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# Reaching the Oldest Population: Improving the Coverage of Service for People over 85 Years Old in Broome County

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Reaching the Oldest Old Population: Improving the Coverage of Service  
for People over 85 Years Old in Broome County

BY

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Submitted in partial fulfillment of the requirements for  
the degree of Masters in Public Administration in the Graduate School of  
Binghamton University  
State University of New York  
2012

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## **Executive Summary**

From 2000 to 2010, the population of those over 85 years old (the oldest old) in Broome County has increased by 23.19%. However at the same time, the number of the oldest old who receive service from Broome County Office for Aging (BCOFA) has decreased by 10%. As the only department in Broome County government which provides services specifically targeting senior citizens, BCOFA wanted to know how the needs of those who receive service from BCOFA may differ from the needs of those who do not and what strategies could be used to improve the service coverage for this population.

To explore the differences in the needs of the oldest old who receive service from BCOFA and those who do not, I sent out 682 surveys to the oldest old in Broome County. The key findings of this study were: 1) the oldest old who are not getting service from BCOFA have lower overall needs for service and are more socially involved than those who receive services; 2) the oldest old who are not getting service from BCOFA reported a higher self-rated health status and overall quality of life than those who receive services; 3) the oldest old who are not getting service from BCOFA are less aware of the services BCOFA provides compared to those who receive services; and 4) the main reason for the oldest old not getting service is that they do not have a need for service at this time. Based on these findings, I recommend that BCOFA 1) use multiple ways to share information about services for the oldest old population and 2) track the oldest old population in Broome County.

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## **Problem Definition**

Those aged 85 and over, the oldest old, are now the fastest growing segment of the elderly population (Hobbs, 1994). The latest data in the 2010 Census released by U.S. Census Bureau shows that the oldest old cohort has experienced significant growth. While the total population in the United States has grown by 9.71% in the last decade (from 2000 to 2010), the population of the oldest old has increased by 29.57% nationwide. The size of the oldest old population is expected to grow to 19 million, or 4.3% of the U.S. population, by 2050, as the baby boomers move into this category (Stibich, 2011). As one of the most aged counties in New York State with a median age of 49 years old, Broome County saw the same tremendous growth in its oldest old population. In the last decade, while the county's total population has only grown by 0.03%, the oldest old cohort has increased by 23.19% (U.S. Census Bureau, 2010).

The mission of the Broome County Office for Aging (BCOFA) is to “improve and enrich the quality of life for all older persons in Broome County” (Broome County Office for Aging, 2010). BCOFA assists seniors and caregivers by providing the benefits and services that elders need to live independently (Broome County Office for Aging, 2010). BCOFA is the only department in Broome County government which provides services specifically targeting senior citizens, including the oldest old.

Even though there has been a significant increase in the oldest old



population from 2000 to 2010 in Broome County, the number of people from this group who are receiving services from BCOFA has decreased. In the last decade, the number of the oldest old people who BCOFA served decreased from 2,243 to 2,198. A review of this data in last decade shows that the percentage of the oldest old cohort that BCOFA served has fluctuated but overall has declined. In 2000, the percentage of the oldest old population in Broome County receiving service from BCOFA was 49%. The percentage of the cohort receiving BCOFA services steadily increased for 5 years, reaching 83% in 2005. However, this percentage then sharply decreased in 2006 to 53%. In 2010, the percentage of the cohort receiving BCOFA services was 39%, reaching its lowest level in the decade (BCOFA census, 2011).

Increasing the percentage of the oldest old being served is crucial to BCOFA for many reasons. First, it will help BCOFA to better meet its mission since the oldest old cohort is an important part of elderly population in Broome County. Second, the vulnerability and the fast growth of the oldest old populations may imply that more BCOFA resources need to be devoted to serving this group. Research on why the percentage of the oldest old population served by BCOFA has declined while the overall size of this population in Broome County increased will help BCOFA to identify limitations with their current services and improve service effectiveness. Third, increasing the percentage of the oldest old getting service from BCOFA will enhance the confidence this group of seniors has about their lives in the future, thus strengthening the trust between citizens and Broome

County government.

Although there are limited data on whether the decrease in the percentage of the oldest old cohort being served is specific to Broome County or reflects a state or even national trend, the oldest old population is growing fast nationwide.

Research on Broome County could be a valuable resource for other counties facing similar situations. From the consumer's perspective, this research will help the oldest old increase their quality of life by improving the services available to them from the local government.

### **Research Questions**

To assist BCOFA with the aforementioned problem concerning the decrease in the percentage of the oldest old cohorts being served, this study examines the differences in needs between the oldest old who do not receive services from BCOFA and those who receive services. This study will also explore strategies to improve the coverage of service for the oldest old cohorts in Broome County.

1. What are the differences in needs between the oldest old who receive service from BCOFA and those who do not?
2. What strategies can BCOFA use to increase the percentage of the oldest old population being served?

### **Literature Review**

This literature review introduces background information on the oldest old (people over 85 years old), and summarizes their major needs. These include

health, housing, long-term care, and social needs. However since there is limited research on this specific age cohort, some of the research cited is based on data collected about individuals 75 years of age and over.

### **Background information on the oldest old**

With increasing age, humans are facing the certainty and reality of diminishing health, resources, and support systems (Poon & Cohen-Mansfield, 2011). The oldest old are at risk for being more physically and cognitively frail compared to younger groups (Margrett et al., 2011), which results in this cohort having more specific needs than the “young old” (aged 65-74) and the “old-old” (aged 75-84) (Garfein & Herzog, 1995). Yet, there is little research focusing exclusively on the oldest old (Poon & Cohen-Mansfield, 2011). The lack of exploration into the needs and the well-being of oldest old can be attributed to the large amount of individual variability within the group, which makes it difficult to make generalizations (Poon & Cohen-Mansfield, 2011). However, regardless of these difficulties, scholars have categorized the needs of the oldest old into four types: health needs, long-term care needs, housing needs, and social needs.

### **Health Needs**

Maintaining a good health status is the most important need of the elderly (Albert & Wilson, 1984). The oldest old cohort consumes a significant and disproportionately high fraction of health services (Townsend & Harel, 1990). As Soldo and Manton (1985) pointed out, the increasing size of the oldest old population in the future is likely to result in increased demand for health care, both in terms of intensity and duration of care. When considering the health needs

of the oldest old, both physical health and mental health should be taken into consideration.

An overwhelmingly large proportion of the oldest old are experiencing physical health challenges. The National Health Survey reports that about 85% of the noninstitutionalized elderly suffer from physical health problems, especially chronic conditions (U.S. DHEW, 1979). Mental health needs are also a major concern for the elderly. The Department of Health (2005) estimates that 40% of older people who see a general practitioner, 50% of older people in general hospitals, and 60% of home care patients have a mental health problem, including depression, dementia, and other mental illnesses. Different from physical health care needs, mental health care needs are under-identified by professionals and older people themselves, and older people are often reluctant to seek assistance with mental health needs (Nicholls, 2006).

### **Long-term care needs**

Long-term care differs from other types of health care in that its goal is to allow individuals to attain and maintain an optimal level of everyday activities, rather than to cure an illness (U.S. Senate Special Committee on Aging, 2000). Long-term care needs arises when functional limitations (such as walking or bathing) which result in one or a combination of diseases cause long-term or permanent loss of independent function (Williams et al., 1997). Findings from various studies consistently show that limitations in performing everyday activities increase with age (dramatically after age 75). This loss of independence in daily activities leads to a corresponding growth in the needs for long-term care,

at an increasing rate in the older age groups (Shanas et al., 1968; Nagi, 1976; Hanley, 1984; Small & Bäckman, 1999; Bäckman & MacDonald, 2006; Boom, 2008).

### **Housing needs**

Another critical concern for the elderly is finding appropriate housing to meet their needs. The housing arrangements of an individual affect the physical, mental, and social needs of the elderly (Benedict, 1979; Atchley, 1980), by influencing accessibility to services as well as informal and formal community supports (White House Conference on Aging, 1973). The nature of housing is so vital that it may determine whether an individual can live independently or in an institution, a solitary or a social life, in safety or in danger, or in extreme cases, whether they live or die (White House Conference on Aging, 1971:1). Approximately 1.5 million people live in nursing homes in U.S, 45% of which are over 85 years old (AARP Public Policy Institute, 2004). However, only 14% of the individuals that are 85 years and older in the U.S. live in total care institutions (U.S. Census Bureau, 2000). Although it is hard to estimate the number of oldest-old who are living completely independently, research showed that about 20% of the oldest-old report themselves “able to live without personal care” (Anderson-Ranberg et al., 2009). In other words, most people over 85 years old live in residential arrangements that may be linked to some type of supportive services.

### **Social needs**

Different from the needs above, social needs represent intangible needs of

the oldest old. Social relationships are positively related to life satisfaction in very late life (Litwin, 2011). In addition, having an enriching social life contributes to better mental health (Litwin, 2004a) and may protect the elderly against mortality risk (Brown et al., 2003). A large proportion of the oldest old group experience a decline in their social activities and network due to residential relocation, the death of peers (particularly friends), and decreased physical mobility. Although new social ties sometimes replace those that were lost, they cannot fully substitute the intensity and efficacy of earlier social relationships (Litwin, 2011). Some studies, however, suggest that quantity of the network is more important than quality (Bowling, 1990).

### **Conclusion**

Among the various needs of the oldest old cohort, research suggests that health, long-term care, housing, and social needs are the most important and urgent. To better understand the needs of individuals over 85 years old in Broome County and to examine whether they are consistent with nationwide trends, I conducted a needs assessment of the county's oldest old. Data from this study will help BCOFA determine strategies for better serving this population.

### **Research Methodology**

To explore the difference between the needs of the oldest old who receive service from BCOFA and do not and to give recommendations accordingly, I survey the oldest old in Broome County. To guarantee that the

whole research process was carried out under ethical principles, I received authorization from Human Subjects Research Review Committee at Binghamton University. Please see Appendix A for the approval letter.

### **Participants**

The survey was sent to two sample groups. Sample group I (SGI) consisted of 299 senior citizens over 85 years old in Broome County who are not getting service from BCOFA. I received contact information for this group by requesting a list of people over 85 years old from Broome County's Voter Registration System, which is public information. However, neither I nor any of the employees in BCOFA had access to their voting history. A program coordinator from BCOFA reviewed this list and removed all the people who received services from them now using their internal software. Sample group II (SGII) consisted of 383 seniors over 85 years old who are currently getting service from BCOFA. In order to increase the response rate, I asked for help from volunteers in Meals on Wheels program, a program that prepares and delivers food for seniors who are unable to prepare their own food. I identified 82 clients of Meals on Wheels who are over 85 years old and asked the volunteers to deliver and collect the surveys when they were delivering meals. I reached the remaining 301 survey targets by using Harmony for Aging, an internal software program that BCOFA uses to track the client data. I removed the Meals on Wheels clients as well as people 85 years old and younger from the database and randomly selected 301 clients to whom I would send out the survey.

## Survey Design

I distributed different surveys to the two sample groups. The survey for SGI consisted of two parts. The first part is a needs assessment. Based on my findings from the literature review, four basic topics are covered on the survey: housing needs, health needs, long-term care needs (stated in the survey as “daily activities needs” to make the participants feel more comfortable), and social needs. Most of the questions in part I are close-ended questions and ask participants to rate their needs as *always*, *sometimes*, and *never*. Also included in this section is an open-ended question which asks if the survey respondents had any other needs not mentioned in the four categories. The second part of the survey for SGI consisted of two questions regarding their familiarity with BCOFA and the reasons why they are not getting service from BCOFA. Please see Appendix C for a complete survey for SGI.

The survey for SGII contains the same questions of that for SGI except that the last question on the survey which asks about why the respondent was not getting service from BCOFA was removed. Please see Appendix D for a complete survey for SGII. Please see table 3.1 for an explanation of the two sample groups and survey designs.



**Table 1. Sample Groups and Survey Types**

Group Explanation	Sample Group I	Sample Group II
<b>Eligibility of Participants</b>	<ul style="list-style-type: none"> <li>● Lives in Broome County</li> <li>● Over 85 years old</li> <li>● Enrolled in 2011 Broome County Voter's Registration System</li> <li>● Not getting service from BCOFA</li> </ul>	<ul style="list-style-type: none"> <li>● Lives in Broome County</li> <li>● Over 85 years old</li> <li>● Getting service from BCOFA</li> <li>● Enrolled in the software Harmony for Aging that track information on clients who participate in BCOFA's programs that provide assistance with health care, transportation, shopping, etc</li> </ul>
<b>Survey Composition</b>	<p><u>Part I</u>: Needs assessment including housing, health, long-term care, and social needs.</p> <p><u>Part II</u>: Familiarity with BCOFA and reasons not getting service from BCOFA</p>	<p><u>Part I</u>: Needs assessment including housing, health, long-term care, and social needs.</p> <p><u>Part II</u>: Familiarity of BCOFA</p>
<b># of Questions</b>	26	25
<b># of Participants</b>	299	383
<b># of Response</b>	58	81
<b>Response Rate</b>	19.40%	21.14%

The responses to both surveys were anonymous. Surveys were mailed on March 15, 2012. The cover letter stated that participants could skip any question that they felt uncomfortable answering and that sending the survey back is completely voluntary. Respondents were instructed to return the surveys by March 30, 2012.

### **Strengths and Limitations of the Research Methodology**

There are many benefits of using surveys. First, mailing surveys to the target group is a low-cost strategy for BCOFA to reach a large sample. Second, it allowed me to reach a widely dispersed group of individuals who are difficult to

reach by other strategies, since this group is relatively vulnerable and is carefully protected by family members and are often not familiar with modern forms of technology such as email or texting. Third, since participants might be uncomfortable answering questions about their needs, using anonymous surveys minimized this risk.

There are several limitations, however, due to how the sample groups were selected. First, many individuals in both samples did not complete the survey: the overall survey response rate was 20.27%. The low response rate for this study is not surprising since other research studies indicate older adults are less likely than other people to participate in surveys (DeMaio, 1980; Herzog and Rodgers, 1988a), and the response rates tend to be particularly low among those over age 85 (Herzog and Rodgers, 1988a, Wallace, 1987). Low response rate might bias the survey sample since those who respond to the survey may have different needs from non-respondents. In this case, the results of this study will not fully represent the overall needs of the oldest old in Broome County. To improve response rate as much as I could, I sent the surveys with prepaid envelopes which were included with the initial mailing, so that there was no cost for the respondents to answer the surveys. Second, since many people over 85 years old might live with someone who takes care of them or see a caregiver frequently, the caregivers might fill out the survey on behalf of the individuals they are caring for. In this case, I am not measuring the needs of the oldest old themselves, but the needs that their caregivers thought they might have.

### **Data Analysis Strategy**

I used both descriptive and inferential statistics to analyze the quantitative survey data. I used descriptive statistics when analyzing survey respondents' needs, self-rated health status and life quality, and familiarity with BCOFA and its services. To test whether my results were statistically significant, I used t-tests and chi-square tests to analyze my data. In order to compare the difference in overall needs of the two sample groups, I coded their answers for whether a particular form of assistance is "always," "sometimes," or "never" needed for the subject as 2, 1, and 0. By adding up the scores for all eight close-ended questions in part I of the survey, I calculated an overall need score for each survey respondent. The range of this score was from 0 to 16. I then used t-tests to assess whether the overall needs of the two sample groups were significantly different and whether the needs of the two sample groups in specific areas were significantly different. A result is considered statistically significant when the probability of getting that result by random chance is very small, in this case, less than 5%. I used chi-square to test whether there is: (1) a relationship between an individual's self-rated health status and whether he/she receives services from BCOFA, (2) a relationship between an individual's self-rated life quality and whether he/she receives services from BCOFA and (3) a relationship between an individual's familiarity with BCOFA and whether he/she receives services from BCOFA.

## Findings

Based on my statistical analysis, I have identified four major findings. These findings are: 1) the oldest old who do not receive services from BCOFA have lower overall needs for services and are more socially involved than those who receive services; 2) the oldest old who do not receive services from BCOFA reported a higher self-rated health status and overall quality of life than those who receive services; 3) the oldest old who are not getting service from BCOFA are less aware of the services BCOFA provides compared to those who receive services; and 4) the main reason for the oldest old not getting service is that they do not have a need for service at this time. These four findings are consistent with each other, which lead us to the complete story: on the one hand, the oldest old who are not getting service from BCOFA consider themselves to be healthier and have a higher quality of life. They also rate themselves as having less need for services at this time compared to those who are currently getting services. On the other hand, those who are not getting service from BCOFA have less understanding of the services the agency provides and therefore lack knowledge about the services available to them.

**Finding #1: The oldest old who are not getting service from BCOFA have lower overall needs for service and are more socially involved than those who receive services.**

A total of 47 people from Sample Group I (SGI) and 45 people from Sample Group II (SGII) answered all eight questions asking about their housing, health,

and long-term care needs. The scale of answers to these questions ranged from 0 (having no needs in any of the eight areas) to 16 (always having needs in all eight areas). The average score of the needs of SGI was 4.51 while the average score for the SGII was 6.04. According to my t-test analysis, the overall needs of SGI were significantly lower than that of SGII. I also examined whether there were differences in needs of the two groups for each of the three categories (housing, health, and long-term care). Using descriptive statistics, I found that even though SGI had lower overall needs than SGII, SGI reported greater needs in some areas. Specifically, SGI reported having greater housing needs than SGII. The average score of housing needs for SGI was 2.50 on a 0 to 6 scale while in the average score for SGII was 2.38. This difference in housing needs, however, was of no statistic significance based on the result of a t-test. The biggest difference in needs of the two groups was in long-term care. On a scale of 0 to 6, SGI had an average score of 1.21 while SGII's average rating was 2.27 for this kind of needs. The result of a t-test indicates that the long-term needs of SGI were significantly lower than those of SGII. I did not run a t-test for the difference in health needs, since the answer scale (from 0 to 4) did not meet the t-test criterion, which requires a score scale of at least 0 to 5. Table 2 details the average ratings of the two sample groups for the three different categories of needs.

**Table 2. Overall Needs of the Oldest Old in Broome County**

	Score Scale	SGI		SGII	
		# of respondents	Average Score	# of respondents	Average Score
<b>Housing Needs</b>	0 - 6	53	2.50	55	2.38
<b>Health Needs</b>	0 - 4	48	1.62	57	1.96
<b>Long-term Care Needs</b>	0 - 6	56	1.21	45	2.27
<b>Overall Needs</b>	0 - 16	47	4.51	45	6.04

Note: The number of answers respondents in each category excludes those who did not provide answers to all questions in a category. The comparison of overall needs excludes responses from individuals who did not provide answers to all questions in the three categories.

Consistent with the result regarding overall needs, SGI also were more engaged in social activities than SGII. On a scale of 0 to 10, where 0 represented “never attend any of the five social activities listed” and 10 represented “always attend all five social activities listed,” SGI had an average score of 5.88 while SGII had an average score of 5.12. However, the results of a t-test indicate that this difference in social engagement between the two sample groups was not statistically significant.

**Finding #2: The oldest old who are not getting service from BCOFA reported a higher self-rated health status and overall quality of life than those who receive services.**

Consistent with finding #1, which concludes that SGI have fewer needs than SGII, the scores of self-rated health status and overall quality of life were higher for SGI than those for SGII: 47.83% of SGI reported their health status as good or excellent, compared with 42.42% of SGII. However, the results of a chi-square

test showed that there is not a significant relationship between a respondent's self-rated health status and whether they receive service from BCOFA. See table 3 for detailed distributions of the responses to the question about health status.

**Table 3. Health Status Self-Ratings**

Health Status	% (Number) Excellent	% (Number) Good	% (Number) Fair	% (Number) Poor	Total # of respondents
SGI	10.87%(5)	36.96% (17)	34.78% (16)	17.39% (8)	46
SGII	3.03% (2)	39.39% (26)	48.48% (32)	9.09% (6)	66

The gap between the ratings of the two sample groups in overall quality of life was greater: 64.29% of SGI reported their life quality as good or excellent while only 45.07% of SGII reported the same answer. Please see table 4 for detailed distributions of the responses to the questions about overall life quality.

**Table 4. Overall Quality of Life Self-Ratings**

Life Quality	% (Number) Excellent or Good	% (Number) Fair or Poor	Total # of respondents
SGI	64.29% (27)	35.71% (15)	42
SGII	45.07% (32)	54.93% (39)	71

Note: There were four answer options for the question regarding life quality: excellent, good, fair, and poor. I combined the excellent and good categories and the fair and poor categories so that I would have a large enough number of responses to run a chi-square test.

The results of chi-square test showed that there is a significant relationship between a respondent's self-rated overall quality of life and whether they receive services from BCOFA. Those who are not getting services from BCOFA assessed the quality of their life significantly more favorably than those who receive services.

**Finding #3: The oldest old who are not getting service from BCOFA are less**

**familiar with the services BCOFA provides compared to those who receive services.**

The results of chi-square test showed that there is a relationship between an individual's familiarity of BCOFA and whether he/she receives services from BCOFA. Although 30.19% from SGI reported that they were familiar with BCOFA and the services it provides and 37.74% indicated that they know at least some of the services BCOFA provides, another 30.19% admitted that they have no idea what kind of service BCOFA provides and one SGI respondent had never even heard of BCOFA. In SGII, 33.33% reported being familiar with BCOFA and its services, and 56.67% reported that they were aware of at least some BCOFA services. Only 10% reported that they were unaware of what kind of services BCOFA provides. The results from the chi-square test showed that there is a significant relationship between an individual's familiarity with BCOFA and whether they received service from it. Please see table 5 for detailed distributions of the responses to the question about familiarity with BCOFA.

**Table 5. The Oldest Old's Familiarity with BCOFA in Broome County**

Familiarity	% SGI (Number)	% SGII (Number)
I am familiar with all the services that BCOFA provides	30.19% (16)	33.33% (20)
I know some of the services but not all	37.74% (20)	56.67% (34)
I know BCOFA but I have no idea what kind of service it provides or I have never heard of BCOFA	32.08% (17)	10.00% (6)

**Finding #4: The reasons that the oldest old are not getting service from BCOFA varied. However, the main reason for the oldest old not getting**



**service is that they do not have a need for service at this time.**

The two most common reasons why SGI report they are not receiving service from BCOFA are consistent with the first three findings. The most common reason for not receiving service which was reported by 60.47% of SGI was that they “have no need for service at this time.” However, many respondents noted that this does not mean that they will not need any service in the future. Some respondents reported that they were taken care of by their children or significant other, and they would ask for service from BCOFA if they had to live on their own. “Things could change” as a respondent wrote on his/her survey. The second most frequently selected reason, chosen by 18.60% of respondents in SGI, was that they do not know what kinds of services were available to them. In addition, 11.63% of SGI had received service from BCOFA before, but stopped receiving the service due to multiple reasons, such as not being “satisfied with the service received,” and their “life style is not conducive to service.” Only 4.65% do not get service from BCOFA because they prefer not getting service from government or because the cost of the service is too high. Please see table 6 for detailed frequencies of responses to the question regarding why SGI does not get service from BCOFA.

**Table 6. Reasons for Not Receiving BCOFA Services**

Options	% of Respondents (Number)
I do not have need for service at this time	60.47% (26)
I don't know what kind of service is available for me	18.60% (8)
I prefer not getting service from the government	4.65% (2)
The cost for the service is too high	4.65% (2)
I had service from BCOFA before, but not now	11.63 % (5)

### Recommendations

This study focused on the difference in the needs of the oldest old who are not getting service from BCOFA and those who receive services. Different from former studies focused on the same age group, this study is completely based on responses from the oldest old. Based on my four key findings, I am making recommendations aimed at increasing the number of the oldest old in Broome County getting services from BCOFA. These recommendations include to: 1) use multiple ways to share information about services for the oldest old population and 2) track the needs of oldest old population in Broome County.

#### **Recommendation #1: Use multiple traditional media to share information about services for the oldest old population.**

The first recommendation focuses on promoting BCOFA's services to individuals who are over 85 years old. Finding 3 indicates that people who are not getting service from BCOFA were less familiar with the agency and its services than those who receive services. Moreover according to Finding 4, lack of

awareness about the kinds of service BCOFA provides was the second largest reason that the oldest old do not receive service from BCOFA. These findings highlight the importance of sharing information countywide on BCOFA services available to the oldest old population. Considering the major ways that this population gets information, BCOFA should use multiple traditional media outlets such as the newspaper, TV advertisements, and mail, rather than modern media such as internet or text messages, to promote their agency's services. The response rate to this survey which was higher than expected and suggests that traditional ways of spreading the information are an efficient and effective to reach the oldest old population.

In order to share the information on services available to the oldest old population, BCOFA can occasionally mail flyers, which describe their programs' services, eligibility requirements, costs, benefits, and contact numbers. In summary, people cannot use a service of which they are not even aware. BCOFA should use multiple ways to keep the oldest old population informed of the services available in order to improve their accessibility to these services.

**Recommendation #2: Track the needs of the oldest old who are not getting service from BCOFA in Broome County.**

The second recommendation is focused on service coverage over the next several years. For the group of the oldest old who are not getting service from BCOFA, although 60.47% declared no need for service at this time, many of them indicated that they may need service in the future. BCOFA should track the

needs of this population so that the agency is able to respond to changes in the needs when they occur. BCOFA should annually survey the oldest old who are not receiving services to ask them about their needs. The agency should compare the results from future surveys with the findings in this research to track any changes in needs of the oldest old population.

### **Conclusion**

The oldest old in Broome County who do not receive services from BCOFA demonstrated lower needs for service and are more socially involved compared to those who receive services. Also, they considered themselves to be in better health and have a higher life quality than those who receive services. In order to respond to changes in their needs in the future, BCOFA should keep sharing information about available services as well as tracking of the needs of this population.

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## Appendix A

Date: March 13, 2012  
To: Xiaofei Jiang, CCPA  
From: Anne M. Casella, CIP Administrator  
Human Subjects Research Review Committee  
Subject: Human Subjects Research Approval

Protocol Number: 1939-12

Protocol title: Serving the oldest old: Improve service percentage to senior citizens over 85 years old in Broome County

Your project identified above was reviewed by the HSRRC and has received an expedited approval pursuant to the Department of Health and Human Services (DHHS) regulations, 45 CFR 46.110(7). The Informed Consent document has been approved – for a period of one year – with the following Waivers: 46.116 (4) Waiver alternate treatment, 46.116 (6) Waiver of requiring whether medical treatments are available if injury occurs

An expedited status requires that you will be required to submit a Continuing Review application annually as outlined by Federal Guidelines: 46.109 (e) An IRB shall conduct continuing review of research covered by this policy at intervals appropriate to the degree of risk, but not less than once per year, and shall have authority to observe or have a third party observe the consent process and the research.

If your project undergoes any changes these changes must be reported to our office prior to implementation, using the form listed below:  
[http://humansubjects.binghamton.edu/2009\\_Forms/012\\_Modification%20Form.rtf](http://humansubjects.binghamton.edu/2009_Forms/012_Modification%20Form.rtf)

Principal Investigators or any individual involved in the research must report any problems involving the conduct of the study or subject participation. Any problems involving the recruitment and consent processes or any deviations from the approved protocol should be reported in writing within five (5) business days as outlined in Binghamton University –Human Subjects Research Review Office - Policy and procedures IX.F.1 Unanticipated problems/adverse event/complaints. We also require that the following form be submitted.  
<http://humansubjects.binghamton.edu/Forms/Forms/Adverse%20Event%20Form.rtf>

University policy requires you to maintain as a part of your records, any documents pertaining to the use of human subjects in your research. This includes any information or materials conveyed to, and received from, the

subjects, as well as any executed consent forms, data and analysis results. These records must be maintained for at least six years after project completion or termination. If this is a funded project, you should be aware that these records are subject to inspection and review by authorized representative of the University, State and Federal governments.

Please notify this office when your project is complete by completing and forwarding to our office the following form:  
<http://humansubjects.binghamton.edu/Forms/Forms/Protocol%20Closure%20Form.rtf>

Upon notification we will close the above referenced file. Any reactivation of the project will require a new application.

This documentation is being provided to you via email. A hard copy will not be mailed unless you request us to do so.

Thank you for your cooperation, I wish you success in your research, and please do not hesitate to contact our office if you have any questions or require further assistance.

***Diane Bulizak, Secretary***  
*Human Subjects Research Review Office*  
*Biotechnology Building, Room 2205*  
*85 Murray Hill Rd.*  
*Vestal, NY 13850*  
[\*dbulizak@binghamton.edu\*](mailto:dbulizak@binghamton.edu)  
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## Appendix B

### Broome County Office for Aging Senior Needs Survey 2012

**For each of the following areas of concern, please indicate if you need assistance with the listed items:**

**1. Housing Needs: Do you need any assistance** Always      Sometimes      Never

- |   |     |     |     |
|---|-----|-----|-----|
| (1) Cleaning/tidying your home?                                     | ___ | ___ | ___ |
| (2) Finding help with home maintenance or repairs?                  | ___ | ___ | ___ |
| (3) Performing household chores (shoveling, mowing, small repairs)? | ___ | ___ | ___ |
| (4) If you have any other housing needs , please tell us here:      |     |     |     |

**2. Health needs: Do you need any assistance** Always      Sometimes      Never

- |   |     |     |     |
|---|-----|-----|-----|
| (5) Picking up prescriptions?   | ___ | ___ | ___ |
| (6) Understanding health insurance?   | ___ | ___ | ___ |
| If you have any other needs to improve your health status, please tell us here: |     |     |     |

**3. Daily activity needs: Do you need any assistance** Always      Sometimes      Never

- |  |     |     |     |
|--|-----|-----|-----|
| (7) Making your own meals?   | ___ | ___ | ___ |
| (8) Shopping for your food?  | ___ | ___ | ___ |
| (9) Finding transportation (such as a car ride or public transit) to get to your doctor, shopping, etc.? | ___ | ___ | ___ |
| (10) If you have any other needs that related to your daily activities, please tell us here:             |     |     |     |

**4. Social needs: Are you currently spending time doing the following things?** Often      Sometimes      Never

- |  |     |     |     |
|--|-----|-----|-----|
| (11) Participating in a hobby such as art, gardening or music?       | ___ | ___ | ___ |
| (12) Participating in religious or spiritual activities with others? | ___ | ___ | ___ |
| (13) Visiting with family in person or on the phone?                 | ___ | ___ | ___ |
| (14) Visiting with friends in person or on the phone?                | ___ | ___ | ___ |

(15) Attending movies, sport events or group events? \_\_\_\_\_

(16) If you have any other needs to enrich your social life, please tell us here:

---

**5. Are there other areas you need help with, or other things you would like to tell us about? Please tell us here:**

---

**6. Overall, please circle your health status:**

- a) Excellent
- b) Good
- c) Fair
- d) Poor

**7. Overall, please circle how you would rate your quality of life?**

- a) Excellent
- b) Good
- c) Fair
- d) Poor

**8. Who do you turn to if you need help? (Such as being given a ride somewhere, having someone to cook for you, shop for you, or do a home repair for you.)**

	Always	Sometimes	Never
a) Your family	_____	_____	_____
b) Your friends	_____	_____	_____
c) Your neighbors	_____	_____	_____
d) A church or spiritual group	_____	_____	_____
e) A non-profit or community agency	_____	_____	_____
f) Other: _____			

**9. Are you familiar with Office for Aging and the services they provide? (check all that apply)**

- a) Yes, I am familiar with all the services that Office for Aging provides
- b) I know some of the services but not all
- c) I know the Office for Aging but I have no idea what services they are providing
- d) I have never heard about the Office for Aging

**10. If you are not getting services from Office for Aging, can you tell us why (check all the reasons apply)?**

- a) I have no need for service at this time
- b) I don't know what kind of service or benefits are available for me
- c) I prefer not getting any service from the government
- d) The cost of the service is too high
- e) I had received service from OFA before, but not recently.  
(Please tell us why: \_\_\_\_\_)
- f) Other (Please tell us here):

**Appendix C**

**Broome County Office for Aging Senior Needs Survey 2012**

**For each of the following areas of concern, please indicate if you need assistance with the listed items:**

<b>11. <u>Housing Needs</u>: Do you need any assistance</b>	Always	Sometimes	Never
(17) Cleaning/tidying your home?	___	___	___
(18) Finding help with home maintenance or repairs?	___	___	___
(19) Performing household chores (shoveling, mowing, small repairs)?	___	___	___
(20) If you have any other housing needs , please tell us here:			

---

<b>12. <u>Health needs</u>: Do you need any assistance</b>	Always	Sometimes	Never
(21) Picking up prescriptions?	___	___	___
(22) Understanding health insurance?	___	___	___
If you have any other needs to improve your health status, please tell us here:			

---

<b>13. <u>Daily activity needs</u>: Do you need any assistance</b>	Always	Sometimes	Never
(23) Making your own meals?	___	___	___
(24) Shopping for your food?	___	___	___
(25) Finding transportation (such as a car ride or public transit) to get to your doctor, shopping, etc.?	___	___	___
(26) If you have any other needs that related to your daily activities, please tell us here:			

---

<b>14. <u>Social needs</u>: Are you currently spending time doing the following things?</b>	Often	Sometimes	Never
(27) Participating in a hobby such as art, gardening or music?	___	___	___
(28) Participating in religious or spiritual activities with others?	___	___	___
(29) Visiting with family in person or on the phone?	___	___	___
(30) Visiting with friends in person or on the phone?	___	___	___
(31) Attending movies, sport events or group events?	___	___	___

(32) If you have any other needs to enrich your social life, please tell us here:

---

**15. Are there other areas you need help with, or other things you would like to tell us about? Please tell us here:**

---

**16. Overall, please circle your health status:**

- e) Excellent
- f) Good
- g) Fair
- h) Poor

**17. Overall, please circle how you would rate your quality of life?**

- a) Excellent
- b) Good
- c) Fair
- d) Poor

**18. Who do you turn to if you need help? (Such as being given a ride somewhere, having someone to cook for you, shop for you, or do a home repair for you.)**

	Always	Sometimes	Never
a) Your family	_____	_____	_____
b) Your friends	_____	_____	_____
c) Your neighbors	_____	_____	_____
d) A church or spiritual group	_____	_____	_____
e) A non-profit or community agency	_____	_____	_____
f) Other: _____			

**19. Are you familiar with Office for Aging and the services they provide? (check all that apply)**

- e) Yes, I am familiar with all the services that Office for Aging provides
- f) I know some of the services but not all
- g) I know the Office for Aging but I have no idea what services they are providing
- h) I have never heard about the Office for Aging

## Appendix D

### Additional Descriptive Statistics for Sample Group I

<b>1. <u>Housing Needs:</u> Do you need any assistance</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
(1) Cleaning/tidying your home?	13.21% (7)	26.42% (14)	43.40% (23)
(2) Finding help with home maintenance or repairs?	18.87% (10)	35.85% (19)	20.75% (11)
(3) Performing household chores (shoveling, mowing, small repairs)?	15.09% (8)	26.42% (14)	33.96% (18)
<b>2. <u>Health needs:</u> Do you need any assistance</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
(1) Picking up prescriptions?	11.32% (6)	11.32% (6)	75.47% (40)
(2) Understanding health insurance?	15.09% (8)	35.85% (19)	49.06% (26)
<b>3. <u>Daily activity needs:</u> Do you need any assistance</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
(1) Making your own meals?	12.50% (7)	12.50% (7)	75.00% (42)
(2) Shopping for your food?	14.29% (8)	14.29% (8)	71.43% (40)
(3) Finding transportation (such as a car ride or public transit) to get to your doctor, shopping, etc.?	10.71% (6)	19.64% (11)	67.86% (38)
<b>4. <u>Social needs:</u> Are you currently spending time doing the following things?</b>	<b>Often</b>	<b>Sometimes</b>	<b>Never</b>
(1) Participating in a hobby such as art, gardening or music?	25.00% (13)	44.23% (23)	30.77% (16)
(2) Participating in religious or spiritual activities with others?	42.31% (22)	28.85% (15)	28.85% (15)
(3) Visiting with family in person or on the phone?	69.23% (36)	19.23% (10)	11.54% (6)
(4) Visiting with friends in person or on the phone?	51.92% (27)	32.69% (17)	15.38% (8)
(5) Attending movies, sport events or group events?	19.23% (10)	48.08% (25)	32.69% (17)

## Appendix E

### Additional Descriptive Statistics for Sample Group II

<b>1. <u>Housing Needs:</u> Do you need any assistance</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
(1) Cleaning/tidying your home?	20.00% (11)	49.09% (27)	32.73% (18)
(2) Finding help with home maintenance or repairs?	20.00% (11)	34.55% (19)	45.45% (25)
(3) Performing household chores (shoveling, mowing, small repairs)?	27.27% (15)	21.82% (12)	50.91% (28)
<b>2. <u>Health needs:</u> Do you need any assistance</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
(1) Picking up prescriptions?	17.54% (10)	26.32% (15)	56.14% (32)
(2) Understanding health insurance?	14.04% (8)	40.35% (23)	45.61% (26)
<b>3. <u>Daily activity needs:</u> Do you need any assistance</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
(1) Making your own meals?	8.89% (4)	33.33% (15)	57.78% (26)
(2) Shopping for your food?	35.56% (16)	20.00% (9)	44.44% (20)
(3) Finding transportation (such as a car ride or public transit) to get to your doctor, shopping, etc.?	26.67% (12)	31.11% (14)	42.22% (19)
<b>4. <u>Social needs:</u> Are you currently spending time doing the following things?</b>	<b>Often</b>	<b>Sometimes</b>	<b>Never</b>
(1) Participating in a hobby such as art, gardening or music?	18.97% (11)	32.76% (19)	48.28% (28)
(2) Participating in religious or spiritual activities with others?	34.48% (20)	32.76% (19)	32.76% (19)
(3) Visiting with family in person or on the phone?	56.90% (33)	31.03% (18)	12.07% (7)
(4) Visiting with friends in person or on the phone?	50.00% (29)	34.48% (20)	15.52% (9)
(5) Attending movies, sport events or group events?	12.07% (7)	36.21% (21)	41.38% (24)