

# Health Trust Evaluation Brief

The Silicon Valley population is aging. Advanced age is often accompanied by barriers that prevent seniors from keeping the thing they value most: their ability to live independent, self-sufficient lives.

## Nutrition & Social Connection for Older Adults

### INTRODUCTION

The purpose of this evaluation brief is to summarize the impact of the Health Trust's Meals On Wheels program on older adults in Silicon Valley/Santa Clara County.

The brief begins with an overview of our aging population and some of the key health issues and challenges facing older adults. It then summarizes the positive impact the Meals On Wheels Program has had on older adults, including their improved nutrition, independence and social connections. The brief concludes with a discussion of future opportunities to improve the health of older adults.

In keeping with a national trend, Santa Clara County's population is aging. According to US Census population estimates, in 2010 there will be 228,704 adults ages 65 and older in Santa Clara County. The number of people over 85 will more than double between 1990 and 2020. Advanced age is often accompanied by barriers that prevent seniors from keeping the thing they value most: their ability to live independent, self-sufficient lives. Research demonstrates that 95 percent of older adults prefer to remain in their homes and communities as they age, but older adults who live alone are exposed to a range of serious risk factors, including social isolation, the possibility of a fall or other injury and malnutrition. For these older adults, poor nutrition is a root cause of a deteriorating quality of life that can lead to the need for long term care. Nationally, 80 percent of older Americans have some type of chronic disease<sup>1</sup> that could be helped by better nutrition.



*A Meals on Wheels client is greeted by a volunteer driver.*

### NUTRITION, HUNGER AND FOOD INSECURITY

Poor nutrition has a serious impact on older adults. Without proper nutrition, older adults are at greater risk for a variety of chronic diseases and acute conditions. Malnutrition, underweight or obesity, can lead to weak muscles, reduced stamina and the inability to engage in physical activity. This in turn results in decreased ability to perform daily living activities, increases risks for falls, and threatens independence. Healthy eating, on the other hand, promotes longevity by reducing risk for cancer, heart disease, and diabetes and managing chronic conditions such as hypertension. Fruits and vegetables, whole grains, low sodium and low saturated fats are especially important in a healthy diet for older adults.<sup>2</sup>

Locally at least 43,000 seniors experience some level of food insecurity. This places older adults at risk for significant and potentially expensive health problems.

Unfortunately, as is the case nationwide, far too many older adults in Santa Clara County are food insecure, placing their health at risk. Food insecurity is defined as “limited or uncertain availability of nutritionally adequate and safe food or limited or uncertain ability to acquire acceptable foods in socially acceptable ways”.<sup>3</sup> According to the Current Population Survey results, 11.4 percent of older Americans (ages 60-90) are marginally food insecure, 5.6 percent are food insecure, and 1.7 percent are very low food secure.<sup>4</sup> If we apply these percentages to the estimated 228,704<sup>5</sup> population of older adults in Santa Clara County (ages 65+), locally at least 43,000 seniors experience some level of food insecurity. This estimate may also be conservative given that in 2004, a total of 327,000 people (all ages) in Santa Clara County, or 20 percent of residents, were estimated to be living in food-insecure households.<sup>6</sup>

Hunger and food insecurity places older adults at risk for more health problems. “Malnutrition can exacerbate disease,

increase disability, lower resistance to infection and extend hospital stays among the elderly. It also raises the cost to caregivers and inflates national health care costs; studies have shown that seniors who experience hunger have up to 100 percent longer hospital stays and increase hospital costs by \$2,000 to \$10,000 per stay.”<sup>7</sup>

While hunger and food insecurity disproportionately affect people living below or near the poverty level, the high cost of living in Silicon Valley may put an even greater portion of older adults at risk. Recent research on the basic annual cost of living for a retired adult has shown that federal poverty levels fail to take into account housing, transportation and medical costs. *The Elder Economic Security Index*<sup>8</sup> is a new way to assess income adequacy for older adults that takes into account local costs of living. According to this Index, the basic annual cost of living for a Santa Clara County retired older adult who is in good health and living in rental housing is \$25,391, or \$37,641 for a single elder with a mortgage. Average Social Security for a single adult in Santa Clara County is as little as one-half to one-third the Elder Standard Index, at \$13,464 per year. Thus, for seniors who rely primarily on Social Security as their income, it is likely they are making choices between spending money on keeping their lights and heat on, buying medication and taking it in prescribed (not reduced) amounts, or paying their rent and buying food.

## ISOLATION AND LONELINESS

Older adults who are limited in their ability to leave home due to health problems and/or mobility restrictions are often isolated and at risk for loneliness and depression. According to the National Institutes of Health, of the 35 million Americans age 65 or older, about two million suffer from clinical depression. An additional five million suffer from less







A Meals on Wheels driver provides a client with a meal.



Joe (right), a MOW driver, visits with a client. Drivers typically spend a few minutes visiting with each client on their route.

severe forms of the illness. Research has found that older adults who are more likely to be depressed include those:

-  With low and medium levels of physical activity
-  Who possess a physical disability or mobility impairment
-  With fewer than three close friends or relatives, and
-  Who were somewhat satisfied or not satisfied with their friendships<sup>9</sup>

Nationally, an estimated 25 percent of people 65 and older experience specific mental disorders that are not part of normal aging. In Santa Clara County this translates to 40,132 individuals. Between 5 and 10 percent of older adults in the US have major depression, translating to between 8,026 and 16,052 older adults in Santa Clara County. Suicide is one of the County's leading causes of death among older adults.<sup>10</sup>

Research has also found a significant association between social isolation and negative health outcomes. Individuals who lack social connections or report frequent feelings of loneliness are more likely to suffer higher rates of morbidity (illness) and mortality (death)<sup>11,12,13</sup>, infection<sup>14</sup> and cognitive decline<sup>15</sup>.

## THE HEALTH TRUST'S HEALTHY AGING STRATEGY: USING MEALS ON WHEELS TO PROVIDE NUTRITION AND SOCIAL CONNECTIONS

Since its inception in 1996, The Health Trust has been committed to improving nutrition and social connections for older adults through its Meals On Wheels (MOW) program. MOW provides home-delivered nutritious meals daily to older adults who have mobility limitations that may prevent them from shopping or cooking for themselves. The largest portion of MOW recipients, 51 percent, is age 80 and older. Most of these elders live alone and have very low incomes, with 60 percent having incomes of less than \$1,000 a month.

In addition to providing a hot meal, trained food deliverers perform a daily wellness check. They talk with the client to make sure he or she is eating, and they check the condition of the house and kitchen. For many clients, their Meals On Wheels driver is the only human connection they have all day. In addition, because many seniors are unaware of how to access community resources, Meals On Wheels offers targeted case

Many older adults are limited in their ability to leave home due to health problems and/or mobility restrictions. Consequently, they are often isolated and at risk for loneliness and depression, and are more likely to suffer higher rates of cognitive decline, illness and death.

The Health Trust Meals On Wheels program provides home-delivered nutritious meals daily to older adults. In addition to a hot meal, food deliverers also perform a daily wellness check on all clients. For many seniors, their Meals On Wheels driver is the *only* human connection they have all day.

management that connects clients with needed services and provides assistance during a crisis.

The Meals On Wheels program is funded by a variety of sources (see Figure 1). While the federal government supports senior nutrition programs, only a very small percentage of the MOW program funding comes from federal government. The program relies heavily on Health Trust fundraising and participant contributions to provide daily hot meals, wellness checks and additional complimentary services such as a monthly pet food program and a fall prevention program.

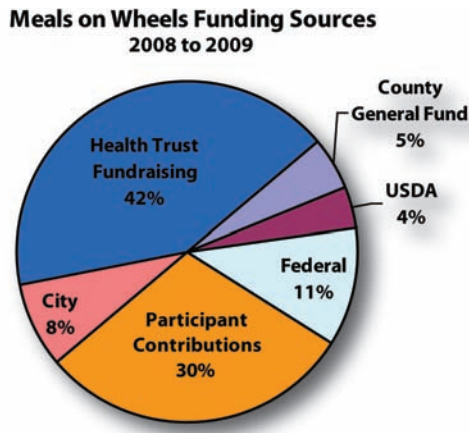


Figure 1

*How much service does the MOW program provide?*

A total of 99,886 meals were provided to 688 older adults (unduplicated) in fiscal year 2009. As presented in Figure 2, this represents a slight increase in service volume over the previous fiscal year and an overall increase of approximately 16,000 meals from 2003 to 2009.

Most of the meals in fiscal year 2009 were delivered by paid part-time drivers, but slightly more than a third of all meals (35 percent) were delivered by trained volunteers.

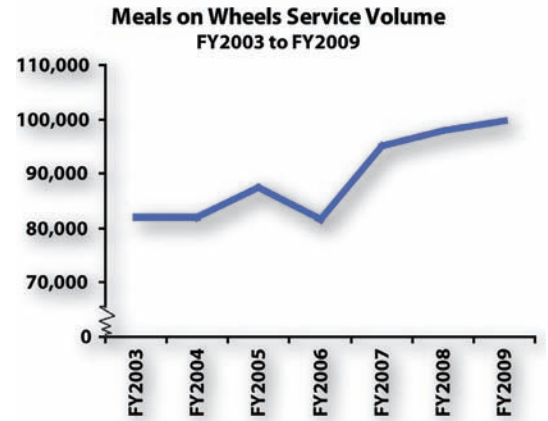


Figure 2

*Who does the MOW program impact?*

During fiscal year 2008-2009, 73 percent of The Health Trust MOW clients were 70 years of age or older (see Figure 3). The population age 0-59 is comprised of people who are homebound due to disabilities. Close to three-quarters of the clients are White followed by 14 percent Hispanic, 5 percent Asian, and 4 percent Black (see Figure 4).

Most MOW clients live alone (87 percent), and a significant portion has incomes at or below the federal poverty level (43 percent).

Prior to receiving meals, all MOW clients are assessed to determine if they are at nutritional risk. Clients are considered to be at nutritional risk if they have an illness or condition that affects food intake; eat less than two meals a day; eat few fruits,

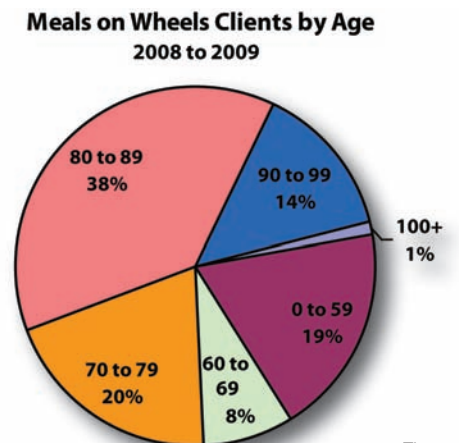


Figure 3

vegetables or milk products; do not have enough money to buy food; eat alone most of the time; have experienced recent significant weight gain or loss; or, are physically unable to shop, cook, or feed his or herself.

**Meals on Wheels Clients by Race  
2008 to 2009**

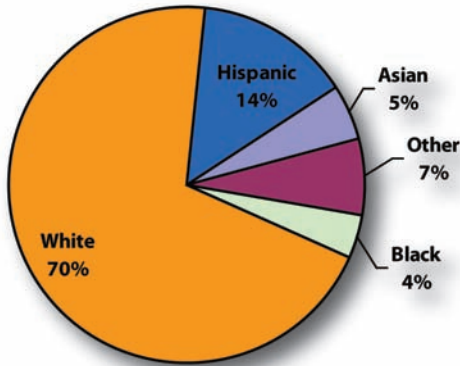


Figure 4

## WHAT DIFFERENCE DOES THE HEALTH TRUST MEALS ON WHEELS PROGRAM MAKE?

A recent evaluation of the program revealed that Meals On Wheels improved the following outcomes for clients.

- Capacity to remain in home
- Improved nutritional intake
- Increased social connection

### Methodology

These outcomes have been evaluated through two evaluation methodologies, which were implemented in FY2009. First, a semi-annual survey of client satisfaction was administered to all MOW clients. The survey evaluated client perceptions about the importance of the MOW program to clients' sense of independence and well-being; clients' views about the quality of the meals; clients' perceptions about changes in their consumption of fruits and vegetables because of the program; and, clients'

satisfaction with the MOW drivers, staff and program as a whole. Second, a qualitative study, using a structured interview methodology, was conducted with a sample of 20 randomly selected eligible clients. The purpose of the evaluation was to gather feedback from MOW clients in order to further understand the impact the program has had on their lives and identify ways to improve the program. Results from each of these evaluations are integrated into the following summary of evaluation findings for FY2009.

### Results

*Meals On Wheels program supports older adults to remain in their homes*

Survey results indicated that more than three-quarters (79 percent) of the MOW clients view the program as “**extremely important**” in helping them remain independent in their home and in supporting their daily well-being (see Figure 5).

The survey results were confirmed and further illuminated by clients' responses to the interview question: What would you do if you didn't have the MOW Program? Interviewees reported that without the MOW program they would be unable to buy groceries; they would be unable to cook their own meals; and, they would have to move out of their home. Twelve out of the 20 clients interviewed shared that they would have problems preparing their own meals. For example, one client said, “I get arthritis pretty bad and I can't cook.” Another client shared, “I cannot cook for myself. I depend totally on the meals since I fell and broke my leg and damaged my hip.”

At a very basic level, interviewed clients reported that they are not able to buy groceries. Some clients attributed their inability to buy groceries to their mobility restrictions. For example, one client said, “I would survive on leftovers and [that

A recent survey of Meals on Wheels clients revealed that they view the service as critical to their ability to remain in their homes and communities.

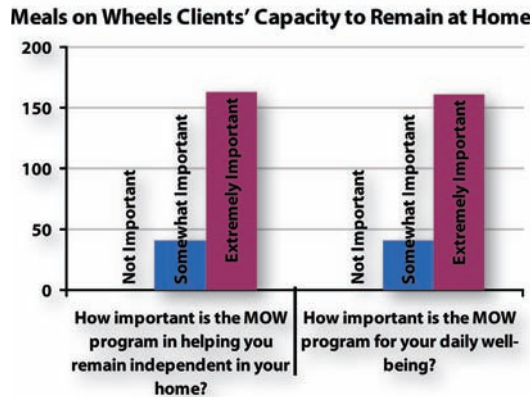


Figure 5

without MOW I would] not eat properly because I cannot go to the store.”

A handful of interviewed clients (20 percent of the interviewees) said their lives would change dramatically if they didn't have Meals On Wheels as they would have to move. One client said she would have to go live with her family. Three clients worried that they would have to go to a board and care facility. For example, one client said, “My daughter says, ‘mom, you need to go to a place.’ But, yeah, I don't know maybe if MOW didn't deliver meals.” Another client said, “I don't know if in the future I would have to go to a nursing home perhaps. I don't know.” Yet another client said “I was existing on Boost, water and Gatorade—that was all. My husband being ill himself, he couldn't support me. I would have to move out where I could get some help. I'm terrified that without MOW I would be put in a board and care.” For these clients, Meals On Wheels is viewed as critical to their ability to remain in their homes and communities.

*Meals On Wheels promotes healthy eating and food security*

According to survey results, most MOW clients reported that the home-delivered meals provide a sufficient amount of food that leaves them satisfied after eating the meal (see Figure 6).

The MOW program supports clients' healthy eating by maintaining or

increasing their intake of fruits and vegetables. Half of all survey respondents indicated that since they started receiving home-delivered meals they are eating more fruits and vegetables. Another 48 percent reported that they were eating about the same amount of fruits and vegetables.

The interview study results show that the MOW program plays a crucial role in promoting healthy eating. Clients described many ways in which their diet would be negatively impacted if they did not have the MOW program. In addition to eating less, clients said they would eat more junk food and fast food, eat canned food, or rely on dry staples such as cereal, noodles, peanut butter and gelatin. In essence, they would be getting less fresh fruit and vegetables, fewer whole grains and fewer healthy proteins.



Figure 6

For many MOW clients, having enough food is not a certainty. Almost 40 percent of MOW survey respondents indicated that they would be interested in receiving free weekly groceries from Second Harvest Food Bank, suggesting a need for food beyond the daily delivered hot meals.

Most of the interviewed clients (65 percent of the interviewees) said that they would not have enough to eat if they did not have the MOW program. One client directly stated, “If I didn't have the program, I'd go hungry.” Many clients reported that they are not able to afford groceries, and they would not be able to

“If I didn't have the Meals on Wheels program, I'd go hungry.”  
-MOW Client

buy food if they were not receiving MOW services. For example, one client said, “I don’t know, I’m not sure what I’d do. I’d have to seek out something elsewhere. But I can’t afford to buy groceries, so I’d be in trouble.” These MOW clients are clearly at risk for food insecurity, and they perceive the MOW program as critical to their ability to get enough to eat.

*Meals On Wheels provides an opportunity for social connection*

According to survey results, almost all clients (92 percent) are extremely satisfied with the services provided by their MOW driver and about two-thirds of the clients indicate that they look forward to visiting with their MOW driver all the time. More than half of the clients (59 percent) reported frequently visiting with their MOW driver.

The interview results provide a better understanding of the impact of the driver visits on the clients. When asked about their interactions with the drivers, about half of the clients interviewed indicated that their driver spent a minimal amount of time with them, but that they appreciated what interaction they had with their

drivers. When clients do talk with their drivers, the topic of discussion varies from conversing about everyday activities (such as movies, weather, and family), the MOW menu, and the client’s health.

Despite some clients’ perception that they have little interaction with their drivers, many of them reported that they like their driver and, in particular, have warm feelings for their ‘favorite’ drivers. For example, one client said, “She [the driver] puts the meals up and she’ll stop and talk to me for a few minutes. I look forward to seeing her on Wednesdays.”

Several clients named their favorite drivers and spoke warmly about them. For example, one client said, “I think he [the driver] should be cloned. He is a very upbeat personality and has a good sense of humor. He’s a good man, a good representative of Meals On Wheels.” Clients described their specific drivers as “nice”, “pleasant and cheerful”, “courteous”, “professional” and “friendly and caring”. One client described her relationship with her drivers as like family: “We’ve gotten to be friends more than the others. So, it’s like having two more kids.”

Clients described specific ways that drivers were caring and helpful. Drivers help clients in a variety of ways, including changing water bottles, moving items, and driving clients to appointments on the driver’s own time. Even the brief interchanges between clients and drivers influence the clients’ perceptions about their drivers. One client relayed, “They come, they greet me and say ‘good morning’ or ‘how are you doing today?’ And, like today, the driver told me ‘have a nice weekend and we’ll see you again on Monday.’”

The combined results of the survey data and the interview results indicate that most clients value visits from their MOW drivers but that these interactions are perhaps briefer than desired. Based on the interview results, the program is collecting more detailed information from

“The drivers are company on a lot of days when you don’t have company, and that’s good cause you can get pretty lonely, and I don’t like being by myself.”  
-MOW Client



Photo courtesy of SVCN

A MOW client prepares to eat her meal.

The combination of affordable daily nutrition and social contact with MOW drivers increases clients' ability to remain in their homes and community.



*City of Gilroy Mayor Pinheiro delivers meals to clients on Mayors for Meals Day.*

clients about their desire to visit with drivers at the time of meal delivery and whether their needs are being met in this area.

### ON THE HORIZON: FUTURE OPPORTUNITIES TO IMPROVE THE HEALTH OF OLDER ADULTS

#### *Health Trust Food Pantry*

Based on evaluation results to-date, and the large portion of MOW clients who have very low-incomes, the MOW program is fundraising to support biweekly free grocery delivery to clients who are at highest risk for food insecurity. Planning is underway to assess the specific needs of the clients and determine the costs and feasibility of implementing this volunteer-based free grocery delivery service.

#### *Exploration of Systems Changes to Congregate Meals*

Through the Older American's Act, congregate meals are provided in

communities throughout Santa Clara County, primarily through city-run community and senior centers. These low-cost meals offer an opportunity for healthy nutrition and social connection. The Health Trust has recently begun collaborating with key stakeholder groups in Santa Clara County to develop strategies for enhancing congregate meal delivery models.

#### *Further Connecting and Engaging Older Adults at Risk*

Based on the evaluation results, the MOW program has reviewed meal routes and driver schedules to ensure that there is enough time for all drivers to visit with each client for at least 10 minutes. In addition to providing social connection through its MOW program, The Health Trust is assessing and promoting opportunities for community engagement for older adults. As part of the organization's long-term plan, the Healthy Aging initiative will be working with partners to develop and implement new options for volunteering, learning and employment.



## CONCLUSION

The evaluation discussed in this brief has limitations due to its reliance on self-reported data, but it provides powerful evidence for the need and success of this program from clients' perspectives. Evaluation results reveal that the Health Trust Meals On Wheels program provides more than just a hot meal to older adults. The combination of affordable daily nutrition and social contact with MOW drivers increases clients' ability to remain in their homes and community.

The Meals on Wheels program is an essential service for the health and well-being of a clearly vulnerable population. The continuation, enhancement and expansion of MOW is an integral part of The Health Trust's Healthy Aging initiative. With an expanding population of older adults in Santa Clara County, sustaining and increasing the contributions of our program funders, community partners, and volunteers is critical to our current and future success.

## FOOTNOTES

<sup>1</sup>Centers for Disease Control and Prevention. 2003. "Public health and aging: trends in aging—United States and worldwide." *Morbidity and Mortality Weekly Report* 2003;52(06):101-106.

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<sup>3</sup>Anderson, S.A. 1990. "Core Indicators of Nutritional State for Difficult-to-Sample Populations." *Journal of Nutrition*, 120:1557-1600.

<sup>4</sup>Ziliak, J.P., C. Gundersen, and M. Haist. 2008. "The causes, consequences, and future of senior hunger in America." 19 Nov. 2009 <<http://216.235.203.153/Document.Doc?id=13>>.

<sup>5</sup>State of California, Department of Finance.

2007. "Race/Ethnic Population with Age and Sex Detail, 2000–2050." Sacramento, CA, July 2007.

<sup>6</sup>California Food Policy Advocates. 2003. "Preventing Hunger Among Elderly Californians." 19 Nov. 2009 <<http://www.cfpa.net/BackgroundSeniorHunger2003.pdf>>.

<sup>7</sup>California Food Policy Advocates. 2003. "Preventing Hunger Among Elderly Californians." 19 Nov. 2009 <<http://www.cfpa.net/BackgroundSeniorHunger2003.pdf>>.

<sup>8</sup>Wider Opportunities for Women. "Elder Economic Security Initiative." 19 Nov. 2009 <<http://www.wowonline.org/ourprograms/eesi/>>.

<sup>9</sup>US Department of Health and Human Services, Older Americans Substance Abuse & Mental Health Technical Assistance Center. "Professional Reference Series Depression and Anxiety, Volume 1: Depression and Anxiety Prevention for Older Adults." 19 Nov 2009 <[http://www.samhsa.gov/OlderAdultsTAC/docs/Depression\\_Booklet.pdf](http://www.samhsa.gov/OlderAdultsTAC/docs/Depression_Booklet.pdf)>.

<sup>10</sup>Santa Clara County Public Health Department. "Santa Clara County MHA Community Services and Supports Three-Year Plan." 19 Nov. 2009 <[www.sccgov.org](http://www.sccgov.org/)>.

<sup>11</sup>Brummett, Beverly, et. al. 2001. "Characteristics of socially isolated patients with coronary artery disease who are at elevated risk for mortality." *Psychosomatic Medicine* 2001;63:267–272.

<sup>12</sup>Seeman, Teresa. 2000. "Health Promoting Effects of Friends and Family on Health Outcomes in Older Adults." *American Journal of Health Promotion*. 2000;14(14):362-70.

<sup>13</sup>Uchino, B, Cacioppo, J, and Kiecolt-Glaser J. 1996. "The Relationship Between Social Support and Physiological Processes: A Review with Emphasis on Underlying Mechanisms and Implications for Health." *Psychological Bulletin*. 1996;119:488-531.

<sup>14</sup>Cohen, Sheldon, et al. 1997. "Social Ties and Susceptibility to the Common Cold." *Journal of American Medical Association*. 1997;277:1940-44.

<sup>15</sup>Barnes, L, et al. 2004. "Social Resources and Cognitive Decline in a Population of Older African Americans and Whites." *Neurology*. 2004;63:2322-26.

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Sustaining and increasing the contributions of our program funders, community partners, and volunteers is critical to our current and future success.