



# Enhancing Senior Well-being through Meals on Wheels

Addressing Senior Loneliness, Malnutrition, and Leveraging the Meals on Wheels Model



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# Introduction

## Meals on Wheels understands senior health

- Meals on Wheels New Mexico (Formerly Meals on Wheels Albuquerque) started in 1972
- Although we serve anyone, of any age, for any reason, 80% of our clients are over the age of 65
- Face-to-face delivery in the Albuquerque Metro, overnight shipping statewide
- Delivered over 4.5 million meals since 1972
- Projected to deliver 200,000 meals to 2,000 clients in 2023

## Senior health is an important issue to focus on

- NM Ranks 7th in the nation for overall food insecurity, and 2nd for senior food insecurity
- By 2030, NM is projected to have the 3rd highest senior population in the US (tied with Wyoming and Maine)
- Inadequate nutrition and limited social contact have negative health consequences for seniors





# Inadequate Nutrition and Limited Social Contact Have Negative Health Consequences for Seniors

Seniors experiencing falls with injury	13%
Hospital readmissions within 30 days	15%
Preventable hospitalizations	28 per 1000
Total medicare spending (billions)	\$3.13

# Senior Loneliness

## Definitions

- Social isolation (objective) v Loneliness (subjective)
- Social isolation is objectively having few social relationships, social roles, group memberships, and infrequent social interaction
- Loneliness is the distressing experience that results from perceived isolation or unmet need between an individual's preferred and actual experience





# Senior Loneliness

## Poor Outcomes are Well Documented

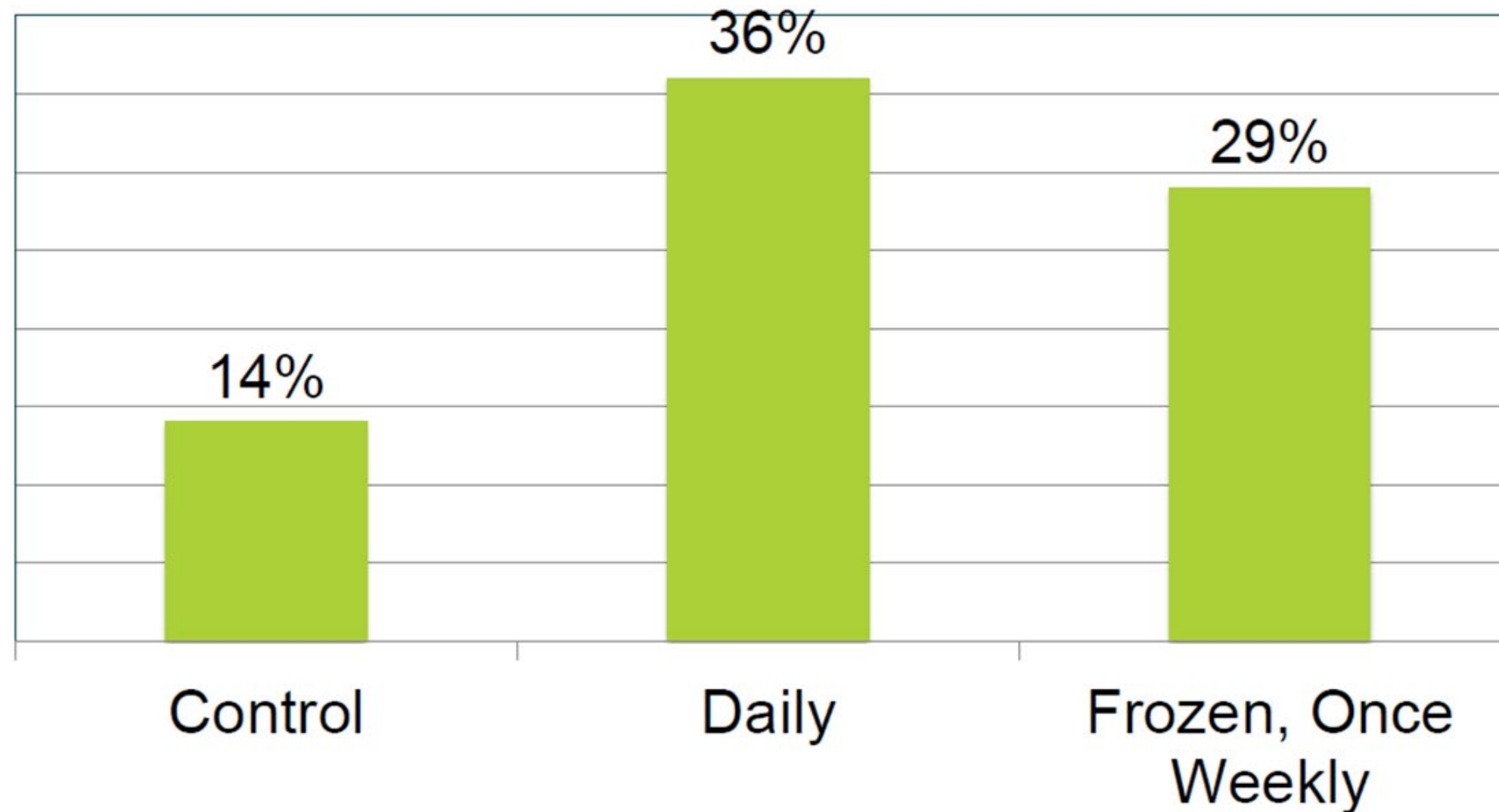
- Loneliness and social isolation increase the risk for premature death by 26% and 29% respectively
- Increases risk for anxiety, depression, and dementia, and susceptibility to viruses and respiratory illness
- In addition, poor or insufficient social connection is associated with increased risk of disease, including:
  - 29% increased risk of heart disease
  - 32% increased risk of stroke

“The mortality impact of being socially disconnected is similar to that caused by smoking up to 15 cigarettes a day.”

-Dr. Vivek H. Murthy 19th and 21st Surgeon General of the United States

# Senior Loneliness

Among those who live alone, meals have a larger effect on improvement in isolation



Q: “How often do you feel isolated from others? Never, Rarely, Sometimes, Often?”  
These differences were statistically significant ( $\chi^2= 8.92, p=0.01$ ).

Table Source: “More Than a Meal Medicare Claims Analyses,” Brown School of Public Health & Gary and Mary West Foundation.

# Malnutrition in the Elderly

## Understanding Malnutrition in the elderly

- In patients over 65, malnutrition is a presenting factor in upwards of 50% of hospital admissions
- Malnutrition can occur from many different factors


Physiologic	Pathologic	Sociologic	Psychologic
Decreased taste	Dentition	Ability to shop for food	Depression
Decreased smell	Dysphagia, swallowing problems	Ability to prepare food	Anxiety
Dysregulation of satiation	Diseases (cancer, CHF, COPD, diabetes, ESRD, thyroid)	Financial status low socioeconomic	Loneliness
Delayed gastric emptying	Medications (diuretic, antihypertensive, dopamine agonist, antidepressant, antibiotic, antihistamine)	Impaired activities of daily living skills	Emotionally stressful life events
Decreased gastric acid	Alcoholism	Lack of interactions with others at mealtime	Grief
Decreased lean body mass	Dementia		Dysphoria













CHF = congestive heart failure; COPD = chronic obstructive pulmonary disease; ESRD = end-stage renal disease.

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 Areas that Meals on Wheels and Medically Tailored meals can help address.

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# Malnutrition in the Elderly

Older patients who transition from hospital to home are particularly at risk for decline in nutritional status

- For patients, malnutrition causes:
  - Slower wound healing
  - Increased risk of falls
  - Exacerbation of pre-existing medical conditions
  - 1.5x higher likelihood of dying while in the hospital
  - 5x higher risk of dying within 90 days
- For hospitals, malnutrition causes:
  - Health care costs that are 300% higher
  - 50% higher readmission rate
  - Increased length of stay of 4–6 days



# Malnutrition in the Elderly

Two separate measures showed decline in participants' nutritional risk, in a study with Meals on Wheels Central Texas and Meals on Wheels of San Antonio.



Participants at "high risk" nutrition status, Nutrition Screening Initiative (NSI) DETERMINE your Health Checklist measure

"Malnourished" participants, Mini Nutrition Assessment-Short Form (MNA-SF)



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Source: 2018 study by Ullevig and colleagues titled "Impact of Home-Delivered Meals on Nutrition Status and Nutrient Intake among Older Adults in Central Texas." Published in The Journal of Nutrition, Health & Aging. Available at: <https://doi.org/10.1007/s12603-018-1038-0>



# Malnutrition in the Elderly

## Meals related to fewer falls among fallers

- Among participants who had fallen in the past three months at baseline (n=116)

		Control	Daily	Weekly, Frozen	Total
Fallen	<i>n</i>	19	10	14	43
	%	54%	21%	41%	
Did Not Fall	<i>n</i>	16	37	20	73
	%	46%	79%	59%	
Total		35	47	34	116

Differences between groups are statistically significant ( $\chi^2=9.718$ ,  $p<0.01$ )



# Malnutrition in the Elderly

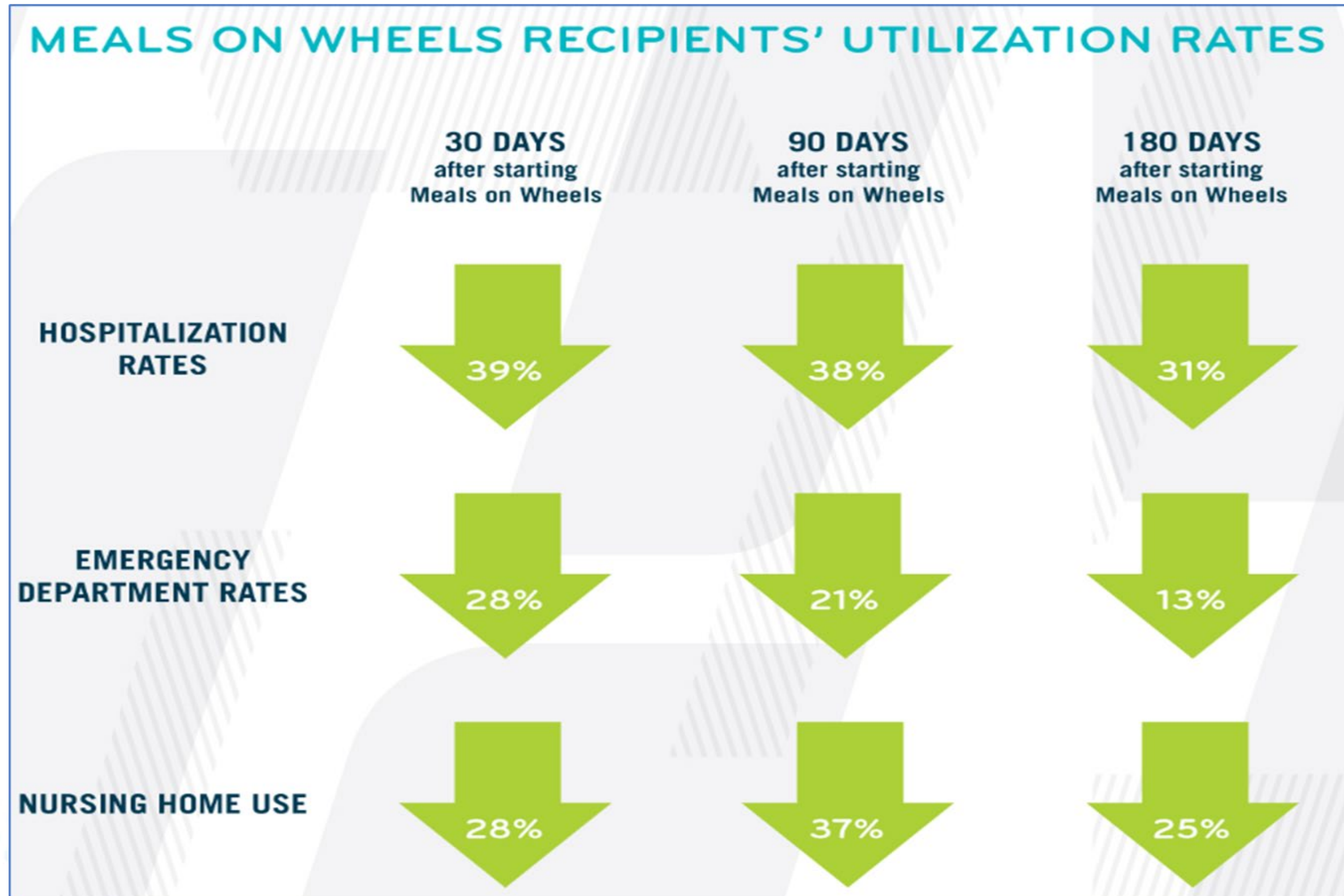


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# Meals on Wheels Program

We're more than just a meal

Nutrition related services:

- 8 different diets, including 3 specifically for medically tailored nutrition
- Weekend pantry bags
- Local harvest
- Dietician consultation

Connection related services:

- All meals delivered by a friendly volunteer
- Newspaper delivery
- Pet program
- Visual doorbells
- Address painting
- Additional program referrals when needed



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# Food is Medicine

Meals on Wheels addresses the spectrum from prevention to treatment through Medically Tailored Meals

What is Food is Medicine?

- Generally refers to prioritizing food and diet in an individual's health plan, with the goal of either preventing, reducing symptoms of, or reversing a disease state.

Medically Tailored Meals:

- Meals approved by a RDN that reflect appropriate dietary therapy based on evidence-based practice guidelines.

## FOOD IS MEDICINE



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Medical News Today, Can Food Be Medicine: Pros and Cons, <https://www.medicalnewstoday.com/articles/can-food-be-medicine-pros-and-cons>

Food is Medicine Coalition, <https://www.fimcoalition.org>

Table source: Food is medicine coalition, <https://static1.squarespace.com/static/580a7cb9e3df2806e84bb687/t/5c8a5bbf6e9a7f0d61202be8/1552571328303/Picture1.png>



# Meet Carl



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# Program Evaluation and Impact

We provide measurable impact on falls, hospital admissions, loneliness and depression, and other health risk factors

Meals on Wheels clients reported:

- 81% of clients report a decrease in feelings of isolation
- 47% decrease in the number of times a respondent has fallen in their home
- 42% decrease in the number of respondents who reported battling depression
- 33% decrease in the number of times a respondent had to visit the doctor for something other than a routine appointment (emergencies)
- 12% decrease in the number of times a respondent had to choose between paying for food or paying for bills and/or medicine



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Meals on Wheels New Mexico, Client Satisfaction Survey 2022



# Future Initiatives and Expansion

## Million Meals Campaign



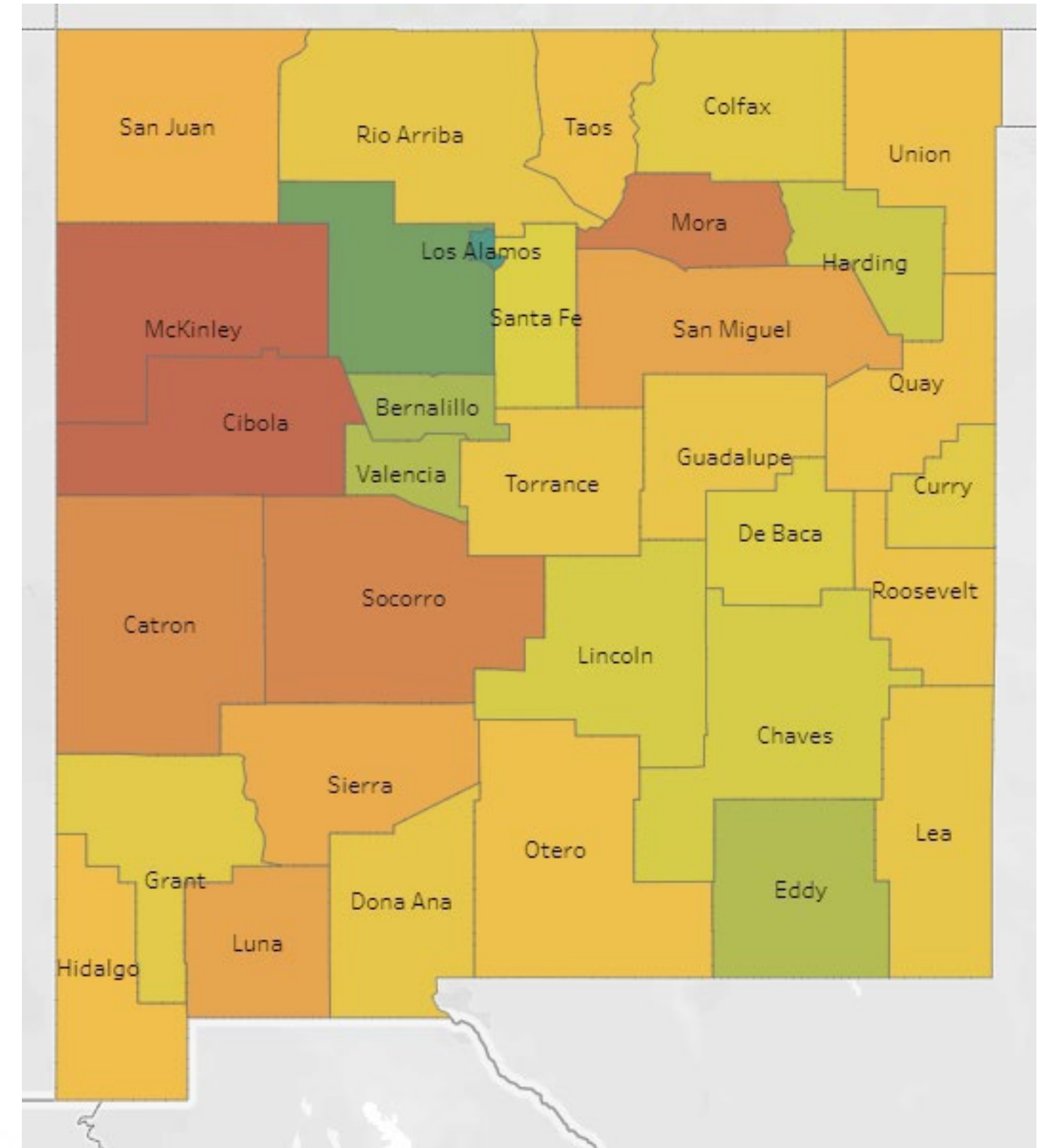
Our goal is to deliver one million meals over the next 5 years

# Future Initiatives and Expansion

## Million Meals Campaign

- UNM School of Public Administration, Dec 2022
- Weighted combination of more than 10 contributing factors to develop Medically Tailored Meals needs heat map
- 5 Counties of greatest need:
  - Cibola (76%)
  - McKinley (76%)
  - Mora (73%)
  - Socorro (72%)
  - Catron (71%)

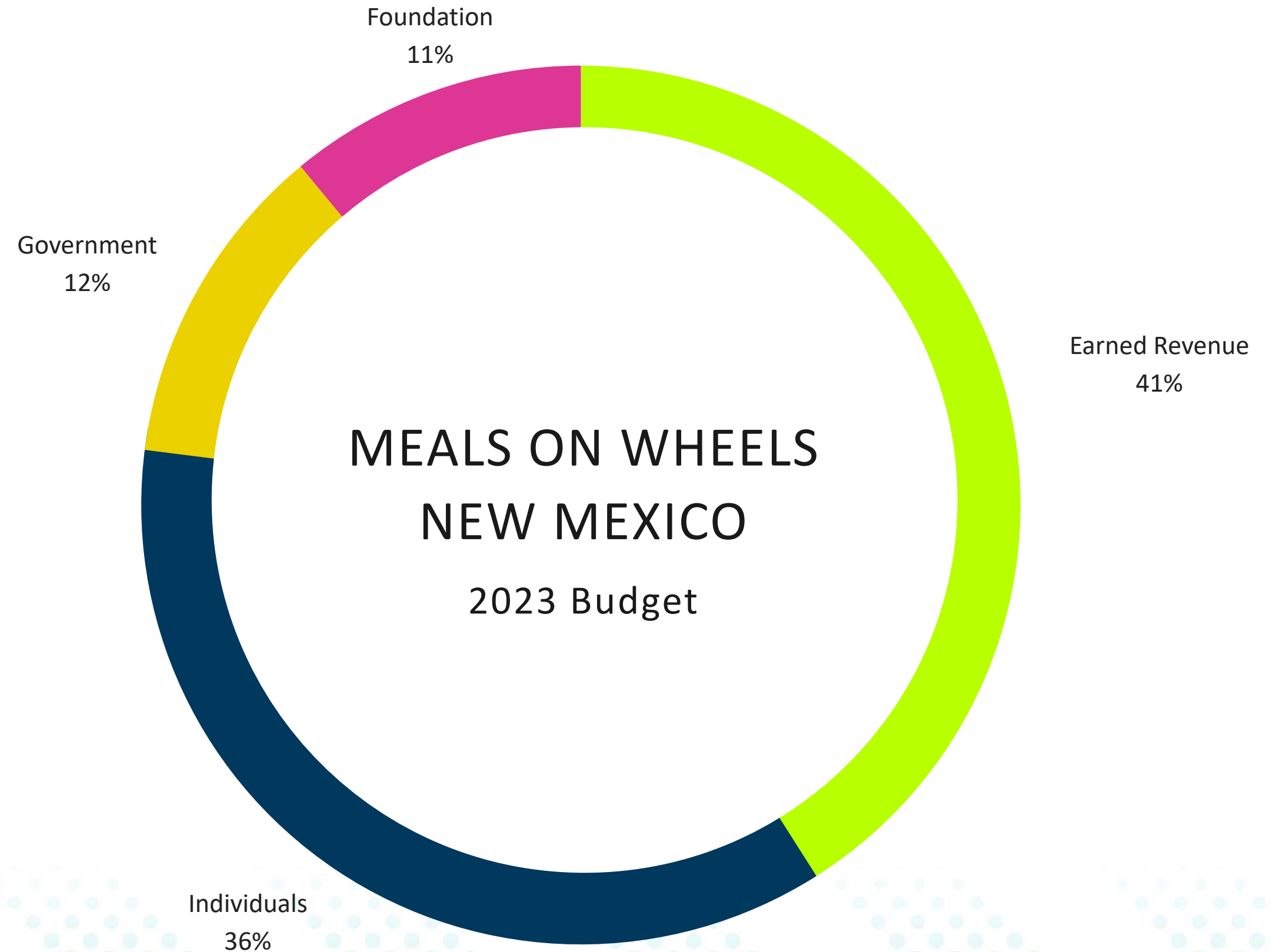
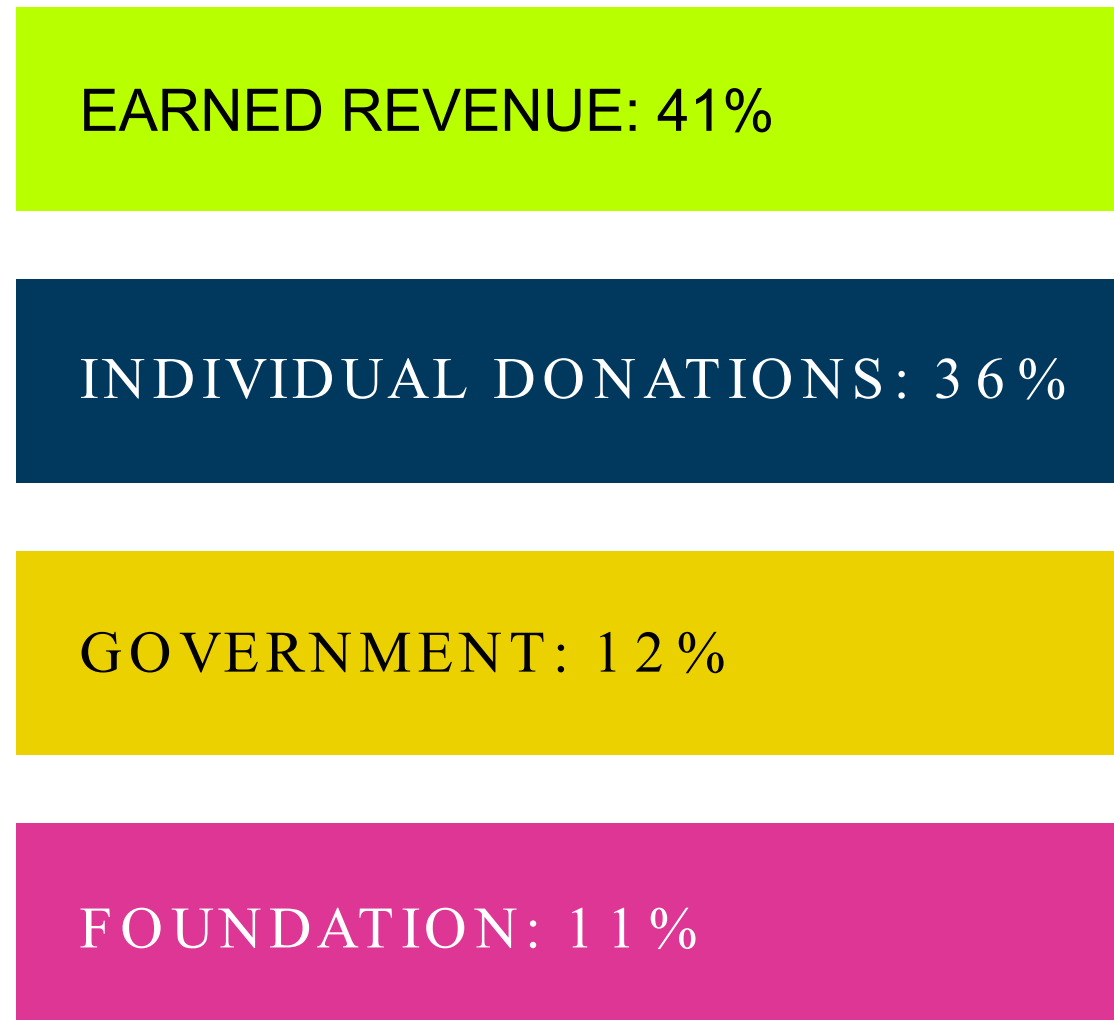
% indicates corresponding need from the weighted ranking formula





# Funding and Sustainability

## 2023 Organizational Revenue



# Community Engagement and Awareness

## Sharing our Impact

### Awareness & Advocacy

- Million Meals Campaign
- #SaveLunch Campaign
- March for Meals - Community Champions Week, March 2024

### OpEds:

- Million Meals Campaign
- Surgeon General's warning on loneliness

### Social Media

- Follow us on Facebook, Instagram, LinkedIn and YouTube





# Conclusion and Call to Action

Join us!

- Volunteer with MOWNM; take a tour
- Help us connect with other stakeholders
- Partner on policy
- Funding support



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Thank you!

