UNDERSTANDING THE IMPORTANCE OF MEAL DELIVERY FOR THE WELL-BEING OF FRAIL ELDERS

A Thesis

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ABSTRACT

Qualitative methods were used to explore the role of Meals on Wheels (MOW) in the lives of frail elders. This study explored the interface between the way MOW operates and clients' need to discover the ways that a meal intervention program integrates with existing lives, beliefs, and cultural values. A random sample of 20 MOW clients (3 receiving frozen meals) was interviewed in the Bronx, New York to obtain data on social contact, lifestyle, meal satisfaction, and eating patterns. General living conditions in clients' homes were observed. Transcribed text was analyzed and coded using Atlas.ti.

Most respondents expressed a desire to eat the meal hot upon arrival although it was delivered any time from 9:00 am-3:00 pm. Satisfaction with taste and perceived healthfulness of meals varied, but respondents were appreciative of the program and viewed the meals as important for their daily diet. One-quarter of the sample reported calling to ask for healthier meals or nutritional information for meals provided by MOW. When these requests were unsuccessful, respondents turned to a variety of remedies including boiling meals, rinsing off salt, removing high-fat sauces, giving meals to friends and neighbors, and throwing meals away.

Respondents usually did not know their driver's name and exchanged few words when food was delivered, but this was often the only social contact respondents had during the weekdays. This frequent contact may play an important role in surveillance of elders' health and safety, and may also build personal relationships over time.

By accepting help from an organization such as MOW, which has a certain amount of institutional inflexibility, respondents both gained independence and experienced certain constraints on their schedules, social contacts, and ability to make culturally appropriate and personally preferred food choices. Given the importance of

MOW for ensuring the food security and well-being of frail elderly, it is important to resolve some of the tensions created by MOW related to health and cultural issues.

There is no single meal plan that is appropriate for the entire diverse group of inner city elders participating in MOW. Respondents expressed a desire for healthier meals and meals specific to common health problems, as well as culturally appropriate meals, specifically for the growing population of Latino elders. In addition, alternative meal plans such as those that incorporate cooking education, grocery delivery, or frozen meals may be appropriate for certain groups of elders based on each client's capability. In this study, capability was captured in two important dimensions: 1) Food Preparation and 2) Food Acquisition. Examining this type of capability provides valuable insight into the food management strategies of elders and may also be a promising new way to ascertain what type of meal plan is appropriate for each client.

BIOGRAPHICAL SKETCH

Megan Henry was born and raised on a small farm in Olympia, Washington. She received her AB in Biological Anthropology from Harvard University in 2000. She worked as a research assistant and technical writer in Seattle and New York City before returning to academia at Cornell University in Fall 2003 to pursue a Masters in Nutritional Sciences with a minor in Epidemiology. Megan received the 2004 Outstanding Teaching Assistant Award in Agriculture and Life Sciences and served as co-President of the Nutrition Graduate Students Organization during the 2004-2005 academic year.

Megan and her husband Kiemanh Pham moved from New York to California after Kiemanh's graduation from NYU Medical School in June 2005. They were married the following September at Lakewold Gardens in Washington State.

Megan's interests include learning about international cuisine and customs, especially through traveling, cooking and lots of tasting. She enjoys photography, wine tasting and outdoor activities with her husband. They have been fortunate to have had the opportunity to travel extensively this year, from a three day cross-country road trip to more leisurely visits to Hawaii, Mexico and Vietnam. Megan's favorite trips are still to Washington state, where she visits her grandmother, parents, siblings and five delightfully rambunctious nieces: Rebecca, Jolyn, Maleila, Maya and Serenne.

Dedicated to Mary Aurelia Brooks

June 21, 1905 —October 14, 2003

Just before I began to work on this project, my father's aunt, our beloved Great Aunt Mary, passed away. She was 97 years old. She lived a full and amazing life that took her on a journey from upstate New York to California by way of Panama. Although she was always interested to hear about our lives, she was also a wonderful storyteller who related tales of her own mother secretly learning how to drive the family's brand new Model T and her father struggling to adjust to the reality of the Great Depression.

It was my family's experience with her final years, however, that made me particularly interested in this project. Like many elders I was able to meet through this research project, Mary Brooks preserved her independence with a fierce dignity, despite considerable difficulties. I am dedicating this thesis to Great Aunt Mary because her memory influenced me throughout this study and guided me to be a better investigator.

Great Aunt Mary's ashes were scattered in San Diego, a place she had loved and called home for over 70 years. Although she is remembered by friends and family, there is no physical monument to honor her remarkable life. Mary Aurelia Brooks was born and raised in Geneva, NY after her father attended Cornell University in 1893, so it is fitting that a small piece of her life history will quietly remain forever in the Cornell Library. Great Aunt Mary never desired to draw attention to herself, but hopefully she would not mind this acknowledgement of the influence she had on my desire to contribute to the well-being of elders by giving them a voice.

ACKNOWLEDGMENTS

It was an honor to be asked to head this qualitative piece of a larger mixed-methods study by Professor Edward Frongillo. The trust Professor Frongillo places in all of his students (across a wide range of projects in multiple countries) to make decisions and determine the course of their own projects is the best kind of learning experience.

I came to Cornell to study Nutritional Anthropology with Professor Gretel Pelto, and it has been a privilege to learn both from Professor Pelto and epidemiologist Jean-Pierre Habicht. They have been invaluable in helping me understand (and never underestimate) the human element of program and policy planning.

I never could have completed such a project without the incredible support and guidance from Professor Carol Devine. Writing from across the country was no small feat and her excellent advice—always at just the right time—was much appreciated.

It was a wonderful experience to work with our team of colleagues across several disciplines at Cornell, as all as our community partners in New York City: Marjorie Cantor, Andrea Kopel, Yasamin Miller, Meghan Miller, Deirdre Nissenson, Karl Pillemer, Marcia Stein and Elaine Wethington.

Thank you to Jennifer Jabs and Betty Sun, two of the most intelligent and driven people I have ever met, for providing excellent advice in the more difficult days of thesis writing. Peter Simon also contributed both commas and good company to the process. Rahul Rawat and Mduduzi Mbuya, aside from being awed and inspired by your real-world experience and matrix-making abilities, your hard work making graduate school enjoyable was much appreciated. I would not have made it without you both.

I would like to thank my husband, Kiemanh Pham. This has been an adventure, and I am lucky to have had your encouragement and support throughout this project.

Your example of what one can achieve with dedication and hard work has inspired me to reach my own goals, and I love and thank you with all my heart.

I would like to thank both of our families for their unwavering support. Special thanks to my Mom, Judith Henry, for instilling in me a fundamental belief in the importance (and delight) of studying nutrition…and for tirelessly editing my thesis! And to my younger sister Katie– now it is time for me to follow in *your* footsteps as I achieve my graduate degree and pursue my career with the passion and dedication that you have shown.

Most of all, I am indebted to all of the elders involved in this study who volunteered their time to welcome a complete stranger into their homes and their lives. These brave individuals graciously allowed their personal histories, thoughts, and feelings to be recorded, examined, and reassembled. By allowing others to experience and learn from their unique perspective, they help everyone make more informed decisions about issues that affect our community.

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LIST OF ABBREVIATIONS

ADL: Activities of Daily Living
Basic personal care tasks: feeding, continence, transferring (in and out of bed or chairs), toileting, dressing, and bathing.

AoA: Administration on Aging
A federal agency within the Department of Health and Human Services responsible for administering all programs authorized by the Older Americans Act (OAA). Also performs an advocacy role for the elderly.

DFTA: Department for the Aging
An agency in New York City coordinating services for New York City seniors. Mission statement: “To work for the empowerment, independence, dignity and quality of life of New York City's diverse older adults and for the support of their families through advocacy, education and the coordination and delivery of services” (DFTA, n.d.).

ENP: Elderly Nutrition Program
A federally funded program authorized under the 1978 Title III-C amendments to the Older Americans Act. ENPs provide congregate and home-delivered meals to low-income, frail, homebound, and otherwise isolated elders who are likely to be at nutritional risk.

HHA: Home Health Aide
In New York State, Home Health Aides and Home Attendants are certified by the New York State Department of Health. In this study, respondents used the term “Home Health Aide” to refer to both types of in-home care. Both assist with household activities such as grocery shopping or laundry, as well as ADL (Activities of Daily Living). In addition, Home Health Aides can perform limited medical duties such as checking pulse rate and temperature. Home Health Aides are also permitted to count out and place medications in a client’s hand, but the law prohibits them from administering the medication directly. If more extensive medical care is necessary, it is provided by a Certified Home Health Agency (CHHA) such as the Visiting Nurse Service of New York. To qualify for these services, clients require a physician’s approval and must be receiving Medicaid.

HDM: Home-Delivered Meals
See Meals on Wheels.

MOW: Meals on Wheels or Meals-on-Wheels
A community-based nutrition program funded through Title III of the Older Americans Act (OAA) that provides and delivers one meal per day, delivered five or more days a week, to homebound elders. Eligibility standards vary in different regions. Privately funded programs that work alone or in partnership with MOW also

exist, such as Citymeals-on-Wheels in New York City. MOW is a common regional name for a Home-delivered Meal program.

NSI: Nutrition Screening Initiative
A collaboration of the American Academy of Family Physicians, the American Dietetic Association, and the national Council on Aging to promote the integration of nutrition screening and intervention into health care for older adults. The goal of NSI is to prevent and manage nutrition-related problems before a person becomes ill or a health condition worsens.

OAA, OAANP: Older Americans Act, Older Americans Act Nutrition Program
Officially established in 1972, OAANP is the largest and most visible federally funded community-based nutrition program for elders. It provides Elderly Nutrition Programs (ENPs) such as: congregate and home-delivered meals, nutrition screening, education and counseling, and an array of other supportive and health services.

RDA: Recommended Daily Allowance
The average daily dietary intake level that is sufficient to meet the nutrient requirement for nearly all (97-98%) healthy individuals in a given age and gender group. The RDAs do not define an individual's nutrient requirements. OAA requires that meals from MOW provide an average of 33% of the RDAs as defined in 1989 for adults age 51 and older.

SSI: Supplemental Security Income
A federal income supplement program run by the Social Security Administration designed to help individuals who are blind, have disabilities or are over age 65 with limited income. SSI takes into consideration income and resources available to the individual. To qualify in 2003, a single individual could not exceed a monthly income of $632 and assets could not exceed $2000. A couple's monthly income could not exceed $921 and assets could not exceed $3000. New York State supplements the amount paid by the federal government. In 2003, the maximum monthly stipend for an individual was $639/month ($552 federal benefit + $87 state supplement). A couple could receive $933/month ($829 federal benefit + $104 state supplement). New York State residents accepted for SSI automatically receive Medicaid, and SSI also pays the Medicare Part B premium for all seniors who are eligible for Medicare.

CHAPTER ONE

INTRODUCTION

> In light of the gift of longevity with which a growing majority of Americans are now blessed, we must engage as a nation in ensuring that we have an architecture for longevity in place; i.e., a design for the future which acknowledges long life as a reality, is sensitive to the needs of current elders, and is informed by the likely requirements and contributions of the largest cohort of older adults this world has yet to see–the baby boomers.
>
> Jeanette C. Takamura
> Assistant Secretary for Aging, U.S. Department of Health and Human Services
> Testimony on Long-Term Care, January 12, 1998

The population of the United States age 65 years and over was nearly 36 million in 2003 (12% of the total U.S. population) and by 2030 is projected to increase to 71.5 million. After that time, it is predicted that the proportion of elders will remain stable at 20% of the total U.S. population, even though the absolute number will continue to grow. In addition, the U.S. Census Bureau predicts the oldest-old (age 85 years and over) will quadruple to nearly 21 million by 2050 as Baby Boomers move into this age group (Older Americans 2004, 2004).

The older population is not only growing larger, it is also becoming more diverse. The older Latino population is projected to grow the fastest, from 2 million in 2003 to 15 million in 2005, surpassing the older African American population by 2028. The older Asian population is also projected to increase quickly from nearly 1 million in 2003 to 7 million in 2050 (Older Americans 2004, 2004).

The changing demographics resulting from shifts in life expectancy are accompanied by increased burdens brought on by individual and multiple chronic health conditions, increased physical inactivity and poor diet. This disproportionately impacts the nutritional and functional status of vulnerable subgroups: women, minorities, those with limited income and education, and homebound elders (Older

Americans 2004, 2004). In addition, brief hospital stays and an increase in elders who lack a usual source of health care add to the growing lists of those requesting meal assistance (Sharkey, 2004a).

The Older Americans Act Nutrition Program (OAANP) Home-delivered Meals (HDM) service has limited program resources to respond to the increased longevity, diversity and needs of its service recipients. Meal programs across the country are being challenged to reconsider the traditional model of service delivery as well as link nutrition programs to measurable outcomes (Sharkey, 2004b).

The New York City Department for the Aging (DFTA) oversees the most extensive meal delivery program in the United States. There has been rapid growth across the entire state, where the number of meals delivered to homebound elderly increased 300 percent in the past 20 years. Every weekday, DFTA oversees the delivery of 17,164 meals (Gotbaum, 2002) through contracts with private agencies that provide meals in the five boroughs of New York City. Private, nonprofit groups like Citymeals-on-Wheels raise private funds and work with DFTA to offer weekend and holiday meals not covered through most Meals on Wheels (MOW) programs. Citymeals-on-Wheels also offers coverage for 1,300 elders who would otherwise be on government wait lists and mails boxes of dry goods and emergency supplies throughout the year to all clients.

Many of the national trends affecting the elderly population are even more dramatic in New York City. The number of New Yorkers age 85 and over doubled over the past 30 years (DFTA Awards Contracts, 2004) and continues to grow. Minorities already represent one in every two elderly New Yorkers (The Older Population in New York City, 2003). In 2000 over 350,000 elders in New York City (39% of the population over age 65) were living with a disability that resulted in mobility or self-care limitations. The high cost of living in New York City presents

additional challenges. The U.S. Census shows that 17.8% of elderly New Yorkers reported income levels at or below the poverty line, which represents a 7.9% increase in the last 10 years and is nearly double the national elderly poverty rate of 9.9% (Quick Facts on the Elderly, 2003).

DFTA was pilot-testing a contentious policy change in the Bronx called "Senior Options," which DFTA Commissioner Méndez-Santiago hailed as being about "flexibility and choice for seniors and building the capacity of the Bronx home delivered meals system" (DFTA Awards Contracts, 2004), but a Bronx city council member described it as "cutting costs at the expense of quality and nutrition" (Robbins, 2004). Before this policy change, DFTA had contracts with 17 agencies that served 12 community districts in the Bronx. A network of community-based providers working through those agencies had been delivering over 800,000 hot meals to 2,500 homebound seniors. In December 2003, DFTA released a request for proposals to select three providers to take over delivery of all meals. As an additional cost-saving measure, providers were required to deliver 60% "ready to heat meals" (such as frozen meals) once or twice per week, while 40% of clients would continue to receive daily hot meal deliveries. A $3 per meal spending cap was also imposed. After a meeting with Bronx officials and providers, DFTA reduced the number of seniors slated to receive frozen meals to 30% and raised its per-meal cost to $5. In October 2004, "Senior Options" was fully operational with two agencies contracted to deliver all meals in the Bronx. "Senior Options" was not expanded as planned, and although DFTA claimed cost savings were realized and wait lists were eliminated, there continued to be much debate about the program. According to newspaper reports, city council member and Aging Committee chair Maria del Carmen Arroyo issued a statement in March 2005 that said, "To date, the Department for the Aging has not

provided evidence that the Bronx pilot initiative has generated any savings." An independent audit of the program was expected to be completed in Spring 2006.

The purpose of this study is not to examine "Senior Options." This highly publicized policy change was of great concern to MOW clients in this sample, including participants who continued to receive meals through the traditional meal delivery methods. Consequently, "Senior Options" will be discussed in order to understand what respondents were experiencing and the impact the design and implementation of the program had on their perception of the MOW program.

Although there is a growing body of literature concerning elders and HDM as it relates to measures food insecurity, there is comparatively little relating elders' *experience* with food insecurity. How elders manage to obtain and prepare food, as well as the role delivered meals play in their daily schedules, is largely unknown. The main goal of this study was to investigate the food management strategies of homebound elderly in an urban setting using the fact that meals come to them as the keystone of their dietary management. A qualitative study has the unique advantage of capturing the breadth of possibilities when someone is the recipient of a meal delivery program because respondents shape the interview by sharing their experiences and ideas.

Appropriate and targeted interventions that effectively utilize resources provide maximum benefit to recipients. In order for HDM services to improve nutrition, critical aspects of nutritional risk in the elderly must be made clear. Understanding MOW from the clients' perspective can assist government and private agencies in making changes that better meet the needs of their clients.

CHAPTER TWO

REVIEW OF LITERATURE

HEALTH MESSAGES AND RECOMMENDATIONS

It is important that elders maintain good nutritional health to prevent complications from chronic disease and functional decline which may lead to loss of independence, costly increases in service utilization, institutionalization, and mortality (Sharkey, 2004b).

The maintenance of good nutritional health is complicated by many factors. Elders require a quality of diet higher than that of younger adults (Osteraas et al., 1983). Age-related changes in gastrointestinal organs and oral health can affect food intake and impair digestion and absorption of nutrients. Utilization of nutrients is further reduced with chronic diseases and drug-nutrient interactions (Choi & Smith, 2004). In addition to the physiological contributions to nutritional risk, the capacity to acquire food often decreases with age due to limited access to transportation, physical disabilities, geographical and social isolation, and inadequate financial resources such as a fixed income or unexpected expenses (Osteraas et al., 1983) (Sharkey, 2004b). Today, older adults are being discharged earlier than was previously the case from hospitals and nursing homes and may not have recovered sufficiently to provide food for themselves (Wellman et al., 2002). Even if food can be acquired, functional impairments may prevent elders from preparing and eating the food that is available (Sharkey, 2004b).

Indicators of socioeconomic and health status show that a large proportion of minority elders are likely to be at even greater nutritional risk (Choi & Smith, 2004). Examination of the data from the Third National Health and Nutrition Examination Survey (NHNES, 1988-1994) and the 1994 Nutrition Survey of the Elderly in New York State showed that nutritional risk among African American elders was 1.3-3

times higher compared to their White counterparts. Risk for Latino elders was 3.5-4 times higher (Lee & Frongillo, 2001a).

FOOD INSECURITY

Food insecurity is defined as "the inability to acquire or consume an adequate quality or sufficient quantity of food appropriate for one's health in socially acceptable ways, or the uncertainty that one will be able to do so" (Radimer et al., 1992). A statistical analysis of the 1994 Nutrition Survey of the Elderly in New York State revealed that elders who were food insecure were significantly more likely to be poor, a minority, living alone, living in New York City, a senior meals program participant, and socially isolated (Lee & Frongillo, 2001b).

Several qualitative studies illustrate what people endure physically and emotionally when experiencing food insecurity. These studies show that ensuring food security in a community requires more than just financial or food assistance. Researching and taking into account factors specific to a certain age group or community, such as the ability to utilize the aid given or the attitude toward depending on others, could greatly improve the success of a program.

Wolfe et al. (2003) conducted qualitative analysis of two in-depth interviews six months apart with each of 53 low-income urban elders in upstate New York. Lack of money was a major cause of food insecurity, but even those who did have enough money faced additional barriers such as limited access to food (when regular help was not available, for example) or inability to prepare or eat what food was available. Most participants had at least one chronic health condition, and they reported anxiety about not having the right foods to eat to stay healthy. Unlike earlier work by Hamelin et al. (1999), food safety was not a major concern among these study participants experiencing food insecurity. Another difference with the earlier work by Hamelin et

al. is although both found that elders described monotony in their diet, here elders appeared very accepting of the situation (Wolfe et al., 2003).

The relationship between food insecurity and dignity needs to be examined. Although it was not focused on elders, a study in Quebec City, Canada explored aspects of food insecurity from the perspective of households who experienced it and concluded household food security requires more than just food to meet survival needs. It also had to meet needs for self-respect and for social well-being. Those who experienced food insecurity expressed feelings of alienation and frustration regarding their limited access to food and their inability to do anything about it. “Because the adults could not feed their household properly and did not anticipate any improvement in the near future, they felt they did not have a fit place in society. This included feelings related to powerlessness, guilt, embarrassment and shame, inequity and frustration; they contributed to a process of feeling excluded from society” (Hamelin et al., 2002, pg. 124). Wolfe et al. reported similar expressions of deprivation and embarrassment as well as a sense of anger that a lifetime of hard work could result in such a difficult food situation (Wolfe et al., 2003).

DEPENDENCY

Baltes (1996) has extensively studied the concept of “dependency” in the elderly. Among many interesting conclusions is a challenge to the traditional association of dependency with incompetence and independence with competence when, in fact, dependency can represent an optimizing strategy whereby elders conserve energy to engage in the more desirable activities. For example, an elder may ask a son or daughter to take over financial affairs because they do not feel competent or do not have sufficient resources. Dependency in this specific domain is functional, even desirable, because it allows the elder to pursue other domains of life higher in priority like socializing or enjoying hobbies (Baltes, 1996).

Development does not mean growing from dependent to independent, but rather finding a balance between dependency and independence, and relying on help when needed at any age. Uncontrollable losses, such as those that may be caused by declining health, are successfully managed when the elder acknowledges the loss and uses “compensatory and selection strategies to maintain and perhaps even optimize functioning” (Baltes, 1996, p. 5). MOW may be one of these strategies. The ways in which MOW maintains or optimizes functioning, or alternatively creates new tensions for the participant, have not been explored.

HISTORICAL PERSPECTIVE OF MOW

The OAANP is the largest and most visible federally funded community-based nutrition program for older adults (Wellman et al., 2002). It began in 1968 as a 3-year demonstration project and was officially established in 1972 when Congress enacted the National Nutrition Program for the Elderly as Title VII in the Older Americans Act.

The Elderly Nutrition Programs (ENPs) were authorized and funded under the 1978 Title III-C amendments to the OAA. ENPs target low-income, frail, and homebound or otherwise isolated elders who are likely to be at nutritional risk by providing congregate and home-delivered meals (Choi & Smith, 2004) (Wellman et al., 2002). Unlike Medicaid and Supplemental Security Income (SSI), determination of eligibility for OAA services is not based on income or assets. Therefore, the nutrition program serves as the primary source of support for many older adults who may be slightly over the poverty line (Wellman et al., 2002).

The U.S. Administration on Aging (AoA), an agency in the Department of Health and Human Services, is meant to provide an effective and visible advocate for older individuals in the United States. AoA is mandated by Congress to provide essential home and community-based programs that keep the older population healthy,

secure, and independent. The nutrition program is administered through an "aging network" including 57 state units, 655 area agencies, and thousands of local providers (Wellman et al., 2002). The New York City Department for the Aging is the largest Area Agency on Aging in the United States.

MOW Diets and Health

Home-delivered meal (HDM) programs are available to all individuals age 60 and over who have been assessed to be homebound or otherwise isolated (Wellman et al., 2002). OAA requires that each meal provides on average 33% of the 1989 Recommended Daily Allowances (RDAs) (Osteraas et al., 1983).

Several studies show that HDM improve nutritional status, but there may be a gap between expected contribution to nutrient intake and actual impact on nutritional status, particularly for minorities. Sharkey and Haines (2001) found that African American participants in a HDM program were 3.7 times more likely than White participants to be at the highest level of nutritional risk, even when age, gender, economic need, living arrangement, and activities affected by daily living impairments were controlled for (Sharkey & Haines, 2001).

MOW FOOD HANDLING PRACTICES AND DISPOSITION

MOW Food Handling Practices and Disposition (how and when the meal is consumed) is a topic of limited review (Fey-Yensan et al., 2001). Food handling practices are of special concern among frail elderly; The American Dietetic Association considers the elderly population the most at-risk segment of the U.S. population for forborne illness, partly due to reduced immune system response (Gerald & Perkin, 2003).

Disposition can include delayed utilization and non-utilization, which occur for a variety of reasons. Delayed utilization (storing all or part of MOW to eat later) has

been documented in several studies. In a study of 230 MOW recipients in suburban and urban Rhode Island, it was found that those who ate the entire meal upon delivery (n=75) were more likely to be younger (65-74), men, on the program three or more years, not receiving SSI, and at moderate nutritional risk as assessed by the Nutrition Screening Initiative (NSI) Checklist. Those who stored part or all of their meal (n=104) were more likely to be the oldest clients, women, participating for 1-2 years, receiving SSI and at highest nutritional risk. Of those who stored meals, 40 (38%) did so in the refrigerator and 31 (30%) on the counter. The types of foods being stored and length of storage is not known. 33 (32%) were unclear about disposition of the meals (Fey-Yensan et al., 2001).

In 2002, a study was conducted with 60 clients receiving meals from a MOW facility at the Maimonides Geriatric Centre in Montréal, Canada (Parsons & Rolls, 2004). The program had recently started to deliver cook-chill meals (meals that are fully cooked then immediately frozen) to 56 clients (four received hot meals upon special request). Only 11% of the clients reported consuming the meal immediately after delivery, the rest (including three of the four hot meals recipients) reported that they stored it in the refrigerator and consumed the entire meal later in the day. This is in contrast to previous work described above where various methods of storage are used (Fogler-Levitt et al., 1995) (Fey-Yensan et al., 2001). Recipients reported no difficulty using microwaves (55%), toaster ovens (23%) or stoves (22%) to reheat their meals.

Non-utilization includes wasting meals by throwing all or part of a meal away, as well as trading and sharing meals. Fogler-Levitt et al. (1995) surveyed 150 White, independently living MOW recipients in rural and urban Ontario, Canada and found that men showed significantly higher overall utilization levels for energy, eight nutrients, and specific foods compared to women. Among women, differences in

utilization were more pronounced by living situation than by age; women living alone had a significantly higher meal utilization rate than did their counterparts living with others.

Fogler-Levitt et al. (1995) were also able to determine what was wasted and reasons specific foods items were not utilized. They found that sensory quality (appearance, smell, and taste) and client preferences were important considerations in elderly nutrition programs, and accounted for the majority of cases of non-utilization of meal components. Poor appetite was a relatively minor factor compared with dislike of the meal and sharing of the meal. Dislike of food (including poor taste, unpopular cooking method, and disagreeable texture and/or unfamiliarity) accounted for 47% of the responses given for non-utilization of HDM. This was followed by sharing meals (21%), poor appetite (3%), oral problems (1%), and inappropriate delivery time (1%). Few people cited physical problems or allergies and intolerances (<1%). "No reason given" comprised about a quarter of the responses. The authors speculate that some clients were reluctant to provide a reason for wasting food because they did not wish to be perceived as complainers or were fearful that negative comments might result in the loss of service.

By determining what foods were most utilized, the authors were able to recommend what items could serve as vehicles for incorporating additional nutrients for which clients may be at risk of inadequacy. Another finding from the study regarding food safety is that all of the delivered foods were eaten or discarded within 10 days except for miscellaneous items like butter and margarine, which were often diverted to baking purposes.

Although sharing meals was the second most common explanation for non-utilization of meals, this paper did not explore the phenomenon in-depth. Frongillo et al. (2003) conducted periodic telephone interviews over four months with 53 low-

income elders in upstate NY and also found a network of food exchange as a source of both food and social support. One example for those on HDM included trading cartons of milk delivered by MOW for homemade soup made by others.

Other factors influence how HDM are utilized. The impact of perceived healthfulness of the food that is delivered, especially for those on special diets, may affect what elders are willing to eat. Prothro and Rosenbloom (1999) did not find a significant relationship between special diets and medication use with regard to six different variables, including the proportion of noon meal usually eaten. The study did find that respondents who regularly ate half or less of the noon meal made more suggestions for cooking foods differently ($p<.005$) and had longer lists of favorite foods ($p<.001$) than those who usually ate most or all of the meal. They also found that elders can articulate their preferences effectively, and if their suggestions are implemented client satisfaction and program compliance might rise. The investigators recommend periodic solicitation of elderly clients with regard to food choices, frequency of offering certain items, and method of preparation which may result in a decrease in plate wastage while enhancing nutrient/energy intakes (Prothro & Rosenbloom, 1999).

Another factor is the cultural appropriateness of foods, which may affect compliance and decisions by MOW recipients to withdraw from the program as the multi-ethnic elderly population MOW continues to grow. Food is highly subject to cultural patterning, and ENPs must serve the needs of minority elders in a culturally appropriate and acceptable manner (Choi & Smith, 2004). One study investigating reasons for discontinuing participation in MOW found a significantly higher proportion of African Americans (28.2%) terminated services compared to Whites (12.8%). Although the program studied offered a wide variety of diet and kosher meals, it did not offer ethnic-sensitive menus for other minorities, which may have

contributed to the low acceptability of the service among African American elders. The authors note that the rate of service termination is not optimal for any group, however. The most frequently recorded reasons for termination were health-related, but a significant proportion (15%) of elders chose to abandon the program because of dissatisfaction with meal quality, because they had different food preferences or poor appetite. Improving the cultural appropriateness of the meals by soliciting menu suggestions and preparation assistance from the intended clients may ultimately reduce nutritional risk (Choi, 1999).

MOW: BEYOND THE FOOD

There is more to the MOW program than nutrition. Overall well-being is also targeted through social contact and a sense of community. In a comprehensive look at the 30-year history of the Older Americans Nutrition Program, Wellman et al. (2002) point out that "the original purposes of the nutrition program were never limited to simply providing a meal, but were always envisioned to provide 'more than a meal.'" They cite language in the original legislation which includes, "Besides promoting better health among the older segment of our population through improved nutrition, such a program would reduce the isolation of older age, offering older Americans an opportunity to live their remaining years in dignity" (original OAA language, Public Law 92-258, sec 701, as cited in Wellman et al., 2002, p. 349).

Social support affects whether elders experiencing financial or physical difficulties also experience food insecurity (Frongillo et al., 2003). Support includes social networks created by family and friends or formal programs such as MOW.

There are limited studies on the importance of familiarity with the organization delivering MOW and social contact with the driver and/or meal deliverer. A study of 31 Massachusetts MOW clients showed that two-fifths of the sample indicated driver contact was not very important, two-fifths indicated it was moderately important, and

only one-fifth said it was very important. These participants were selected for the study using criteria including independence in skills of daily living and adequate social support; consequently the proportions are likely different when less independent and more socially isolated clients are included in the sample. None of the clients mentioned a sense of vulnerability as a reason for wanting greater contact with the driver, and instead praised personal characteristics such as friendliness and kindness (Osteraas et al., 1983).

DIFFERENT MODELS FOR MOW DELIVERY

Osteraas et al. (1983) implemented a weekly delivery of five frozen meals to a small subset of HDM clients in Massachusetts selected for the capability of participating in an experimental meals program. First, Osteraas et al. found that there was no predisposition to regard frozen foods as inferior to hot home-delivered meals. No significant differences between frozen and hot home-delivered meals existed for any attribute except convenience, where hot meals received a superior rating. The frozen meals were rated favorably for both taste and appearance. In addition, the study found an appreciable savings in the frozen meal delivery system (Osteraas et al., 1983).

The Quebec study previously mentioned (Parsons & Rolls, 2004) also found that 75% of those receiving chilled meals did not object to them, although reasons for dissatisfaction among the 25% that did object was not explored.

Regardless of the different meal systems studied and the conclusions reached about the safety, acceptability, and cost effectiveness of frozen meals, there is consensus regarding how to approach the issue. Although Osteraas et al. (1983) felt that a large part of the client population had the necessary functional capacity and home resources to deal comfortably with a frozen meal system, they also cautioned that particularly frail elderly may require extra support, possibly in the form of

delivery of more than one meal per day. They cautioned against a single meal system to provide HDM to elderly clients for multiple reasons, "Although somewhat easier logistically, a single system may not allow a nutrition service provider to realize maximum cost savings and may fail to link clients with the most appropriate and satisfactory kinds of service" (Osteraas et al., 1983).

Another research team conducted a similar prospective comparative study using the traditional MOW program of five hot meals per week (Kretser et al., 2003). Instead of using frozen meals as the alternative nutrition intervention model, here they implemented a new program of three meals and two snacks per day, seven days a week. The conclusions are similar in that they recommended that nutritional status should determine the type of meal plan the individual should be provided. A single home-delivered meal is appropriate for well-nourished homebound individuals, but those who are at risk for malnutrition or who are already malnourished need a greater level of meal service. Kretser et al. (2003) stressed the need for careful screening of the nutritional status of the homebound older adult population in order to implement a targeted nutritional intervention with best use of available resources.

Finally, Wellman et al. (2002) predict programs will expand to include culturally and ethnically appropriate services, greater attention to customer wants, more options or choices in meals, more than one meal a day, weekend meals, and modified and therapeutic diets. "The future of OAA Nutrition Programs is to become full-service community programs rather than meal programs. They will be expected to offer more varied and improved services to fill gaps in health care and social services, particularly in rural areas and inner cities" (Wellman et al., 2002).

Past literature has shown that elders have unique nutritional requirements due to age-related changes in physiology, higher burden of disease, and drug-related interactions. Barriers to acquiring the right foods include insufficient money, social

isolation, limited access to foods, and inability to prepare and eat foods that are available. Elderly Nutrition Programs like MOW have been shown to be important in ensuring food security for elders.

In summary, the MOW program is designed to contribute substantially to the nutrient intake of at-risk elders, and many studies have shown that it does improve nutritional status. Minority clients, however, are more likely to be at higher nutritional risk than White clients even after controlling for major confounders. This important finding can be validated and further investigated by exploring the clients' perspective through a qualitative study. In addition, earlier work has established an additional psychological component to food insecurity in an adult population. The importance of such factors as the need for self-respect and social well-being has not been investigated for elders. Establishing the importance of psychological aspects of food security in elders and incorporating these principles in assistance programs may ultimately improve client satisfaction and compliance.

Delayed utilization and non-utilization of meals from MOW has been studied through quantitative surveys. The reasons why clients store meals to eat later, trade or give away meals, and throw out meals has not been widely investigated through in-depth qualitative studies. This study aims to provide insight into not just how clients utilize meals, but why they make these choices.

There are many aspects of the MOW program that are not known. It is important to understand what clients currently experience while in the program in order to appropriately expand and offer cost-effective alternative meal systems for the future. Appropriate adjustments will ensure the program can serve the needs of the elderly population as it grows and becomes more ethnically diverse. Ultimately, this study aims to understand what elders experience as clients in the MOW program so information can be provided to improve targeting, compliance, and client satisfaction.

CHAPTER THREE

RESEARCH GOALS AND APPROACH

RESEARCH QUESTIONS

The purpose of this study was to examine the role of a home-delivered meals program on the food management strategies of urban elders. The following are three specific research questions that this study addressed:

1. What is the experience of being a MOW recipient like for elders in the Bronx?
2. How do elders adjust to a meal intervention program and integrate it with the rest of their lives?
3. What tensions are experienced by elders in MOW, and what possibilities for resolution emerge from the interviews?

RESEARCH DESIGN

This research is part of a larger mixed-methods study. Qualitative methods are the best way to answer the research questions outlined above because it captures the *emic* viewpoint: Meals on Wheels participants' experience of the program in their own words.

For the quantitative portion of the mixed-methods study, a telephone survey was administered over the phone to Meals on Wheels participants in all five boroughs of New York City, including 705 clients in the Bronx. The qualitative portion did not have the prior selection of predetermined categories as a constraint, which contributed depth, openness, and detail to the overall study (Patton, 2002). The investigator was able to discover what issues were central to these participants (Lofland, 1995) rather than impose upon them a preconceived or outsider's scheme (Patton, 2002).

A semi-structured interview guide provided a framework for elders to respond in a way that represented their experience with Meals on Wheels. In the course of in-

depth, one-on-one interviews, the investigator also had the flexibility to individualize each session (Glaser, 1967), allowing the respondents to relate the ideas and experiences most important to them. The investigator was also able to probe various topics in more detail as well as clarify concepts and ideas that arose during the interview, even if they fell outside of the initial interview guide. This resulted in data that conveyed depth of emotion, thoughts about what is happening, experiences, and basic perceptions (Patton, 2002).

In this study, there was less emphasis on the *etic* experience, or observed behavior and interpretation of behavior or attitudes from outsiders. To gain more than what could be learned from the spoken interview alone, direct participation (spending a day with meal deliverers) and observation (of neighborhoods, living situations, kitchens, refrigerators/freezers, and meals) were employed to more fully understand the complexity of the situation. At the conclusion of the interview, the investigator asked to see the kitchen, including inside cupboards, refrigerators, and freezers. If the respondent appeared comfortable with this inspection, the investigator asked permission to photograph these same areas. All respondents who were asked agreed to have photographs of their kitchens taken. These photographs were used for triangulation to validate what respondents had said about what foods were kept in the cupboards, general use of the kitchen (especially the condition of the stove and the existence of a microwave), MOW storage in the refrigerator, and the existence of snacks. Photographs were not included in the initial data analysis.

Data collection and analysis were guided by an interpretivist approach (Lincoln, 1985) (Lin, 1998) to uncover the conscious and unconscious explanations participants have for what they do or believe. This study was an attempt to capture a particular time, culture, and place so that actions people took could become intelligible

and the investigator could demonstrate the ability to account for a range of behaviors and beliefs in the community described.

Qualitative studies typically produce a wealth of detailed information about a small number of people, which increases depth of understanding but reduces generalizability (Patton, 2002). The goal was to illustrate the world of a particular group of recipients through both the diversity and similarity in outlook, action, issues, and experiences surrounding home-delivered meals.

SAMPLE SELECTION

The sampling frame included all Meals on Wheels participants living in the Bronx, New York. New York City has over 8 million residents, making it the most populous (and densely populated) major city in the United States. Just over 1 million people live in the The Bronx, the northernmost borough of New York City. The sample included clients from across the borough, from an older housing community along the shore, to the densely populated inner city of the South Bronx, to an area one respondent identified as an "old Irish neighborhood." Clients interviewed also included residents of the largest residential development in the United States: Co-op City, which includes 15,000 residential units within 35 high-rise towers.

The following information outlines eligibility for the Meals on Wheels program (see Appendix A for expanded criteria):

> In order to qualify for home-delivered meals, a person must be at least 60 years of age and have a chronic physical disability such that the person cannot shop for food and prepare meals that meet daily nutritional needs…In order to receive meals-on-wheels service, every client must undergo an assessment by a trained social worker. When you request meals-on-wheels service, your meal center will send one of its social workers to your home for an assessment visit (Citymeals-on-Wheels: Eligibility, n.d.).

Qualitative samples are generally selected purposefully. The goal is to understand a phenomenon in-depth, a process best facilitated by selecting information-

rich cases where one can learn a great deal about issues of central importance (Patton, 2002). Due to the politically charged atmosphere of the study setting, however, there was a concern that purposive sampling would be perceived as a way to pick and choose cases to illustrate a certain viewpoint. As an alternative, simple random sampling was used. The total sample size of 20 is too small to provide the ability to make claims about generalizability, nor was this the purpose. Rather, the research team wished to eliminate any appearance of bias from the outset and to make it possible for the study findings to be used without the perception they had been gathered with a specific answer already in mind.

A list of 3,085 Meals on Wheels clients in the Bronx was obtained through a community partner in August 2004. A random number generator was used to rearrange the list, arranging client names in a new and arbitrary order. The clients were initially contacted by phone starting with the first name. The investigator explained the project and answered any questions after which the clients were asked to participate in the study. If they agreed, another appointment was set up for the investigator to come to the client's home for an interview. The investigator interviewed 10 participants during this initial recruitment period until it was discovered that the list was not current due to the number of people that could not be reached and the large percentage of clients that were deceased.

The community partner then conducted a complete census by requesting that all agencies managing all Meals on Wheels clients in the Bronx submit current information for everyone they served. This was completed during fall 2004. By December 2004, another 10 participants were recruited using the same methods as described above. Although the rate of success in contacting clients was improved, there were still problems. It was discovered that through a database error, the updated list of 3,079 clients included those from agencies that no longer existed (M. Sweeney,

personal communication, November 29, 2004). This made it harder to reach those still with the program, but the list did contain complete information for all 2,421 current clients eligible for the study.

Table 1 shows the outcome for each call that was made to a MOW client on the lists provided by the community partner. The majority of refusals were due to poor health. Most cited recent hospital stays or current conditions that resulted in fatigue or "not feeling up to visitors." A few clients had serious health conditions or dementia, and a family member, home health aide, or nurse informed the investigator that the client would not able to endure an hour-long interview. Other refusals included not wanting anyone at the house or feeling too busy. Two people refused immediately and hung up abruptly. A follow-up call was made in each case to find out why they did not wish to participate; one hung up immediately and the other said she would be happy to participate by mail before hanging up again. Three clients in the second sample said they would be temporarily away from their own residence while they stayed with relatives over the holidays. All volunteered to participate when they returned, but this was not possible for the investigator. There were also clients in each sample who could not be reached despite repeated attempts to call at different times of the day. Non-English speakers, including five clients who spoke Spanish and one who spoke Russian, were excluded due to the inability of the interviewer to speak these languages. Four clients made appointments that they did not keep: two forgot, one changed her mind, and one was admitted to the hospital just a few hours before the interview. Whether people volunteered or declined to participate, it was stressed that this study was not being conducted through or for the Meals on Wheels organization and would in no way impact their Meals on Wheels service.

Table 1: Eligibility, Participation, and Refusal for Qualitative Study

	MOW Clients Contacted		
	Aug 2004	Dec 2004	Outcome
Not Eligible for Study	19	15	Wrong/disconnected/no phone number listed
	29		Deceased
	12	5	No longer receives MOW
Total Not Eligible	60	20	
Eligible for Study	7	5	Refused: poor health
	1	1	Refused: no reason provided
	3		Refused: does not want visitors
	1		Refused: too busy
		3	Willing to be interviewed but leaving for holidays
	2	3	Foreign language: Spanish
	1		Foreign language: Russian
	13	15	Could not contact after at least three attempts
	2	2	Appointment not kept
	10	10	Interview completed
Total Eligible	40	39	
Total	100	59	

Table 2 shows a timeline for the mixed-methods study. The four-month delay between the first and second set of qualitative interviews allowed for the creation of an accurate client list, but it also produced an important difference between the two samples. At the beginning of the study in August 2004, all 10 study participants received hot meals delivered once every weekday, with frozen meals delivered on weekends and holidays. There was no possibility of interviewing clients receiving chilled or frozen meal delivery for weekday consumption in the first sample. In the second sample, however, there were three respondents who had recently started to receive biweekly delivery of frozen meals after the Department for the Aging began delivering frozen meals to approximately 30% of Bronx Meals on Wheels clients in

October 2004. Regardless of whether the individual respondent had been transitioned to the frozen meal plan, all respondents in the second sample talked more about the policy change than respondents in the first sample, presumably because it had just been implemented.

Table 2: Timeline for Mixed-Methods Study

August 2004	October 2004	November 2004	December 2004
10 Bronx MOW participants interviewed for qualitative piece of mixed-methods research study	30% of MOW clients in Bronx begin to receive biweekly delivery of frozen meals	2500 NYC MOW participants interviewed by telephone (705 in Bronx, qualitative participants excluded) for quantitative piece of mixed-methods research study	10 Bronx MOW participants interviewed (3 on biweekly delivery of frozen meals) for qualitative piece of mixed-methods research study

DATA COLLECTION

Initially the investigator was put in contact with a Meals on Wheels driver-deliverer team in order to get familiar with the day-to-day operations of the organization. The investigator spent one day riding in the delivery truck, talking with the employees, observing their interaction with clients, and becoming familiar with the Bronx. In addition, the investigator was able to gain another perspective and prepare for fieldwork through several meetings at Citymeals-on-Wheels. No formal interviews were conducted with Meals on Wheels administrators or government officials connected to the program because the focus of this study was to gain the perspective of the participants.

After an initial telephone call, one interview was scheduled at each study participant's home in August or December 2004. There were three households that included more than one person on Meals on Wheels. In one case, two sisters shared an apartment but only one was willing to be interviewed. The other two cases involved

the two married couples in the study. Although both members of the household received Meals on Wheels, only one member of each couple was interviewed due to the bed-bound health status of the non-interviewed spouse.

At the beginning of the interview, the investigator read aloud the Informed Consent Form (Appendix B) and asked each participant to read it over again themselves and sign if they understood the study and were willing to participate. A separate signature was required if they were also willing to have the interview tape-recorded. Each participant was informed that the interview could proceed without use of the tape recorder and that the recording and/or interview could stop at any time. There was no payment or other compensation offered.

All 20 interviews were conducted in the participants' homes and were tape-recorded. An undergraduate colleague joined the investigator for the first eight interviews and occasionally contributed follow-up questions. The interviews lasted from 45-95 minutes. Notes were not taken extensively; most interviews required the full attention of the interviewer to establish rapport, and the act of writing while talking appeared to interrupt the flow of dialogue. Ideas for additional follow-up questions were noted. In some cases it was difficult to understand participants who whispered at certain points, had heavy accents, and/or had speech impediments. In these cases, the interviewer attempted to repeat back anything that was not clear, and made a written note to supplement the transcripts. In a few cases, a Meals on Wheels delivery occurred during the interview, and the interaction between the participant and the meal deliverer was captured on tape and transcribed along with the rest of the interview. Interview transcripts were supplemented with detailed field notes describing the setting of the interview (neighborhood and dwelling) and other important issues that were observed and not discussed, or discussed but not tape-recorded.

Two interviews were conducted in English with clients who spoke Spanish as their primary language. This may have impacted the exchange of dialogue more than other interviews where the respondent and interviewer shared English as a first language.

The semi-structured interview guide (Appendix C) consisted of open-ended general questions about participants' daily food routines. Participants were asked about what they usually ate, their eating environment, and how food preparation and grocery shopping were usually accomplished. In addition, they were asked about the Meals on Wheels program, daily activities, health problems, and availability of social support. Individualized questions were created during the interviews to gain depth, clarity and confirmation on specific issues that emerged from each participant's responses.

Recommendations for sample extensiveness vary greatly. One goal of this qualitative study was to gather enough cases such that additional data would be unlikely to provide new insights into the perspective of MOW clients. There were several categories where no new or relevant data appeared to emerge, as well as a number of information-rich cases that provided extensive material to answer the research questions. Sampling to the point of redundancy is an ideal that can rarely be met with timeline and resource constraints, however (Sobal, 2001). A sample size of 20 respondents represents decisions made during the course of data collection regarding a balance between attaining research goals and the practical limitations of available resources.

DATA ANALYSIS

Data analysis included three major stages: data reduction, data display, and conclusion drawing and verification (Miles & Huberman, 1994). Data reduction is the process of transforming large amounts of data into manageable, intelligible terms. To

begin this process, each in-depth taped interview was transcribed verbatim. The investigator listened to the tapes and corrected the transcripts where necessary. Meaningful quote segments were coded in the transcripts using the qualitative data analysis software Atlas 5.0 for Windows (Scientific Software Development, Berlin). Memoing was used throughout the coding process to record ideas about codes and their possible relationships.

The investigator used an open coding scheme based on multiple readings of the first 10 interview transcripts. A codebook was created including strict definitions for each code. When a concept could not be described within the existing definitions, either the definition was expanded or a new code was created with its own definition. A record was kept of when new codes were added so that they could be appropriately applied to any previously coded transcript. The investigator reviewed the entire set of transcripts one final time with the completed codebook (which included the code, when it was added, and its definition). This ensured that nothing was missed and that codes were applied consistently. Units of text were compared to existing codes, until no new concepts or themes emerged.

Codes were created to represent the major concepts reported, including: Appetite, Death, Environment, Faith, Health, Food Shopping, Hobbies/Activities, Injustice, Isolation, Meals on Wheels, Meals outside of Meals on Wheels, Money, Nostalgia, Origins, Pride, Profession, Safety, Social Contact, Stress, Support and Transportation. Most concepts included subcategories. For instance, the code *Meals on Wheels* included: changes in program, communication, delivery time, description of food, driver/deliverer interaction, impact on eating schedule, meals, present at delivery, reason for starting, satisfaction, and time in program. Some of these were further specified. For example, the code *Meals on Wheels- meals* included: eaten for breakfast, lunch, or dinner; given/thrown away; portion size; reheating method;

storage; modified; weekend. An example of a final code with subcategories is *Meals on Wheels- meals, reheating method*. In all, there were over 100 codes.

Analysis of the data proceeded using the principles of Grounded Theory with the coded units sorted and each set of related quote segments compared and categorized (Glaser, 1967). Qualitative analysis strategies based on the constant comparative method were used to interpret meaning, examine themes, and draw conclusions from the patterns that emerged (Patton, 2002). Initially, one large matrix was created using Microsoft Excel 2004 for Mac (Microsoft Corporation, Redmond). This matrix was both time-ordered and case-ordered to capture a typical day of eating as reported by each respondent, including what they ate at various times throughout the day, along with any relevant descriptions providing insight as to why they made these choices.

Miles and Huberman (1994) consider the act of designing a display (including deciding on the rows and columns to include as well as which data and in which form it should be entered in the cells) as an important part of the analytic process. Displays such as matrices also compress and organize a large amount of information, making it easier to comprehend what is happening.

There is a continuous, iterative relationship between coding data and creating displays. "The coding of data, for example (data reduction), leads to new ideas on what should go into a matrix (data display). Entering the data requires further data reduction. As the matrix fills up, preliminary conclusions are drawn, but they lead to the decision, for example, to add another column to the matrix to test the conclusion" (Miles & Huberman, 1994, p. 12). Columns were inserted, fields merged, and the matrix changed as codes were continually added and the investigator noted patterns, themes, contrasts, and comparisons emerging from the data. Additional matrices also were created to explore codes related to social support, capability, satisfaction with

MOW, among other topics. Using this process, the investigator was able to draw conclusions, move on to a more promising area of the matrix, or create a new display with additional information and ideas.

Finally, the investigator began to write and explain the themes that emerged. Thematic analysis proved useful not only for understanding the data, but also for data presentation; the chapters that follow are organized around emergent themes. Writing and data analysis also proceeded in an iterative fashion because it required returning to transcripts, memos, field notes, and matrices to ensure conclusions were not oversimplified and distorted. If genuinely representative examples (not just unusually interesting or vivid cases) of the conclusions presented were absent, those conclusions were revised. This process often led to reformulations of ideas and areas of further analysis.

In qualitative inquiry, the investigator is the instrument of data collection. This requires that the investigator carefully reflect on, deal with, and report potential sources of bias and error (Patton, 2002). These are described in the following section under Role of the Investigator. Multiple data sources (Meals on Wheels clients and employees and informants at partner agencies) were used although focus was clearly on the clients. Methodological triangulation (interviews, observation, and photographs) were also used to verify what was reported. Anything observed during the in-home interviews that seemed inconsistent or contradictory was further discussed with the participant. Using multiple methods ensures data are “credible, trustworthy, authentic, balanced about the phenomenon under study, and fair to the people studied” (Patton, 2002). Peer debriefing (Guba, 1989) took place throughout the study in the form of discussions and presentations with faculty members, students and the individuals working with the community partner.

All names used for respondents, deliverers, and MOW agencies are pseudonyms, in order to protect their privacy.

ROLE OF THE INVESTIGATOR

The investigator of this study conducted all of the interviews and data analysis. The investigator was a 27-year-old Caucasian female graduate student who resided in another borough of New York City (Manhattan) for two years prior to starting graduate school in upstate New York. The investigator did not have prior experience working with urban elders. The investigator was not familiar with qualitative techniques before the start of the study, although she had extensive interviewing experience in many varied settings. By the second set of interviews, the investigator had benefited from the experience of the first interviews, as well as techniques learned during a semester-long graduate course on mixed methodology.

It should be noted that in most neighborhoods where interviews took place, the investigator attracted some attention. For example, in the South Bronx the investigator and an undergraduate colleague were stopped on the street by a passer-by and asked if they were social workers. No unpleasant or dangerous situations occurred although the investigator was certainly (and justifiably) perceived as an 'outsider' by the community.

Just prior to beginning the study, the investigator's Great Aunt passed away at the age of 97. Like many of the elders interviewed for this study, she lived independently in her own home despite having serious complications with diabetes and progressive blindness. Her experience made the investigator sympathetic to many of the issues reported such as outliving family and friends, loss of independence, and increased vulnerability. The investigator was able to establish trust and rapport by sharing personal information about this family member, especially to validate experiences participants feared the investigator may have not believed. This rapport

appeared to make participants more comfortable revealing certain types of sensitive information. It is also possible that the investigator paid more attention to issues that resonated with her own family situation.

Throughout the length of this project, the investigator has been privileged to spend time (either in person, on tape, or on paper) with elders who have contributed to society for many years in interesting and unique ways. Their struggle to live an independent life with dignity in increasingly difficult circumstances, as well as the recent loss of a beloved Great Aunt, made the project emotionally difficult for the investigator. The investigator certainly experienced sympathy, the impulse to help, and frustration regarding the system in general, and guilt about what could and could not be done for these participants in particular. In retrospect, the investigator should have employed standard practices such as journaling and keeping in contact with fellow researchers with whom the problems could be discussed, placed in context, and weighed (Lofland, 1995) so that the rewards of such interesting work were better balanced with the emotional toll it took.

CHAPTER FOUR

RESULTS

DESCRIPTION OF THE SAMPLE

Demographics

Simple random sampling resulted in a diverse sample of 17 clients receiving weekday deliveries of hot meals plus three clients receiving a biweekly delivery of frozen meals. Demographic information for a sample size of 20 cannot accurately represent the actual population of 2,622 MOW clients in the Bronx (Gotbaum, 2002). This population may be better described by a concurrent telephone survey of 705 Bronx MOW clients that was also part of a larger mixed-methods study. Demographic data from both studies are shown in Table 3.

Table 3: Demographics for Mixed Methods Study

Characteristic	Qualitative n=20		Quantitative n=705
	Average	**Range**	**Average**
Age	80.5	(69-98)	80
Years lived in Bronx/NYC	54 (Bronx)	(27-83)	65.5 (NYC)
Years in Dwelling	34	(12-56)	No Data
Years in MOW	3	(3mo-8yr)	2.5
Female	12 (60%)		73%
Live Alone	14 (70%)		73%
Home Health Aide	5 (25%)		34%
Ethnicity			
African American	11 (55%)		32%
White	6 (30%)		51% (White and Asian)
Latino	3 (15%)		17%
Marital Status			
Widowed	9 (45%)		61%
Never Married	3 (15%)		13%
Married	2 (10%)		11%
Divorced	2 (10%)		7%
Separated	0		5.2%
Unmarried Couple	0		0.6%
Missing Data	4 (20%)		1.1%

There were differences in the two surveys. For the qualitative study, respondents were asked how long they had lived in the Bronx as well as how long they had lived in their current place of residence. The larger telephone survey included a question about how long they had lived in New York City and did not ask about their current place of residence. In addition, the larger study did not separate the White and Asian ethnicities.

Fifteen respondents mentioned where they had been born and raised: the Southern United States (n=7), New York City (n=5), and the Caribbean (n=3). Of those born and raised in the boroughs of New York City, two were from the Bronx. Although respondents in this sample originated from all over the East Coast, they expressed great pride in being able to call themselves New Yorkers. One respondent expressed his feelings:

> Shoot man…you can't beat New York! But you've got to have money in New York! You can't be broke in New York and be homeless now…They talk about the crime and all that. There's crime other places too. I don't care where you go there's crime. But New York has the best transportation trains. You don't have to have a car. You can take the subway, you take the bus wherever you want to go. A lot of places don't have that. We've got the best. This is the best city. I don't care what nobody say. The best city. (#16)

Most respondents mentioned past involvement in and the current importance of their particular neighborhood to their livelihood and well-being. In fact, the newest resident in this sample had still called the Bronx home for 27 years.

More than half of the qualitative sample reported that they lived alone, which actually encompassed a variety of living situations beyond the most common: living without others in a home or apartment. One woman lived on her own floor of a three-family dwelling with two of her children and their families in apartments above and below. Another had a niece from a different state living with her short-term while she recuperated from a recent hospital stay. Other living situations included living with an

elderly sibling (n=1), child and grandchildren (n=1), or a roommate (n=1). One 74-year-old woman was living with and raising her four grandchildren (n=1). Two respondents were married, and both lived with spouses that were bed-bound at the time of the interviews (n=2).

Health Status

All but two respondents took prescribed medication for at least one serious medical problem; the majority had multiple medical conditions. Fifteen respondents in the sample had cardiopulmonary problems, four had diabetes, and four had arthritis. Vision problems were very common: three were legally blind, two were blind in one eye, and three more had a condition that was serious enough to impact their ability to complete tasks of daily living. Three respondents were currently being treated for cancer. About a quarter of the sample complained of weakness and sudden weight loss. Most individuals appeared to be very open about their medical issues and reported being treated for a variety of other conditions including mental health issues, sexual dysfunction, alcoholism and hearing loss.

About one-third of respondents reported that they were following a physician-recommended restricted diet due to their health conditions. Lack of appetite was very commonly reported. Five respondents said their lack or appetite was due to health conditions that made it difficult to eat even when they knew they should. Three additional respondents reported that in addition to low appetite, their physical ability to eat was also compromised by tooth, esophageal, or stomach problems.

Limited mobility was prevalent in this sample. Fifteen respondents utilized a cane, walker, or motorized scooter. One additional woman used a wheelchair after a stroke caused partial paralysis. Lack of mobility was usually due to pain from arthritis or back problems, weakness, shortness of breath, and fear of falling. Four of the seven respondents that had experienced recent falls said they had broken bones as a result.

Those who could not walk unassisted commonly reported leaning on companions or objects like shopping carts when necessary.

Services provided by an Home Health Aide (HHA) were a source of support for a quarter of the sample who could not carry out tasks of daily living without assistance. An additional respondent had a 24-hour HHA for her husband. HHAs helped clean or shop (although some respondents reported grocery shopping was outside of the normal duties for a HHA), but only two respondents reported that their HHA prepared meals. Most respondents said they were very happy with the HHA service. Some wished for more hours while others qualified for more assistance but refused it. Three respondents were eligible for HHAs but refused services altogether. Two respondents interviewed (one who discontinued HHA services and one who continued to use them) cited past experiences in which HHAs stole from them. Another was eligible and desired services but said she did not know how to get in touch with a HHA service. Two respondents expressed a desire to have an HHA but said they did not qualify financially. One of these respondents continued to pay her HHA privately after coverage ran out but said the HHA left after a few days for a better-paying job. Another respondent said she regularly borrowed services from a neighbor's HHA to help monitor her diabetes.

THEMES REGARDING RESPONDENTS' ENVIRONMENT

Social Interaction

Respondents said obligations and busy schedules rendered regular visits from friends and family rare during weekdays. All respondents outside of the "high" social interaction category reported that it was not unusual to spend the entire week indoors until a relative visited on the weekend, often reporting that the last time they had left their dwelling was to attend an appointment with their physician.

The presence of an HHA had an unexpected affect in alleviating social isolation. The poorest respondents with the most severe limitations in performing Activities of Daily Living (ADL) qualified for an HHA, which provided a source of social contact and support throughout the week. These respondents described HHAs or another live-in family member as their sole source of day-to-day social interaction. Many other respondents were in a similar situation but were just above the cut-off (either financially or physically) to qualify for an HHA, or they had refused the services of an HHA. Consequently, although these respondents were slightly more able, they were actually more isolated. Table 4 shows that respondents who lived alone without an HHA were either the least socially isolated (if they were able to leave their homes) or the most socially isolated (if they stayed in their homes without social contact until someone visited them on weekends).

Table 4: Social Interaction Patterns

High (n=7)
Leaves home most days to meet friends at local shops, dates, attends social activities in the building or neighborhood; friends and family visit or take out
Moderate-High (n=4)
Stays home during week (due to severe health problems) but has HHA or family member to assist; friends or family visit or take out (usually to church or family dinner) about 1 time/week
Moderate (n=3)
Stays home during week (due to severe health problems) but has HHA or family member to assist; friends or family visit occasionally
Moderate-Low (n=5)
Stays home during week (due to severe health problems) and has **no** HHA or family member to assist; friends or family visit or take out (usually to church or family dinner) about 1 time/week OR Stays home during week (due to severe health problems), has only HHA but **no** family member to assist
Low (n=1)
Stays home during week (due to severe health problems) and has **no** HHA or family member to assist

It should be noted that this scale is relative; a respondent in the "high" social interaction category usually relied on established routines that could change quickly with a respondent's gradual or sudden health decline; budget cuts affecting community programs; and the schedules, declining health, and even death of friends and relatives. These same factors, as well as the desire to remain independent, also made an impact on the fragile support network that respondents relied on for meals, cleaning, transportation (especially going to the physician and dentist), recovery after major health issues, keeping finances in order, and other daily activities.

Safety

Concern about safety was an unexpectedly strong theme. Although these urban elders seemed to accept a certain degree of danger as a matter of course, they were aware of safety issues in their daily life from social contact during the day to peaceful sleep at night. Even those who said their neighborhoods were safe had examples that might seem extreme for those living outside a densely populated city. Respondents were asked, "Do you feel like this is a pretty safe neighborhood?" Most respondents reported being cautious, especially at night, based on past experiences and the changing character of their neighborhood. Even respondents who thought it was generally safe answered with qualifications:

> To me it's safe, but you know, it's still New York. (#3)
>
> You see when you live by yourself like me, you know, you've got to be very careful because if you see any danger you can't fight. And they've got too many crimes in New York, you know…You've got to be on the defensive side, you know? (#12)
>
> It's safe as far as I'm concerned. I mind my business and they leave me alone. That's how you go around here. Just mind your business and you get along. (#15)
>
> We had, what do you call it? A newspaper stand downstairs. We had the fresh vegetable, the milk, and the juice and what have you. You didn't have to go

> out if you didn't feel like it.…and I don't know what happened to the kids across the street in that project, because when I came in here that project wasn't built. (#17)

> Ha! Don't talk about it! Like day and night. The people that lived in this house…when you came in this house it was beautiful! And people were friendly and kind to one another.…But today you have people come in sometimes, they're only here three months and they're evicted, you know? One time we had four or five different apartments that had drugs in it…I wouldn't venture out at night. I really wouldn't. (#19)

Perhaps the most startling example came from a 69-year-old man who was blind and undergoing chemotherapy three times per week to treat lung cancer:

> Respondent: I hear shots, I mean, a bullet has no name on it! I just roll. I'm use to it. It don't bother me at all.
>
> Investigator: How often does that happen?
>
> Respondent: I can't really tell ya how often but it happens often enough! You hear them shootin' the guns off at night. And too close…you can hear it from a distance, and you can hear it kinda close. When you hear it kinda close you kinda get off that seat. When I'm layin' here that could hit me, so I'm on the floor until it's cleared up and then I get up. Life begins all over again.
>
> Investigator: Have you ever heard of any bullets coming into the building?
>
> Respondent: Ah, down on the main lobby floor. Sometimes in the main lobby but never in the windows up to now. So far I haven't heard of nothin' like that, but I ain't takin' no chances!…You learn. You learn.
>
> Investigator: Has the neighborhood changed at all since you moved in here?
>
> Respondent: Oh, yes, it's changed! Definitely it changed. When I first moved here you didn't hear a whole lot of shooting! Once in a blue moon! Now it's every other night you can hear it…gunshots out there. You hear it. You see the two cops in blue running down…I don't know who they're running after, they'd be chasing somebody out there. It's the wild west! (#15)

Faith

More than half of the study participants expressed faith in God as an important part of their lives. Many described going with friends and relatives to weekend church services. A few could not travel to the church they had attended in the past, so they attended services at a closer church. Respondents expressed ambivalence about this

situation, "I was sick, so a church is a church…the church right across the street…but it's not my church." (#17) Two respondents who could not travel watched religious television programs on Sunday, and another was visited by a priest to take communion every week. One respondent related why he had recently stopped attending services, saying, "I don't personally believe in a lot of things, especially now! I feel very aggravated for what them priests have done to their children! I've lost a lot of respect for the Church." (#8) Respondents' comments regarding faith mainly fell into one of four categories:

Faith and family

> And, you know, my sons, thank God…God bless them! (#14)

Faith and health

> I have no disease. I try to pray to God not to get that too because you get so you forget about people, you don't know people, you don't know what you're doin' and all that. (#16)
>
> I just say, Lord let it be your will. Let it be his will. And sometimes I…the pain, sometimes my fingers. I scream! And I say, well, God died for me, why can't I bear some pain for Him. And I just go along. And He wakes me up the next morning, what He does regardless of the pain, I just thank Him for another day. That's how I get through it. (#17)

Faith and living a good life

> I took care of my wife. I think that's why God has blessed me today because I was good, you know. (#16)
>
> I just thank God for the life that He gave me, and He gave me a good one, from my childhood until now. (#17)

Faith and death

> But God was with me. He didn't desire death. (#13)
>
> If God's ready for me I'm ready to go. I have lived…Sometimes I can be so sick, so painful that I wish I was dead! …And I've just gotten to the point where I don't care. I care in a sense of where I'm goin' but I'm not caring am I gonna live forever, you know? (#17)

Only one respondent (who made the most remarks regarding faith) commented on faith and food or hunger, saying, "But thank God I haven't been hungry." (#17)

THEMES REGARDING MEALS OUTSIDE OF MOW

Methods of Shopping for Groceries

Respondents were vague when asked directly about how and when they purchased groceries. One man described taking great pleasure in daily walks to a local market, where he shopped exclusively. He also explained how buying a few grocery items at a time during each daily trip made transporting goods back to his apartment manageable. Another respondent said she got basics like milk and bread only "about once a month or whenever somebody's here to take me [to the store]." (#7) Table 5 shows that there were a few respondents who described being able to shop for groceries without help, but the majority reported either going with a family member, having a family member shop and bring back groceries, or devising an alternative method such as hiring help or ordering items over the phone for pick-up.

Many respondents reported that local stores were expensive and were not a source of groceries beyond the basics like bread, milk, juice, and fruit. The following comments were typical, "[You go] for an emergency in there because you don't want to eat everything out of that store because it's very expensive," (#7) and "Because this store that is closest…Ma and Pa stores…you go over there because when you have no alternative…they charge so much!" (#12)

Table 5: Methods of Shopping for Groceries

Respondents' Method of Shopping for Groceries	Number of Respondents
Respondent shops for groceries without help	**4**
Shops at smaller, more expensive local market	2
Drives to larger, less expensive chain grocery store	2
Respondent shops for groceries with help	**8**
Walks across the street to shop for basics at smaller, more expensive local market AND/OR Driven by relative to larger, less expensive chain grocery store Driven by: daughter (n=1), son (n=1), daughter-in-law (n=1), or granddaughter (n=1)	4
Walks with relative across street to larger, less expensive chain grocery store Taken by: sister (n=1), daughter (n=1), or godson (n=1)	3
Driven by relative to larger, less expensive chain grocery store	1
Respondent does not shop for groceries	**8**
Relative shops for groceries Shopper: daughter (n=2), granddaughter (n=1), niece (n=2)	5
Non-relative shops for groceries Orders food (fruit, frozen meals) through the mail AND/OR Calls local market, gets order ready, HHA picks up (n=1) Taken by someone to smaller, more expensive market (could not specify a particular person), market delivers heavy items AND/OR HHA shops for groceries (n=1) Teenager shops for groceries through volunteer program (Respondent also gives her money from time to time) (n=1)	3

Grocery Shopping and Social Contact

Another theme that emerged related to grocery shopping was the importance of socializing at local shops after grocery shopping. This was an important source of social contact reported by three respondents. One man combined his daily shopping at a local market with a trip to the nearby bagel shop. He described his experience, "Well, they're not friends. Like 'bagel friends,'…I just know them from the bagel shop, you know. I never get together with them. But to me it's a big deal, you know, because I don't have many friends." (#3)

Another woman described her routine, “Oh, I go to the bakery. There’s a bakery down here and I go there at times. And there’s people there that, you know, I know a long time ago we talk a little bit, you know? And then I come home around 3:30-4:00. And then I go into [the local market] if I need something, and then I come up and I have my whatever-I-have.” (#14)

The importance of local shops—not formal restaurants but places where respondents could go and spend time interacting with people in the neighborhood—extended beyond food shopping. Although they were unable to shop for food on their own, two other respondents mentioned going alone to a nearby deli or fast food restaurant to “meet different people.” (#13)

All but one of these respondents mentioned bad weather as a deterrent to traveling outside. A typical pattern was to go out every day or every other day in the summer, but to go outside much less in the winter. “I go to the bakery, you know, like two blocks down. No big deal. But now it’s freezing so I’ve got to take it easy.” (#14) In fact, eight respondents in the sample talked about the seasonality of leaving the home. A few respondents also mentioned being cautious during day-to-day weather fluctuations, making comments like “I don’t want to get out there and it’d start raining and I can’t run back. I’d get wet.” (#1)

Foods outside of MOW

In the course of describing a typical day of eating, many respondents reported reliance on prepared foods such as those listed in Table 6. In addition, there were several other prepared items that only one respondent reported eating, including chicken patties, applesauce, and chocolate-covered nuts. Less healthy items were seldom mentioned. When asked if they consumed snack foods, respondents would often respond with an answer such as, “As a rule not, because it’s not very smart for me to do it.” (#19) The interviewer observed items in the home that would seem to

contradict similar denials from at least three respondents: a dish of candy on a coffee table, potato chips clipped closed with clothespins onto a clothesline in the kitchen, and store-bought cake on a counter. When asked about these specific items, respondents said they were primarily for others to eat (guests, grandchildren or the HHA). All but one acknowledged they did occasionally eat these foods kept primarily for others.

Table 6: Prevalence of Prepared Foods Used on a Daily Basis

Prepared Food	Number of Respondents
Cereal (dry, boxed)	9
Bread	6
Buns, muffins, biscuits or rolls	6
Cake	6
Crackers (plain, with canned tuna, or peanut butter)	6
Frozen foods (pot pie, liver, pizza, vegetables)	5
Donuts	4
Canned food, misc. (hot dogs and beans, vegetables)	4
Canned fish	3
Soup (canned, powdered)	3
Candy	3
Deli meat/prepared sandwiches	3
Oatmeal (instant)	3
Bagels	2
Cookies	2
Ice cream	2

Table 7 shows that many of these prepared foods served as respondents' breakfasts, particularly dry cereal, baked goods, and instant oatmeal. Most respondents reported that they prepared their own breakfast (n=16). Others said someone living with them prepared breakfast (n=2), it was eaten at a senior center (n=1), or it was not eaten at all (n=1).

Table 7: Typical Breakfast Foods

Breakfast Food	Number of Respondents
Coffee/tea	14
Muffins, buns, bagels or toast	10
Boxed Cereal	9
Fruit	7
Juice	4
Oatmeal	4
Eggs	4
Leftovers, not MOW	2
Leftovers, MOW	2
Grits	1

Lunch was typically MOW, as indicated on Table 8. Lunch outside of MOW was usually prepared by the respondent, although a few respondents said they would eat leftovers from meals purchased or made by relatives or friends when such food was available.

Table 8: Typical Lunch Foods

Lunch Foods	Number of Respondents
MOW	11
Nothing	5
Sandwich	2
Salad	1
Canned food	1

Unlike breakfast, where there was a high reliance on prepared foods, or lunch, where the majority of respondents ate MOW, there was more variation in the foods respondents reported eating for a “recent” or “typical” dinner. Respondents described eating a variety of dishes: corned beef, fried peppers and onions, oxtail stew, collard greens and other specific dishes. Respondents reported that relatives, friends, and neighbors were usually responsible for making the labor-intensive meals they listed. If a relative who cooked lived with the respondent, the meal would be made at home and shared. More often, a relative, friend, or neighbor outside the home would make a

meal and bring it to the respondent. Many respondents described a typical dinner as incorporating these foods with leftovers they had saved from eating MOW at lunch.

Respondents provided a less extensive list of items when asked what they could prepare themselves compared to what they provided when asked what they ate for a typical dinner. Many items were common among the respondents, notably sandwiches. Table 9 lists those dinner foods mentioned by the most respondents, and Appendix D compares what each respondent listed as a typical dinner (along with who prepared it) to what foods respondents said they could prepare themselves.

Table 9: Typical Dinner Foods

Dinner Foods Mentioned Most Often	Number of Respondents	Prepared By
Sandwich (n=5), MOW leftovers (n=4), steak (n=4), fish (n=4), eggs (n=4), vegetables (n=4), canned food (n=4), pasta (n=3)	14	Respondent, Relative, HHA, Friend, Neighbor
MOW	4	Respondent
Snack, nothing	2	Respondent

THEMES REGARDING USE OF MOW

MOW Delivery Times

The earliest delivery time that respondents reported was 9:30 am and the latest was 3:00 pm. Nine respondents reported that the meal was delivered at the same time (within an hour) every day, however three of those respondents said the meal had not yet been delivered on the day of the interview although the usual delivery time had passed. One respondent complained that although the time was consistent, “They usually come so early that I have to take Meals on Wheels instead of my breakfast!” (#19) This respondent, like many others, felt it was important to eat the meal hot when it came, even if it arrived much earlier than they desired to eat MOW.

Six respondents reported that meal delivery was very unpredictable from one day to the next, but that meals usually arrived within a time frame ranging from two hours (n=2), 3 hours (n=1), 4 hours (n=2) or 5 hours (n=1). As one respondent said, the meals arrive at "one o'clock, two o'clock…any kind of clock." (#17) Three respondents said that occasionally meals did not arrive at all, in which case they all said they called MOW to report the problem. There was a range of attitudes about waiting for meals to arrive. Some felt that, "I have to stay here so it doesn't matter," (#6) or expressed understanding such as "They feed so many people!" (#1) One respondent had concern for others who depended on eating at a certain hour because of medications or appointments. Another respondent was very unhappy, asking, "Who wants a lunch at three o'clock?" (#9) as well as, "And waiting! That's the aggravation! Like if I have to stay here and wait. I've got things to do! I have doctors to see. I've got whatever! I've got my life to lead!" (#9) Even in this case, however, the respondent still expressed a measure of sympathy for the people working at MOW:

> There's so many excuses. But they're human beings. They don't follow it up real well, you know. Or if they do follow it up sometimes they've got different workers. They don't do a good job as far as deliveries is concerned. I've mentioned that to [MOW]. I told him, look…your delivery aspect of the whole program is a mess! (#9)

The pattern of irregular delivery times reported by respondents was confirmed by MOW administrators who said they could not (and did not) promise meals would arrive at the same time every day. MOW explained this as being due primarily to the flux of MOW clients, which required re-drawing (and often expanding) established delivery routes.

Hot Meal Delivery

The Importance of Eating MOW Hot

More than half of the study participants described the various reasons it was important that MOW arrived hot. Table 10 shows that most people who received hot meals ate them when they arrived around lunchtime.

Table 10: Impact on Daily Eating Schedule for Clients Receiving Hot Meals

Time Respondents Usually Eat MOW	Number of Respondents
Lunch	11
Dinner	3
Does not usually eat MOW	3

The investigator did not ask directly about the importance of hot meals, yet nine of the eleven respondents who ate MOW for lunch mentioned that they ate the meal as soon as it was delivered, citing reasons such as: "I like them hot," (#4) "…it's usually fairly hot," (#18) "Yeah, because when it arrives it's hot. They're always hot, so I eat what I could eat because that's around lunchtime." (#13) Three MOW respondents had a MOW delivery during the interview. Two respondents (both with hot meals) began eating the meal as soon as it arrived while one (with frozen meal delivery) set it on the counter.

An additional respondent (who did not eat MOW regularly due to health reasons) reported that when she did eat MOW it was best to eat it hot. Another frail respondent with similar health concerns and a low appetite described being enticed to eat by the fact MOW was ready to eat and smelled good. Another respondent who did not always eat the meal immediately stored it only long enough so that it could be eaten without reheating it, "Sometimes I don't eat it right away but I'll put it in the refrigerator. But I don't leave it. If I know I'm gonna eat it, you know, then I don't leave it in there that long to get cold, you know." (#6)

Respondents who usually ate MOW for Lunch

MOW was most commonly eaten for lunch. 10 respondents reported that their eating pattern on most days was as follows:

6:00 am–9:00 am: Breakfast

11:00 am–2:00 pm: MOW

6:00 pm–8:00 pm: Dinner

Another respondent followed a similar pattern but instead of eating breakfast at home, he was the only one to report daily visits to a congregate meals center in his neighborhood. In addition, he did not eat dinner but rather had what he described as a "snack."

Two respondents (both blind) said they often asked for assistance opening MOW, either from a family member or the MOW deliverer. The other respondents said they did not have any difficulty preparing MOW themselves.

Respondents who usually ate MOW for Dinner

Three respondents reported eating MOW for dinner. All three said they ate only two meals per day (two did not eat lunch and the other did not eat breakfast). Unlike the majority of those who preferred to eat their meal for lunch, no mention was made of the importance or desirability of eating the meal when it was delivered because it was hot. In fact, one respondent expressed her view of irregular delivery times (and her fellow MOW respondents):

> Well, [the delivery time] does not bother me because I keep it for the dinner. So people who are waiting for the people to deliver, what's the matter with them? They can just eat something early!…I know them hungry dogs are waitin' for food! (#11)

Respondents who did not usually eat MOW

Three respondents explained that they used to eat MOW but stopped, or currently ate meals only on rare occasion. When meals were eaten, they were eaten for lunch. When meals were not eaten (for health and cultural reasons), these respondents did not substitute other foods.

In two of these cases, the respondents did not consider most meals from MOW to be right for their health. One very frail, homebound respondent, with only her HHA and a neighbor as resources for grocery shopping and food preparation, explained why she would "go without" meals if she felt they were not right for her health, although she preferred to eat the meals if she could:

> I want what the doctor told me to eat. I leave alone what I'm not suppose to eat. I don't smoke. I don't drink.…some days I look at [MOW] and that's it, and I'll go without because it's not what I want. (#17)

The same respondent said she had a low appetite, so when she decided not to eat a meal she would not feel hunger. She described how she was occasionally enticed by the smell of MOW, "If it's a hot meal and something that smells good, I'll open it right then and there because I want to see what it is. Maybe it is something I can eat," and "If I get the smell I'll put my attention to that." (#17) Another respondent said she usually only ate the vegetables (if she ate anything at all). If she did eat the meal, she explained that she would eat it when it was hot because, "I think you should. It's better to do it that way, you know." (#19)

Frozen Meal Delivery

The three respondents in the sample who received frozen meals reported more irregular eating patterns than the 17 others receiving hot meals. When describing what he ate for breakfast, lunch, and dinner one respondent did not mention MOW at all. Another respondent only mentioned eating parts of MOW, supplemented with bread

and coffee, for breakfast, lunch, and dinner. The last respondent described that she ate MOW for dinner but unlike the others who ate MOW for dinner, she ate a full breakfast and lunch and often supplemented her dinner with side dishes she prepared. None of the respondents receiving frozen meals said they ate the meal when it was delivered.

Weekend Meal Delivery

In general, MOW delivered two meals on Saturday. One was hot and meant to be eaten that day. The other was chilled or frozen and intended for Sunday when there was no meal delivery. There were variations on this delivery pattern: Jewish clients reported receiving two meals Friday with no delivery on Saturday, and other respondents reported receiving both weekend meals chilled and/or frozen. Most respondents described eating the first meal when it was delivered and the second meal on Sunday when there was no meal delivery, but there were exceptions. Four respondents reported that they would occasionally eat both meals on Saturday either because they got hungry or because they knew that Sunday someone was going to provide food for them. One respondent saved both meals for later. Throughout the week he supplemented MOW with other foods to make it last longer, so by Saturday he still had enough leftover MOW to eat that day. Two respondents said they usually threw away the second meal. The first said she considered it her “emergency meal” and had previously canceled other weekend deliveries so she would not have to answer her door on those days. The second respondent did not find the meals culturally acceptable.

Utilization of MOW

Storing MOW

All respondents reported they would put hot meals in the refrigerator if the meals (or parts of meals) needed to be stored for later. Two respondents said they occasionally left a hot meal out on the counter until they were ready to eat it. Another described how in the winter she would place the meal on the radiator to keep it warm until she was ready to eat it. Respondents explained that they placed frozen meals in the freezer and generally defrosted them in the refrigerator. A few respondents reported placing hot meals in the freezer as well, saying, "If I feel I wanted to really save it I would put it in the freezer." (#6)

Reheating MOW

To reheat meals, 10 respondents reported using microwaves, seven used a stovetop (including one respondent who boiled meals), four used an oven, and three used a toaster oven. Four respondents reported using more than one method. Six respondents did not own a microwave, but most expressed a desire to own one. One respondent felt a microwave would be safer than using a stove, "If it needs the oven you put it in the oven, which is not always good if it has to go on the top of the stove for an elderly person…you can burn yourself by trying to lift it out of the oven or whatever. Or your sleeve will catch on fire while you're reaching to take it off the top of the stove." (#14) Most other respondents cited the expense of purchasing a microwave as a barrier to owning the appliance, "I prefer…well I would like to have a microwave but I don't…I can't afford a microwave. See, that's another thing…I really can't afford a lot of things what I would like to have." (#12)

Non-utilization of MOW

Eight respondents reported giving away or throwing away MOW, practices which have been collectively called "non-utilization" in previous literature. Table 11 shows that respondents who consistently threw out or gave away meals reported doing so for health and cultural reasons. Those who reported occasionally throwing out or giving away meals explained that they did so primarily because other meals were being provided or the respondent had insufficient appetite to finish a meal.

One respondent described giving away her entire meal when she felt it was necessary:

> When I find a lot of things are not things that I should be eating, then right away I give it to my neighbor, because her husband left her and she has no job, and she's trying to get working. So I feel like that helps her a little bit, you know? But I wouldn't give it to her if I could eat it, you know, because I know my health demands that I eat that…[How often MOW is given away] depends on how often they have things that I can't eat that she can eat, you know? Let's face it: a 51-year-old can eat things that an 86-year-old woman can't. (#19)

One respondent concerned about health also complained about the taste of MOW, but the primary reason she provided for throwing out food was for health reasons. A few additional respondents reported dissatisfaction with the taste of particular entrées, which they would modify by adding ingredients or not eat, or particular ingredients, which they would pick out and discard. These respondents indicated that these unpalatable meals were served only occasionally (a couple of times per month), so meals were not thrown out very often for this reason.

Table 11: Reasons Respondents did not Consume MOW

Reason	Portion	Frequency	Thrown/Given Away
Health No nutrition labels, cannot chew some foods, cannot eat red meat, high fat/cholesterol/oily foods/fried foods (like gravy), unhealthy snacks/desserts	Part of MOW (eats vegetables)	>3x/week	Thrown away (n=3) Thrown away or given away (n=2)
Culture/Taste Foods not right for culture, general dislike of bland food	Entire MOW	>3x/week	Thrown away (n=1)
MOW Not Needed If sufficient food provided by family, MOW may not be used	Entire MOW	1x/week	Frozen meals that accumulate in freezer given away (n=1) "Emergency meal" thrown away (n=1)
Appetite Cannot finish entire meal	Part of MOW	1x/week	Thrown away (n=1)

Modifications to MOW

The majority of respondents described supplementing or modifying meals from MOW for one or more of the following reasons: for health, for taste, or to make meals last longer. Table 12 lists the ways respondents described modifying meals as well as the spices, condiments and foods they reported using to supplement MOW. All of the respondents who threw or gave away meals for health reasons also reported that they attempted various methods to make MOW healthier. Methods to improve the healthiness of MOW included boiling entire meals, rinsing off meat to remove salt, and scraping away and discarding high-fat sauces such as gravy. Outside of health issues, there was no clear pattern with regard to non-utilization of MOW and modification (see Appendix E for analysis matrix).

Table 12: Modifications to MOW

Methods to Improve Healthiness of MOW (n=7)
Boiled to remove salt
Rinsed to remove salt
Scraped clean to remove high-fat sauces (ex: gravy)
Discarded entire MOW meal except vegetables
Items Added to/Eaten with MOW to Improve Taste (n=6), excluding salt and pepper
Bread (added more culturally appropriate type)
Browned onions (added to potatoes and rice)
Cayenne pepper
Chicken (replaced meat portion from MOW)
Condiments (ex: Thai sweet chili sauce for chicken)
Garlic (added to potatoes and rice)
Olive oil and fresh herbs (added to rice)
Salad dressing (added to vegetables)
Tomatoes (added to entrée, from respondent's garden)
Corn on the cob
Items Added to/Eaten with MOW to Make it Last Longer (n=6)
Bread (also used with leftover MOW to make sandwich)
Canned tuna fish
Cheese
Frozen chopped liver
Fruit (fresh, canned)
Green salad
Leftover food from family members (combined with leftover MOW)
Potato (baked, mashed)

THEMES REGARDING INTERACTION WITH THE DELIVERER

Interaction with Driver/Deliverer

When asked directly if they knew the name of the person delivering MOW, only two respondents in this study said they did. An additional respondent mentioned

the deliverer by name later in the interview although she had previously said she did not know it. Although names were not known, half of the respondents immediately volunteered their positive feelings for the deliverer with comments such as, "I'm not familiar with none of them really. They treat me nice." (#1) Other respondents were similarly quick to say the deliver was "nice" (n=3) "very nice" or "very pleasant," (n=4) and "very, very nice" (n=1). One of these respondents remarked, "They're nice…they try to understand you…. and when you get my age you get sometimes cranky, you see?…They go out of the way to bring the food to all the fellows, you see…they do a good job." (#12)

One respondent complained about a particular deliverer who no longer delivered meals to him, "There was one before [the current deliverer] that was no good! He use to tell me that he delivered and I told him, you're lying! I was downstairs right there in the park sitting down. I see when your truck comes. Don't lie to me, I'm too old already for that!" (#9) When asked directly, only one respondent (the same respondent who disliked his earlier deliverer) said he regularly conversed with people from MOW. "Well, I chat with them but I don't know their names. I don't bother, you know. And he…in fact the one that delivers now is pretty good. He's very good. Because he looks out for me and all that because I established some rapport with him, you know." (#9) The other 19 respondents reported little or no verbal exchange with meal deliverers beyond pleasantries. The following two comments were typical of how respondents described the exchanges during meal delivery: "I don't talk about nothin'. That man got his work to do. Nothin' really to talk about. 'Hello. How you doin'?' 'Hello. Fine, thank you.' That's about it." (#1) or "'Hi, how you doing, blah, blah,' you know? General conversation." (#15)

MOW arrived with meals during three interviews. One exchange, which the respondent said was typical, was transcribed as follows:

Respondent: Good morning! Thank you very much!

MOW Deliverer: You're welcome. I think it's locked.

Respondent [walks to the door and unlocks it]: Yeah. Thank you.

MOW Deliverer: You're welcome. Okay?

Respondent: Okay.

MOW Deliverer: Have a good one.

Respondent: You too! (#13)

This was the extent of dialog with the driver, but it led to another small exchange with a neighbor who was also outside at the time regarding the respondent's health.

Respondents vehemently denied that they ever asked the deliverer for favors, with 11 respondents responding to the question "Do you ever ask the driver to get you anything?" with a denial, "No," "No, no," and even "No, no, no." Five additional respondents replied negatively, but with a little more explanation, such as:

> "They don't do like that kind of thing. They have to get their work done." (#5)
>
> "No, they don't do that! He just comes to the door…" (#9)
>
> "No, I never…never. All I said to them is thanks and have a great day. I'll see you tomorrow or something like that. But I never did ask for any favor." (#13)

Only one respondent reported asking for a favor. She said both, "No! You don't ask Alice, because I know Alice can't do this because she has things to do," and later, "No, I did ask her once to give me a telephone book, but Alice, she forgets, you know. She has other things to do." (#6)

Regardless of whether respondents were discussing familiarity, favors, conversation, or the time of meal deliveries, they expressed their views regarding the deliverers' demanding schedules. A few respondents voiced frustration, but overall they expressed understanding and sympathetic views on the situation:

> "They've got to run! When they show that ad about them sitting—where they come and the guy sits down and opens the package and sits and talks to them—no." (#5)

> "Well I don't think we say ten, fifteen sentences because I know that Alice has to…she's trying to get through at her regular time." (#6)

> "I don't talk about anything else because they're in a hurry going to do their other chores. So they don't speak." (#13)

> "Because they're busy, you know?" (#14)

> "[I ask the deliverer], 'Are they working you too hard? Don't let them work you too hard, like I tell you…don't work too hard, no good for the nervous system.'" (#15)

> "They don't have that much time anyway." (#18)

> "Well, they're very busy, you know. They must have a lot of people to…I imagine they have a lot of houses to go to to bring the food." (#19)

Interaction with Driver/Deliverer: Another Perspective

Another perspective provides insight into the relationship between meal deliverers and clients. The MOW organization graciously allowed the investigator to spend one full day riding in the delivery van and observing meal deliveries. The two MOW employees (one driver and one meal deliverer) confirmed what the respondents said: every day the deliverers had a longer list of people who needed meals but the same number of work hours to complete their assignment. They had an incentive to be done with deliveries by 3:00 pm because they said they would not be paid for any time after this cut-off. Both had additional jobs outside of MOW after they were done with their shifts at MOW.

On the day the investigator rode with MOW it was almost 100°F outside, yet the deliverer ran up as many as three stories (in buildings without elevators or air conditioning) to deliver steaming hot meals while the driver waited outside. At certain points the driver would go ahead and deliver a few meals to the next building, but they

said they had to be careful about leaving the van unattended to avoid expensive parking tickets. The system was extremely efficient; they were always moving between or inside buildings to deliver the meals, which did not allow time to exchange more than a few words with each client. A few respondents grumbled about the delivery time, a few reminded the deliverers about later in the week when they would not be home, and one woman reminded them to bring her newspaper at the next delivery. One man answered the door with a frying pan in his hand, as if he were going to use it for protection, muttered something unintelligible (to the investigator), and accepted the meal. The meal deliverers never stopped to talk about any one issue, nor did they enter any client's home. Throughout all this, both MOW employees were pleasant to everyone, as the respondents reported.

What was striking is how much the drivers knew about the clients. They knew who was sick and with what, and related bits and pieces of clients' life stories as rounds were made. They warned the investigator about the man with the pan, explained the reason for his condition, and understood what he was saying and how to respond appropriately. Overall, even from this relatively brief encounter, the investigator had the strong impression that the driver/deliverers had a uniquely strong understanding of clients and their situations.

Contact with Driver Necessary to Receive MOW

Respondents reported that they had to be present at delivery because the meal would not be left outside, "[MOW] told me when I'm not home they're not gonna leave it." (#13) More colorful descriptions included:

> "I don't think nobody'd want it. If I see a package of food in front of somebody's door I don't want it either! I don't know what's in there. 'Cause people in New York is crazy! They might put rat poison in it." (#1)
>
> Investigator: And what happens if you're not home?
>
> Respondent: I don't get anything!

> Investigator: Okay, so they won't leave it outside the door, or anything like that?
>
> Respondent: You mean for the cats and the dogs? [Laughs] You know, they know better than that! (#2)

> Because they don't like to leave the food outside the door. They don't want to do that. Because sometimes people take it, but they don't do it over here, but you never know. That's the way they feel, anyway. They want to make sure that we get it. (#14)

There were two exceptions. The first was a respondent who explained that she had a doorman to accept meals if she was not at home (although there were a few buildings with security posted at the entrance, there was only one building with a doorman). The second reported—contrary to what others said—that the meal would be left on the doorstep if the respondent was not at home. Figure 1 reflects the scenario each respondent provided if they were not present for the delivery.