOVATION  
HARVARD LAW SCHOOL

FEEDING AMERICA

FALL 2021

**FOOD BANKS AS PARTNERS IN HEALTH PROMOTION**  
Navigating Patient Inducement Laws

THIS IS MY VOLUNTEER SHIRT

CHEP CENTER for HEALTH LAW and POLICY INNOVATION  
Harvard Law School

Health Law Lab  
ADVISING FOR HEALTH LAW AND POLICY INNOVATION  
HARVARD LAW SCHOOL

HUNGER + HEALTH

FEEDING AMERICA

**Key Drivers to Improve Food Security and Health Outcomes**

AN EVIDENCE REVIEW OF  
FOOD BANK - HEALTH CARE PARTNERSHIPS  
AND RELATED INTERVENTIONS

Brittney N. Cavaliere, Katie S. Martin  
Institute for Hunger Research & Solutions at Foodshare

Morgan Smith, Monica Hoke  
Feeding America

March 2021

CONNECTICUT FOOD BANK | FOODSHARE | FEEDING AMERICA

HUNGER + HEALTH | FEEDING AMERICA

**Food is Medicine**

FINAL PROJECT REPORT

RESULTS AND KEY LEARNINGS  
2018-2020

RELEASED APRIL 2021

FEEDING AMERICA | CENTENE

**Food for Tomorrow**

SNAP Application Assistance  
In Health Care Settings

NATIONAL GUIDELINES AND RECOMMENDATIONS

FEEDING AMERICA

ADDRESSING FOOD INSECURITY AND DIABETES PREVENTION:  
RESOURCES AND TOOLS FOR SUCCESS

HUNGER + HEALTH | FEEDING AMERICA

Understand Food Insecurity | Resources | Healthy Recipes | Explore Our Work | Get Involved | Blog

**OUR MISSION**

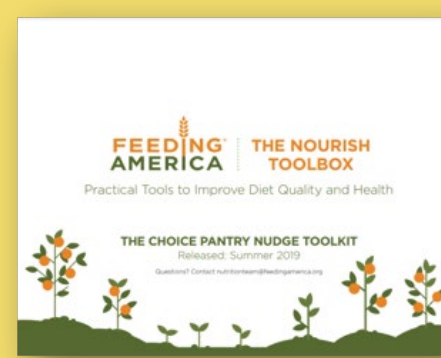
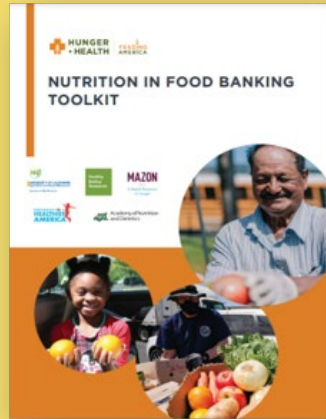
Educate, connect and engage cross-sector professionals on the intersections of food insecurity, nutrition and health.

Resources available at:

- [Hunger + Health](#)
- [HungerNet HCP Toolkit Page](#)

# Nutrition Resources

## HCP Toolkit Yammer Page



# THANK YOU!

**Traci Simmons, MPH, CPH, CHES**

**Senior Manager, Programs**

[tsimmons@feedingamerica.org](mailto:tsimmons@feedingamerica.org)



# Screening for Food Insecurity: Health Systems Explore New Ways to Improve Outcomes for Patients

Barbara Markham Smith, JD  
Vice-President of Community Health



# The Sources of Poor Health Outcomes: Social Determinants of Health



The conditions in which people are born, grow, live, work, and age, including the health care they receive.

World Health Organization, [www.who.int/social\\_determinants/en/](http://www.who.int/social_determinants/en/)



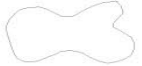
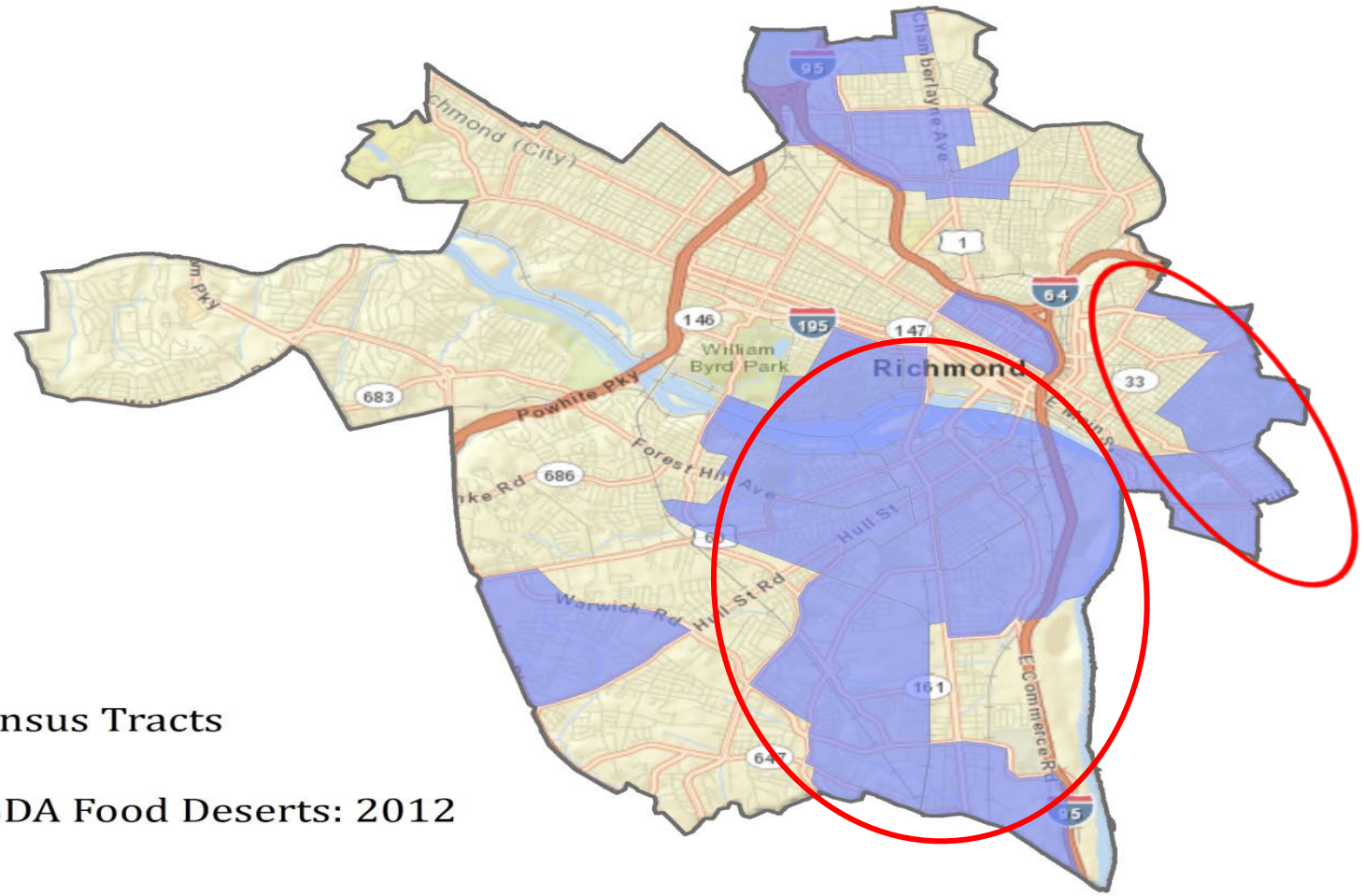
# The Focus on Food

***“Among the various social determinants of health, food insecurity has one of the most extensive impacts on the overall health of individuals.”***

- Altarum Health Care Hub (<https://www.healthcarevaluehub.org/advocate-resources/publications/social-determinants-health-food-insecurity-united-states>)



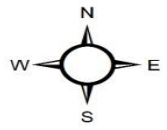
# USDA Food Deserts in the City of Richmond



Census Tracts



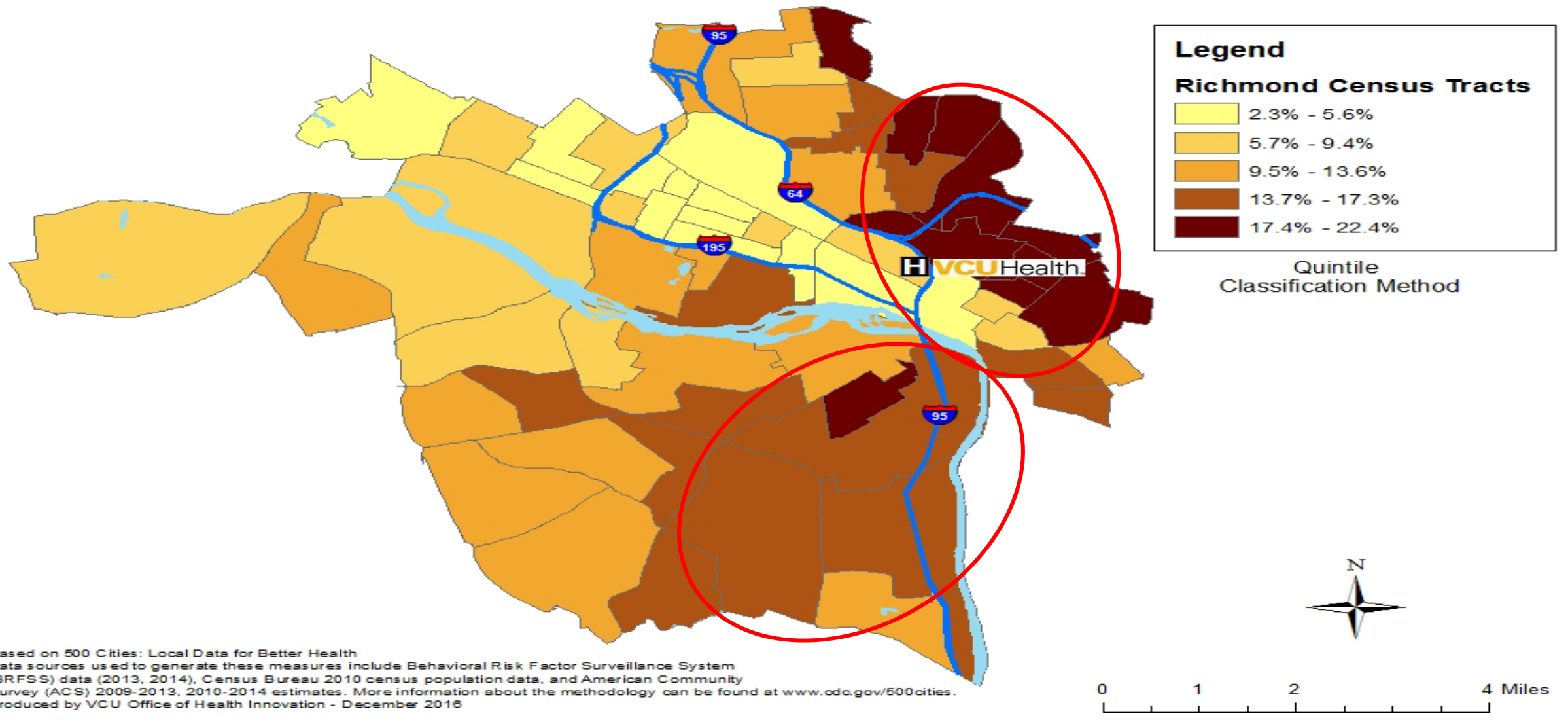
USDA Food Deserts: 2012



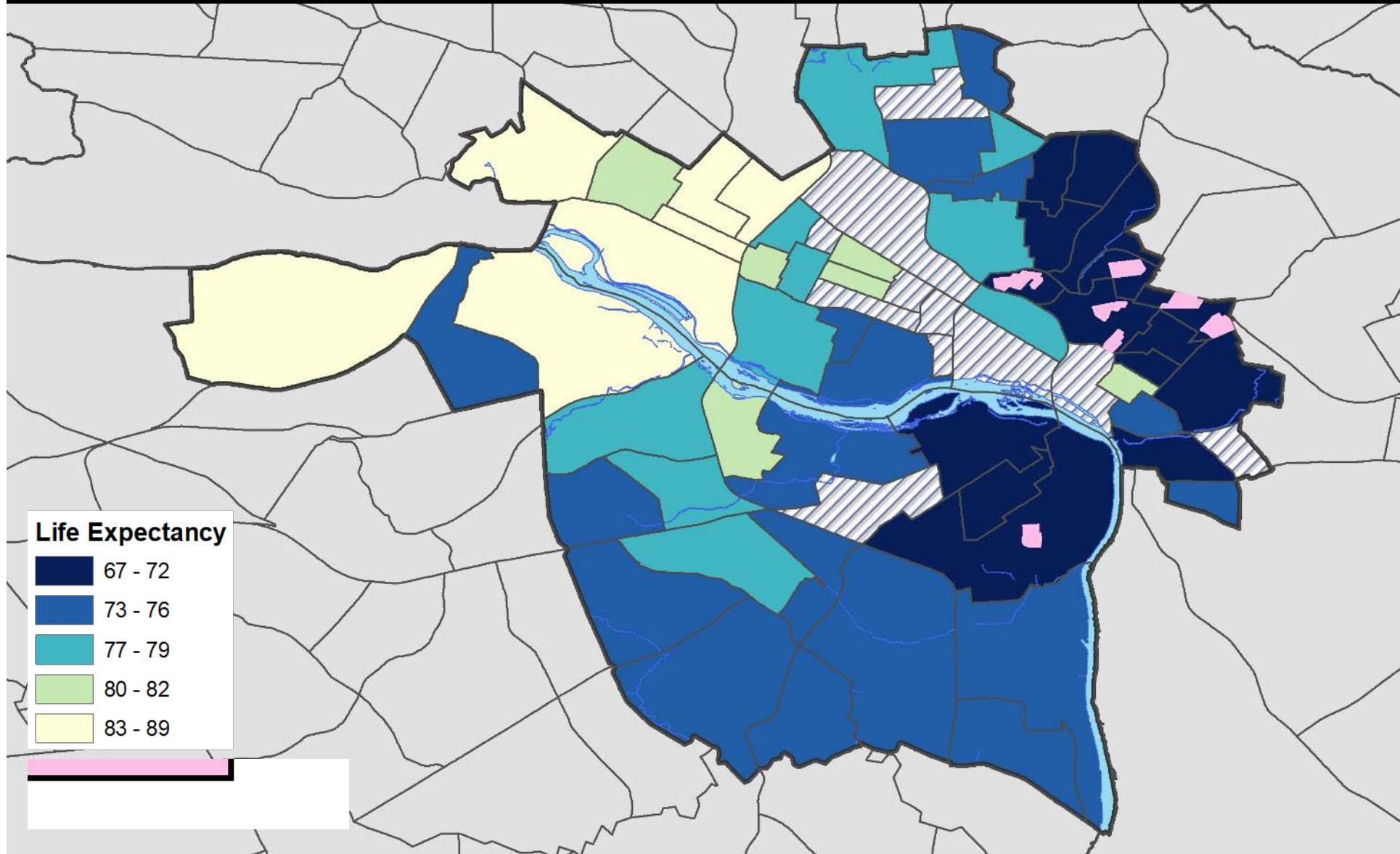
May, 2014

Sources:  
USDA, 2014; US Census Bureau, 2014  
Food Deserts are census tracts where 20% of households have incomes below the federal poverty level, and 33% percent of the tract's population is more than a mile from a supermarket in urban tracts, or 10 miles in rural tracts.  
Food Deserts calculated using US Census Bureau data for the year 2012.

# CDC Small Area Estimates Diagnosed diabetes among adults aged $\geq 18$ Years

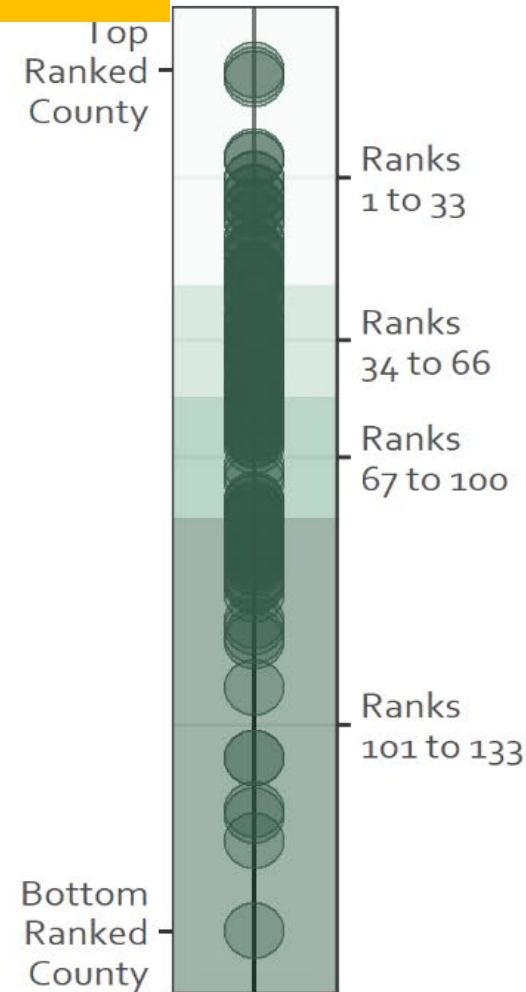
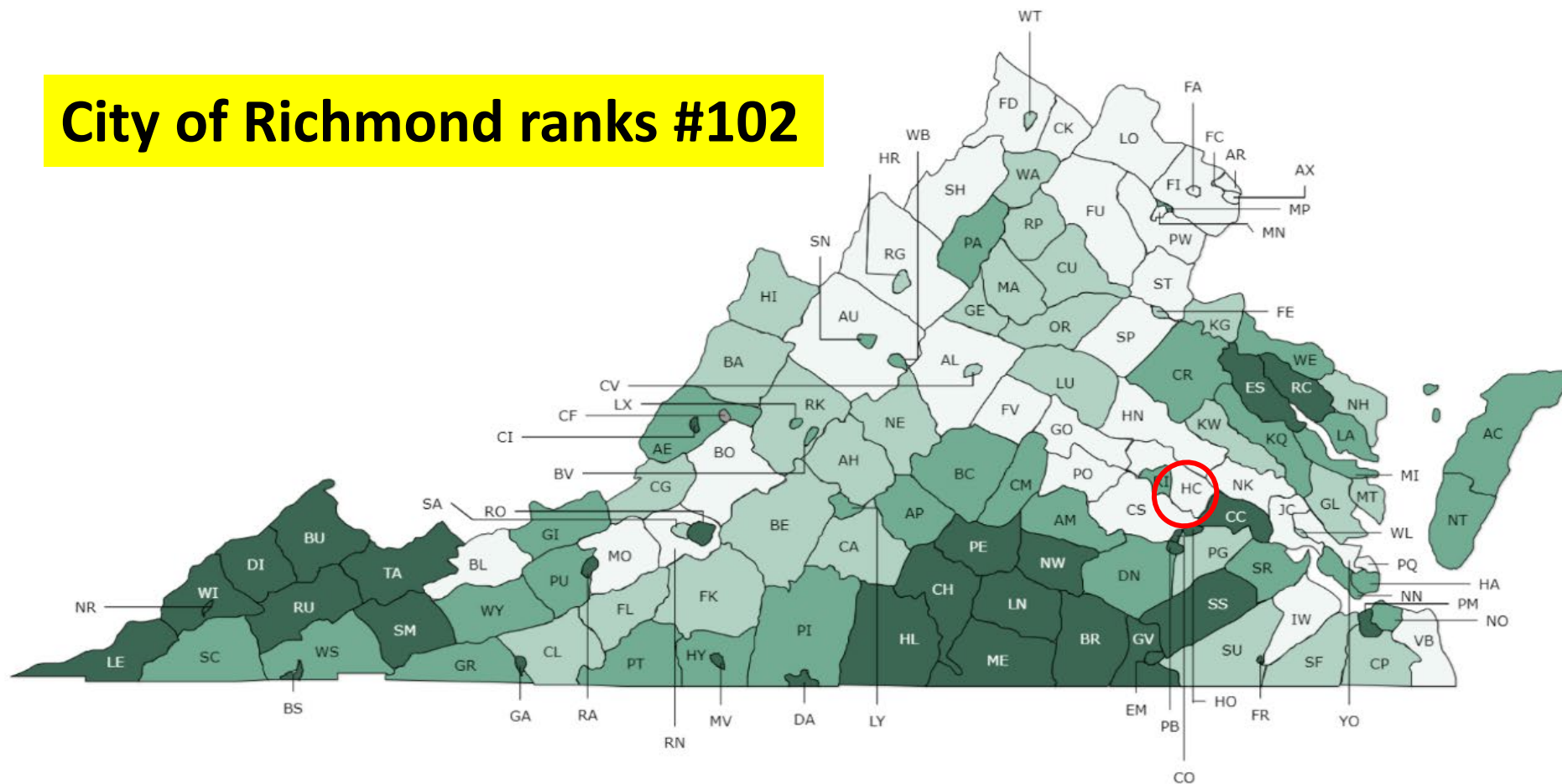


# Life Expectancy at Birth Varies 22 Years Across Census Tracts in Richmond, VA (2010-2015)



# Virginia's 2021 County Rankings for Health Outcomes

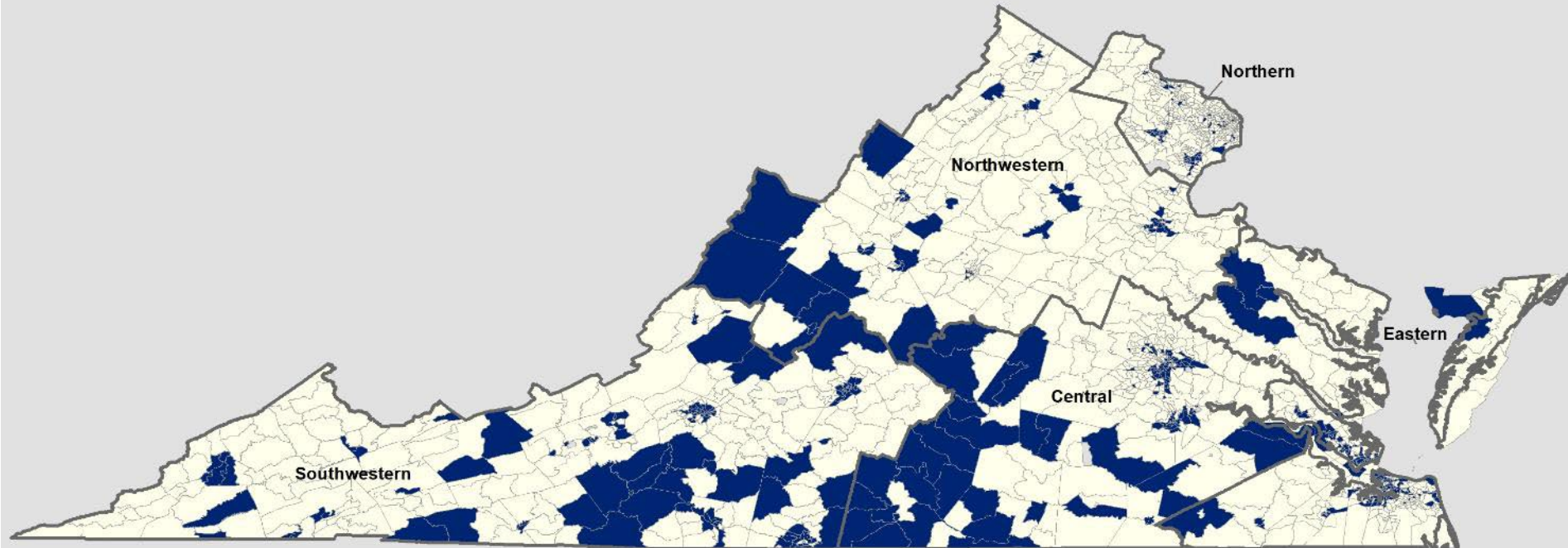
**City of Richmond ranks #102**



Health Outcome Ranks  1 to 33  34 to 66  67 to 100  101 to 133

One County

# Low Income Census Tracts (>20% living in poverty) with Low Food Access (>0.5 mile from large grocery store), Virginia(2019)



# Survey of VCUHS Adult Internal Medicine and ED Patients revealed prevalence of health-related social needs

- Transportation – 26.8%
- Food – 23.1%
- Housing - 14.2%
- Utilities – 11.8%

N=223



O'Neal, J., Favour, M., Turkiewicz, A., McHenry, C., Gonzalez, M., Etz, R., Survey: Presence of Social Need among VCUHS Patients, Spring 2018.

# Scale and Impact of Food Insecurity in Virginia

- According to the Federation of Virginia Food Banks:
  - 9.9% of Virginia's population was food insecure in 2019
  - That number jumped to 22% in 2020, more than doubling.
- According to a CDC-published analysis, “the median annual health care cost associated with food insecurity [nationally] was \$687,041,000.”\*

\*Berkowitz SA, Basu S, Gundersen C, Seligman HK. State-Level and County-Level Estimates of Health Care Costs Associated with Food Insecurity. *Prev Chronic Dis* 2019;16:180549. DOI: <http://dx.doi.org/10.5888/pcd16.180549>external icon.



# Impact of Food Insecurity on Health

**“Unhealthy diets amplify the negative outcomes experienced by food insecure individuals”**

**More days missed from school**



**More child referrals to MH**



**Impaired growth in children**



**More chronic disease for adults**



**Higher healthcare costs**



**Missed work days and lower income**



**HEALTH IMPLICATIONS**

**FINANCIAL IMPLICATIONS**

Food Insecurity and Health: A Toolkit for Physicians and Health Care Organizations, Humana and Feeding America, <https://hungerandhealth.feedingamerica.org/wp-content/uploads/2017/11/Food-Insecurity-Toolkit.pdf>. Accessed October 20, 2020; <https://agricultureandfoodsecurity.biomedcentral.com/articles/10.1186/s40066-016-0083-3>. <https://childrenshealthwatch.org/wp-content/uploads/Shankar-et-al-JDBP-2017.pdf>

# The Screening Harvest

- ✓ The **ability** to identify need
- ✓ The **opportunity** to connect with community partners
- ✓ The **possibility** to track referrals
- ✓ The **potential** to determine health outcomes of intervention



# IDENTIFYING & ADDRESSING FOOD INSECURITY AT A HEALTHCARE SITE



# From Design to Practice

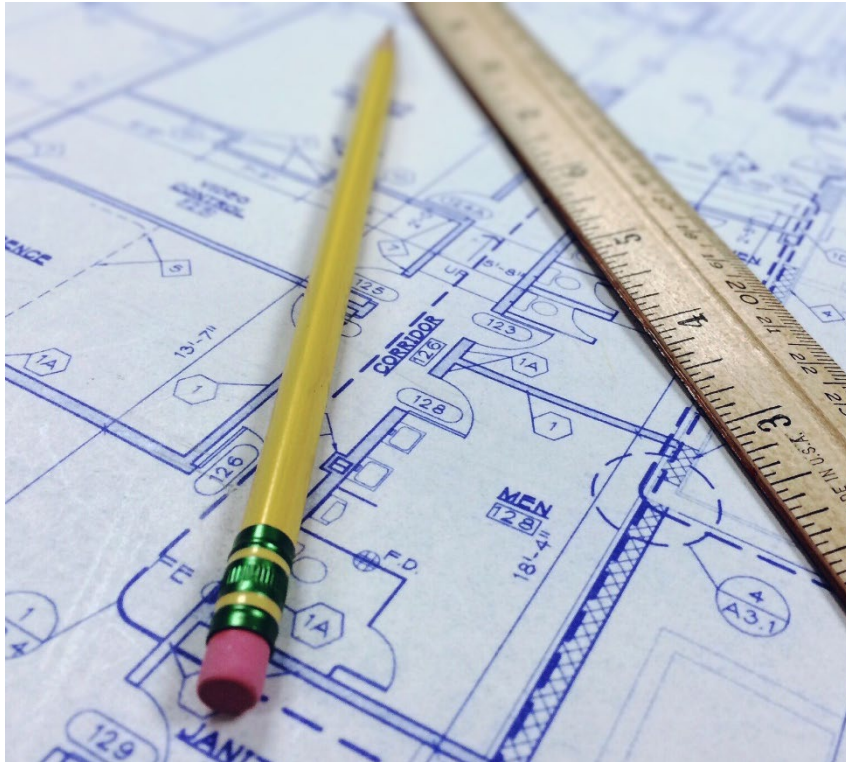


Photo by Unknown Author is licensed under [CC BY-SA](#)

# Anthem Foundation Partnership with Feeding America Launched Food is Medicine Programs

- Initiative funded seven Feeding America member food banks to partner with local hospital clinics
- Goals:
  - 1) Reduce barriers for patients by implementing on-site **food insecurity screening** and **food distribution** at hospital clinics
  - 2) Address long-term food insecurity by supporting **enrollment in SNAP** and connecting patients to **additional food assistance resources**





# Food is Medicine Program at VCU Health System

- Implemented food insecurity screening and food box distribution in 7 adult clinic locations
- FeedMore provided food boxes stored at VCUHS to meet short term needs
- Provided reusable grocery bags and transportation assistance to facilitate transport of food items home
- Referrals made to the Hunger Hotline, Wellness Pantries and SNAP application assistance



# Food Insecurity Pilot Extended to 4 Units at Children's Hospital of Richmond

1. CHoR: From July 2021 – February 2022\*  
Food boxes distributed: **370**
2. Ambulatory settings for adults  
1/2019 – 12/2021: **795**

**Total distributed: 1,165 food boxes**



*\*Number of families screened understated because of documentation disruptions related to Omicron surge. This could also affect the positivity rate. Positivity rate ranged from 20% - 50%.*

# Expansion of Food is Medicine Program to VCUHS Inpatient services

- Launched a pilot on a General Internal Medicine unit with a high readmission rate
- Goal: Screen and refer for health related social needs to identify impact on utilization rates
- Incorporated screening results into daily flash rounds
- Established space and processes for the distribution of food boxes
- Initiated closed loop tracking with FeedMore to determine pantry utilization post-discharge



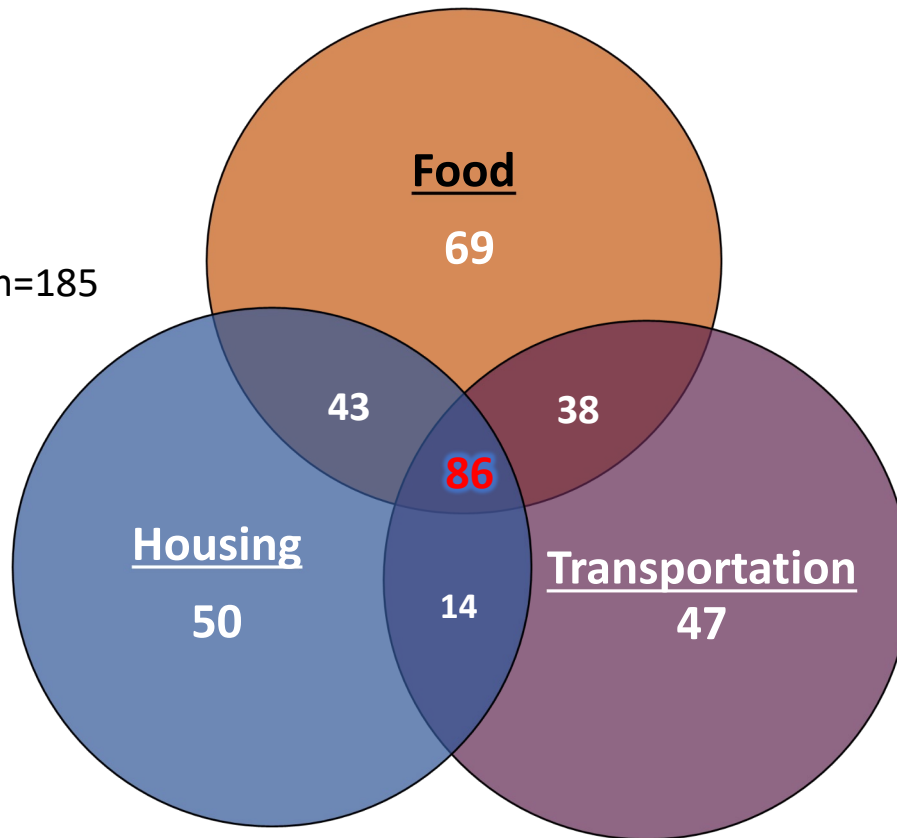


# **INTERVENTIONS: 776 patients screened to date**

## **347 screened positive for at least one need – and food is again #1**

**N = 347**

Food=236  
Housing=193  
Transportation=185



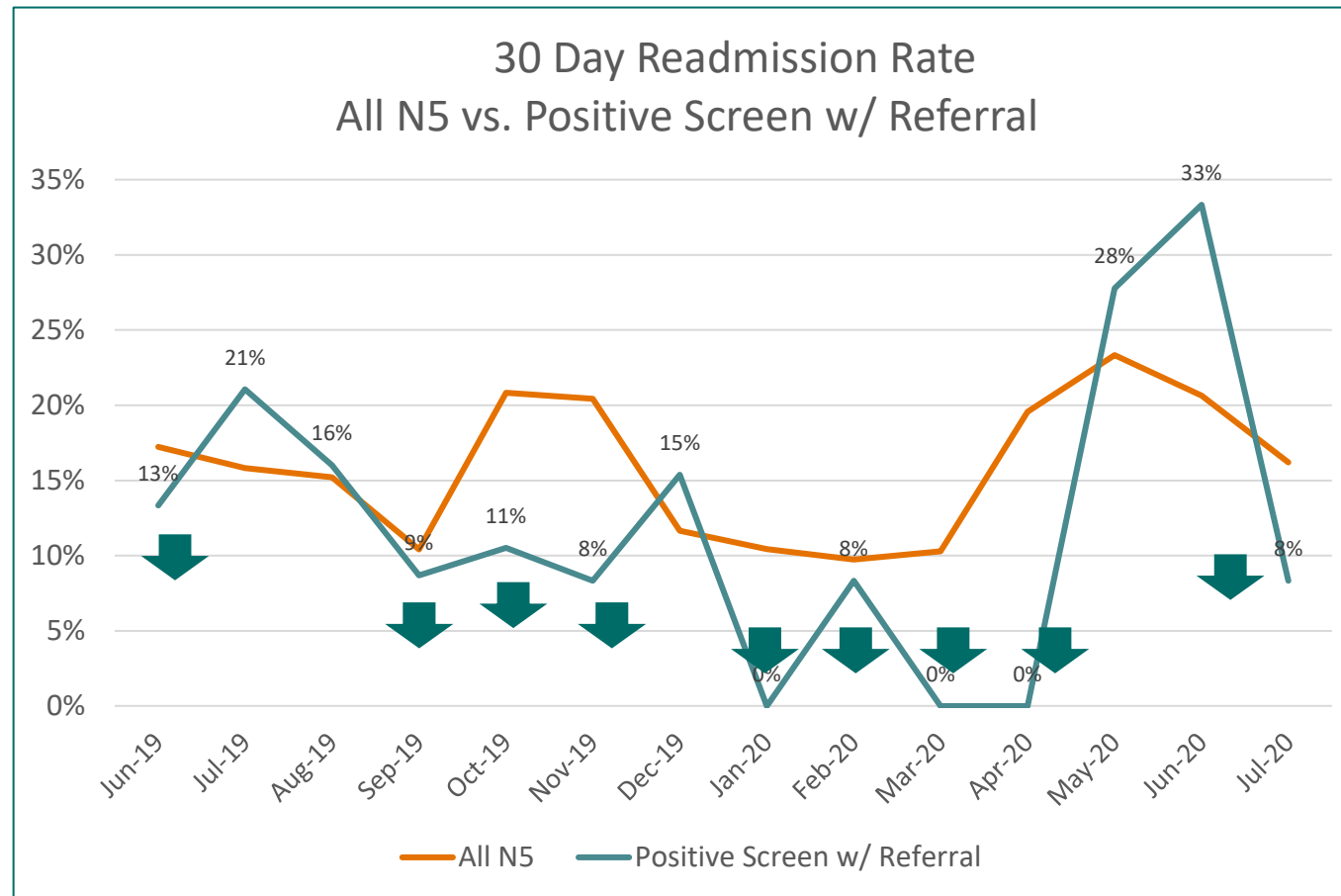
### • Interventions

- Food Boxes
- Hunger Hotline Referrals
- Assistance with SNAP
- Housing Crisis Line Information
- Income-based Housing Information
- Medicaid Transportation and RoundTrip Rides
- Other transportation options for follow-up appointments\*

\*Other transportation options includes Arrive2Care, GRTC specialized transportation, and CAPUP

- 1) Data range 5/20/19 – 10/2/2020
- 2) Includes all patients that screened positive for at least one need. Numbers to left of graph are the totals for that need; of that total, patients with multiple needs are represented in the overlapping circles.
- 3) Screening data includes multiple data for patients with multiple admissions to N5 during the timeframe.

# ***OUTCOMES:*** For the Intervention population, 30-day readmission rates were lower for 9 of the 14 months



- 1) Data for each month reflects the cohort of patients with discharges from N5 during that month
- 2) PRE data is all VCUMC utilization for cohort patients for 60 day period prior to their Index Discharge on N5
- 3) POST data reflects VCUMC utilization for cohort patients for 60 day period after their Index Discharge on N5
- 4) Includes data for Index Discharges from N5 between 5/20/19 and 9/8/2020, data as of 9/8/2020



This Photo by Unknown Author is licensed under [CC BY](#)

# Universal Screening

- By January, 2022, VCUHS had in place the *electronic capacity* to conduct universal screening for SDoH: food insecurity, housing, transportation, interpersonal violence.
- The screening is done through a tool called Healthy Planet in the Epic electronic medical record (EMR)
- Operationalization is still a work in progress with challenges around staffing, work flow protocols, and reporting.

# Closing Thoughts....

- Universal screening tells us the scale of the problem among our patients and whom it affects.
- Screening enables us to track interventions, determine outcomes, and adjust interventions to improve results - adequate staffing is essential to these activities.
- It provides a mechanism through which clinicians can integrate clinical interventions with social interventions.
- None of this can happen without community partnerships to connect patients with needed resources and close referral loops.
- Health care systems and community partners need to explore alternative payment models with payers to develop sustainability models.

# Best Practices

- Kaiser Permanente – Food for Life  
(<https://about.kaiserpermanente.org/community-health/news/boosting-food-security-to-improve-nation-s-total-health>).
- Boston Medical Center – Preventive Food Pantry  
(<https://www.bmc.org/nourishing-our-community/preventive-food-pantry>)
- Eskenazi Health and Meals on Wheels of Central Indiana  
(<https://www.aha.org/news/insights-and-analysis/2018-02-21-case-study-eskenazi-health-partners-community-address-food>).
- Arkansas Children's Hospital - Little Rock, Arkansas  
(<https://www.aha.org/news/insights-and-analysis/2018-01-23-arkansas-childrens-hospital-works-community-partners-address>).



Contact:  
Barbara M. Smith, JD  
VP Community Health and Innovation  
[Barbara.m.smith@vcuhealth.org](mailto:Barbara.m.smith@vcuhealth.org)

# Getting Better Together:

## Our Food Pharmacy Program

**Maria Bowman, MPH**  
Director of Health Initiatives



Blue Ridge Area  
**FOOD BANK**

A member of  
**FEEDING  
AMERICA**

# Blue Ridge Area Food Bank



- 1 of 7 Virginia Food Banks
- **207 agencies** - pantries, soup kitchens, and shelters
- **180 program sites** including schools, clinics, senior centers, and mobile distributions





# Health Equity



We believe *we have a role to play in advancing health equity* in our service area.

To achieve this, we are partnering with hospitals, clinics, other Virginia food banks, and community organizations that prioritize health to provide nutritious food.

# Our Health Initiatives



We develop community partnerships *within and beyond the pantry setting* to increase dignified access to nourishing food for all who need it

- State-wide health equity collaborations
- Nutritious sourcing with *Nourish*
- Healthy Food Pantry program
- Food Pharmacy

# Food Pharmacy



## Medically-tailored foods delivered in a clinical setting

### Benefits to patients

- Convenient, accessible, free
- Nutrient dense foods appropriate for medical conditions
- Health and nutrition recommendations from trusted, familiar providers

### Benefits to hospital/clinic

- Impactful referral opportunity for positive screens
- Increased patient wellbeing and health outcomes (also valuable for payers)
- Increased patient satisfaction with hospital/clinic
- Alignment with Community Health Needs Assessments



# Current Food Pharmacy Partner Types



- Network of dialysis clinics across our service area
- Community hospital system with 17 referring clinics (on and off the hospital campus)
- Community/free clinics



*“The Food Pharmacy program enables us to not only tell patients what foods to eat when following a renal diet but to also provide these foods to those who are in need.”*

*– Kim, Partner Dietitian*



# How We Work Together

UVA KIDNEY CENTER (KC) & BLUE RIDGE AREA FOOD BANK (BRAFB)



Dietitian selects and orders kidney-friendly foods from BRAFB online inventory

BRAFB delivers food to KC regularly

Food stored on shelves in Kidney Center



# How We Work Together

UVA KIDNEY CENTER (KC) & BLUE RIDGE AREA FOOD BANK (BRAFB)



Dietitian selects and orders kidney-friendly foods from BRAFB online inventory

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Food stored on shelves in Kidney Center



Dietetic team screens KC patients for food insecurity, refers to Food Pharmacy

Food-insecure KC patients receive supplemental food weekly

Bags of food are packed by KC staff and delivered to patient during treatment

KC staff documents patient's visit to Food Pharmacy, welcomes feedback



# How We Work Together

UVA KIDNEY CENTER (KC) & BLUE RIDGE AREA FOOD BANK (BRAFB)



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Dietetic team screens KC patients for food insecurity, refers to Food Pharmacy

Food-insecure KC patients receive supplemental food weekly

Bags of food are packed by KC staff and delivered to patient during treatment

KC staff documents patient's visit to Food Pharmacy, welcomes feedback



Keep in mind—**This is new, innovative work.** We are learning together.

Have questions? Don't be afraid to ask. We may all need that question answered.

Share program feedback (yours and patients') with BRAFB staff

Collaborate and communicate. **We're a good team.**

# Food Pharmacy: What Has Worked Well



1. Centering patients
2. Partnering with intention;  
time for mutual questions

### Partner when you have:

- Identified community/patient need
- Mutually aligned goals for health equity
- Capacity - staff, space, and systems
- Clear expectations - data sharing and program roles

### Resources:

- *Assessing Readiness and Creating Value Through Food Bank –Health Care Partnerships (FANO)*
- *Suitability for Partnership Assessment (Roadrunner Food Bank)*





# Questions for Cross-Sector Stakeholders



- Which program **metrics** will support patients' health and facilitate sustainable partnerships?
  - ...For healthcare entities? Food banks? Payers?
- How to best glean program **feedback from participants/** potential participants?
- How can we **reduce stigma** to promote accurate screenings/referrals and increase program utilization
- Is Hunger Vital Signs the **best screening tool** for all clinical settings? If not, why not? Effective alternatives?
- What **types of training** do healthcare providers need to confidently and sensitively conduct nutrition security screenings and referrals?
- How can we **streamline HIPAA-compliant data sharing** for the food bank and healthcare partner?

*“Putting healthier foods in our patient’s hands when they leave their treatment helps bring them one step closer to success.” – Partner Dietitian*



**Maria Bowman, MPH**  
Director of Health Initiatives  
mbowman@brafb.org



**Blue Ridge Area**  
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A member of  
**FEEDING**  
**AMERICA**



Slides 13 -15 could be used during Q&A in case folks ask about the data we collect or Nourish.

# Food Pharmacy Monthly Data

# of <u>total patients</u> seen at the practice this reporting month			
# of <u>patients screened</u> for food insecurity this reporting month			
# of <u>patients who screened positive</u> for food insecurity this reporting month			
# of <u>patients referred to external community food resources</u> this reporting month			
# of <u>patients receiving nutrition education</u> this reporting month			
# of <u>total households</u> receiving food <u>in-clinic</u> this reporting month			
# of <u>patients with chronic illness</u>			
# of <u>patients</u> receiving food <u>in-clinic</u> this reporting month (in each age category)	0-18	19-59	60+
# of <u>patients</u> receiving <u>fresh produce</u> this reporting month (in each age category)	0-18	19-59	60+
# of <u>total bags/boxes</u> of food distributed in-clinic this reporting month			

*We warmly welcome patient and clinic staff feedback on all aspects of the program! Please share here:*

# Food Pharmacy Monthly Data Example

# of <u>total patients</u> seen at the practice this reporting month	100		
# of <u>patients screened</u> for food insecurity this reporting month	92		
# of <u>patients who screened positive</u> for food insecurity this reporting month	30		
# of <u>patients referred to external community food resources</u> this reporting month	30		
# of <u>patients receiving nutrition education</u> this reporting month	100		
# of <u>total households</u> receiving food <u>in-clinic</u> this reporting month	25		
# of <u>patients with chronic illness</u>	22		
# of <u>patients</u> receiving food <u>in-clinic</u> this reporting month (in each age category)	0-18	19-59	60+
	3	19	8
# of <u>patients</u> receiving <u>fresh produce</u> this reporting month (in each age category)	0-18	19-59	60+
	3	19	8
# of <u>total bags/boxes</u> of food distributed in-clinic this reporting month	48		

*We warmly welcome patient and clinic staff feedback on all aspects of the program! Please share here:*

- $92/30 = 30.6\%$  of screened patients are food insecure
- 100% of food insecure patients received shelf stable food and produce in-clinic
- $48/30 = 1.6$  Participants received avg of 1.6 bags of food this month

# Nourish



Nourish uses the HER guidelines to support nutritious food sourcing at the food bank level.



often

**Green foods** are most **nutritious** because they have higher amounts of health promoting nutrients such as vitamins, minerals and fiber. *Green foods should be selected often.*



sometimes

**Yellow foods** are nutritious, but can contain more added sugar, salt and fat compared to *green foods* and should be *selected sometimes*;



rarely

**Red foods** are least **nutritious** as they contain fewer health promoting nutrients and the highest amounts of added sugar, salt and fat. *In excess amounts, red foods may negatively impact health and should be selected rarely.*