



MEALS ON WHEELS PET PROGRAMMING AND CLIENT NEEDS ASSESSMENT

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In 2019, PetSmart Charities granted funds to Meals on Wheels America for a three-year partnership to provide home-delivered pet meals and veterinary care to pets of homebound seniors, as well as fund research to assist both organizations in understanding the needs of clients and the barriers that they face. This initiative is the first of its kind to be supported on a national scale and is part of Meals on Wheels America's portfolio of work to prevent loneliness and social isolation among older adults.

Meals on Wheels America approached the firm Adisa to conduct research to assist it in gaining a better understanding of the needs of Meals on Wheels clients and their pets. The Adisa team is nationally recognized as leaders in animal welfare, veterinary medicine, and organizational strategy and design, and the principal Adisa consultants on this research project – Heather Cammisa and Dr. Jyothi Robertson – have more than 40 years combined experience in community animal welfare.

This project presented a unique opportunity to bridge the gap between social services and animal welfare. The purpose of this research included the following:

- Analyze Meals on Wheels client perceptions of pet companionship.
- Analyze the extent to which pet support programs empower socialization and reduce social isolation.
- Offer a profile of Meals on Wheels pet-owning clients.
- Identify pet needs among Meals on Wheels pet-owning households, as well as incidence and barriers to obtaining needed veterinary care.

Thank you to the following parties for contributing to this research effort:

PetSmart Charities – For funding this research project and supporting the expansion of pet programming to Meals on Wheels clients nationwide.

University of Tennessee – Knoxville, School of Social Work – Specifically thanks to Dr. William Nugent and Linda Daugherty for sharing their Bonded Family scale for the telephone survey and for the time spent reviewing the survey with the Adisa team.



PET PROGRAMMING AND CLIENT NEEDS ASSESSMENT

We would like to thank the following Meals on Wheels programs that participated in the telephone survey research project for their generous support and offering to contribute to this study during a pandemic:

- Appalachian Agency for Senior Citizens, Inc.
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- Community Emergency Service: CES Meals
 on Wheels
- Council on Aging of Central Oregon dba Meals on Wheels Central Oregon
- Eastern Area Agency on Aging
- Estuary Council of Seniors, Inc.
- Frederick County Department of Aging
- Hocking Athens Perry Community Action (HAPCAP)
- Kenosha Area Family and Aging Services, Inc.
- Kitchen Angels
- LifeCare Alliance
- Meals on Wheels Atlanta
- Meals on Wheels Central Texas
- Meals on Wheels Fairfield County
- Meals on Wheels of Albuquerque
- Meals on Wheels of Metro Tulsa, Inc.
- Meals on Wheels of New Castle, Inc.

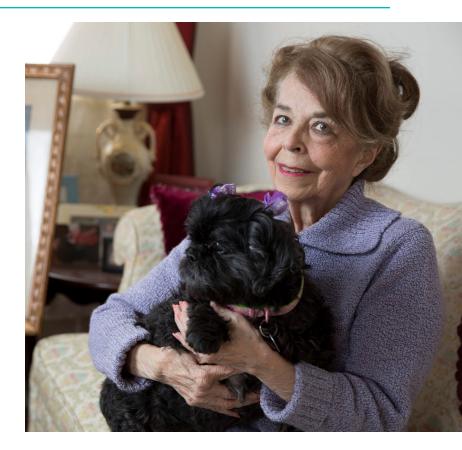
- Meals on Wheels of Norman
- Meals on Wheels of North Central Texas
- Meals on Wheels of Sarasota, Inc.
- Meals on Wheels of Solano County
- Meals on Wheels of Texoma
- Meals on Wheels of the Greater Lehigh Valley
- Meals on Wheels San Antonio
- Meals on Wheels South Florida
- Mid Florida Community Services, Inc.
- Monroe County Meals on Wheels, Inc.
- Pitt County Council on Aging
- Senior Neighbors, Inc.
- Senior Resource Connection
- Senior Resources of Guilford
- Senior Resources, Inc.
- Senior Services Southwest Michigan
- SeniorCare Experts Home Delivered Meals
- Smoky Mountain Meals on Wheels
- Spectrum Community Services
- The Heritage Area Agency on Aging

EXECUTIVE SUMMARY

Efforts to address loneliness and social isolation are central to the program and research goals of Meals on Wheels America. To further explore isolation, loneliness and the role pets play in providing comfort and companionship to Meals on Wheels clients, Meals on Wheels America embarked on a research project from July 2020 through January 2021 – during the COVID-19 pandemic. Through this research project, Meals on Wheels America aimed to better understand the specific needs, challenges and opportunities available to clients and the Meals on Wheels network in addressing gaps in pet care.

This report examines results from a telephone survey conducted of clients with pets, providing new insight into the pet program needs among local Meals on Wheels programs that are members of Meals on Wheels America. Note that only clients with pets were included in this study, so a comparative population of clients without pets is not available in this dataset.

As shown in the telephone survey findings:



- Home-delivered meal clients demonstrated strong attachment to their pet companion, with nearly 100 percent reporting that their pet brings happiness to their life.
- Forty-five percent of respondents classified as lonely.
- Sixty-four percent of respondents were at risk for social isolation.
- Seven out of every ten clients who classified as lonely and at risk for social isolation lived alone.
- This cohort had the highest bonding scores with their pets on a pet attachment scale, emphasizing the companionship that pets offer to people living alone.
- Clients with pets reported significant challenges to caring for their pet and accessing veterinary care.
 - Half of pet homes reported an inability to obtain needed veterinary care in the past two years, nearly double the findings of other research of pet homes and nearly 50 percent above pet homes who are eligible for assistance from the Supplemental Nutrition Assistance Program (SNAP).
 - \circ The primary barrier to pet care was financial.
 - Half of clients reported transportation as a barrier, another statistic well above other reported rates.
 - Nearly 30 percent of clients reported foregoing personal care in order to provide for their pets.
 - $\circ\,$ One in two clients indicated that they do not have anyone else to help them with their pet needs other than Meals on Wheels pet programming.

This project presented a unique opportunity to bridge the gap between social services and animal welfare and offered insights into Meals on Wheels client perceptions of pet companionship; the extent to which pet support programs empower socialization and reduce social isolation; and a profile of Meals on Wheels pet-owning clients.



SETTING THE LANDSCAPE

COVID-19 has shed light on the issues of social isolation and loneliness and amplified the need for pet companionship to combat these issues. Just as local Meals on Wheels programs saw a significant increase in applications for meals during the COVID-19 shutdown, the animal welfare community also saw a parallel increase in community engagement with more pets in foster homes than ever historically reported nationally.¹ Pets were a source of comfort and security as people reduced their social interactions with neighbors, friends and family due to COVID-19 restrictions.

With this increase in animal-related community engagement and a recognition of the social structures and socioeconomic threats that lead pets to enter shelters and break pet families – the separation of pets from their current family – came a simultaneous increase in national programs focused on providing affordable care for these pets to keep them in their homes. While many well-established programs continue to focus on important aspects of veterinary care – such as reducing overpopulation through free or low-cost spay/neuter – other movements have developed to examine the underlying root causes of many animal-related problems: structures that have kept people from acquiring pets due to barriers, such as affordable care, rental unit regulations or employment status. Such groups are examining how to create programs that intersect human social services and needs with those of animals by using a One Health approach:

WHAT IS ONE HEALTH?

One Health is an approach that recognizes that the health of people is closely connected to the health of animals and our shared environment. One Health is not new, but it has become more important in recent years. This is because many factors have changed interactions between people, animals, plants and our environment.

Successful public health interventions require the cooperation of human, animal and environmental health partners. Professionals in human health (doctors, nurses, public health practitioners, epidemiologists), animal health (veterinarians, paraprofessionals, agricultural workers), environment (ecologists, wildlife experts) and other areas of expertise need to communicate, collaborate on and coordinate activities.

- Centers for Disease Control & Prevention: www.cdc.gov/onehealth/basics/

As daily interactions were modified to fit sheltering-in-place guidelines throughout the COVID-19 pandemic and were replaced by video calls, telephone calls or socially distanced visits, people with pets had the benefit of having a social companion in their pet.² For individuals living alone, the importance of a non-human family member was accentuated during the pandemic.

LONELINESS AND SOCIAL ISOLATION IN RELATION TO PETS AND HEALTHY AGING

Meals on Wheels America's strategy around socialization aims to reduce loneliness and social isolation among older adults. The following key concepts will be examined in further detail in this report:

- 1. Loneliness and social isolation are threats to healthy aging.
- 2. Pets can mitigate feelings of loneliness, depression and social isolation.
- 3. Pets can improve the physical health of older adults.
- 4. People of all demographics and income levels have pets, including older adults living in poverty.
- 5. There is value in addressing the pet needs of Meals on Wheels clients to combat social isolation and loneliness, improve physical health and support healthy aging.

LONELINESS AND SOCIAL ISOLATION

Social Isolation and Loneliness in Society³

- According to the AARP Foundation, social isolation affects more than eight million adults age 50-plus and is growing as 10,000 Americans turn 65 every day.
- Approximately one-third of Americans older than 65 and half of those over 85 live alone.
- An estimated 17 percent of all Americans over the age of 65 are isolated because they live alone and face one or more barriers related to geographic location, language or disability.
- People with poorer health particularly those with mood disorders, like anxiety and depression are more likely to feel lonely.

Health Impacts of Social Isolation and Loneliness

- Loneliness is a major risk factor for depression, which accelerates health decline and increases mortality.
- The strength of social isolation as a predictor of mortality is similar to that of well-documented clinical risk factors, such as smoking and high blood pressure.
- Research indicates that loneliness is a risk factor for, and may contribute to, poorer overall cognitive
 performance, faster cognitive decline, poorer executive functioning, increased negativity and depressive
 cognition, heightened sensitivity to social threats, a confirmatory bias in social cognition that is selfprotective and paradoxically self-defeating.
- Loneliness can impair health by raising levels of stress hormones and inflammation, which in turn can increase the risk of heart disease, arthritis, type 2 diabetes, dementia and even suicide attempts.
- Individuals who lack social connections or report frequent feelings of loneliness tend to suffer higher rates of morbidity and mortality, as well as infection, depression and cognitive decline.
- One recent study found that isolation increases the risk of heart disease by 29 percent and stroke by 32 percent.
- Social relationships both quantity and quality affect mental and physical health. Adults who are more socially connected are healthier and live longer than their more isolated peers.



Social isolation denotes few social connections or interactions, whereas loneliness involves the subjective perception of isolation – the discrepancy between one's desired and actual level of social connection.⁴ Although objective social isolation can affect loneliness, perceived social isolation is more closely related to the quality, rather than quantity, of social interactions.⁵ This is an important consideration when understanding the impact of pets on people's lives and specifically when considering ways in which to capture this information.

IMPACT OF PETS ON LONELINESS, SOCIAL ISOLATION AND EMOTIONAL HEALTH

Pets can also help alleviate some of the loneliness and social isolation impacts felt by individuals. For example³:

- 1. People with low social support systems are likely to benefit from pets.
- 2. Pets fulfill a need to confide in or talk with someone trusted.
- 3. There is a significant link between interacting with companion animals and the development of social awareness, relationship skills and other skills that improve the ability to interact successfully with others.
- 4. Pet owners report that they have gotten to know people in their neighborhood and made friends through their companion animals.

In a study from 2019, researchers interviewed 21 older adults who were pet guardians to explore the ways in which their relationship to their pets was influenced by their own health factors as they age.⁶ "How does the phenomenon of aging, complete with changing health of the individual or a family member and changing social support needs, intersect with the ability to have pets?" is the question posed by the research team. Four key areas for consideration emerged from this study:

- 1. Accommodations to aging changes made by people to care for their animals
- 2. The impact of pets on mental health; specifically, the ways pets can decrease loneliness and depression while also being a cause for concern
- 3. The importance of formal and informal support systems, including family, vets and others
- 4. Dogs as an activity catalyst

This study describes not only the benefits of having pets in seniors' lives; it also highlights the significant changes that occur over time in the relationship due to aging and factors that should be recognized when supporting older individuals in having a healthy relationship with their pets.

MEASURES OF ATTACHMENT TO ANIMALS

Examining a person's attachment to their pet and their perceived loneliness and social isolation could lead to understanding if a stronger bond with an animal leads to less loneliness. Likewise, if friendships form through the act of having a pet (via pet-related activities), there could be a decrease in loneliness and a decreased risk for isolation due to the relationship between the individual and their pet. If this is coupled with evidence showing that people are healthier when having pets, there is a strong case for supporting people in maintaining their relationship with their pets.





PHYSICAL BENEFITS OF PET OWNERSHIP ON HEALTHY AGING

Research in the areas of physical health – including obesity, cardiovascular health, cancer and quality of life – has been conducted to examine the physical impacts of pets on people's lives. Some of the positive benefits of owning pets include⁷:

- 1. Positive impacts on cardiovascular functioning^{8 9 10}
- 2. Improved outcomes related to AIDS diagnosis and depression¹¹
- 3. Increased physical activity leading to improved health^{12 11}
- 4. Improved daily functioning levels¹³
- 5. Increased opportunities for interaction, through walking or going to the veterinary office and through increased mobility, extends into other domains of health, as well¹⁴
- 6. Improved physical health as evidenced by fewer visits to physicians for medical care¹⁵

THE APPROACH TO MEET PROJECT GOALS: STUDY METHODOLOGY METHODS

A telephone survey was designed to obtain the most accurate information on pet supply needs, pet attachment, veterinary needs and demographic information for pet-owning clients. Questions pertaining to veterinary care and demographic data were adapted from two published telephone surveys, the Access to Veterinary Care Coalition (AVCC) 2018 survey and the American Veterinary Medical Association Pet Ownership and Demographics Sourcebook.

To evaluate pet attachment, two scales were selected to be utilized in this report: the general attachment subscale of the Lexington Attachment to Pets Scale and the University of Tennessee's Bonded Family scale. The UCLA Loneliness Scale, a single item loneliness question (as also presented in a publication by Stanley 2014), and the Lubben Social Network Scale with six questions (LSNS-6) were interspersed within the survey. Questions specific to Meals on Wheels programs were formulated to obtain particular information about pet service offerings and perceived value of offerings.



The survey consisted of a total of 45 questions and a survey time of 20 minutes. Survey design, coding and administration, including gaining client consent, was conducted by a professional survey design firm selected for their experience working with elderly populations and sensitive topics. Ongoing training for telephone interviewing and adjustments to the telephone script were made as warranted. The survey was administered in both English and Spanish. The survey was reviewed and approved by Meals on Wheels America for readability, content and length.

Three hundred and thirty-seven Meals on Wheels America Member programs that had previously indicated interest in supporting pet programming research were contacted to participate in this survey. Emails were sent to these programs explaining the intent for the research. Of these 337 programs, 37 programs chose to participate in this research project. All 37 programs offer some form of pet programming.

Thirty-three programs provided anonymous contact information for pet service clients in the form of telephone numbers. Four programs requested access to an optional in-bound telephone number to provide to clients in lieu of sharing client telephone numbers. An 800 number was provided to all participating programs along with language to communicate the opportunity to homebound clients with pets and volunteers.

SURVEY ANALYSIS

Data collected from the survey was coded and analyzed using Python, Mathematica and Google Data Studio. Descriptive statistics and qualitative analysis were performed.

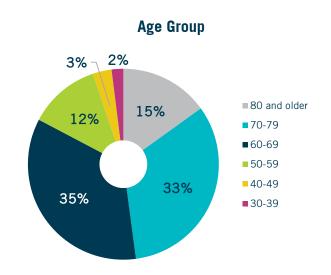
STUDY RESULTS

SUMMARY QUANTITATIVE RESULTS – TELEPHONE SURVEY DESCRIPTIVE STATISTICS

The Adisa team conducted a telephone survey of Meals on Wheels pet program clients over a six-week period November-December 31, 2020. Four hundred and fifteen clients participated in this survey. The following is a descriptive analysis of the data obtained from this survey.

DESCRIPTIVE STATISTICS ON SURVEY RESPONDENTS:

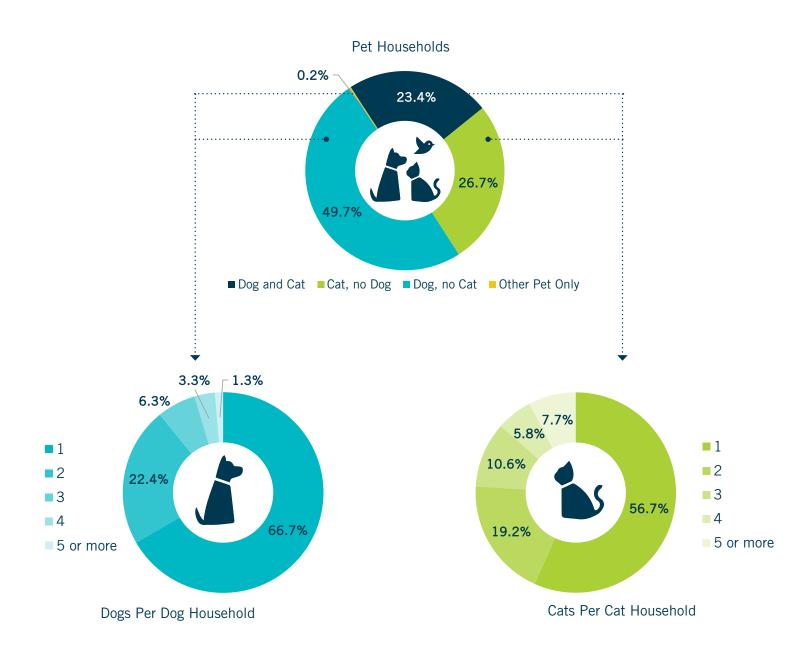
- The average age was 68.4 years among respondents who provided an exact age versus a response to an age range (n=303). 82.6 percent of respondents were over 60 years of age.
- Nearly three quarters of the participants in this study were female (72.8 percent) and the majority of respondents categorized their race as White (62.2 percent). Black or African American individuals accounted for 20.2 percent of respondents, and those who identified as Hispanic/Latinx were 11.1 percent of survey participants.
- The majority of clients with pets shared their home with one or two animals. Nearly a quarter of homes had both cats and dogs (23.4 percent). Half of homes had dogs and other pets, without cats (49.7 percent), and more than a quarter



of pet homes had cats and other pets without dogs (26.7 percent). In dog households, nine in 10 homes had one or two dogs (89.1 percent). Nearly nine in 10 cat homes had three or fewer cats (86.5 percent).

Only a single respondent had only "other pets" without any cats or dogs. In total, seven percent of clients reported having pets other than dogs and cats. Birds were the most common among these pets (3.9 percent). Respondents also shared their homes with fish, turtles, guinea pigs, hedgehogs, a ferret and a pet pig.

- 58.8 percent of 403 respondents reported that they live alone. Among the 62.4 percent of those who lived alone with their pets and reported exact monthly income, the average was \$1,156.73, or 108.7 percent of Federal Poverty Level (FPL).
- Sixty-two percent of participants lived in a large city with a population of over 100,000 people. One in five respondents lived in a town or small city (19.3 percent) and less than 10 percent of survey respondents lived in a farming or non-farming rural area. Smaller towns, cities and rural areas are important considerations in the provision of pet programming.



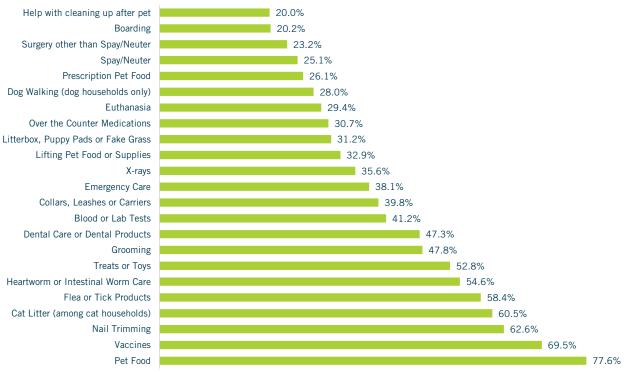
CURRENT OR RECENT PET NEEDS OF PARTICIPANTS

Participants were asked if they needed assistance with a list of services in the past two years or currently need assistance with these services. The results of this question are diagrammed in the chart below.ⁱ

- Roughly three of every four clients had needed pet food in the past two years or currently needed it at the time of the survey.
- One quarter of clients had needed prescription pet food in the past two years or currently need it at the time of the survey.
- 60.5 percent of cat homes reported needing help with cat litter, 52.8 percent of all pet clients had a need for treats or toys for their pets and 39.8 percent needed collars, leashes or carriers.
- The most needed medical services reported were vaccinations, with nearly 70 percent of respondents needing this service, and heartworm or intestinal parasite care, with the majority (over 54 percent) of respondents needing this service at the time of the survey or in the past two years. Nearly half of respondents had needed or currently needed assistance with dental care for their pets at the time of the survey.

Of the 272 participants who were able to take their pet to a veterinarian for an annual exam, 57 percent of participants received care at a veterinary office or clinic and 17 percent received it at an animal shelter or community clinic. Of this group, specific services received were:

- 235 pets received vaccinations (86.4 percent)
- 113 pets received heartworm, flea or tick prevention (41.5 percent)
- 40 clients received advice on how to care for their pet (14.7 percent)
- 11 clients received help with a behavior problem (4.0 percent)



Currently Need or Have Needed Assistance in Past Two Years

Percentage of Meals on Wheels Pet Clients



i Only cat owners were asked about cat litter and only dog owners were asked about dog walking. Affirmative responses of need were evaluated against those who answered yes or no to the question, ranging from 407 to 410 of all-species questions. For cat litter and dog walking, 205 and 300 respondents answered yes or no, respectively.



MEALS ON WHEELS PROGRAM SUPPORT FOR PET NEEDS

• Eighty-six percent of respondents were receiving support from their Meals on Wheels program for their pets at the time of the survey.

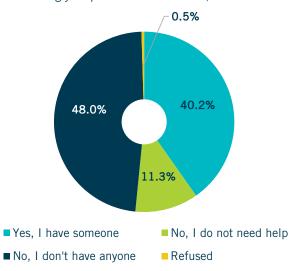
Of those receiving support:

- Nearly 92 percent of those receiving support got help with pet food.
- Pet supplies were provided to 32 percent of those clients receiving support.
- Fifty-eight percent of those receiving support reported receiving some sort of veterinary assistance.
- Forty-one percent of participants received assistance for routine veterinary care, such as vaccinations.
- Only 60 out of 358 clients received assistance for a pet's specific medical need.
- Thirteen percent of participants received assistance for grooming.
- Only seven participants received assistance with boarding, and six participants received assistance with dog walking and pet care, such as cleaning the litter box.
- 20 percent did not receive support for all their animals but received assistance for a subset of the animals they own.
- One in two clients reported that they had no one outside of Meals on Wheels to help them with their pets (48 percent).
- Eleven percent of participants did not need help with their pets. Forty percent received some form of unpaid help from people outside of Meals on Wheels programs, but a larger percentage (48 percent) did not have anyone to assist them outside of Meals on Wheels, albeit needing it.
- Only 16 percent of clients reached out to humane organizations for assistance for their pets in the past two years.

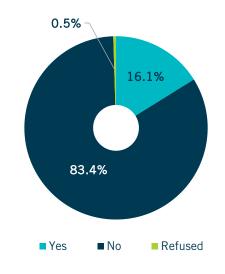


- Over 50 percent of those surveyed answered that they strongly believed that Meals on Wheels support had made it possible to keep their pet. Another 31 percent of respondents agreed with this statement, demonstrating that the vast majority of clients surveyed feel that Meals on Wheels support is critical to their ability to have a pet in their lives.
- One in 10 clients (10.6 percent) had a written plan for lifetime care for their pets, while 45.8 percent of clients did not have them written but did have plans laid out. A nearly equal number (43.1 percent) did not have any plans if something happened to them.
- More than one in three clients (36.6 percent) did not have short term care plans for their pets if they got sick or needed to go to the hospital.

Do you have someone outside of Meals on Wheels to help you with your pet, such as pet sitting, helping with care or driving your pet to the veterinarian, if needed?



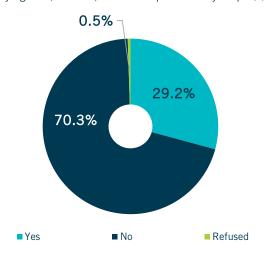
In the past two years, have you reached out to a shelter or humane society for assistance with your pets?



BARRIERS TO RECEIVING CARE

One of the concerns that this study wanted to illuminate was whether or not clients were foregoing their own necessities for their pets. Nearly 30 percent of respondents (29.2 percent) went without personal care or necessities for themselves - such as medical care, paying bills, utilities, etc. - in the past two years in order to provide for their pets. More than one in five clients reported going without food to feed their pets (20.7 percent) in the past two years. The percentage of people answering this question as the affirmative would be presumed to be lower than those clients who may be served by Meals on Wheels programs that have more limited or nonexistent pet programming since the population of clients from whom this survey was distributed contained those who are already in existing pet programs.

In the past two years, have you ever gone without personal care or necessities for yourself such as medical care, paying bills, utilities, in order to provide for your pet(s)?



Using questions aligned to the Access to Veterinary Care Coalition report, survey participants were asked if they were unable to access veterinary care in the past two years, what barriers they faced and the primary barrier among those reported. Veterinary care was broken into preventative care and sick/emergency care. Preventative care includes receiving annual exams, vaccinations, heartworm treatment and routine bloodwork. Sick or emergency care is unplanned veterinary care that is needed for a specific event or occurrence. Follow-up questions collected the type of care sought.

BARRIERS TO RECEIVING PREVENTATIVE CARE

- Forty-five percent of respondents (44.8 percent) reported that they were unable to get preventative care for their pets in the past two years. These respondents were then asked to think about the most recent time they were unable to get care for a pet.
- Ninety-two percent (91.9 percent) of those clients who were unable to get preventative care could not get it due to financial reasons.
- Fifty-four percent (54.3 percent) were unable to receive the care because they did not have a way to get to the veterinarian.
- Eighty-six percent (85.5 percent) believed that cost was the most important reason they were unable to receive care for their pets.
- Those people receiving care were most likely to go to a private practitioner. Only 12 percent of those receiving preventative care for their animals went to an animal shelter for this care.

BARRIERS TO RECEIVING SICK OR EMERGENCY CARE

- Twenty-two percent (21.9 percent) of respondents needed sick or emergency care for their pets but were unable to get it in the past two years.
- Ninety-two percent (92.3 percent) of those respondents needing this care were unable to receive it due to cost.
- Forty-six percent (46.2 percent) did not have adequate transportation to take their pet for this service.
- When asked to rank the primary barrier to access to veterinary care, 89 percent of the respondents said that cost was the biggest barrier to receiving sick or emergency care. Transportation was selected as the primary barrier for six percent of clients and was selected as a secondary barrier for most participants.
- Language, not knowing where to receive care, not having a pet carrier or leash and being concerned about if the veterinarian would think badly of them were not frequently selected barriers to accessing care for this population of participants.

One in two clients (49.6 percent) reported being unable to access either preventative or sick/emergency veterinary care in the past two years.

LONELINESS AND SOCIAL ISOLATION SCALES

The telephone survey collected data on social isolation and loneliness among clients with pets, leveraging several widely accepted scales used to quantitatively measure social isolation and/or loneliness. The scales used in this research effort are as follows:

UCLA LONELINESS SCALE (UCLA-3)

The UCLA-3 Loneliness Scale is a three-question scale asking participants how often they feel they lack companionship, how often they feel left out and how often they feel isolated from others. Responses are "hardly ever," "some of the time" or "often" and are scored 1, 2 or 3, respectively. Possible summation of scores range

from 3 to 9, where researchers have grouped 3 to 5 as "not lonely" and 6 to 9 as "lonely."¹⁶

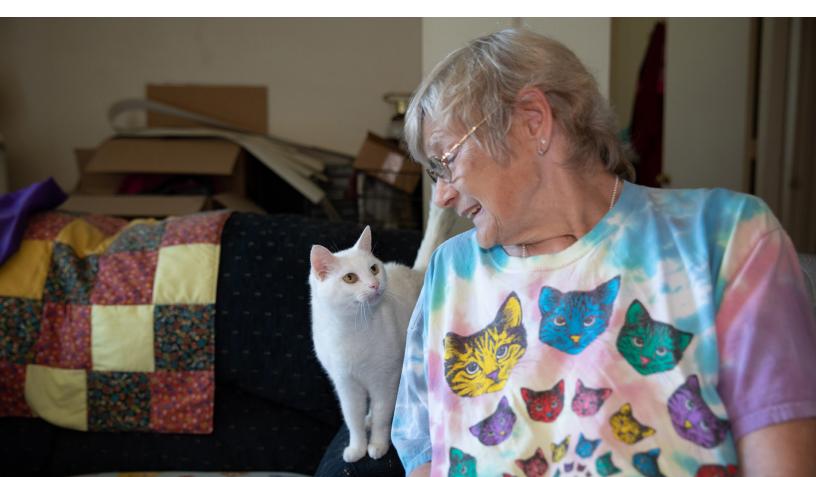
Four hundred people answered all three of these questions. The average score for clients was 5.6 and median 5, both falling in the "not lonely" category. Scores ranged from 3 to 9.

Using the grouping above, 44.8 percent of clients could be classified as lonely.

LUBBEN SOCIAL NETWORK SCALE (LSNS-6)

The Lubben Social Network Scale is comprised of six questions asking respondents the number of family and friends with whom they have interactions within a month, the number they feel at ease with to discuss private matters, and the number with whom they feel close such that they could call upon them for help. The scale is scored as the straight sum of each question with values assigned, and a total score of 12 and under is classified as being "at risk" for social isolation.

Four hundred clients answered all six questions. Sixty four percent of Meals on Wheels respondents were found to be at-risk for social isolation. The average score was 10.7 and median score was 10.



ATTACHMENT SCALE: BONDED FAMILY

This research effort also leveraged tools to help measure pet attachment and the bond Meals on Wheels clients have with their pets, including:

BONDED FAMILY SCALE

The Bonded Family scale was utilized to analyze attachment between Meals on Wheels clients and their pets. The scale was designed to improve upon limitations in the Lexington Attachment to Pets Scale, another tool used to measure pet attachment.

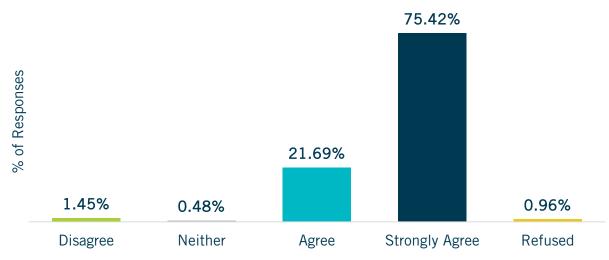
Survey respondents were asked to think about the pet that they have had the longest when responding to 23 questions. Survey results from the Bonded Family scale were analyzed by totaling scores for each person, with a higher score demonstrating stronger attachment. The highest score possible is 115 for the 23 questions. With 400 fully completed Bonded Family scales, the average score for clients on the scale was 105.4 with the median being 108, demonstrating strong attachment scores. The average for each question is 4.6.

The Bonded Family scale questions provide a lot of insight into the relationship of people with their pets by examining the individual questions. The scale is broken out into "strongly agree," "agree," "neutral," "disagree" and "strongly disagree."

Additional findings from the Bonded Family scale included these points:

- More than nine in 10 participants dreaded their pet dying, with three quarters of participants strongly agreeing with the statement. Three quarters of participants indicated they called their pet by affectionate nicknames and that they worried about their pet when they were away from home.
- Nearly all respondents (98.8 percent) agreed or strongly agreed with the statement, "you feel your pet is a member of your family," and 93.3 percent of respondents agreed or strongly agreed that they felt their pet was like a child of theirs (68.9 percent strongly agreed).
- Ninety-two percent of survey respondents agreed that their pet means as much to them as others in their family, and seven in 10 strongly agreed with that statement.
- One in five participants disagreed with the statement that they hesitated to move when sitting by their pet because they did not want to disturb the pet.
- Nearly one in three participants disagreed with the statement that they were more likely to get needed medication for their pets than themselves. Ten percent neither agreed nor disagreed. Still, more than half (56.9 percent) agreed with the statement, and 30.1 percent strongly agreed that they were more likely to get needed medication for their pets than themselves.







BONDED FAMILY SCALE

- 98.1% of Meals on Wheels pet owners agreed with the statement that their pet "brings happiness to your life" (80% strongly agreed with the statement)
- 94.5% agreed that they "would feel lost without their pet" (74.5% strongly agreed)
- 96.6% agreed that "having a pet in your life makes you feel less lonely" (74.9% strongly agreed)
- 98.6% agreed that their "pet in your family makes you happier" (78.3% strongly agreed)
- 95.9% agreed that "your pet comforts you when you have bad feelings" (71.8% strongly agreed)
- 98.1% agreed that "you feel emotionally close to your pet" (76.4% strongly agreed)
- 98.3% felt that their pet loves them (77.6% strongly agreed)
- 95.2% felt that having a pet around makes them healthier (71.3% strongly agreed)
- 94.2% felt their pet is a great companion (88.4% strongly agreed)
- 92.8% considered their pet to be a friend (83.4% strongly agreed)



LONELINESS, PET ATTACHMENT AND SOCIAL ISOLATION AMONG MEALS ON WHEELS CLIENTS WITH PETS

In combination, Meals on Wheels clients had strong attachment levels to their pets and were "at risk" for social isolation at relatively large numbers; yet, they had relatively low loneliness scores using one predominant scale. Those who lived alone and classified as lonely had a higher social isolation risk and also had very strong pet attachment.

Analyzing 388 responses with complete scales for Bonded Family, UCLA-3 and LSNS-6 and who answered number of people in their household, we found that for clients who lived alone, 68.1 percent

For those clients who lived alone and who scored as "lonely,"

80.5%

were at risk for social isolation and reported very high pet bonding.

were at risk for social isolation versus 57.9 percent of those who lived with others. For those clients who lived alone and who scored as "lonely," 80.5 percent were at risk for social isolation and reported very high pet bonding.

LIVE ALONE	% OF RESPON- DENTS	MEAN UCLA-3	MEDIAN UCLA-3	% LONELY UCLA-3	LSNS-6 MEAN	LSNS-6 MEDIAN	LSNS-6 AT-RISK	BONDED FAMILY MEAN	BONDED FAMILY MEDIAN	BONDED FAMILY AVG PER Q
Yes	59%	5.8	5	49.3%	10.2	9	68.1%	106.3	109	4.62
No	41%	5.3	5	39.0%	11.6	12	57.9%	104.9	108	4.56
Grand Total	100%	5.6	5	45.1%	10.8	10	63.9%	105.7	109	4.60

LIVE ALONE	LONELY UCLA-3	% OF RESPON- DENTS	LSNS-6 MEAN	LSNS-6 MEDIAN	LSNS-6 AT-RISK	BONDED FAMILY MEAN	BONDED FAMILY MEDIAN	BONDED FAMILY AVG PER Q
Yes	Yes	29.1%	8.0	7	80.5%	108.2	111	4.71
Yes	No	29.9%	12.3	12	56.0%	104.4	106.5	4.54
No	Yes	16.0%	10.6	10	61.3%	106.5	109	4.63
No	No	25.0%	12.2	12	55.7%	103.8	108	4.51
Grand	Total	100.0%	10.8	10	63.90%	105.7	109	4.60

LONELY UCLA-3	AT-RISK LSNS-6	% OF TOTAL	% THAT LIVE ALONE	BONDED FAMILY MEAN	BONDED FAMILY MEDIAN	BONDED FAMILY AVG PER Q
Yes	Yes	33.2%	70.5%	107.7	111	4.68
Yes	No	11.9%	47.8%	107.5	109	4.67
No	Yes	30.7%	54.6%	102.8	106	4.47
No	No	24.2%	54.3%	105.7	108	4.60
Grand	l Total	100.0%	59.0%	105.7	109	4.60

Presented another way, for those clients who classified as lonely and at risk for social isolation,

70.5% LIVED ALONE.

This cohort demonstrated the highest bond with their pets.

DISCUSSION OF SURVEY FINDINGS

The data in this study presents a very compelling story supporting the expansion of pet programming. Clients demonstrated strong attachment to their pets. Those who had higher levels of loneliness and social isolation had formed stronger bonds with their pets. These pets were loved as family members, and some clients forwent their own meals and medications to pay for their pets' needs. Many clients relied on Meals on Wheels assistance to help care for their pets. Yet, there were significant gaps in what was offered and what was needed. There were also cost and transportation barriers to accessing needed preventive, sick and emergency veterinary services.

SURVEY DEMOGRAPHICS

The survey results offer a profile of the Meals on Wheels pet-owning client. Participants were predominantly females living alone in urban areas who identified as White and were older than 60. Nearly 60 percent of respondents lived alone (58.8 percent), an important consideration in examination of the relationship between pets and their humans and importantly aligned to Meals on Wheels America data that 58 percent of home-delivered meal clients lived alone.¹⁷ In comparison, the Access to Veterinary Care Coalition (AVCC) report on which many of the questions in this survey were modeled includes a large younger population of 18-34 years of age, a second range of 35-54 years and a third age category of 55+ years.¹⁸ The age range of participants is important when considering some of the differences in results between those found in the AVCC report and those found in this study, since younger people may have more access to technology or transportation, which both impact accessibility to veterinary services.

The number of pets owned by Meals on Wheels clients is consistent with findings from other studies. Most clients had one or two pets. Lower income households were more likely to own more than one pet than those with higher income levels in other studies.¹⁸ About one out of three (37.3 percent) households with the lowest income (<138 percent of the Federal Poverty Level, FPL) reported owning only one pet compared to 43.6 percent of those whose income was between 138 percent and 250 percent of the FPL and 44.4 percent of those with income that exceeded 250 percent of the FPL. Households whose income fell below 138 percent of the FPL were also less likely than higher income households to own pets who were spayed or neutered. Among the 62.4 percent of those Meals on Wheels clients who lived alone with their pets and reported exact monthly income, the average was \$1,156.73, or 108.7 percent of the FPL, which falls within the lowest income bracket described above.



ABILITY TO ACCESS VETERINARY CARE

Meals on Wheels clients reported a high incidence of inability to obtain needed veterinary care due to finances and transportation. The Meals on Wheels pet client telephone survey utilized questions to draw comparisons to the 2018 Access to Veterinary Care Coalition (AVCC) Study conducted by the University of Tennessee's College of Social Work and the Veterinary Social Work program at the College of Veterinary Medicine. The national study of pet owners collected data on income and socio-demographics; pets; experiences not being able to access preventative, sick and emergency veterinary care in the past two years; the care needed; and the barriers that prevented the pet guardian from being able to access care for their pet.

	MEALS ON WHEELS CLIENT TELEPHONE SURVEY 2020	ACCESS TO VETERINARY CARE 2018 – OVERALL	ACCESS TO VETERINARY CARE 2018-<138%FPL
Unable to Access Preventative Veterinary Care	44.8%	22.7%	33.7%
Cost was a barrier	91.9%	80.0%	Not published
Transportation was a barrier	54.3%	11%	Not published
Unable to Access Sick / Emergency Veterinary Care	21.9%	13.6% – Sick 7.7% – Emergency	20.3% – Sick 10.8% – Emergency
Cost was a barrier	92.3%	73.8% – Sick 55.7% – Emergency	77.0% – Sick
Transportation was a barrier	46.2%	11% – Sick 15.0% – Emergency	13.4% – Sick

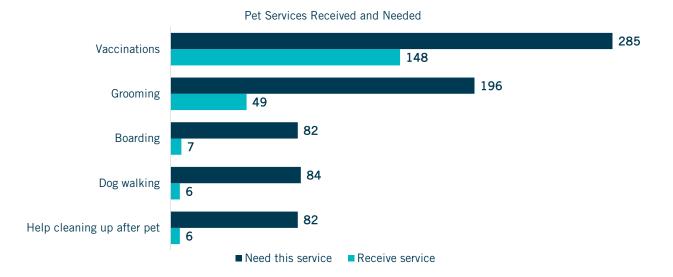
Overall, 27.9 percent of AVCC pet family respondents reported they were unable to access preventative, sick or emergency care in the past two years. Nearly twice that percentage of Meals on Wheels clients – one in two (49.6 percent) – reported being unable to access either preventative or sick/emergency veterinary care in the past two years.

A larger number of Meals on Wheels clients were unable to access needed veterinary care due to transportation barriers than in the AVCC population. One in two Meals on Wheels pet homes identified transportation as a barrier to accessing veterinary care for their animals. This is an important expected finding of this study since the client population constitutes homebound seniors and will require solutions that address this population's unique needs to accessing veterinary services. Few Member programs were found to provide pet transportation. A perceived need to rely on mobile veterinarians was found in qualitative research to reach clients who could not drive. Mobile providers are often more expensive, given time demands, and focusing on this provision obviates exploration of accessible care that is otherwise available in the community.



PET SERVICES RECEIVED AND NEEDED

Participants' top three needs over the past two years had been pet food, vaccines and nail trims. There were large gaps between services received and services needed in the following areas:



To describe the need another way, half of clients (47.8 percent) responded that they had needed or currently needed grooming services at the time of the survey, while 11.8 percent reported having received this support from Meals on Wheels. Nail trimming was a much-needed support among clients, with more than six in 10 reporting the need for assistance (62.5 percent). Pet grooming is an important quality of life factor for pets. Long nails can impact pet mobility and can also impact the client (scratches). Unkept coats can lead to parasites, fleas and sores or "hot spots" that could lead to future veterinary care. In more severe cases for some breeds of dogs, it may be considered cruelty as the animal can suffer physical and mobility harm.

Vaccinations, flea or tick products, and heartworm or intestinal parasite medications are needed by over half of participants in the AVCC report and an equal percentage in this study of Meals on Wheels clients. These products can easily be provided through partnerships. Parasites can have negative effects on human health if not addressed and are relatively easy to prevent with the proper medications. Providing these basic services greatly improves the quality of life for the pet and the person.

One in four clients (27.7 percent) currently received pet supplies, "such as cat litter, treats, toys and collars," from their Meals on Wheels programs at the time of the survey. This is in contrast to 60.5 percent of cat homes who reported needing help with cat litter, 52.8 percent of all pet clients having had a need for treats or toys for their pets and 39.8 percent needing collars, leashes or carriers in the past two years. Lack of collars, leashes and carriers are important transport barriers that can be easily remedied by programs. Collars have the additional benefit of being a quick way to reunite a lost pet, so there is value in offering these basic supplies that have important uses.

Three of every four clients (77.6 percent) had needed pet food in the past two years or currently needed it at the time of the survey. Pet food is the entrance point for many Meals on Wheels programs in providing some form of pet support for their clients. One quarter of clients had needed prescription pet food in the past two years or currently needed it at the time of the survey. Prescription pet foods can be a significant cost and are often not part of pet food programming in Meals on Wheels programs.

These findings offer a sense of the need and may be combined with pet ownership information for Meals on Wheels programs seeking to build a pet program. Some issues will be easier to tackle – e.g., helping the pet clients who cited the lack of a crate/carrier as a barrier to getting preventative care. The ultimate barrier to care, though, is undoubtedly financial. When rank ordered, cost was the primary barrier for nine in 10 clients with pets who could not access needed care. The good news is that there are new and developing programs to address the

financial barriers to obtaining veterinary care. Meals on Wheels programs nationwide have potential to find and locate services in their communities.

Another area to note is the emotional strain that could occur when a pet's needs are not addressed. One in 10 clients (10.6 percent) had a written plan for lifetime care for their pets while 45.8 percent of clients did not have them written but did have plans laid out. A nearly equal number (43.1 percent) did not have any plans if something happened to them. Three in 10 clients noted that they had needed end-of-life care for their pets. There is an opportunity for Meals on Wheels programs to assist their pet-owning clients by having conversations with them about designating care for their pets in the event of an emergency and having a lifetime plan for care. Humane euthanasia or end-of-life care is compassionate service that all pet programs should offer. Having these items addressed could relieve some of the emotional duress of pet ownership for an aging population.

THE BOND BETWEEN CLIENTS AND THEIR PETS AND IMPACT ON LONELINESS AND SOCIAL ISOLATION

The data presents a compelling case for providing care to support the bond between clients and their pets. This research project provides new data to showcase the needs of pet families and the importance of pets in the lives of those who receive Meals on Wheels services.

In combination, Meals on Wheels clients had strong attachment levels to their pets and were "at risk" for social isolation at relatively large numbers yet had relatively low loneliness scores using one predominant scale. Those who lived alone and classified as lonely had a higher social isolation risk and also had very strong pet attachment.

The high pet attachment scores could reflect the importance of pets in people's lives when they are alone leading to tightly bonding with their pets, since human companionship is not readily available. Since we do not have findings from those who do not own pets, we do not have a comparative sample to determine if the loneliness and social isolation numbers are impacted by pet ownership.¹⁶

The scores in the Bonded Family scale were exceptionally high, demonstrating a strong attachment to pets. Clients had strong attachment scores, with the majority of participants answering that they strongly agree with many of the positive statements reflecting their relationship with their pet. Interestingly, there were two questions where responses point to a person's attachment having negative ramifications. One in five participants disagreed with the statement that they hesitated to move when sitting by their pet because they did not want to disturb the pet. This response reflects a client placing their own physical needs as equally important to that of their pet. Nearly one in three participants disagreed with the statement that they were more likely to get needed medication for their pets than themselves. Ten percent



neither agreed nor disagreed. Still, more than half agreed with the statement (56.9 percent) and 30.1 percent strongly agreed that they were more likely to get needed medication for their pets than themselves. In this question, disagreeing with this statement demonstrates that people would not forgo their own health to care for their pets, which is an important consideration. From this standpoint, a score of 115 – which is the maximum

score on this scale – reflects extremely strong attachment that does not translate to the overall well-being of the client. As this scale continues to be developed, the significance of these variations in scoring should become more apparent.

Loneliness scores varied depending on the scale utilized. Using the UCLA-3 scale, Meals on Wheels clients had an average score of 5.6, which falls within the "not lonely" category. This compares to utilizing the one question measure, which is described by Stanley et al.¹¹ In the Meals on Wheels' population, 56.6 percent of clients surveyed indicated a presence of loneliness by responding "very true for me" or "somewhat true for me" using the one question measure. The Stanley study, controlling for variables not controlled for in this study, had 28.7 percent of pet owners reporting loneliness where 56.1 percent were female, 32.4 percent lived alone and the mean age was 70.9 years. Comparatively in this study population, 72.8 percent of the population was female and 58.8 percent of the population lived alone. Age ranges were obtained in this study, with the largest age range being in the 60-to-69-year range and the second highest in the 70–79-year range. When viewing the differences in population, living alone was a key factor that has been noted in other studies to increase loneliness.⁵

A research paper on loneliness that examines 20 research articles on companion animals and loneliness states the following: "It is important to view the current systematic review within the broader context of research into loneliness. While numerous studies have investigated whether companion animals can help to alleviate loneliness, one must be cognizant that the etiology of loneliness is almost certainly multi-faceted. It is unlikely that many people will report feeling lonely because they lack companion animal contact; for example, among the elderly, 'advancing age, living alone or in a residential home, widowhood, low level of education and poor income ... poor health status, poor functional status, poor vision and loss of hearing increased the prevalence of loneliness'." A further complexity is that each of these factors may influence the decision or the ability to own a companion animal. Nevertheless, if companion animals can alleviate or ameliorate the symptoms of loneliness, perhaps by helping people to connect with others,ⁱⁱⁱ then their study with regard to loneliness will be highly valuable."¹⁶

CONCLUSION

The research effort detailed in this report set out to analyze Meals on Wheels client perceptions of pet companionship; analyze the extent to which pet support programs empower socialization and reduce social isolation; and offer a profile of Meals on Wheels pet-owning clients – all with the ultimate aim of helping Meals on Wheels America to better understand the specific needs, challenges and opportunities available to clients and the Meals on Wheels network in addressing gaps in pet care.

The results of this study should be further explored to parse out those factors that may be impacting loneliness, social isolation and pet attachment. At a high level, the case for pet programming can be summed up as follows:

- Meals on Wheels programs are seeing an increase in numbers of clients.
- Many Meals on Wheels clients have pets, and we anticipate this number increasing.
- Scientific research confirms that pets improve the physical and mental well-being of their human caregivers.
- Meals on Wheels home delivery clients are strongly attached to their pets, which can reduce loneliness.
- There are significant needs that people have to maintain the health of their pets e.g., supporting access to veterinary care; providing pet food and supplies; assisting to overcome financial and transportation barriers to securing appropriate pet care. Reducing these needs by offering support can improve the lives of animals, and through that – by fostering the human-animal bond – improve the physical and mental well-being of their human caregiver.

There remain ample opportunities for Meals on Wheels programs to efficiently operate and scale veterinary care provision and pet programming using program planning, partnerships, volunteers and development activities.

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