

# A Scaled Rural Prevention Network: Addressing Food Insecurity in Northern Maine

|              |                       |                              |
|--------------|-----------------------|------------------------------|
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# CDC Partnerships to Improve Community Health



## National Prevention Strategy

1. **Healthy & Safe Community Environments**
2. **Expand Quality Preventive Services**
3. **Empower People to Make Healthy Choices**
4. **Eliminate Health Disparities**

# Overview

- **Network Partners** – Northern Maine Rural Collaborative (NMRC)
- **Regional Context**
- **Health Factors**
- **Food Security Interventions**
- **Results** - Reach, Adoption and Network Engagement

# Northern Maine Rural Collaborative Network Partners & Regional Context

# Northern Light Health – Serving Maine



## Northern

1. Home Care & Hospice
2. A. R. Gould Hospital
3. Homecare & Hospice

## Maine Highlands

4. Charles A. Dean Hospital
5. Eastern Maine Medical Center  
Foundation  
Acadia Hospital  
Home Care & Hospice  
Rosscare  
Affiliated
6. Eastern Maine Medical Center  
Home Office  
Beacon Health  
Affiliated

## Downeast Acadia

7. Maine Coast Hospital  
Home Care & Hospice
8. Blue Hill Hospital

## Kennebec Valley

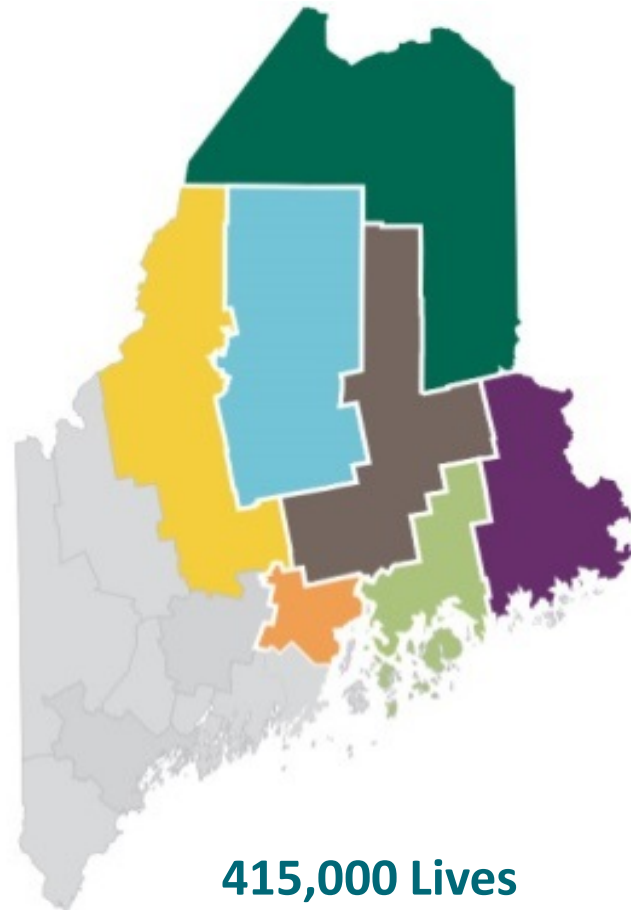
9. Sebasticook Valley Health
10. Inland Hospital  
Lakewood  
Home Care & Hospice

## Southern

11. Mercy Hospital  
Home Care & Hospice  
Affiliated

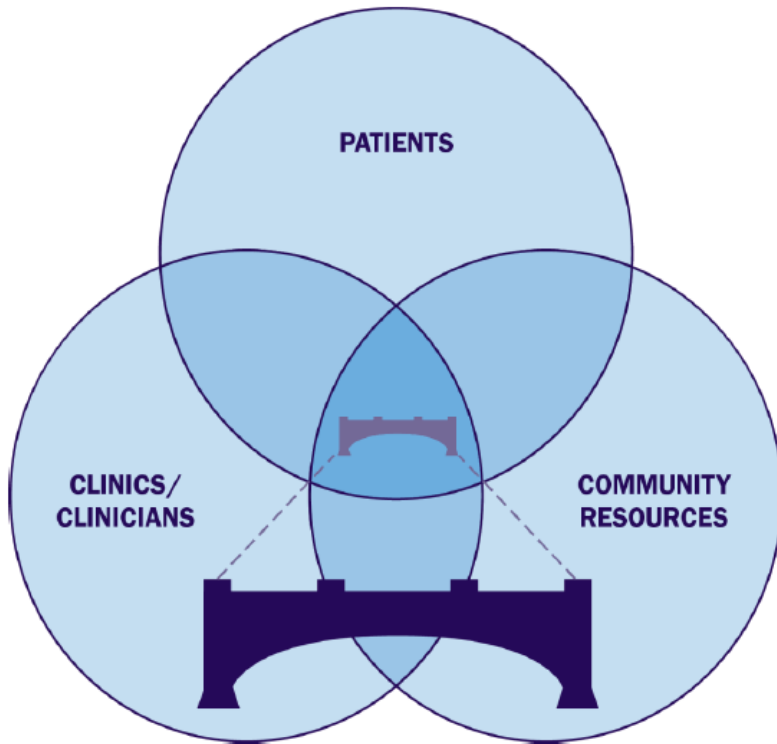
# Northern Maine Rural Collaborative Network Partners

Aroostook County Action Program  
Power of Prevention  
Mayo Community Outreach  
Millinocket Regional Hospital  
Healthy Acadia  
Good Shepherd Food Bank  
EMMC Clinical Research Center



Coastal Healthcare Alliance  
Bangor Public Health  
Healthy Sebasticook Valley  
Somerset Public Health  
VNA Home Health Hospice  
United Way of Eastern Maine  
USM Muskie School of Public Service

# Northern Maine Rural Collaborative



## Shared Network Goals

1. **Prevent Chronic Disease** using evidence-based population level strategies
2. **Link Community & Clinical Partners** to better connect patients with community supports
3. **Foster a Prevention Network** that could rapidly scale rural community health improvement

# Population Health Factors & Disparities



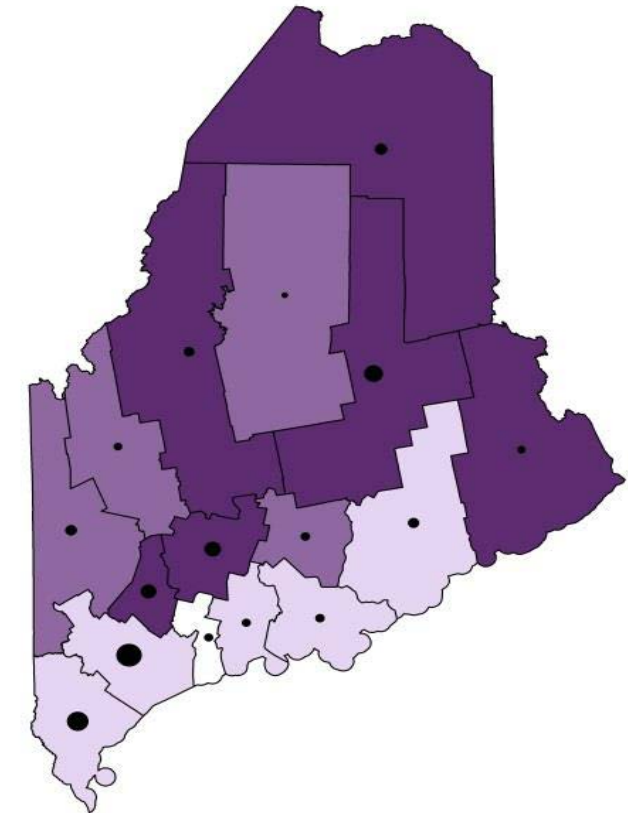
# Why Northern Maine?

## Health Gaps – Excess Chronic Disease

### Excess Chronic Disease Morbidity & Mortality Demographic, Environmental & Behavioral Risk

- Aging
- Poverty/Household Income
- Cancer
- Food Insecurity

University of Wisconsin, Population Health Institutes Health Gaps Report 2015



**Percent of deaths in excess**



**Population size**



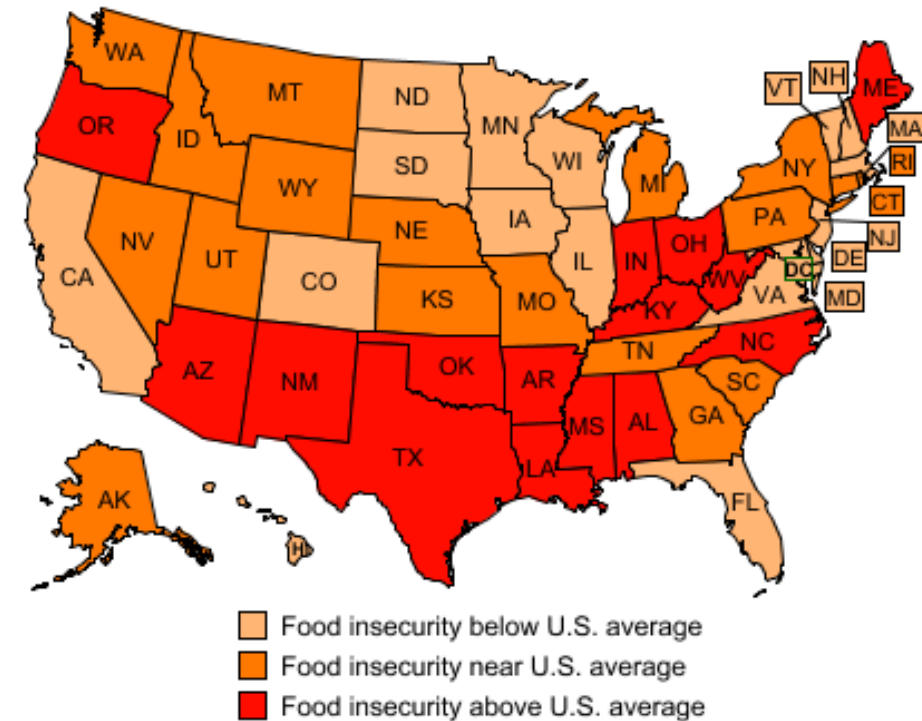
# Health Gaps – Food Insecurity in the Maine

## Low or Very Low Food Security

Prevalence Rates:  
(2004-2006)      (2014-2016)

|               |              |              |
|---------------|--------------|--------------|
| <b>USA:</b>   | <b>11.3%</b> | <b>13.0%</b> |
| <b>Maine:</b> | <b>12.9%</b> | <b>16.4%</b> |

Prevalence of food insecurity, average 2014-16



Source: USDA, Economic Research Service, using data from the December 2014, 2015, and 2016 Current Population Survey Food Security Supplements.

# Food Security Interventions

# Intervention Strategy

## Changing the Context for Health (PSE)

### 1. Food Pantry System

Strengthen the rural food security network

### 2. Healthier Hospital Food Service

Source & serve healthier foods

### 3. Hunger Screening & Referral

Clinical-community connections

# Food Insecurity Screening & Referral Community Food & Nutrition Resources

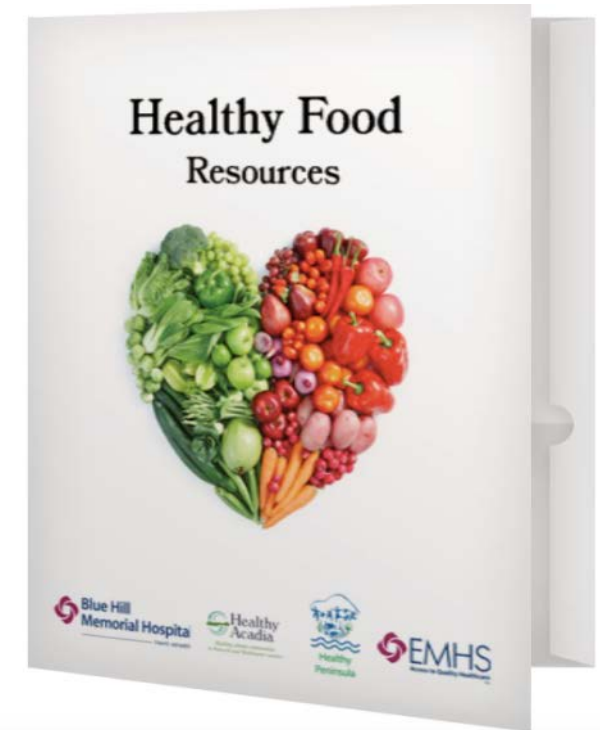
Community partner outreach - laying the groundwork, building relationships, educating & assisting providers



*Eastern Area Agency on Aging*



*Good Shepherd Food Bank*



*County Resource Guides*

# Food Insecurity Screening

## Hunger Vital Sign: Validated 2-Question Screen



The Hunger Vital Sign™ identifies individuals and families as being at risk if they answer that either of the following two statements is ‘often true’ or ‘sometimes true’:

1. “Within the past 12 months we worried whether our food would run out before we got money to buy more.”
2. “Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”

# Results







## Reach, Adoption and Network Engagement

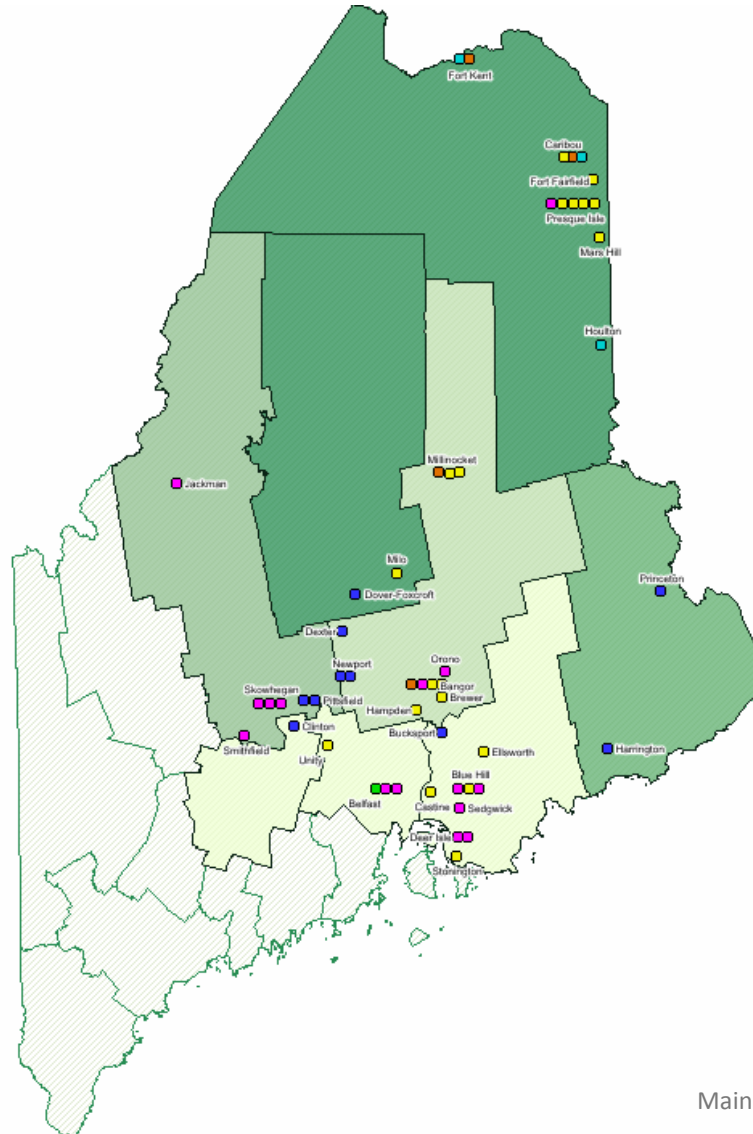


# REACH - Food Insecurity Screening and Referral




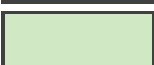
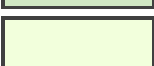
## 52 Screening Sites, 7 Counties

### Screening Sites

|   |                        |      |
|---|------------------------|------|
|  | Community Organization | (15) |
|  | Dental Clinic          | (1)  |
|  | FQHC                   | (10) |
|  | Hospital               | (4)  |
|  | Primary Care Practice  | (19) |
|  | VNA                    | (3)  |



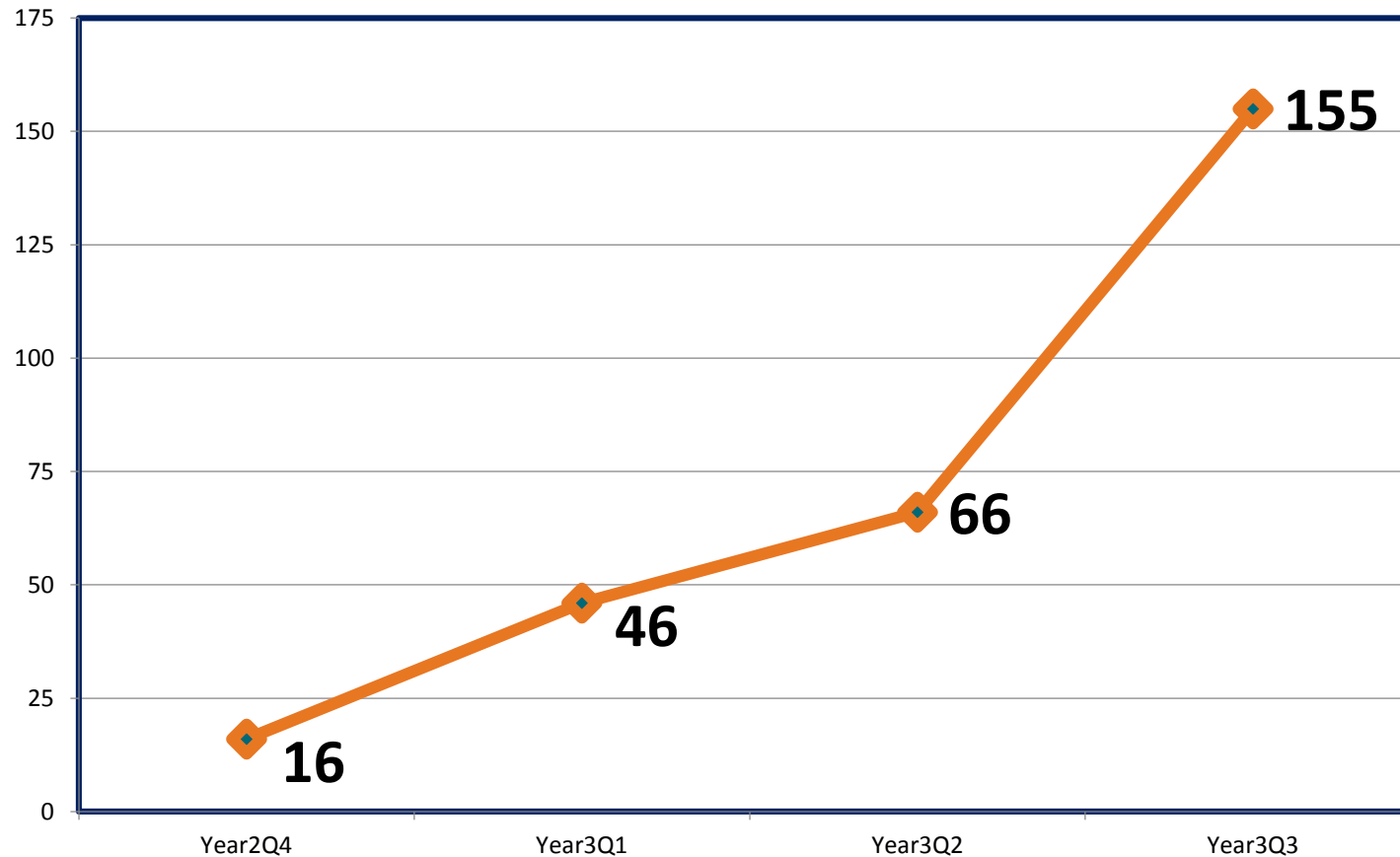
### Counties by Food Insecurity Rate (2015)

|  |                |
|--|----------------|
|   | 16.6% to 16.8% |
|   | 16.5% to 16.6% |
|   | 16.0% to 16.5% |
|   | 15.8% to 16.0% |
|  | 14.4% to 15.8% |



# ADOPTION - Healthcare Providers Activated

## Total Providers by Quarter (12 mos)



# Food Insecurity Screening & Referral

## FINDINGS

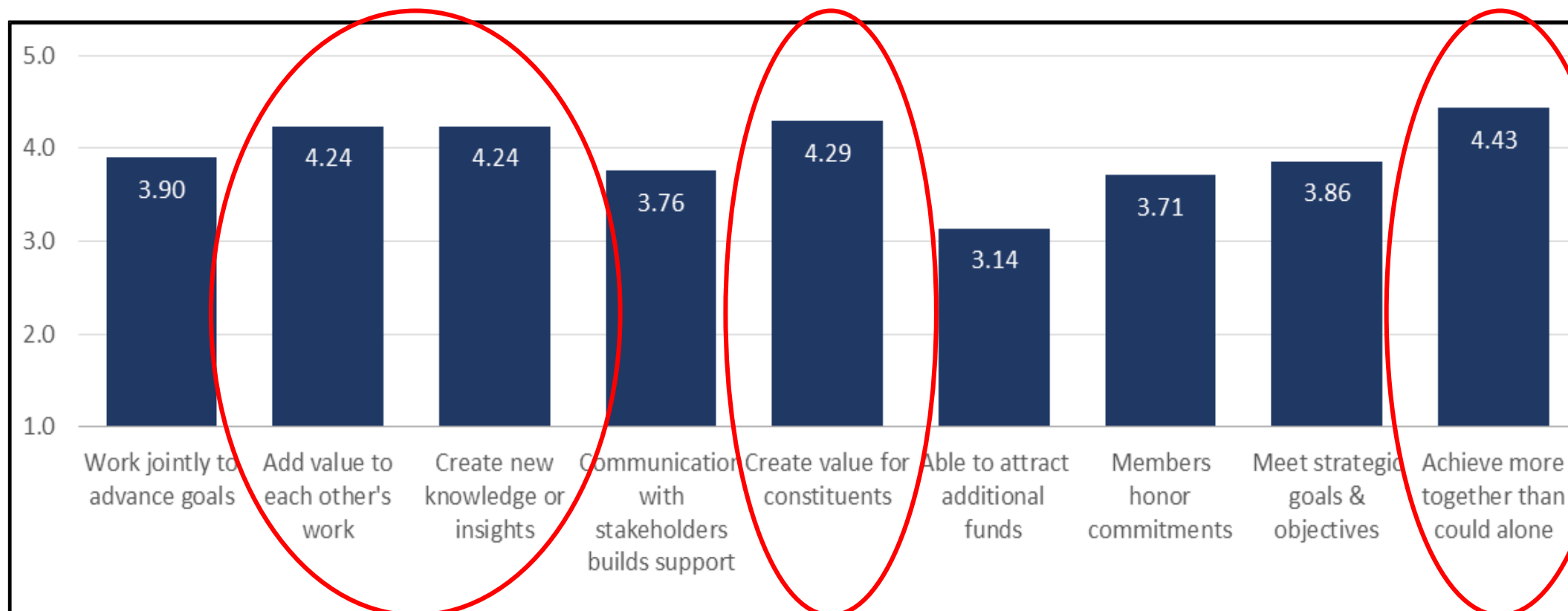
|                 | # Sites   | # Screenings  | # Positive   | % Positive |
|-----------------|-----------|---------------|--------------|------------|
| Clinical sites  | 37        | 59,720        | 4,049        | 6.8        |
| Community sites | 15        | 1,531         | 450          | 29.4       |
| <b>TOTAL</b>    | <b>52</b> | <b>61,254</b> | <b>4,499</b> | <b>7.4</b> |

### Effectiveness

- Patients screening positive were provided referrals 97% of the time.
- 75.3% of patients with positive screens connected with food resources

# ENGAGEMENT - Northern Maine Rural Collaborative Network Analysis – Network Performance Mean Scores

**Foster a Prevention Network** that could rapidly  
scale rural community health improvement



# Network Engagement Implementation Factors

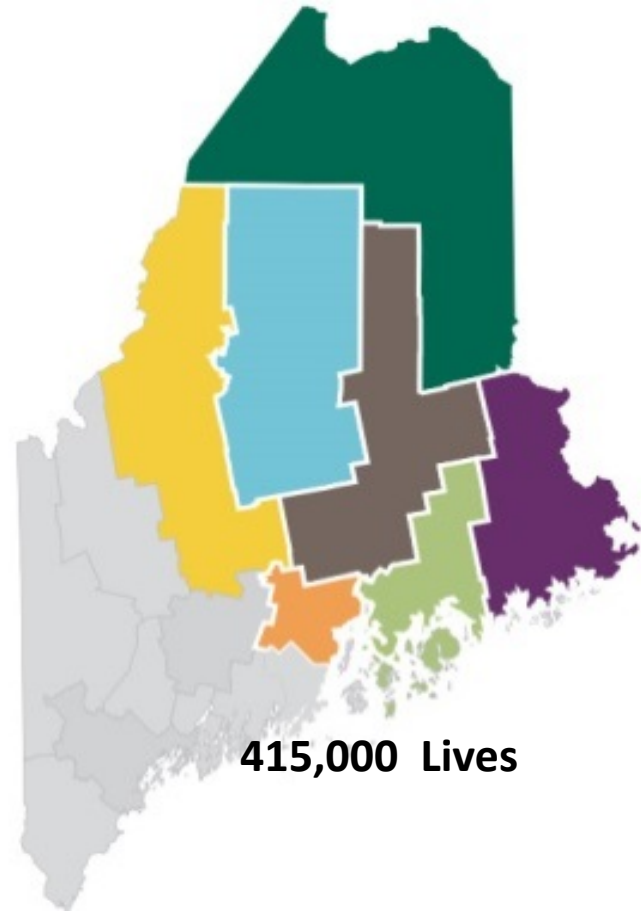
## Peer Leadership & Practice Sharing

*“Sharing summits have had really good content. Some of the best information comes from within.”*



# Scale - Cumulative Prevention Network Reach (3 years)

## All Sites, All Interventions



**275 Organizations**

**305,000 Lives**

**73% of Northern Maine  
Population**

# Conclusions

- 1. Healthcare providers and delivery systems can play a vital role in addressing Food Insecurity and other SDOH (Social Determinants of Health)**

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1. Healthcare providers and delivery systems can play a vital role in addressing Food Insecurity and other SDOH (Social Determinants of Health)
2. Real-time peer practice sharing can accelerate best practice implementation and site adoption
3. Accountable rural prevention networks can create scaled value for patients and communities



# Thank You

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