

Contract No.: 040530
MPR Reference No.: 8861-800

MATHEMATICA
Policy Research, Inc.

Comment [YIH1]: Site6 created with
RepGen v2.0r167 using data with a
creation date of 1/26/2003 6:37:33 PM

**The Community
Partnership for Older
Adults Program: A
Descriptive Analysis of
Older Adults in
Houston/Harris County,
Texas**

Final Report

January 31, 2003

*William Black
Randall Brown
Karen CyBulski
John Hall*

Submitted to:

The Robert Wood Johnson Foundation
P.O. Box 2316
College Road East and Rt. 1
Princeton, NJ 08543-2316

Project Officer:

Nancy Fishman

Submitted by:

Mathematica Policy Research, Inc.
P.O. Box 2393
Princeton, NJ 08543-2393
Telephone: (609) 799-3535
Facsimile: (609) 799-0005

Project Director:

Randall Brown

ACKNOWLEDGMENTS

The authors gratefully acknowledge the efforts of the people who helped make this report possible. Elise Bolda of the University of Southern Maine and Nancy Fishman and Jane Lowe of the Robert Wood Johnson Foundation provided helpful comments in the design stage and on the initial draft. At MPR, Beth Stevens provided valuable internal review of our draft, and Walt Brower and Patricia Ciaccio edited the manuscript. Carlo Caci displayed remarkable ingenuity and skill through his implementation of a computer system that automated the report production process. Angela Richardson and Carol Razafindrakoto provided a great deal of essential programming to support report analyses and production. Bryan Gustus provided outstanding secretarial assistance, with the help of Monica Capizzi-Linder, Cathy Harper, and Marjorie Mitchell. Karen Sautter made a highly valuable contribution to the report production process. We especially thank the 5,298 survey respondents who graciously answered our questions, and the survey supervisors and interviewers who monitored and conducted the interviews.

CONTENTS

Chapter	Page
EXECUTIVE SUMMARY.....	v
I INTRODUCTION.....	1
II THE COMMUNITY PARTNERSHIPS FOR OLDER ADULTS PROGRAM	4
A. PROGRAM DESCRIPTION.....	4
B. PROGRAM EVALUATION.....	5
1. Survey of Older Adults	5
2. Implementation Analysis	6
3. Outcomes Analysis	7
III SURVEY METHODOLOGY.....	8
A. TARGET POPULATION.....	8
B. SURVEY FIELDING	9
C. RESPONSE RATES	10
D. SAMPLE SIZES	10
IV SURVEY RESULTS.....	11
A. METHODOLOGY.....	11
B. SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS (TABLE 1).....	12
C. MEDIA SOURCES (TABLE 2).....	14
D. COMMUNITY SITUATION (TABLE 3).....	15
E. SOCIAL SITUATION (TABLE 4)	17

Chapter	Page
F. LIVING AND FINANCIAL SITUATION (TABLE 5).....	18
G. TRANSPORTATION (TABLE 6)	20
H. HEALTH STATUS (TABLE 7).....	20
I. FUNCTIONAL LIMITATIONS AND UNMET NEEDS (TABLE 8).....	21
J. SERVICES: INFORMATION SOURCES (TABLE 9)	22
K. SERVICES: COVERAGE AND COST (TABLE 10)	23
L. AVAILABILITY AND USE OF SUPPORT SERVICES (TABLE 11)	26
M. AVAILABILITY AND USE OF CUSTODIAL/HOUSING SERVICES (TABLE 12)	28
N. REASONS FOR INABILITY TO ACCESS SERVICES (TABLE 13)	30
O. COMMUNITY-SPECIFIC QUESTIONS (TABLE 14)	30
 V DISCUSSION	 32
A. INFORMATION GAPS IN LONG-TERM CARE SERVICES	32
B. UNMET NEEDS.....	33
C. UNIQUE CHARACTERISTICS OF THIS SITE.....	34
 REFERENCES	 36

EXECUTIVE SUMMARY

As the average life span of Americans increases and members of the baby boom generation become senior citizens, the demands on communities for information about long-term care and for services will intensify. Unfortunately, few communities have established a long-term care system that is able to meet even current demands for either information or services. In large part, the problem is that, rather than a long-term care system, most communities have an amalgam of independent entities and organizations, each of which provides a particular service, and each of which has limited information about other locally available services. Most consumers have little knowledge or awareness of long-term care issues, and, when the need arises for such services, have no idea where to go to obtain information.

The Robert Wood Johnson Foundation has established the Community Partnerships for Older Adults program to help communities begin to address these critical needs. Under this program, the Foundation has awarded development grants of \$150,000 to community-based partnerships in 13 geographic areas to help the partnerships develop plans to improve existing systems of long-term care and support services. These partnerships are composed of service providers, advocacy groups, public agencies, and other local stakeholders in the community. In January 2004, eight of the partnerships will receive \$750,000 implementation grants to help bring their plans to fruition.

To aid the 13 grantees in their planning efforts, and to establish a preintervention benchmark to be used to assess the grantees' progress, the Foundation funded a survey of roughly 400 older adults in each of the communities. This survey, part of the overall evaluation of the program that Mathematica Policy Research, Inc. is conducting, was conducted by telephone, using a random-digit-dialing methodology to identify and interview adults age 50 and older. Half the sample in each area consisted of "vulnerable" adults, defined as adults whose characteristics make them more likely than most older adults to need long-term care services for themselves or for a family member during the next few years. These characteristics include (1) being age 75 or older, or (2) being age 60 or older and having a chronic illness or an impairment in functioning. The survey obtained data on the older adults' characteristics, health and functioning, knowledge and awareness of long-term care issues and service availability, and need for information and services. This report discusses the survey results on adults in the community partnership of Houston/Harris county in Texas.

We find that the older residents of Houston and Harris county are more likely to have unmet needs for help with daily living tasks and less likely to know about the availability of long term care services locally than are the older residents of the other grantee communities. The older adults in the two counties also have less knowledge about long-term care costs or insurance. And, while their incomes are not lower than those of older adults elsewhere, Houston's older adults are more likely to have found themselves unable to pay for some basic necessities (food, health care, utility bills, rent). Nearly half of them believe that the community must do "a lot more" to address the needs of the elderly.

Among the many estimates provided, we highlight the following:

- One-fifth lack a high school education, and 31 percent of vulnerable adults were unable to afford at least one item necessary for daily living (for example, rent, prescription drugs, or food) at some time during the past year. One-third had annual incomes of less than \$20,000; one-fourth of vulnerable adults do not have any prescription drug coverage. One-third believe they will not have enough money to take care of themselves for the rest of their lives, compared with about one-fourth of older adults in the other grantee sites.
- More than one-fourth of the older adults describe their health as fair or poor (similar to what is observed in the other grantee sites). One in six vulnerable adults have problems or need help with at least one activity of daily living, and nearly one-third report some limitation in physical functioning.
- About 1 in 8 vulnerable adults are unable to leave their homes as often as they would like to because of health or transportation problems. Vulnerable older adults in this community are more likely than those in the other communities to gather in religious settings.
- About 11 percent of older adults have unmet needs for personal assistance with daily activities, and over one-fourth of those who are dependant on unpaid assistance believe it is at least somewhat likely that this critical help will not be available next year. If unpaid assistance is not available, 12 percent of those who rely on this help say they would move to assisted-living or to a nursing home.
- One in six of older adults in Houston do not know the cost of nursing home care and one in seven do not know what personal assistance services cost; one-third have not heard about long-term care insurance, and only 13 percent have this type of insurance. More than half do not know whether Medicaid covers personal assistance services.
- About half of the older adults have used the Internet; only 26 percent of vulnerable adults have ever used it. They watch television and listen to the radio more frequently than they read the newspaper.
- Ignorance about the availability of long-term care support services is widespread; more than three in ten do not know whether their community has a telephone helpline, door-to-door transportation assistance, or housekeeping services. At least one in five do not know whether various types of custodial or housing assistance are available (for example, home repair services, adult day programs, senior centers, and hospice care).
- Nearly half say their community needs to do a lot more to address the needs of the frail elderly, yet only one-fourth of the area's older adults would be willing to pay additional taxes for this purpose. Only about one-fourth of Houston's older adults rate their community as an excellent place to live, compared to 41 percent of older adults in the other 12 sites.

The characteristics of the older adults in Houston/Harris county suggest that the partnership will have unique challenges in educating consumers about local long-term care and locally available services. Our hope is that this report will be useful to the partnership in planning its activities and interventions to improve long-term care awareness and service availability, and will serve as a springboard and guide for the partnership's own data collection efforts.

I. INTRODUCTION

The provision of long-term care services is an increasingly important issue for communities because of medical advances that increase the average lifespan of Americans and because of recent demographic trends. The demand for long-term care is expected to grow substantially during the next several decades, as the number of elderly people with disabilities who require long-term care is projected at least to double (U.S. General Accounting Office 1998). At the same time, the supply of family caregivers may dwindle as a result of increased childlessness among current middle-aged women (the future elderly of the next 20 to 40 years) relative to previous generations, and possibly, to increased participation in the paid workforce by women (historically the main source of informal care) (Wolf 2001). The continued supply of sufficient numbers of paid caregivers is also in question, as evidenced by recent research (National Council on the Aging 2001), and current nursing shortages and declining enrollments in nursing schools.

Knowledge about long-term care services is integral to obtaining needed services but is difficult to obtain. The fragmented nature of long-term care service provision makes it difficult for providers to communicate and coordinate care effectively. These services are delivered by a complex mosaic of businesses, institutions, and other providers of health care, supportive, and custodial/housing services instead of through a cohesive system. Therefore, long-term care consumers must be knowledgeable about the long-term care options available locally to obtain the services that best meet their needs, a difficult task given the lack of a single, commonly used, authoritative source of such information. This lack of information (1) impedes the ability of those currently in need of long-term care for themselves or others to make good decisions and obtain services, and (2) results in potential future long-term care consumers being less prepared when long-term care services become necessary.

In addition to the impediments posed by lack of knowledge and awareness of long-term care services and issues, many older adults with disabilities face other severe barriers to finding and retaining affordable and satisfactory long-term care. Because Medicaid covers only the very poor, it provides no help to most seniors with long-term care needs until they become impoverished by “spending down” their assets to pay for long-term care. Seniors who need long-term care have few other options—Medicare does not cover such care, few elderly people have purchased private insurance for it, and paying out of pocket for care is expensive (Feder et al. 2000). The majority of home- and community-based long-term care services are thus provided by family or friends who do so at a heavy economic, emotional, and physical cost to themselves (Feder et al. 2000; Schulz and Beach 1999; Ory et al. 1999; and Arno et al. 1999). Moreover, despite this unpaid assistance, many community-dwelling elderly people report having unmet needs for supportive services (Allen and Mor 1997).¹

In response to the concern over communities’ ability to accommodate the increasing needs of the elderly, the Robert Wood Johnson Foundation has launched the Community Partnerships for Older Adults (CPOA) Program. This program, described in detail below, has awarded grants to 13 community-based partnerships across the country to develop and implement plans to improve long-term care service delivery in their communities.

This report presents descriptive information about adults age 50 and over in one of these communities—Houston/Harris county, Texas—from the Survey of Older Adults, a component of

¹Allen and Mor (1997) found that as many as 1 in 5 adults age 65 and over with ADL limitations have unmet needs for certain Activities of Daily Living (ADL) (for example, 17 percent have unmet needs for transferring, and 23 percent have unmet needs for bathing). One in 3 seniors with ADL limitations have unmet needs for certain Instrumental Activities of Daily Living (IADL) (for example, 30 percent have unmet needs for heavy housekeeping, and 26 percent have unmet needs for transportation).

the CPOA study (see Section II.B: Program Evaluation for a summary of the evaluation goals and components). The goal of this and similar reports for each of the other 12 partnerships is to provide information that may be helpful to the communities as they develop a plan to improve long-term care information and service delivery in their community. This report will not answer all of the partnership's questions about the characteristics, needs, or long-term care awareness of older adults in their community. Rather, it is hoped that this report will enable the partnership to identify some important issues and sharpen the questions the partnership will want to address in data collection efforts of its own.

II. THE COMMUNITY PARTNERSHIPS FOR OLDER ADULTS PROGRAM

A. PROGRAM DESCRIPTION

Community Partnerships for Older Adults is an initiative of the Robert Wood Johnson Foundation. Its purpose is to help communities develop and implement community-wide plans to improve care and support for older adults through local public-private partnerships. The program will make up to \$20 million available to approximately 30 grantee community partnerships over eight years. Phase I has already been initiated—development grants of \$150,000, which were awarded in August 2002, are intended to help individual community partnerships develop plans to improve existing systems of long-term care and supportive services. Implementation grants of \$750,000, which are scheduled to be awarded in January 2004 to eight of the development grantees, will allow the partnerships to continue their comprehensive efforts to provide better care and support to vulnerable adults and their caregivers.

Community-based partnerships know people and institutions in their communities well. Therefore, they can understand what people in the community need and can promote systems reform. Community-based partnerships, by bringing together key groups—such as social service and health organizations, nonprofit and public agencies, private businesses, community leaders, government officials, and consumers—are in the best position to identify what local residents lack in terms of availability of long-term care services and information about them.

The overarching goal of the Community Partnerships for Older Adults program is to promote improvements in the organization and delivery of long-term care and supportive services. Specifically, the program is intended to:

1. Mobilize the community to improve long-term care and supportive services systems by:
 - Creating greater awareness among civic leaders, the business community, and the public about the implications of an aging society
 - Helping community members become more knowledgeable consumers of long-term care and supportive services, as well as better decision makers
 - Strengthening community partnerships

2. Improve access to long-term care and supportive services by:
 - Providing community members with information that is easy to find and understand, in a timely and responsive manner
 - Increasing communication and coordination among the community's health, long-term care, and support services providers
 - Leveraging public and private resources in response to the community's identified needs

3. Promote a better quality of life and quality of care for older adults and their caregivers by:
 - Enhancing choices available to older adults and their ability to make these choices wisely
 - Responding to a diverse range of needs of individual caregivers

B. PROGRAM EVALUATION

The evaluation will address three main goals: (1) provide baseline descriptive information on each community's residents, age 50 and older, through the Survey of Older Adults; (2) describe how the program was implemented; and (3) analyze the outcomes of the Community Partnership Grants. This report provides the descriptive information for one of the communities (Houston/Harris county, Texas). Reports over the next three years will address the other goals.

1. Survey of Older Adults

The Survey of Older Adults is a key source of descriptive quantitative information about people age 50 and older who live in each partnership's target area and has three main goals. First, results from the survey (the foundation of this report) will give sites baseline data for the

community's population age 50 and older, and these data should allow the community to target the partnership's activities in the most effective way. The survey will produce results that are representative of the population of older adults in each site (see Chapter III for additional detail on the survey methodology). Second, the survey is designed to provide a springboard for sites' own data collection efforts. Finally, should RWJF choose to fund a second phase of the evaluation, the survey could serve as a baseline for future analysis of the impact of the partnerships.

The survey collected information that is both general and specific to long-term care. General community-level information collected included the demographics, media use, social situation, and health status of the community's population. Information specific to long-term care included (1) public awareness of issues related to long-term care, (2) public perceptions of long-term care service availability and information sources, (3) the types and level of unmet need for long-term care in a community, and (4) barriers community members met when trying to obtain needed care.

2. Implementation Analysis

The implementation analysis will involve site visits to grantee communities, supplemented by meetings with representatives of each partnership at the annual meetings. The information we collect during the site visits will enable us to (1) describe the partnership's membership—their relationships, their level of commitment, and the environment in which they operate; (2) obtain information on what they did and accomplished; (3) obtain partnership members' views on what they see as the partnership's major successes or failures; and (4) explain the reasons for partnership successes and failures.

3. Outcomes Analysis

The outcomes analysis will address the partnership's impact on target outcomes, such as the availability and dissemination of information about long-term care and the availability and quality of long-term care services. This analysis will be based primarily on data from three sources: (1) community service inventories, (2) case manager assessments, and (3) tracking of media and legislative activity. For the community service inventories, each site will periodically provide information about the long-term care service availability and capacity in its community. Where possible, we will link changes in these reported levels to partnership activities. Case manager assessments are designed to periodically provide an impartial perspective on the service system. In each grantee community, we will identify three professional case managers who are independent of the grantee. We will ask these case managers to develop a care plan for hypothetical clients periodically during the evaluation. The information the case manager provides will help us determine whether the availability of information related to long-term care and access to long-term care services have changed over time. Finally, we will conduct media reviews and track legislative developments to identify whether media coverage and legislative activity related to long-term care changed because of the partnership's activities.

III. SURVEY METHODOLOGY

The telephone survey was designed to provide a snapshot of older adults' health demographic characteristics, awareness of long-term care issues and service availability, and use of services in the grantee communities. When possible, questions were drawn from the Advantage Initiative for Supportive Communities Survey to enable eventual comparisons across the two studies, since their objectives overlap somewhat. Other questions were drawn from the Harvard Survey or were newly created specifically for this project. The topic areas for the survey included residents' attitudes toward their community, living situation, awareness of long-term care services available locally, use of and unmet need for long-term care services, health status, and utilization of health care services. Other topic areas were residents' ability to perform activities of daily living (ADLs) and instrumental activities of daily living (IADLs) without assistance, transportation, caregiving, health insurance, and demographics. On average, the survey took 24 minutes to complete. Appendix B gives more details about the survey methodology.

A. TARGET POPULATION

In each grantee community, we interviewed 350 to 400 residents age 50 or older. Subpopulations of interest within this group included "vulnerable" people and "decision makers." To qualify as vulnerable, a person had to be age 60 or older and had to meet at least one of the following criteria: needed help bathing; used a cane, walker, or wheelchair; rated their health as fair or poor; was afraid to be alone for more than two hours; had a chronic illness; or was of advanced age (75 or older). A decision maker was identified as someone age 50 or older who makes decisions about the living arrangements or assistance with personal care for a vulnerable person in the grantee community.

Our target was to have at least half the respondents be people who met the vulnerable criteria or who were decision makers, because long-term care issues would be more salient for them and they would be more likely to have some experience with the local system. To identify whether a household had an eligible respondent, we first asked the person who answered the telephone whether anyone in the household was age 50 or older and, if so, to identify all such people. Using our criteria, we classified each person over age 50 as vulnerable or nonvulnerable. At the beginning of survey fielding, the computer program used for the survey selected one household member to be interviewed at random from among all vulnerable and nonvulnerable members of the household. As the survey progressed, we monitored the number of vulnerable and nonvulnerable respondents and adjusted the selection of household members to ensure that the vulnerable and nonvulnerable subgroups each made up approximately half the total survey sample in a given site. Appendix B contains additional details about the selection of household members.

B. SURVEY FIELDING

Interviewing began on June 26, 2002, and continued for 20 weeks, ending on November 17, 2002. Respondents were identified through a random-digit-dialing (RDD) sampling methodology, with the telephone numbers being generated by a vendor specializing in such samples. In this site, 22 percent of the households screened contained someone eligible to complete the interview. The rate for all sites combined was 27 percent and varied across sites from 19 to 45 percent.

If someone in the household was selected as the eligible respondent but was unable to participate meaningfully in the interview as the result of a cognitive, physical, or sensory

impairment, we identified and interviewed a proxy respondent who was knowledgeable about the person. Overall, we conducted only 3.3 percent of all interviews with a proxy.

To increase the response rate without making the fielding period longer, we sent letters about 12 weeks into the fielding period offering identified, eligible individuals \$25 to complete the survey. The offers were sent to respondents who had completed the telephone screen and been selected for the survey but had not yet completed the interview. We found addresses for those with listed phone numbers by using reverse telephone directories, and we were able to locate a full name for 544 of the eligible sample members. For these cases, we enclosed a check for \$25 and encouraged the respondent to call us on the project's toll-free telephone number to complete the interview. For those sample members whose name was not listed in the directory, we sent a letter offering them \$25 if they would call us on our toll-free number and complete the interview.

C. RESPONSE RATES²

Approximately 56 percent of eligible sample members in Houston/Harris county completed the survey. The response rate over all 13 sites was 63 percent and ranged from 53 to 71 percent across the sites.

D. SAMPLE SIZES³

We completed 455 interviews with older adults in Houston/Harris county, with 191 being vulnerable adults. Across all sites combined we completed 5,298 interviews, with 2,442 being vulnerable people.

²See Appendix B for additional detail.

³See Appendix B for additional detail.

IV. SURVEY RESULTS

Here, we organize the survey findings by substantive area. First, we briefly describe the methodology used to generate, test, and present the results.

A. METHODOLOGY

In each table, we present the averages of the survey variables for Houston/Harris county, as well as the average across the other 12 sites to illustrate ways in which this site is unique. We present averages separately for the vulnerable and nonvulnerable populations, as well as overall. To reflect accurately the population of older adults in Houston/Harris county and in the other 12 sites, we weighted the data to account for the unequal probabilities of selection and differential nonresponse and telephone service availability. (Appendix B contains a detailed explanation of the weighting methodology.) Finally, since there were some questions we could ask only of a small subset of survey respondents, we do not present results for a given variable if the sample size was smaller than 10.⁴

We performed hypothesis tests to determine whether the estimates for Houston/Harris county are significantly different from the average across the other 12 sites. These tests allow the reader to ascertain whether observed differences between Houston/Harris county and those of the other 12 sites could be simply chance differences due to the modest sample size or indicate a true difference between this site and the others. We performed these tests for the full sample and

⁴For example, questions about satisfaction with a particular service are asked only of service users, which could be limited to a small number of survey respondents.

for the subsamples of vulnerable and nonvulnerable adults. In addition, these tests take into account the survey design effects due to weighting.⁵

For each of the estimated sample averages, we also present a range that we are confident contains the true averages for the entire population of older adults. Appendix C displays 95 percent confidence intervals for all estimates in the survey tables. In presenting the results, we collapsed certain response categories for some variables when we could do so without losing important information. The tables in Appendix C present results for the uncollapsed categories.

Census data for 2000 show the population age 50 and over in Houston/Harris county to be about 687,900. To estimate the *number* of residents exhibiting a particular characteristic, multiply this total by the estimated proportion exhibiting the characteristic. To estimate the number of vulnerable adults with a particular characteristic, multiply the estimated number of vulnerable individuals by the proportion estimated in the tables. Nearly half (36 percent) of Houston/Harris county older adults age 50 and over are classified as vulnerable, implying that there are approximately 247,644 [(0.36)*(687,900 adults age 50 and over)] vulnerable older adults in this site.

B. SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS (TABLE 1)

Overall, about *16 percent of the older adult population (that is, adults age 50 and over) in Houston/Harris county are over age 75, three-fourths are white, and slightly over half are female.* About 13 percent of older adults are age 75 to 84, and 3 percent are age 85 or older.

⁵These hypothesis tests are chi-squared tests of whether the distribution of a particular categorical variable for this site is significantly different from the distribution for the other 12 sites. If any of the cells have zero frequency, the tests are not valid and are suppressed. Also, no hypothesis tests are conducted for *overall* distributions on age, race, ethnicity, or gender because sample observations were weighted to match census totals on these variables. Tests of equivalence of distributions on these variables for *subsets* of the population are valid, however.

Nearly all older adults in this site describe themselves as either white (73 percent) or black (17 percent), with a small proportion also specifying American Indian or Alaskan Native (3 percent). About 16 percent say they are Hispanic.

Approximately one-third of the older adults in this site are unmarried, one-fifth lack a high school education, and two-thirds are unemployed or out of the labor force. Half of the older adults in this site have only a high school education (28 percent) or less (20 percent). Those not working are either unemployed or an unpaid homemaker (38 percent), retired (14 percent), or disabled (4 percent).

Overall, about *1 in 3 adults in this site earn less than \$20,000 per year, 6 percent of vulnerable adults lack health insurance, and one-fourth of vulnerable adults do not have prescription drug coverage.* Low-income adults in this site are split between those earning \$10,000 to \$19,999 (18 percent) and those making less than \$10,000 (14 percent). Although most vulnerable adults are enrolled in Medicare (80 percent) and/or Medicaid (23 percent), 6 percent of them have no health insurance coverage. The fact that 26 percent of vulnerable adults lack prescription drug coverage, coupled with their low incomes, suggests that many vulnerable older adults may not be able to afford needed medication.

The vulnerable population is older than the nonvulnerable adult population, but surprisingly, does not have a higher proportion of women. The age differences reflect the methodology we used to categorize survey respondents as vulnerable or nonvulnerable (Chapter III). Women make up 54 percent of both the vulnerable and nonvulnerable population despite their greater longevity.

Vulnerable adults in this site are also less likely to be married or employed than their nonvulnerable counterparts, and they have lower education and income levels. Approximately 51 percent of vulnerable adults are currently married, compared to 71 percent of nonvulnerable

adults. They are also more likely to be widowed (31 percent, versus 8 percent for nonvulnerable adults). Only 19 percent of vulnerable adults are under age 65, whereas 83 percent of nonvulnerable adults are, so it is not surprising that vulnerable adults are much less likely than nonvulnerable adults to be employed full-time (11 percent, versus 49 percent of nonvulnerable adults). As a result of the lower likelihood of full-time employment, vulnerable adults have lower incomes than their fellow nonvulnerable residents—they are far more likely to make less than \$10,000 per year (21 percent, versus 11 percent of nonvulnerable adults).

Compared to other sites, older adults in Houston/Harris county are more likely to be employed full-time, less likely to be retired, and more likely to have six-figure incomes.

Overall, 35 percent of older adults in this site are employed full-time, compared to 30 percent in other sites. The proportion who are retired (14 percent) is markedly lower than the 24 percent in other sites. Over 14 percent of older adults in Houston/Harris county have incomes over \$100,000, compared to 9 percent in other sites. Houston/Harris county residents are less likely than older adults elsewhere to have incomes in the \$20,000-\$30,000 range.

The overall difference in income is driven by the nonvulnerable segment of the population. While the proportion who have incomes below \$20,000 is similar to other areas, the proportion with incomes over \$100,000 is greater and the proportion with incomes in the \$20,000-\$30,000 range is less than in other areas.

C. MEDIA SOURCES (TABLE 2)

Television and radio are the media sources that older adults in Houston/Harris county use most often. Nine out of 10 (90 percent of) older adults in these counties watch television daily, and 59 percent listen to the radio every day. About half (49 percent) of the older adult population have used the Internet, and responses were similar for communicating by e-mail.

Vulnerable adults were substantially less likely than their nonvulnerable counterparts to use the Internet or e-mail and slightly less likely to listen to the radio daily. When asked about going on the Internet, 74 percent of vulnerable respondents reported never doing so, compared to 37 percent of nonvulnerable respondents. Similarly, members of the vulnerable population had a lower likelihood of listening to the radio daily (48 percent, versus 66 percent of nonvulnerable adults). These differences are likely to be due partially to employment status differences—vulnerable adults are much less likely to be employed full-time (11 percent, versus 49 percent of nonvulnerable adults), which may decrease their likelihood of both listening to the radio during their commute and of using computers at work.

Compared to the other 12 sites in the program, *older adults in Houston/Harris county read the paper far less often*. Overall, only 44 percent of Houston/Harris county residents read the paper daily, compared to 64 percent in the other 12 sites. Other modes of communication are similar to rates observed in the other sites.

D. COMMUNITY SITUATION (TABLE 3)

Most older adults in Houston/Harris county have been there for over 20 years, plan to stay for at least another five years, and are happy with their community. Seven in 10 (71 percent) of older adults in Houston/Harris county have lived there for more than 20 years, and 93 percent of them expect to be there five years later. In addition, about 3 of 4 older adults consider their community a “good” (51 percent) or an “excellent” (26 percent) place to live.

Although most adults are happy with their community as a place to live, a large proportion (48 percent) believe that the community “needs to do a lot more” to address the needs of frail older adults. It is therefore not surprising that many older adults believe that improving services for frail older adults is among the most important issues facing their community. Older adults in Houston/Harris county described the following issues as “extremely important”: (1) improving

services for frail older adults (41 percent); and (2) making the community safer (50 percent). These issues were more often viewed as “extremely important” than improving education (37 percent), lowering taxes (36 percent), and providing health coverage for the uninsured (34 percent). However, despite their concern about improving services for frail older adults, only one-fourth (29 percent) would be willing to pay additional taxes to improve services for frail older adults.

Interestingly, vulnerable adults were generally happier than their nonvulnerable counterparts with their community and with what it is doing for frail elders. About one-third of vulnerable adults (32 percent) describe their community as an “excellent” place to live, compared to 23 percent of nonvulnerable adults. Similarly, vulnerable adults were less likely to believe that their community “needs to do a lot more” to address the needs of frail older adults (40 percent versus 52 percent for nonvulnerable adults).

Compared to older adults in the other 12 sites, *Houston/Harris county residents were less satisfied with their community and with how it deals with the needs of frail elders and the concerns of older adults.* Only 26 percent rate the area as an “excellent” place to live, compared to 41 percent in the other communities. Among adults in Houston/Harris county, 48 percent believe that the community “needs to do a lot more” in dealing with the needs of frail elders, compared to 34 percent in the remaining sites. Consistent with this is the result that 41 percent of Houston/Harris county adults consider improving services for frail older adults an “extremely important” issue, compared to only 34 percent in the other 12 sites. Houston/Harris county’s older adults also were less likely to say that local officials take into account the concerns of older people. However, despite lower satisfaction with how their community addresses the needs of frail elders and the high priority that they place on the issue of services for frail elders, adults in Houston/Harris county were no more willing to pay additional taxes to

improve the situation than older adults in the other 12 sites. On the other hand, half of the older adult population (50 percent) believes that making their community safer is an “extremely important” issue, compared to 37 percent in other sites. Older adults in this site may therefore believe that public expenditures to improve community safety are more necessary than spending to improve services for frail older adults.

E. SOCIAL SITUATION (TABLE 4)

A sizable proportion of adults in Houston/Harris county do not feel that they are as socially active as they would like, and about 1 in 10 vulnerable adults are unable to leave their home as often as they would like due to health or transportation problems. About 4 of 10 adults (39 percent) “would like to be doing more” social activities, and 9 percent did not participate in any social activities during the past week. Being unable to leave one’s home when one would like may impede social activity—31 percent of vulnerable adults either leave their home 1 to 3 days per week, 4 percent do so less frequently than 1 day per week, and 6 percent never leave their home. Of the people who leave their home 3 days per week or less, 35 percent are unable to go out more often as a result of health problems and 9 percent cannot due to lack of transportation.

Vulnerable adults are less likely than their nonvulnerable counterparts to have participated in social activities such as going to a movie or getting together with friends and family. For example, 49 percent of vulnerable adults participated in a social activity such as going to a movie, restaurant, or club meeting during the past week, compared to 65 percent of nonvulnerable adults. In addition, vulnerable adults are also less likely to have socialized with family and friends in any other setting—74 percent did so, compared to 81 percent of nonvulnerable adults.

The social activities of vulnerable older adults in Houston/Harris county suggest that the avenues to reach this population may differ from those of other sites—*vulnerable older adults in this site are more likely than those in other areas to gather in religious settings*. For instance, 65 percent of vulnerable older adults in this site went to a religious gathering during the past week compared to 55 percent of those in other sites. There were no discernable differences in participation (about 60 percent did so in the past week) in secular activities such as seeing a movie or going to a restaurant or club meeting.

F. LIVING AND FINANCIAL SITUATION (TABLE 5)

A sizable minority among adult community residents live alone, and a small but important number of people do not have someone they know to call on in case of an emergency. Nursing and group home residents account for a very small proportion of those surveyed (less than 1 percent).⁶ Among community residents (that is, residents who do not live in a nursing home or group home), about one-fifth (21 percent) live alone. In addition, 17 percent of adults do not have someone on whom they can call should some emergency occur. However, 60 percent of vulnerable adults live either with their child (18 percent) or live closer than 20 minutes away (42 percent).

⁶Data from the 1997 Medicare Current Beneficiary Survey (MCBS) indicate that 6.1 percent of Medicare beneficiaries age 65 and over were institutionalized at some time during the year (Sharma et al. 2001). This proportion is substantially higher than that from our survey, which indicates that 2.3 percent of adults age 65 and across all 13 sites in the Community Partnerships for Older Adults Program were either in a nursing or group home. This difference illustrates an important characteristic of the random-digit-dialed survey method, which essentially restricts the survey sample to individuals who have, or whose proxy or decision maker has, a home phone. By doing so, we are likely to miss a small proportion of the population residing in nursing or group homes at the time of the survey who do not have a home phone, which may explain the discrepancy between the proportion of institutionalized adults age 65 and over in this survey compared to the same statistic from the MCBS.

Overall, 8 out of 10 adults consider it either “very important” (55 percent) or the “most important” thing for them (26 percent) that they continue living in their own home, and over 9 out of 10 are either “somewhat confident” (30 percent) or “very confident” (61 percent) that they will live in their own home as long as they like. However, about one-third (37 percent) expect to need regular help to live on their own at some point before their 80th birthday (or already receive it), and another 41 percent expect to need it at some time after age 80. Despite the fact that 90 percent are at least “somewhat confident” that they will remain in their current residence as long as they like, **80 percent believe they’ll need to move from their current home at some point due to physical or mental problems.**

A large proportion of vulnerable older adults in Houston/Harris county experience financial difficulties. Nearly two-thirds (64 percent) believe that they’ll have enough money to take care of themselves for the rest of their life. Furthermore, 3 in 10 (31 percent) were unable, because of lack of money during the past 12 months, to fulfill an important need such as buying needed food, paying rent, or obtaining a hearing aid. For example, 19 percent had to forgo the purchase of a prescription medication at least once during the past 12 months, and 12 percent were unable to buy needed food during that time.

Compared to their nonvulnerable counterparts in Houston/Harris county, vulnerable adults are more likely to live alone (29 percent versus 17 percent for nonvulnerable adults) and, surprisingly, are *more* likely to believe that they will never need help to remain living on their own—17 percent of vulnerable adults believe that they will never need regular help to remain living on their own, compared to 11 percent of nonvulnerable adults.

Vulnerable adults in Houston/Harris county were less financially secure than those in the other 12 sites. About 64 percent believe that they will have enough money to take care of themselves for the rest of their life, compared to 73 percent in other sites. While this difference

was not statistically significant, the 31 percent of vulnerable older adults in Houston/Harris county with insufficient money to pay for at least one component of their medical, nutritional, or housing needs is significantly greater than the proportion of 22 percent observed in the other 12 sites.

There were also statistically significant differences in the current and expected future living situation of adults in Houston/Harris county compared to those in the other sites. Older adults in Houston/Harris county are significantly less likely to live more than an hour away from their child (13 percent versus 21 percent). Houston/Harris county's older adults were also more likely to say they would need regular help before they turned 80 in order to live on their own (44 percent versus 32 percent).

G. TRANSPORTATION (TABLE 6)

Most vulnerable adults (87 percent) are able to get the transportation they need, with few reporting that they are “not often” (5 percent) or “sometimes not able” (8 percent) to do so. Sample sizes are too small to determine the reasons for the difficulties vulnerable adults in Houston/Harris county had in getting needed transportation. However, results for the remaining 12 sites indicate that, among those who often had trouble getting needed transportation, the most common difficulties were (1) physical or other impairments (39 percent); (2) unavailable or inconvenient public transportation (22 percent); and (3) lack of a car (14 percent).

H. HEALTH STATUS (TABLE 7)

Older adults in Houston/Harris county had health status and difficulty doing daily chores similar to that of adults in other sites. About one-fourth of adults in this site were in either “fair” (19 percent) or “poor” (9 percent) health. About 10 percent of vulnerable adults in Houston/Harris county were “unable to do daily work or chores for health reasons.”

As in other sites, hypertension and arthritis were the most common health conditions among vulnerable older adults in Houston/Harris county, afflicting 57 percent and 54 percent, respectively. However, vulnerable older adults in Houston/Harris county were more likely to have had a stroke than their counterparts in other sites. They were also more likely to have had either no visits to physicians in the last 3 months (25 percent versus 21 percent) or at least 3 visits (37 percent versus 32 percent). This pattern suggests that there may be both greater access problems for some vulnerable adults in this site, and a higher level of need or use among others.

I. FUNCTIONAL LIMITATIONS AND UNMET NEEDS (TABLE 8)

About 1 in 6 (16 percent of) vulnerable adults in Houston/Harris county have problems or need help with at least one activity of daily living (ADL) such as dressing or taking a bath, and one-fourth (26 percent) are limited in their ability to do activities such as light housework or preparing meals (that is, instrumental activities of daily living, or IADLs). This suggests that approximately 39,623 vulnerable older adults $[(0.16) \times (247,644 \text{ vulnerable adults})]$ in Houston/Harris county need help with ADL activities and 64,387 $[(0.26) \times (247,644 \text{ vulnerable adults})]$ need help with IADL tasks. The most common ADL limitations for vulnerable adults in Houston/Harris county were taking a bath or shower (8 percent have problems or need help) and getting in and out of bed (11 percent have problems or need help). The IADL limitations that were most prevalent among vulnerable adults in Houston/Harris county were going outside the home to shop or visit the doctor (19 percent have problems or need help) and doing light housework (17 percent have problems or need help).

Overall, 11 percent of vulnerable older adults in Houston/Harris county experienced unmet needs for help with at least one functional limitation (that is, at least one ADL or IADL). More specifically, 4 percent of vulnerable older adults did not receive enough needed help with ADLs, and 9 percent of them did not receive enough needed help with IADLs. Although sample sizes

were too small to present results on the reasons for most unmet needs for Houston/Harris county, estimates for the other 12 sites suggest that the inability to find or afford help was the most common cause.

Most of the help that vulnerable adults in Houston/Harris county receive is unpaid, and whether or not that unpaid help continues may have important implications for their ability to remain in the community. Among vulnerable adults receiving help with ADL/IADL tasks, 76 percent do not receive any paid help, but only 7 percent had no unpaid help. Three out of 10 vulnerable adults are unsure whether the unpaid help they receive will continue, stating that it is either “somewhat likely” (25 percent) or “not likely” (4 percent) that this help will be available one year later. *Should the supply of unpaid help discontinue for those receiving it, 1 out of 8 (12 percent) say they would have to move to a nursing home or an assisted living facility.*

There is limited evidence to suggest that functional limitations are more common in Houston/Harris county than in the other 12 sites. The proportion of vulnerable adults with at least one IADL limitation was significantly higher in this site—one-third (26 percent) of vulnerable adults in this site have problems or need help with at least 1 IADL limitation, compared to one-fourth (26 percent) in the other 12 sites.

J. SERVICES: INFORMATION SOURCES (TABLE 9)

Most adults in Houston/Harris county would turn to their family/friends (43 percent) or doctor (25 percent) for advice if they needed help with personal care at home. In addition, about 12 percent would obtain a hospital-based referral, and 11 percent would turn to another health care provider.

Vulnerable adults in Houston/Harris county are less likely than their nonvulnerable counterparts turn to their doctor or hospital for a referral, but more likely to seek out other health care providers. Among vulnerable adults, 15 percent would turn to another health care provider,

versus 9 percent for nonvulnerable adults. Conversely only 20 percent of vulnerable adults would ask their doctor, compared to 28 percent for nonvulnerable adults.

Older adults in Houston/Harris county would depend more heavily on their family or friends and church than would adults in other sites, and less on other health care providers or hospitals. Among vulnerable adults in Houston/Harris county, 43 percent would turn to their family or friends for information versus 34 percent in other sites.

Adults in this site were also *less likely to depend on community referrals, but more likely to use the Internet (6 percent) or to not know where to turn (21 percent)*. For example, only 2 percent would contact their senior center, compared to 9 percent in other sites. Relatively few adults in Houston/Harris county would look for information about personal care on the Internet (6 percent), but more than those in other sites (3 percent). A similar difference was seen for seeking help from a toll-free helpline (6 percent versus 3 percent for other sites).

K. SERVICES: COVERAGE AND COST (TABLE 10)

Many older adults in Houston/Harris county lack knowledge of the coverage and cost of long-term care services. The constrained ability of adults in this site to absorb the high cost of long-term care is manifested by the findings that (1) 49 percent would be unable to pay \$100 a week or more for help with personal care at home; and (2) 31 experienced unmet needs for necessities such as food or prescription medications (Table 5). However, despite the importance of understanding the availability, cost, and coverage of long-term care services, a large proportion of older adults in Houston/Harris county lack correct information concerning whether Medicare or Medicaid cover help with personal care at home. Over one-third (38 percent) do not know whether Medicare covers such care. Similarly, over half (54 percent) do not know whether Medicaid covers personal care at home, and two-thirds (65 percent) do not know whether their

community offers a program covering personal care at home for lower-income older adults who are ineligible for Medicaid.

A large proportion of adults also lack sufficient information about the cost of nursing home care and long-term care insurance. About 1 in 6 (17 percent of) vulnerable adults did not know how much it would cost per month to stay in a nursing home. Although two-thirds of adults (66 percent) residing in this site have heard of long-term care insurance, only 13 percent have it. Furthermore, of the adults without long-term care insurance, 63 percent do not know how much it would cost. Because the cost of long-term care insurance varies substantially by age, a more useful assessment of older adults' knowledge would involve comparing the expectations of older adults in a given age category to the national data. We plan to conduct a more thorough analysis of this type and disseminate it to each site in the near future.

Despite being more likely to need personal assistance services, vulnerable adults in Houston/Harris county are not more likely than their nonvulnerable counterparts to know whether Medicare covers such care. Although a much larger proportion are eligible for Medicare, vulnerable adults in Houston/Harris county are about as likely as their nonvulnerable counterparts not to know whether it covers help with personal care at home (36 percent and 38 percent, respectively). In addition, most older adults could not afford to pay \$100 a week or more for personal assistance services, so it is possible that many of them, should they require such services, either would have to experience unmet needs for such care or would have to "spend down" to Medicaid to become eligible for coverage. However, even though the prospect of potentially becoming Medicaid-eligible is closer at hand for vulnerable adults, they are no more likely than nonvulnerable adults to say they know whether Medicaid covers personal assistance services (54 percent do not know versus 53 percent of nonvulnerable adults).

However, only 10 percent of vulnerable adults incorrectly say that Medicaid does *not* cover personal care, compared to 18 percent of nonvulnerable older adults.

Vulnerable adults are less likely than other older adults to be able to afford personal assistance services, and are less likely to believe that they know the cost of such services. About 38 percent of vulnerable adults would be able to afford \$100 a week or more for help with personal care at home, compared to about 48 percent of nonvulnerable adults. In addition, vulnerable adults are less certain of the cost of personal assistance services—19 percent of vulnerable adults reported that they did not know how much these services would cost, compared to 11 percent of nonvulnerable adults. However, for both groups the estimates given varied widely, so their “knowledge” is suspect.

Vulnerable adults were less likely to have long-term care insurance, and (not surprisingly) paid, or expected to pay, more for it. Only 10 percent of vulnerable adults had long-term care insurance, compared to 14 percent for nonvulnerable adults. Moreover, vulnerable adults without long-term care insurance were more likely to say they did not know how much it would cost—71 percent of them did not know how much it would cost, compared to 58 percent of nonvulnerable adults.

Compared to the other 12 sites, older adults in this site believe that personal and nursing home care would cost less, and are less likely to have heard of long-term care insurance. Houston/Harris county older adults’ estimate of personal care costs are lower than in other sites—37 percent of adults in this site believe that it would cost less than \$10 per hour, compared to 31 percent of adults in other sites. Similarly, vulnerable adults in this site give lower estimates of costs for nursing homes—58 percent of older adults in this site expect it to cost \$2,500 or less per month, compared to 42 percent of older adults in the other sites. Finally, only 66 percent of

older adults in this site have heard of long-term care insurance, compared to 74 percent in the other 12 sites.

Most Houston/Harris county older adults (65 percent) do not know whether there is a program in their community that covers personal care at home for low-income adults who are ineligible for Medicaid, similar to the rate observed in other sites.

L. AVAILABILITY AND USE OF SUPPORT SERVICES (TABLE 11)

For five of the six support services addressed by the survey, over half the older adult population in Houston/Harris county believe that they are available, but *there is a substantial proportion who either do not believe they are available or do not know whether they are available*. For example, although a majority of older adults in Houston/Harris county (57 percent) think that door-to-door transportation services are available, 4 out of 10 either think that they are not available (13 percent) or do not know about their availability (30 percent). Similarly, one-third of adults in Houston/Harris county either think that visiting nurse services are unavailable (10 percent) or do not know about their availability (22 percent). Over one-third of older adults (36 percent) do not know whether they have access to a telephone helpline service, or to housekeeping services (38 percent). Thus, a sizable fraction of older adults are either uninformed or misinformed about service availability.

The vast majority of older adults in Houston/Harris county have never used long-term care support services, but *very few adults reported having been unable to access needed services at some time*. For example, 93 percent of adults in this site have never used personal assistance services, and only 0.9 percent have sought but been unable to receive needed such services in the past. The proportion who have never used the various services in Table 11 ranges from 86 percent (visiting nurse service) to 98 percent (telephone helpline). The proportion wanting but being unable to use a service was less than 1 percent for all 6 services examined.

Older adults who had used long-term care support services generally found them easy to arrange, and fewer than 1 in 10 were placed on a waiting list. These results must be viewed cautiously, however, because the number of respondents who had used these services was small, ranging from 22 to 58.⁷ Among the 15 percent of adults who have used visiting nurse services, 59 percent found them “very easy” to arrange, and 64 percent of housekeeping or cleaning service users responded in the same manner. A substantial minority of service users did report having to wait for some services—21 percent were put on a waiting list for visiting nurse services, and 26 percent had to wait for housekeeping or cleaning services.

Finally, although over half of long-term care support service consumers in Houston/Harris county rate service quality as very good or excellent for every service, there were some who were less satisfied. For example, about 1 in 6 rated housekeeping or cleaning services as “fair” (11 percent) or “poor” (5 percent), and 1 in 6 rated senior lunch programs as “fair” (13 percent) or “poor” (3 percent).

There were significant differences between this site and the other sites in perceived service availability for five of the long-term care support services addressed by this survey, with Houston’s older adults being less likely than those in other areas to think the services were available. For example, adults in Houston/Harris county were less likely to believe that housekeeping or cleaning services were available (50 percent versus 61 percent in the other sites) and that personal assistance services were available (64 percent versus 72 percent in the other sites). It is unclear whether these discrepancies reflect an actual difference in service availability across sites or a difference in awareness.

⁷Tables in Appendix C contain the number of observations for all results.

Compared to older adults in other sites, those in Houston/Harris county find it harder to arrange for most support services (though none of the differences were significant), and were more likely to have had to wait for one of the services. For example, 48 percent of adults in this site who used door-to-door transportation found it “very easy” to arrange, compared to 66 percent of adults in the other sites. The one statistically significant difference was that 21 percent of those who used visiting nurse services in this site reported having been put on a waiting list for this service, whereas only 6 percent of these service users in other sites had to wait before receiving these services.

We find no significant differences between this site and others in satisfaction with long-term care support services. Satisfaction levels were generally high, but 25 percent of older adults in this site rated the door-to-door transportation services as “fair” or “poor.” Furthermore, 17 percent of the survey respondents in this site rated visiting nurse services as either “fair” or “poor.”

M. AVAILABILITY AND USE OF CUSTODIAL/HOUSING SERVICES (TABLE 12)

The great majority (86 percent) of older adults in Houston/Harris county believes that nursing homes are available in the area, but *there are substantial information gaps with regard to the other custodial/housing services addressed by the survey*. There is very little knowledge about the availability of home repair assistance services—47 percent reported not knowing about the availability of these services. Furthermore, 1 in 5 reported not knowing about the availability of hospice care (21 percent), and 1 in 6 (16 percent) do not know whether assisted living facilities are available.

A very small proportion of the older adult population in Houston/Harris county have ever used long-term care custodial/housing services, and there is little evidence of older adults’ inability to access these services when needed. Few older adults have ever used services such as

hospice care (5 percent) or assisted living facilities (1 percent). For each of the 6 services in Table 12, less than 1 percent of the survey respondents reported that they had sought to use the service but were unable to. However, these low rates may understate actual unmet need because some individuals may not have sought service that they needed (perhaps because of eligibility requirements). For example, only 1 percent of adults in this site who believe that home repair assistance services were available reported having been unable to use such services at some time when they wanted to. However, this small proportion is potentially inconsistent with the finding in Table 5 that 1 in 6 (17 percent of) Houston/Harris county residents age 50 and older believe that their current residence needs significant repairs to improve their ability to live in it over the next 5 years. Since only 3 percent have ever used the service and less than 1 percent tried but were unable to, many of the 17 percent needing home repairs have not sought public help with these repairs.

Most service users felt that it was easy to arrange for use of a senior center and hospice care, but over half had to wait for home repair assistance. All of the 24 adults in Houston/Harris county using hospice care reported it was “very easy” to arrange, and 88 percent of senior center users gave that assessment. Nursing home users were somewhat less complimentary, with 57 percent saying that arranging for services was “very easy” and 40 percent saying “somewhat easy.” Because fewer than 10 sample members used or tried to use the following services, we do not provide results about them: ease of arrangement for adult day programs and assisted living facilities.

Older adults in Houston/Harris county were quite satisfied with hospice care and senior centers, but sizeable proportions reported some dissatisfaction with nursing homes and home repair services. For example, most (64 percent) of the 24 older adults who had used it rate hospice care as “excellent,” but only 23 percent give the same rating to nursing homes, and

nearly half rate nursing homes as either “fair” (42 percent) or “poor” (5 percent). Small sample sizes due to the small proportion of service users limit the accuracy of these results but suggest large differences in perceived quality of these two pairs of services.

Senior centers and adult day programs are less likely to be thought available in Houston/Harris county than in other sites. For instance, 73 percent of older adults in this site reported that a senior center was available, compared to 87 percent in other sites. We also found significantly lower use of senior centers and adult day programs in this site compared to the other 12 sites. About 10 percent of older adults in this site had used a senior center, compared to 16 percent in other sites. For adult day programs the percentages were 1 versus 3 percent for Houston and the other 12 sites, respectively.

N. REASONS FOR INABILITY TO ACCESS SERVICES (TABLE 13)

A thorough analysis of reasons for which older adults in Houston/Harris county were unable to use needed long-term care services is not possible, because only 22 (4 percent of) adults in this site reported being unable to access needed services at some time. Despite the potential inaccuracy of these estimates based on this small sample, however, it is worth noting that we estimate that only 3 percent of older adults in this area reported being unable to access needed long-term care services at some time because their income was too high for them to qualify for the service—a much smaller proportion than the 11 percent of the attempted service users in other sites who had this problem.

O. COMMUNITY-SPECIFIC QUESTIONS (TABLE 14)

Results for the site-specific questions added by this site suggest that two-thirds of older adults have heard of the United Way Helpline, but other informational resources are less widely recognized. Just over half of Houston/Harris county older adults have heard of the Sheltering

Arms Elder Care Referral Services, only about one-third have heard of the county's Area Agency on Aging, and only 16 percent have heard of the Senior Guidance Program.

There are some differences between the vulnerable and nonvulnerable groups in awareness of these sources, with the vulnerable population being more aware of the Agency on Aging and the nonvulnerable group being more aware of United Helpline and Sheltering Arms.

The differences between vulnerable and nonvulnerable adults are more pronounced when they are asked which of these agencies they could call if looking for assistance. The vulnerable adults are most likely to call Sheltering Arms, whereas the nonvulnerable group is most likely to call the United Way Helpline. About one-fourth of each group would call the Area Agency on Aging and only 6 percent of each group would call the Senior Guidance Program.

V. DISCUSSION

Older adults in Houston/Harris county have weak knowledge of long-term care costs and service availability. There is also widespread belief that the community needs to do a lot more to address the needs of the elderly. Finally, the older adult population in this community is more likely to lack sufficient help with activities of daily living in the home and community.

A. INFORMATION GAPS IN LONG-TERM CARE SERVICES

Our descriptive analysis of data from the Survey of Older Adults revealed that a substantial portion of older adults in Houston/Harris county lack knowledge of the costs of long-term care and the coverage of such care. In addition, we found areas in which the needs of older adults for long-term care services are not being met and uncovered some sources of dissatisfaction.

There are several reasons to believe that older adults in Houston/Harris county are not sufficiently aware of the financial implications of requiring long-term care services. One-seventh of older adults in this site do not know the hourly cost of personal assistance services (14 percent), and one-sixth (17 percent) do not know the monthly cost of nursing home care (Table 10). Insufficient knowledge of long-term care cost and coverage is especially important given that half of the older adults in this site (49 percent) (Table 10) would be unable to afford even a modest amount of help (\$100 a week) with personal care at home.

Despite the high cost of long-term care and their limited ability to finance such care on their own, many adults in this site lack knowledge of long-term care coverage. First, one-third (34 percent) (Table 10) of older adults in this site have not heard of long-term care insurance, and few (13 percent) (Table 10) are currently covered by it. Older adults also lack knowledge about public coverage sources—38 percent (Table 10) do not know whether Medicare covers personal assistance services, and even more (54 percent) do not know whether Medicaid provides such

coverage. Furthermore, two-thirds (65 percent) do not know whether their community offers a program to help with personal assistance services.

Effective dissemination of information concerning the *availability* of long-term care services is also needed. For instance, there are three types of long-term care support services where at least 30 percent of the older adult population reported not knowing about service availability (Table 11)—telephone helpline (36 percent), door-to-door transportation (30 percent), and housekeeping or cleaning service (38 percent). There were also four types of long-term care custodial/housing services where at least one-fifth of older adults were uninformed about service availability (Table 12)—home repair assistance (47 percent), adult day programs (37 percent), senior center (23 percent), and hospice care (21 percent).

B. UNMET NEEDS

About 9 percent (Table 14) of older adults in Houston/Harris county have experienced unmet needs for medical care during the past three years, and 11 percent currently do not receive enough help with at least one daily activity (Table 8). Only 4 percent of vulnerable adults in this site say they receive insufficient help with at least 1 activity of daily living (ADL) such as bathing or dressing. Unmet needs for help with instrumental activities of daily living (IADLs) such as doing light housework or preparing meals are more common—9 percent do not receive enough help with at least 1 instrumental activity of daily living (IADL).

The supply of unpaid help is of critical importance in long-term care service delivery, and some older adults worry that the unpaid help they currently receive will cease, potentially jeopardizing their ability to remain in the community. About 3 of 10 older adults in this site reported that it is either somewhat likely (25 percent) or not likely (4 percent) that the unpaid help they currently receive will be available one year later (Table 8). Moreover, should their

supply of unpaid help discontinue for those receiving it, 10 percent say they would “go without or make do,” and 12 percent would move to an assisted living facility or nursing home (Table 8).

Finally, some older adults reported dissatisfaction with their community and how it addresses the needs of frail elders. One-fifth rated their community as either a fair (17 percent) or a poor (5 percent) place to live (Table 3). Nearly half (48 percent) (Table 3) believe that their community “needs to do a lot more” to address the needs of frail elders. When asked about the extent to which local officials take into account the interests and concerns of older people, over 4 in 10 replied either “not very much” (35 percent) or “not at all” (8 percent) (Table 3). However, despite the aforementioned dissatisfaction and the belief of 41 percent of the older adult population that improving services for frail older adults is “extremely important,” only one fourth (28 percent) of the population reported being willing to pay additional taxes to improve the situation (Table 3).

C. UNIQUE CHARACTERISTICS OF THIS SITE

The unique characteristics of older adults in Houston/Harris county create challenges for both providers and consumers of long-term care services. This population is challenging for providers because older adults in this site have greater unmet needs for help with daily living activities than adults in other sites. Getting long-term care services may be particularly challenging for the older adults themselves because of their lesser knowledge of long-term care costs and availability than older adults in other areas. Nearly half of the respondents say that Houston/Harris county needs to do a lot more for frail elderly residents.

Although older adults in Houston/Harris county are more likely to be employed full-time than those in other sites, and are no more likely to have incomes below \$20,000, they are more likely to have been unable to meet basic expenses in the past year. We find that 31 percent of vulnerable adults in this site reported being unable at some time in the past year to afford at least

one item necessary for daily living such as paying rent, filling a prescription, or buying needed food—significantly more than the proportion of 22 percent observed in the other sites (Table 5).

This high incidence of older adults being unable to afford basic necessities, combined with their lack of knowledge of local support services and information services, suggests the need for an aggressive community-wide intervention that would get information and services to those in need. The lower rating of the community as a place to live (only 26 percent of Houston older adults rate their community as “excellent,” compared to 41 percent in the other communities), and the higher proportion (43 percent versus 28 percent) saying public officials pay little or no attention to the concerns of elderly residents suggest a need for greater attention to this group, including improved services and information. Nearly half say Houston/Harris county “needs to do a lot more” for its frail elderly residents, a much higher proportion than in other sites. Houston’s older adults are (1) less likely than those in other sites to say that various support services are available locally, and (2) significantly more likely to indicate that they don’t know about the availability of these. One-third do not know about long-term care insurance, compared to one-fourth elsewhere, and two-thirds of those who have heard of it do not know what it costs. Older adults in Houston/Harris county give significantly lower estimates of the average costs of home and community based long-term care services and nursing homes than adults in the other sites. Yet Houston’s older adults are more likely than older adults in the other sites to say they already have or expect to need help before they turn age 80 (46 percent compared to 35 percent) to remain in their own home. Thus, the need for improved information is great, as is the opportunity to make an important contribution to the welfare of older adults in this area.

REFERENCES

- Allen, Susan M., and Vincent Mor. "The Prevalence and Consequences of Unmet Need: Contrasts Between Older and Younger Adults with Disability." *Medical Care*, vol. 35, no. 11, November 1997, pp. 1132-48.
- Arno, Peter S., Carol Levine, and Margaret M. Memmott. "The Economic Value of Informal Caregiving." *Health Affairs*, vol. 18, no. 2, March/April 1999, pp. 182-8.
- Brick, J.M., J. Waksberg, D. Culp, and A. Starer. "Bias in List-Assisted Telephone Samples." *Public Opinion Quarterly*, vol. 59, 1995, pp. 218-35.
- Feder, Judith, Harriet L. Komisar, and Marlene Niefeld. "Long-Term Care in the United States: An Overview." *Health Affairs*, vol. 19, no. 3, May/June 2000, pp. 40-56.
- Lepkowski, J. "Telephone Sampling Methods in the United States." In: *Telephone Survey Methodology*, edited by Robert M. Groves et al., New York: Wiley, 1988.
- National Council on the Aging. "A National Survey of Health and Supportive Services in the Aging Network." NCOA, summer 2001.
- Ory, Marcia G., Richard R. Hoffman III, Jennifer L. Yee, Sharon Tennstedt, and Richard Schulz. "Prevalence and Impact of Caregiving: A Detailed Comparison Between Dementia and Nondementia Caregivers." *Gerontologist*, vol. 39, no. 2, April 1999, pp. 177-85.
- Sharma, Ravi, Sophia Chan, Hongji Liu, and Caren Ginsberg. "Health & Health Care of the Medicare Population: Data from the 1997 Medicare Current Beneficiary Survey." Rockville, MD: Westat, September 2001.
- Schulz, Richard, and Scott R. Beach. "Caregiving as a Risk Factor for Mortality: The Caregiver Health Effects Study." *Journal of the American Medical Association*, vol. 282, no. 23, December 15, 1999, pp. 2215-9.
- U.S. General Accounting Office. "Long-Term Care: Baby Boom Generation Presents Financing Challenges." GAO/T-HEHS-98-107. Testimony of William J. Scanlon before the Special Committee on Aging, U.S. Senate, March 9, 1998.
- Waksberg, J. "Sampling Methods for Random Digit Dialing." *Journal of the American Statistical Association*, vol. 73, 1978, pp. 40-6.
- Wolf, Douglas A. "Population Change: Friend or Foe of the Chronic Care System?" *Health Affairs*, vol. 20, no. 6, November/December 2001, pp. 28-42.