

U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-Term Care Policy



THE DAILY ACTIVITIES OF THE COMMUNITY-DWELLING ELDERLY:

EVIDENCE FROM THE AMERICAN TIME USE SURVEY

September 2006

Office of the Assistant Secretary for Planning and Evaluation

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) is the principal advisor to the Secretary of the Department of Health and Human Services (HHS) on policy development issues, and is responsible for major activities in the areas of legislative and budget development, strategic planning, policy research and evaluation, and economic analysis.

ASPE develops or reviews issues from the viewpoint of the Secretary, providing a perspective that is broader in scope than the specific focus of the various operating agencies. ASPE also works closely with the HHS operating divisions. It assists these agencies in developing policies, and planning policy research, evaluation and data collection within broad HHS and administration initiatives. ASPE often serves a coordinating role for crosscutting policy and administrative activities.

ASPE plans and conducts evaluations and research--both in-house and through support of projects by external researchers--of current and proposed programs and topics of particular interest to the Secretary, the Administration and the Congress.

Office of Disability, Aging and Long-Term Care Policy

The Office of Disability, Aging and Long-Term Care Policy (DALTCP), within ASPE, is responsible for the development, coordination, analysis, research and evaluation of HHS policies and programs which support the independence, health and long-term care of persons with disabilities--children, working aging adults, and older persons. DALTCP is also responsible for policy coordination and research to promote the economic and social well-being of the elderly.

In particular, DALTCP addresses policies concerning: nursing home and community-based services, informal caregiving, the integration of acute and long-term care, Medicare post-acute services and home care, managed care for people with disabilities, long-term rehabilitation services, children's disability, and linkages between employment and health policies. These activities are carried out through policy planning, policy and program analysis, regulatory reviews, formulation of legislative proposals, policy research, evaluation and data planning.

This report was prepared under contract #HHS-100-03-0011 between HHS's ASPE/DALTCP and the Urban Institute. For additional information about this subject, you can visit the DALTCP home page at http://aspe.hhs.gov/_/office_specific/daltcp.cfm or contact the ASPE Project Officers, William Marton and Hakan Aykan, at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. Their e-mail addresses are: William.Marton@hhs.gov and Hakan.Aykan@hhs.gov.

THE DAILY ACTIVITIES OF THE COMMUNITYDWELLING ELDERLY: Evidence from the American Time Use Survey

Timothy Waidmann
The Urban Institute

Vicki Freedman
University of Medicine and Dentistry of New Jersey

September 27, 2006

Prepared for
Office of Disability, Aging and Long-Term Care Policy
Office of the Assistant Secretary for Planning and Evaluation
U.S. Department of Health and Human Services
Contract #HHS-100-03-0011

The opinions and views expressed in this report are those of the authors. They do not necessarily reflect the views of the Department of Health and Human Services, the contractor or any other funding organization.

TABLE OF CONTENTS

AB:	STRACT	iii
EXE	ECUTIVE SUMMARY	iv
I.	BACKGROUND	1
II.	DATA AND METHODS	3
III.	FINDINGS A. Review of ADL and IADLs in National Survey B. Summary of Participation and Time Use C. Exploring the Purpose of Activities D. Patterns by Demographic Group	5 5 7
IV.	DISCUSSION AND RECOMMENDATIONS	10
REI	FERENCES	12
API	PENDIX	19

LIST OF TABLES

TABLE 1.	Sample Characteristics	4
TABLE 2.	Measures of Activities of Daily Living in Select National Surveys 1	4
TABLE 3.	Measures of Instrumental Activities of Daily Living in Select National Surveys	5
TABLE 4.	Participation: Common Activities among the Elderly 1	6
TABLE 5.	Time Use: How do the Elderly Spend Their Time?1	7
TABLE 6a.	Type of Leisure Activity among Those with Any Use1	7
TABLE 6b.	Purpose of Travel among Those with Any Use1	7
TABLE 6c.	Purpose of Phone Use among Those with Any Use1	8
TABLE 6d.	Purpose of Computer Use among Those with Any Use 1	8
TABLE 6e.	Purpose of Service Use among Those with Any Use 1	8
TABLE 7.	Participation Differences by Individual Characteristics	8
TABLE A1.	Cross-walk of ATUS Activities Categories with Activity Groups 1	9
TABLE A2.	Detailed Participation and Time Use	29
TABLE A3.	Measures of Activities of Daily Living in Select National Surveys 3	0
TABLE A4.	Measures of Instrumental Activities of Daily Living in Select National Surveys	32

ABSTRACT

Building on recent advances in the conceptualization of disability, this report uses data on how older Americans spend their time to provide insights into enhancements to common survey measures of activity limitation and participation restrictions experienced in late life. We use the 2003-2005 waves of the American Time Use Survey to assess how well the common activity of daily living and instrumental activity of daily living instruments capture the common activities of daily life. The analysis finds several areas of activity participation that are not commonly measured but may be important features of independent living and makes suggestions for how these activities might be included in surveys. These include several "quality of life" activities like socializing with others, travel and leisure, administrative activities like handling the mail/e-mail, home repairs or arranging for and using services, "helping" activities like volunteering and caring for others, and self-care activities like physical exercise and health-related self-care.

EXECUTIVE SUMMARY

Questions about limitations in Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) have become fixtures in national surveys of older adults, and policy makers rely heavily upon these measures in crafting disability and long-term care policy. Initially developed for various clinical purposes during the 1960s and 1970s, these measures became widely adopted as self-reported disability items in national surveys during the 1980s and 1990s. Katz (1963; 1970), for example, developed the original ADL index to assess the rehabilitation potential of hospitalized geriatric patients. The original IADL scale, developed by Lawton and Brody (1969), was intended to facilitate communication about clients' everyday functional competence among different personnel and agencies involved in treatment plans.

Recent advances in conceptualizing disability provide new opportunities for surveys to improve upon this general approach to assessing late-life disability. For example, the International Classification of Functioning, Disability and Health (WHO 2001) highlights the notions of activity limitations (difficulties an individual may have in the capacity to execute a task or action) and participation restrictions (problems an individual may have in the performance of those activities and thus in involvement in life situations). Current ADL and IADL scales were not designed to make such distinctions nor have they been updated to reflect the breadth of activities in which older adults currently participate.

Data on time use at older ages--that is, how they spend their time on a given day, week, or month--are especially relevant to this topic. Yet attention to disability or its measurement in analyses of time use by older adults has been limited (Pentland & McColl 1999). The principal aim of this report is to use data on how older Americans spend their time to provide insights into enhancements to current measures of late-life disability. In doing so, we consider which types of activities and what aspects of participation should be queried. We end with a series of recommendations for future survey design efforts.

Our analysis proceeds as follows. First we reviewed current ADL and IADL questions in national surveys on health and/or aging, identifying the most common activities and question structure. Next, we analyzed the time use patterns for a sample of adults ages 65 and older responding to the 2003-2005 waves of the American Time Use Survey (ATUS; N=7,932). The survey collects detailed information about activities carried out by community-dwelling persons living in the United States for the previous (randomly selected) day. We tabulated both participation in an activity (spending any time on an activity on the previous day) and the average time spent on the activity in the population. For some activities we further examined the purpose of the activity (e.g., for travel, telephone use, computing, and service use). To investigate whether participation was sensitive to the disablement process, we would ideally examine the participation among older adults with and without physical, cognitive, and emotional impairments. Because this information is not available in the ATUS, we instead contrast the

experience of older adults with an additional group of persons aged 55-64 who were retired for reasons other than disability. In particular, we estimated a logistic regression model for each major type of activity and included as predictors an indicator of being 65 or older (vs. 55-64 and retired due to reasons other than disability), gender, marital status, and income. The strategy here is to hold work behavior (and thus the time budget) constant while finding a proxy variable associated with physical function. Since the older group is likely to have more physical limitations than the younger group, we interpret positive coefficients on "young age" to suggest a participation increase in the dependent variable (the activity) that is associated with physical capacity.

From our review of surveys we identified activities most commonly included in ADL and IADL measures. ADLs most often address bathing or showering; dressing; eating; getting in or out of bed; using the toilet, and getting around inside. IADLs most often include preparing meals, shopping for groceries, taking or managing medication, managing money, and getting around outside/going places outside of walking distance. Only rarely do surveys ask about difficulty with/participation in leisure activities. For example, the National Health Interview Survey (and National Health and Nutrition Examination Survey) asks about difficulty with going out to things like shopping, movies, or sporting events; participating in social activities (visiting friends, attending clubs or meetings or going to parties); and doing things to relax at home or for leisure (reading, watching TV, sewing, listening to music).

Our analysis of the 2003-2005 ATUS suggests that the traditional ADLs and IADLs are well represented in the commonly performed tasks by older Americans. Consistent with previous studies these 'obligatory' activities constitute five hours per day or about one-third of waking hours. Eating and grooming, for example, take on average two hours per day whereas IADL activities (food preparation, shopping, household maintenance, cleaning, using the phone, financial/legal issues, and laundry) occupy about three hours.

We also find that several additional activities with relatively high rates of daily participation could be considered candidates for inclusion in an expanded list of "IADL" items or in a newly defined group of regular activities. New activities for consideration include:

- leisure activity;
- travel;
- socializing;
- household maintenance;
- caring for others;
- work/volunteering;
- physical recreation;
- communication (which includes handling household and personal mail);
- health-related self-care;
- using/arranging for services; and
- computer use.

On average the typical older adult spends about ten and one-half hours per day on these activities (626 minutes).

For some activities, information on the purpose of the activity provides additional clarity and context. In particular, survey designers may want to consider incorporating into questions the most common forms and/or reasons for carrying out an activity. For example:

- doing things to relax at home or for leisure, such as watching TV or reading;
- traveling to shop, eat, or visit with others;
- participating in physical activities such as walking, playing a sport, or other kind of exercise;
- arranging for and using services related to your health, finances, or taking care of one's home; and
- using a computer to send e-mail or look up health-related, financial or other information.

Logistic regression models confirm that participation rates are generally higher among the younger/healthier group, controlling for gender, marital status, and income. The exception, not surprisingly, is health-related self-care. For the most part, these differences are moderate in size. We find no significant differences in grooming, the management of financial/legal affairs, written or phone communication, or the use of services.

In crafting new items, it will be especially important to ask not only about an individual's capacity to perform these activities but also their actual participation. One possible sequence of questions to consider is first asking whether the respondent has participated in each of these types of activities in a given window of time (past week or month) and then ask either the level of difficulty participating, or if they did not participate, whether they are (un)able to do so. The window of time could be selected based on the frequency of participation, with more common activities requiring shorter windows (e.g., a week) and less frequent activities being assessed over a longer time frame (e.g., a month). A model for this variable-sized window approach can be found in the Health and Retirement Study's 2003 Consumption and Activities Mail Survey.

Finally, we emphasize that these analyses are but a first step in crafting new items to measure disability in late life. We recommend that any new questions be first tested in a laboratory setting for meaning and comprehension. Such cognitive testing may involve asking respondents to react to the question itself, as well as talk aloud about what they were thinking when answering a question (Beatty & Willis 2007; Presser et al. 2004). If these items prove useful in the laboratory setting, pilot testing is recommended as a way of determining question validity and reliability. Only through rigorous testing of new measures will valuable enhancements to current measures of late-life disability be possible.

I. BACKGROUND

Questions about limitations in Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) have become fixtures in national surveys of older adults. These measures were initially developed for various clinical purposes during the 1960s and 1970s, and became widely adopted as self-reported disability items in national surveys during the 1980s and 1990s.

Katz (1963; 1970), for example, developed the original ADL index to assess the rehabilitation potential of hospitalized geriatric patients. The index was to be assessed by means of a series of questions and observations by a professional of the patient's status on a series of self-care activities during the previous two weeks. The observer determined whether another person assisted the patient (through supervision, direction, or personal assistance) or whether the patient functioned alone.

The original IADL scale, developed by Lawton and Brody (1969), was intended to facilitate communication about clients' everyday functional competence among different personnel and agencies involved in treatment plans. The original authors proposed "representative" activities for consideration: women were to be evaluated by their ability to shop, cook, and do laundry, whereas men were to be evaluated by their performance in transportation and handling money. While the gender division of activities is no longer maintained in current national surveys, the list of IADL items included in most national surveys of older adults remains largely unchanged since 1969.

Recent advances in conceptualizing disability provide new opportunities for surveys to improve upon this general approach to assessing late-life disability. For example, new conceptual models of disability have highlighted the notions of activity limitations and participation restrictions (WHO 2001). In this context, activity limitations are difficulties an individual may have in the capacity to execute a task or action whereas participation restrictions are problems an individual may have in the performance of those activities and thus in involvement in life situations. Current ADL and IADL scales were not designed to make such distinctions nor have they been updated to reflect the breadth of activities in which older adults currently participate.

Data on time use at older ages are especially relevant to this topic. A growing number of studies have examined data on use of time by older adults (Clark et al. 1999; Cutler & Hendricks 1990; Herzog et al. 1989; Gauthier & Smeeding 2003; Fast et al. 2005a, 2005b; Glass et al. 2005; Krantz-Kent & Stewart 2005; Horgas et al. 1998; Klumb & Baltes 1999; Larson, Zuzanek & Mannell 1985; Marsiske et al. 1997; Moss & Lawton 1982; Pruchno & Rose 2002; Verbrugge et al. 1996). Some draw upon time "diary" data (generally, a full accounting of the previous days' activities; such as the American Time Use Survey (ATUS)) whereas others draw upon stylized questions about particular activities over the past week or month (for example, as found in the Health and Retirement Study's (HRS's) Consumption and Activities Mail Survey). Despite the different measurement approaches, on balance, this literature suggests that

older adults spend much of their time alone, at home, with about one-third of their time devoted to "obligatory" (non-leisure) activities.

Attention to disability in this literature has been limited and largely peripheral (Pentland & McColl 1999). Yet an individual's capacity and his or her current environment are both likely to be critical in influencing time use. The principal aim of this report is to use data on how older Americans spend their time to provide insights into enhancements to current measures of late-life disability. In doing so, we consider which types of activities and what aspects of participation should be queried. We end with a series of recommendations for future survey design efforts.

II. DATA AND METHODS

The ATUS is conducted by the Bureau of Labor Statistics. It is designed to collect information on the kinds of activities done by persons living in the United States and on the time spent on those activities. Respondents are selected monthly from the cohort of households completing their last (8th) interview in the Current Population Survey (CPS). Approximately half of the "retiring" CPS households are selected, and one random individual (age 15 or over) is chosen from the household for an interview about their time use. The sample is a stratified, three-stage sample. In the first stage, the state oversampling done by the CPS is undone so that eligible households are geographically proportional to the United States population. In the second stage, households with Hispanic and African American householders are oversampled, as are households with children present. In the third stage, an age-eligible person is randomly selected from each selected household. Selected individuals are contacted for up to eight weeks to obtain an interview. In 2003, approximately 39,000 individuals were interviewed, while approximately 27,000 were interviewed in 2004 and in 2005. We further limit the samples from the three years to persons age 65 and over at the time of the ATUS interview.

Interviews are conducted over the phone using Computer Assisted Telephone Interviewing (CATI). In addition to collecting summary data on a variety of time use topics, the interviewer also asks the respondent to go through every activity of the previous day, sequentially beginning at 4:00 am the previous day and ending at 4:00 am on the day of the interview. It is the data from this "time-diary" that we use in our analyses. The ATUS staff members assign a code and create an individual record for each reported activity. We have modified the ATUS codes somewhat to reduce the number of activity categories we report. The cross-walk between the ATUS coding and our abbreviated list is provided in the Appendix.

The ATUS also provides linked data from the CPS interviews that we use in our analyses. In particular, we use data on work disability, education, household income, and demographics collected as part of the CPS. The combined sample from the three years is 7,932 individuals. Summary statistics on the sample are presented in Table 1.

We performed two principal analyses. The first is a summary of the most common activities in the population. We tabulate both participation in an activity (spending any time on an activity) and the average time spent on the activity in the population. While we are generally interested in the activities on which the population spends most of its time, activities with widespread participation on the randomly selected diary day may be candidates for inclusion in a list of "necessary" daily activities, even if they do not demand large amounts of time to complete.

To identify potential reasons for differences in participation, in the second set of analyses we estimate logistic regression models of each major activity. We are particularly interested, however, in activities that are sensitive to health problems. These

may be particularly good candidates to serve as markers of the disablement process. Unfortunately, neither the CPS nor the ATUS collects much information on health or functional status.¹

As an alternative to using a direct measure of health, we use a strategy that compares two groups of individuals with similar time endowments but who differ, on average, in health and physical functioning. Thus, as a "control group" for the elderly members of the ATUS sample, we include a group persons aged 55-64 who are retired for reasons other than disability/work limitation. This group is arguably in better health than the average person over 65, but like most of those over 65, their time budgets are not constrained by participation in the labor market. Thus we interpret the coefficient on the dummy variable indicating membership in the young retiree group as our estimate of the impact of relatively good health on activity participation. We also include as independent variables gender, marital status, and income because they are related to both health and activity participation.

-

¹ The CPS asks all respondents "(Do you/Does anyone in this household) have a health problem or disability which prevents (you/them) from working or which limits the kind or amount of work (you/they) can do?" If the household member who is selected as the ATUS respondent has been identified as disabled, they are asked to confirm this status in their ATUS interview. While this is clearly not a standard measure of late-life disability, and is not even a terribly useful measure of disability at earlier ages, it is likely to be correlated with underlying health problems.

III. FINDINGS

A. Review of ADL and IADLs in National Surveys

Table 2 and Table 3 present the types of activities currently included in ADL and IADL measures in select national surveys (see Appendix Table A3 and Table A4 for details). Generally six ADLs are included: bathing or showering; dressing; eating; getting in or out of bed; using the toilet, and getting round inside. Less frequently surveys ask about difficulty going outside or getting outside the home. IADLs most often include: preparing meals, shopping for groceries, taking or managing medication, managing money, and getting around outside/going places outside of walking distance. Less frequently surveys assess difficulty with making telephone calls and doing laundry, and only one survey assesses using a map. There is also variation as to whether surveys ask about difficulty with the performance of activities, difficulty with respect to the capacity to perform these activities, or whether respondents receive help or use equipment to carry out such activities.

Not shown in the table are newer items that ask about the amount of difficulty with leisure activities. The National Health Interview Survey (NHIS) (and National Health and Nutrition Examination Survey (NHANES)), for example, asks about difficulty with going out to things like shopping, movies, or sporting events; participating in social activities (visiting friends, attending clubs or meetings or going to parties); and doing things to relax at home or for leisure (reading, watching television, sewing, listening to music). Whether the original and additional activities identified here are indeed common and whether other common activities are omitted is assessed in the next section.

B. Summary of Participation and Time Use

Table 4 presents findings on the prevalence of the older population reporting that they participated in a given activity on the previous day ("participation"). Three activities have essentially universal participation on a daily basis among community-dwelling elderly: sleeping, eating, and leisure, with participation of more than 97%. A majority of respondents also indicated travel (72.4%), grooming (70.0%) and food preparation (61.2%) activities on the day before the interview. Between a third and a half of respondents reported in-person socializing (39.9%), shopping (38.4%), household maintenance (36.5%), and cleaning (33.2%) among their activities. The remaining activities were reported by between 10% and 20% of elderly ATUS respondents.

Table 4 also indicates whether these most common activities are captured under common ADL and IADL items on national surveys. As they are designed to be, ADL

² For reference, Appendix Table A1 presents participation and time use for a more disaggregated list of activities.

measures are well represented in the commonly performed tasks. Eating and grooming (includes bathing, dressing and toileting) are overwhelmingly reported as having been performed on the previous day. Transfer is not captured as an activity itself, since the CATI diary instrument does not inquire about how the respondent transitions between one activity and another. That is, we do not know how much time is involved in getting out of bed or walking across a room, since these transitions are included as part of the "destination" activities (e.g., grooming). Using the toilet is not identified as a separate activity.

IADLs are also relatively common activities. The diary categories food preparation, shopping, household maintenance, cleaning, laundry, using the phone, and handling financial/legal affairs include some of the most common IADL tasks, and are performed on a random day by significant proportions of respondents. Taking medications is most likely aggregated into health-related self-care, though this category may well include other activities as well (e.g., monitoring blood sugar). Finally, getting around outside may be included in both "travel" items as well as under physical recreation (which includes walking), although these items also include activities beyond the IADL concept of mobility.

The remaining activities (except for sleeping) with relatively high rates of daily participation can be considered candidates for inclusion in an expanded list of "IADL" items or in a newly defined group of regular activities. These include leisure activity, travel, socializing, household maintenance, caring for others, work/volunteering, physical recreation, communication (which includes handling household and personal mail), health-related self-care, using/arranging for services, and computer use.

Table 5 presents the average time spent on these activities in the total population and among participants in each activity. Eating and grooming (the two ADLs that are identifiable) on average take up two hours per day whereas IADLs (food preparation, shopping, household maintenance, cleaning, using the phone, financial/legal issues, and laundry) occupy about three hours.

How time consuming are activities that are not currently ADLs or IADLs? After sleeping (8 hours and 47 minutes), leisure activities occupy the largest portion (6:01) of the day for elderly persons. In Table 6a, we disaggregate participation and time use for leisure activities into the most commonly reported specific activities. Television viewing accounts for approximately two-thirds (nearly four hours of the day) of leisure time activity. Reading for personal interest and relaxing/thinking account for most of the remaining leisure time. These findings suggest any item on leisure time should explicitly include reference to both television viewing and reading.

Other activities not currently queried in ADL and IADL questions involve considerable time. If one adds together the time devoted to the ten activities recommended in Table 4, on average the typical older adult spends just ten and one-half hours per day on these activities (626 minutes). For example, travel accounts for nearly an hour of an average day, and among those with any travel, nearly an hour and

a half. Work and volunteering also account for nearly an hour of the average day. However, the average amount of time spent by those with any work or volunteer activity is nearly five hours. Household maintenance and socializing average typically 45 minutes per day. The remaining activities range from 5-17 minutes on average per day.

We also examined the detailed activity data on physical recreation and caring for others (not shown). The detailed distribution of physical recreation indicated that the most common activity was walking (53%). Sixteen percent (16%) reported unspecified working out; 13% reported using cardiovascular equipment; and 6% reported golfing. Among those reporting providing care for others, the largest amount of time (28 out of 86 minutes) is spent in caring for "non-household" children. There is no indication of family relation in the activity data, so this could include grandchildren living in another home as well as unrelated children. Providing help (including IADL-type activities like housework and providing transportation) to non-household adults accounts for 20 minutes of total care time. Providing physical and health care to a household adult accounts for 16 minutes of time spent by elderly persons giving care to others.

C. Exploring the Purpose of Activities

Some of the activities that are common and/or time intensive involve an activity that is a means to carrying out another activity. For example, older adults may travel to eat, shop, or socialize; use the telephone or computer to socialize, handle finances, or shop; and enlist services for activities including personal care and household management. Here we examine the purpose of travel, telephone, computing, and service.

Table 6b disaggregates travel into the most common purposes. Chief among these is shopping, in which more than half of those with travel participate. In terms of time, approximately one-quarter (20 out of 84 minutes) of travel time. Nearly a third of those traveling do so for the purpose of eating. Other common purposes of travel include socializing, caring for others, work and health-related self-care (i.e., traveling to the doctor).

The remaining detailed tables--Table 6c, Table 6d and Table 6e--examine participation and time use for phone, computer, and service utilization. By far, the primary purpose for using the phone is socializing with others. It accounts for more than two-thirds of the time spent on the phone. Computer use appears to be largely for the purpose of e-mail and web surfing, although the use of computer as part of one's job, or as part of managing money, or as a mode of shopping are not identifiable using ATUS's coding lexicon. Service use is most often health-related (42.3%), related to financial/legal affairs (29.7%), and related to household maintenance (16.3%).

D. Patterns by Demographic Group

The final step in our analysis was to examine the extent to which health and other demographic factors influences participation in various activities in late life. We estimated logit models on each activity to identify which activities had differential participation rates along four dimensions. We summarize the results from these multivariate models in Table 7. For each of 17 activities, we present the odds ratios of participation for: (1) young/healthy relative to old/unhealthy individuals; (2) upper income relative to lower income individuals; (3) males relative to females; and (4) married relative to single individuals. Blank cells indicate that the two groups are not significantly different in their odds of participation. As an example, the first odds ratio of 1.38 for Travel indicates that the members of the younger/healthier group have 38% higher odds than the older/less healthy group of spending time traveling. The blank in the next row indicates that the two groups do not differ significantly in their odds of performing grooming activities.

Aging/Disability

As discussed above, because good measures of health and disability are not included in the ATUS or the CPS, we rely on differences in participation between a younger group that is retired, but does not report a health problem as the reason for not working. This group has a similar endowment of time compared to our study population, but they are likely to have fewer health problems limiting their activities, and thus more human capital (health) resources available.

We find that participation rates in each activity are generally higher among the younger/healthier group. The exception, not surprisingly is health-related self-care. For the most part, these differences are moderate. The only activities where participation is more than 50% higher among the younger group were computer use and caring for others. Computer use may be lower in older cohorts due to lack of familiarity with and access to the technology. Younger persons are also more likely to have both living parents, spouses and to have children living at home--groups often requiring care. We do not find significant differences in grooming, the management of financial/legal affairs, written or phone communication, or the use of services.

Income

The availability of financial resources--measured as having total household income greater than \$25,000--also tends to increase participation, sometimes by a great deal. Having higher income greatly increases the probability of computer use, work/volunteer activity (though the causality here is likely in the opposite direction), travel, and the management of financial and legal affairs. The only activity where those with higher incomes are *less* likely to participate is health-related self-care. As would be expected, income increases the likelihood of using services that may substitute for some activities.

³ Since the younger group is defined as being retired, it is also not surprising that they are less likely to report work than the general population over 65.

Income does not appear to affect the participation in most IADLs and does not alter the likelihood of social interaction.

Marital Status

The presence of a spouse can also be viewed as a resource, although the only forms of participation that being married appears to encourage are socializing and caregiving (which can include doing so for one's spouse), household maintenance activities, and computer use. Of these, only the increased use of the computer is a larger-than-modest effect. Being married is associated with a lower likelihood of grooming, written and phone communication and managing financial/legal affairs.

Gender

Finally, there appear to be fairly ubiquitous participation differences by gender. Men are less likely to perform housekeeping tasks (cleaning, food preparation, and laundry, financial/legal affairs), less likely to communicate with others either in person, by phone or in writing, and less likely to care for others or themselves (grooming and health-related self-care). They are modestly more likely to do household maintenance tasks, to travel, work, use the computer, and do physical recreation.

IV. DISCUSSION AND RECOMMENDATIONS

The international adoption of the International Classification of Functioning, Disability, and Health as a guiding model for understanding disability has highlighted the need for new measures to capture both activity limitations and participation. The analyses in this report are intended to help guide these efforts, particularly as they relate to disability measurement among older adults. Our recommendations relate to three specific areas: new activities for consideration; attention to purpose of the activity (e.g., for telephone, computer use, travel, and service use); and attention to distinctions between capacity (e.g., difficulty with activity) and participation (e.g., actual performance of the activity) and related ordering issues.

This analysis has confirmed that the activities currently of interest in ADL and IADL measures are still highly prevalent and generally consume approximately five hours per day. We have identified several new activities for consideration, which are common in late life and appear to be sensitive to health deterioration. Specifically, we propose exploring items related to ten types of activities:

- leisure;
- travel;
- socializing or visiting with others;
- taking care of home repairs or yard work;
- caring for others;
- working or volunteering;
- physical activities;
- handling the mail and writing letters:
- health-related self-care:
- arranging for and using services; and
- using a computer.

As a first step, survey designers may want to gather related questions from existing surveys. For example, the NHIS and NHANES have already included social interaction and leisure questions, the HRS has asked (for example, in 1994) about frequency of participation in light physical activity (such as walking, dancing, gardening, golfing, or bowling) and vigorous physical activity or sports (such as heavy housework, aerobics, running, swimming, or bicycling). Moreover, the HRS Consumption and Activities Mail Survey has included questions about several dozen activities including: visiting in-person with friends, neighbors, or relatives; communicating by telephone, letters, or e-mail, working for pay, using the computer, and helping friends, neighbors or relatives.

In some cases, items should be explicit about the purpose of the activity to provide clarity and context. In particular, survey designers may want to consider incorporating the most forms and/or reasons for carrying out an activity. For example:

- doing things to relax at home or for leisure, such as watching TV or reading;
- traveling to shop, eat, or visit with others;
- participating in physical activities such as walking, playing a sport, or other kind of exercise:
- arranging for and using services related to your health, finances, or taking care of one's home; and
- using a computer to send e-mail or look up health-related, financial or other information.

In crafting these new items, it will be especially important to ask not only about an individual's capacity to perform these activities but also their actual participation. The sequencing of such items is not altogether straightforward and therefore deserves comment. Asking about difficulty with activities that are not universally performed may lead to ambiguous answers such as "don't do" or "can't do." Indeed this occurs frequently in many surveys that ask about gender-related IADLs. Surveys have addressed this issue by asking respondents who report that they "don't" or "can't" do an activity a follow-up item as to whether this is because of a health problem. An alternative sequence of questions to consider is first asking whether the respondent has participated in each of these types of activities in a given window of time (past week or month) and then ask either the level of difficulty participating, or if they did not participate, whether they are (un)able to do so. The window of time could be selected based on the frequency of participation, with more common activities requiring shorter windows (e.g., a week) and less frequent activities being assessed over a longer time frame (e.g., a month). A model for this variable-sized window approach can be found in the HRS's 2003 Consumption and Activities Mail Survey.

Finally, we emphasize that these analyses are but a first step in crafting new items to measure disability in late life. We recommend that any new questions be first tested in a laboratory setting for meaning and comprehension. Such cognitive testing may involve asking respondents to react to the question itself, as well as talk aloud about what they were thinking when answering a question. If these items prove useful in the laboratory setting, pilot testing is recommended as a way of determining question validity and reliability (see for example, Freedman, Agree, and Cornman 2005). Only through rigorous testing of new measures will valuable enhancements to current measures of late-life disability be possible.

REFERENCES

- Beatty P.C., and G.B. Willis. 2007. "Research Synthesis: The Practice of Cognitive Interviewing." *Public Opinion Quarterly* 71(2):287-311
- Clark, M.S., M.J. Bond, and L. Sanchez. 1999. "Effect of Sensory Impairment on the Lifestyle Activities of Older People." *Australasian Journal of Ageing* 18(3):124-129.
- Cutler, S.J., and J. Hendricks. 1990. "Leisure and Time Use Across the Life Course." In R.H. Binstock and L.K. George (eds.) *The Handbook of Social Science and Aging*. San Diego, CA: Academic Press.
- Fast, J., D. Dosman, S.A. Chapman, and N. Keating. 2005a. "Are Retired Canadians Aging Well by Staying Engaged?" *Canadian Journal of Aging* 23:5-19.
- Fast, J., D. Dosman, and L. Moran. 2005b. "Productive Activity in Later Life: Three Decades of Stability and Change." Presented at the 2005 IATUR Conference. November 2-4, Halifax, Canada.
- Gauthier, A., and T. Smeeding. 2003. "Time Use at Older Ages." *Research on Aging* 25(3):247-274.
- Glass, T., T.E. Seeman, A.R. Herzog, R. Kahn, and L.F. Berkman. 1995. "Change in Productive Activity in Late Adulthood: Macarthur Studies of Successful Aging." *Journal of Gerontology: Social Sciences* 50B(2):S65-S76.
- Herzog, A.R., R.L. Kahn, J.N. Morgan, J.S. Jackson, and T.C. Antonucci. 1989. "Age Differences in Productive Activities." *Journal of Gerontology* 44:S129-S138.
- Horgas, A.L., H.U. Wilms, and M.M. Baltes. 1998. "Daily Life in Very Old Age: Everyday Activities as Expression of Successful Living." *The Gerontologist* 38(5):556-568.
- Katz, S., A.B. Ford, R.W. Moskowitz, B.A. Jackson, and M.W. Jaffe. 1963. "Studies in Illness in the Aged. The Index of ADL: A Standardized Measure of Biological and Psychosocial Function." *JAMA* 185:914-919.
- Katz, S., T.D. Downs, H.R. Cash, and R.C. Grotz. 1970. "Progress in Development of the Index of ADL." *The Gerontologist* 10(1):20-30.
- Klumb, P.L., and M.M. Baltes. 1999. "Time Use of Old and Very Old Berliners: Productive and Consumptive Activities as Functions of Resources." *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 54B(5):S271-S278.

- Krantz-Kent, R., and J. Stewart. 2005. "How do the Elderly Spend their Time?" Paper presented at the Joint Statistical Meetings, August 7-11, Minneapolis, MN.
- Larson, R., J. Zuzanek, and R. Mannell. 1985. "Being Alone Versus being with People: Disengagement in the Daily Experience of Older Adults." *Journal of Gerontology* 40(3):375-381.
- Lawton, M.P., and E.M. Brody. 1969. "Assessment of Older People: Self-Maintaining and Instrumental Activities of Daily Living." *Gerontologist* 9(3):179-186.
- Marsiske M, P. Klumb, and M.M. Baltes. 1997. "Everyday Activity Patterns and Sensory Functioning in Old Age." *Psychology and Aging* 12(3):444-457.
- Moss, M.S. and M.P. Lawton. 1982. "Time Budgets of Older People: A Window on Four Lifestyles." *Journal of Gerontology* 48(3):S102-S111.
- Pentland, W. 1999. "Application of Time Use Research to Study Life with Disability." In W. Pentland, A. Harvey, M.P. Lawton, and M.A. McColl (eds.) *Time Use Research in the Social Sciences.* New York, NY: Kluwer Academic/Plenum Press. 169-183.
- Presser, S., M.P. Couper, J.T. Lessler, E. Martin, J. Martin, J.M. Rothgeb, and E. Singer. 2004. "Methods for Testing and Evaluating Survey Questions." *Public Opinion Quarterly* 68(1):109-130.
- Pruchno, R.A., and M.S. Rose. 2002. "Time Use by Frail Older People in Different Care Settings." *Journal of Applied Gerontology* 21(1):5-23.
- Verbrugge, L.M., A.L. Gruber-Baldini, and J.L. Fozard. 1996. "Age Differences and Age Changes in Activities: Baltimore Longitudinal Study of Aging." *Journal of Gerontology B Psychological Sciences and Social Sciences* 51(1):S30-41.
- World Health Organization (WHO). 2001. *International Classification of Functioning, Disability, and Health*. Geneva, Switzerland: World Health Organization.

TABLE 1. Sample Characteristics			
AGE			
65 - 69	28.7%		
70 - 74	24.5%		
75 - 79	24.0%		
80 and over	22.8%		
MALE	42.7%		
MARRIED, SPOUSE PRESENT	56.4%		
INCOME			
< 5,000	1.3%		
5,000 - 9,999	6.4%		
10,000 - 24,999	26.2%		
25,000 - 49,999	27.1%		
50,000 - 99,999	14.9%		
100,000 and above	2.6%		
Refused	21.4%		
RACE/ETHNICITY			
White, non-Hispanic	85.7%		
Black, non-Hispanic	8.2%		
Other, non-Hispanic	0.2%		
Hispanic	5.8%		
EDUCATION			
Less than High School	22.6%		
High School Graduate	38.8%		
Some College	18.6%		
College Graduate (Bachelor's Degree)	18.6%		
HAS WORK-LIMITING DISABILITY	3.0%		
SAMPLE SIZE	7,932		

TABLE 2. Measures of Activities of Daily Living in Select National Surveys							
Survey	ADL Items						
·	Bathing or Showering	Dressing	Eating	Getting In and Out of Bed	Using the Toilet	Getting Around Inside or Walking Across a Room or Walking	Going Outside Home/Getting Outside
American Community Survey (ACS); 1999 and later	X	Х				X	
Health and Retirement Study (HRS); 1995 and later	Х	Х	Х	Х	Х	X	
Medicare Current Beneficiary Survey (MCBS); 1992 and later (community sample)	Х	X	х	Х	Х	x	
Medical Expenditure Panel Survey (MEPS-Long-Term Care Supplement); 1997 and later	х	Х	х	х	х		
National Health and Nutrition Examination Survey (NHANES); 1999-2000		Х	х	Х		х	
National Health Interview Survey (NHIS); 1997 and later	Х	Х	Х	Х	Х	×	
National Long-Term Care Survey (NLTCS); 1982 and later (community sample)							
Screener: Community interview:	X X	X X	X X	X X	X X	X X	Х
Survey of Income and Program Participation (SIPP); 1991 and later	Х	Х	Х	Х	х	Х	х
Supplement on Aging (SOA); 1995	Х	Х	Х	Х	Х	Х	Х

	TABLE 3. Measures of Instrumental Activities of Daily Living in Select National Surveys				/S				
Survey	Preparing Meals	Shopping for Groceries or Personal Items	Making Phone Calls or Using Telephone	Taking or Managing Medication	ADL Items Managing Money	Get Around Outside/ Go Places Outside of Walking Distance	Light Housework, Heavy Housework, or Work Around the House or Yard	Doing Laundry	Using a Map
American Community Survey (ACS); 1999 and later						×			
Health and Retirement Study (HRS); 1995 and later	Х	Х	Х	х	Х		Х		Х
Medicare Current Beneficiary Survey (MCBS); 1992 and later (community sample)	х	х	х		х		Х		
Medical Expenditure Panel Survey (MEPS- Long-Term Care Supplement); 1997 and later	Х	х		Х	Х	Х	х	х	
National Health and Nutrition Examination Survey (NHANES); 1999-2000	Х				Х		Х		
National Health Interview Survey (NHIS); 1997 and later						Х			
National Long- Term Care Survey (NLTCS); 1982 and later (community sample) Screener: Community interview:	X X	X	X	X X	X X	х	X X	X X	
Survey of Income and Program Participation (SIPP); 1991 and later	Х	Х		Х	Х		Х		
Supplement on Aging (SOA); 1995	Х	Х	Х	Х	Х	Х	Х		

TABLE 4. Participation: Common Activities among the Elderly			
Activity	Туре	% Participating	
Sleeping	<u> </u>	99.9%	
Eating*	Α	97.8%	
Leisure*	Р	97.4%	
Travel	Р	72.4%	
Grooming	A	70.0%	
Food Preparation	I	61.2%	
Socializing*	Р	39.9%	
Shopping*	I	38.4%	
Household Maintenance*	Р	36.5%	
Cleaning*	I	33.2%	
Phone	I	20.7%	
Caring for Others*	Р	19.9%	
Financial/Legal Affairs*	I	18.5%	
Work/Volunteering*	Р	18.3%	
Physical Recreation	Р	17.9%	
Laundry*	I	17.3%	
Communication (mail)*	Р	16.4%	
Health-Related Self-Care*	Р	15.0%	
Using/Arranging Services	Р	14.9%	
Computer Use	Р	9.6%	
Other		42.9%	
* See detailed table (Tables 6a-6e). A = Current ADL I = Current IADL			
P = Proposed Addition			

TABLE 5. Time	Use: How do the Elderly Spe	end Their Time?
Activity	All Elderly	Among Participating
	(h : m)	(h : m)
Sleeping	8 : 47	8 : 48
Eating	1 : 22	1:24
Leisure	6 : 01	6 : 10
Travel	0 : 55	1:17
Grooming	0 : 37	0:53
Food Preparation	0:43	1:10
Socializing	0 : 45	1:53
Shopping	0 : 25	1:04
Household Maintenance	0 : 46	2:05
Cleaning	0 : 28	1:24
Phone	0:09	0 : 41
Caring for Others	0 : 17	1:26
Financial/Legal Affairs	0 : 12	1:06
Work/Volunteering	0 : 52	4:42
Physical Recreation	0 : 14	1 : 16
Laundry	0 : 13	1:13
Communication (mail)	0 : 05	0:30
Health-Related Self-Care	0:11	1:16
Using/Arranging Services	0:11	1:13
Computer Use	0:09	1:31
Other	0 : 40	1:33
	24:00	

TABLE 6a. Type of Leisure Activity among Those with Any Use (97.4%)					
Activity Participation Time Use					
		h : m			
Watching Television	89.8%	3 : 57			
Reading for Personal Interest	54.1%	1:02			
Relaxing/Thinking	30.3%	0 : 42			
All Other	22.9%	0:30			

TABLE 6b. Purpose of Travel among Those with Any Use (72.4%)				
Activity	Participation	Time Use h : m		
Eating	32.6%	0 : 11		
Socializing	28.2%	0 : 09		
Shopping	52.5%	0 : 20		
Caring for Others	19.2%	0 : 08		
Work/Volunteering	18.2%	0:07		
Health-Related Self-Care	11.0%	0:03		
All Other	47.4%	0 : 18		

TABLE 6c. Purpose of Phone Use among Those with Any Use (20.7%)					
Activity Participation Time Use					
		h : m			
Socializing	69.7%	0:26			
Shopping	1.9%	0:00			
Caring for Others	0.1%	0:00			
All Other	37.9%	0 : 15			

TABLE 6d. Purpose of Computer Use among Those with Any Use (9.6%)				
Activity Participation Time Use				
		h : m		
Leisure/Web Surfing/Playing	58.8%	1:00		
Work/Volunteering	6.7%	0 : 08		
E-mail Communication	48.6%	0 : 23		

TABLE 6e. Purpose of Service Use among Those with Any Use (14.9%)				
Activity	Participation	Time Use		
		h : m		
Household Maintenance	16.3%	0:12		
Cleaning	0.5%	0 : 01		
Financial/Legal Affairs	29.7%	0:09		
Laundry	3.1%	0:00		
Health-Related Self-Care	42.3%	0:39		
All Other	18.5%	0 : 13		

TABLE 7. Participation Differences by Individual Characteristics				
	Relative Odds of Participation			
	Young, Healthy Retired	Upper Income (> 25K)	Male	Married
Travel	1.38	1.63	1.28	
Grooming		1.38	0.52	0.85
Food Preparation	1.26		0.24	
Socializing	1.21		0.77	1.14
Shopping	1.36	1.52		
Household Maintenance	1.40		1.22	1.15
Cleaning	1.18		0.19	
Phone		1.22	0.37	0.67
Caring for Others	1.74	1.32	0.79	1.41
Financial/Legal Affairs		1.76	0.73	0.85
Work/Volunteering	0.78	1.79	1.20	
Physical Recreation	1.27	1.49	1.27	
Laundry	1.27		0.14	
Communication (mail)		1.22	0.79	0.63
Health-Related Self-Care	0.78	0.61	0.71	0.85
Using/Arranging Services		1.42		
Computer Use	1.80	2.69	1.20	1.56
Only significant (p < 0.05) results reported.				

APPENDIX

TABLE	TABLE A1. Cross-walk to ATUS Activities Categories with Activity Groups		
Activity	Activity Detail		
Sleeping	Sleeping		
	Sleeping, n.e.c.*		
Eating	Eating and drinking		
	Eating and drinking, n.e.c.*		
	Waiting associated w/eating & drinking		
	Waiting associated with eating & drinking, n.e.c.*		
	Eating and drinking, n.e.c.*		
Leisure	Television and movies (not religious)		
	Television (religious)		
	Reading for personal interest		
	Relaxing, thinking		
	Tobacco and drug use		
	Listening to the radio		
	Listening to/playing music (not radio)		
	Playing games		
	Arts and crafts as a hobby		
	Collecting as a hobby		
	Hobbies, except arts & crafts and collecting		
	Writing for personal interest		
	Relaxing and leisure, n.e.c.*		
	Attending performing arts		
	Attending museums		
	Attending movies/film		
	Attending gambling establishments		
	Security procedures related. to arts & entertainment		
	Arts and entertainment, n.e.c.*		
	Waiting assoc. w/socializing & communicating		
	Waiting assoc. w/attending/hosting social events		
	Waiting associated with relaxing/leisure		
	Waiting associated with arts & entertainment		
	Watching aerobics		
	Watching baseball		
	Watching basketball		
	Watching biking		
	Watching billiards		
	Watching boating		
	Watching bowling		
	Watching climbing, spelunking, caving		
	Watching dancing		
	Watching equestrian sports		
	Watching fencing		
	Watching fishing		
	Watching football		
	Watching golfing		
	Watching gymnastics		
	Watching hockey		
	Watching martial arts		

	TABLE A1 (continued)			
Activity	Activity Detail			
Leisure (continued)	Watching racquet sports			
	Watching rodeo competitions			
	Watching rollerblading			
	Watching rugby			
	Watching running			
	Watching skiing, ice skating, snowboarding			
	Watching soccer			
	Watching softball			
	Watching vehicle touring/racing			
	Watching volleyball			
	Watching walking			
	Watching water sports			
	Watching weightlifting/strength training			
	Watching people working out, unspecified			
	Watching wrestling			
	Attending sporting events, n.e.c.*			
	Waiting related to playing sports or exercising			
	Waiting related to attending sporting events			
	Waiting associated with sports, exercise, & recreation, n.e.c.*			
	Security related to playing sports or exercising			
	Security related to playing sports of exercising Security related to attending sporting events			
	Security related to sports, exercise, & recreation, n.e.c.*			
	Travel as a form of entertainment			
Travel	Travel related to eating and drinking			
	Travel related to eating and drinking, n.e.c.*			
	Travel related to socializing and communicating			
	Travel related to attending or hosting social events			
	Travel related to grocery shopping			
	Travel related to purchasing gas			
	Travel related to purchasing food (not groceries)			
	Travel related to shopping, ex groceries, food, and gas			
	Travel related to consumer purchases, n.e.c.*			
	Travel related to using medical services			
	Travel related to using personal care services			
	Travel related to caring for & helping hh children			
	Travel related to hh children's education			
	Travel related to hh children's health			
	Travel related to caring for hh adults			
	Travel related to helping hh adults			
	Travel rel. to caring for & helping hh members, n.e.c.*			
	Travel related to caring for and helping nonhh children			
	Travel related to nonhh children's education			
	Travel related to nonhh children's health			
	Travel related to caring for nonhh adults			
	Travel related to helping nonhh adults			
	Travel rel. to caring for & helping nonhh members, n.e.c.*			
	Travel related to using childcare services			
	Travel related to working			
	Travel related to work-related activities			
	Travel related to income-generating activities			
	Travel related to job search & interviewing			
	Traver related to job scaron a menuewing			

	TABLE A1 (continued)
Activity	Activity Detail
Travel (continued)	Travel related to work, n.e.c.*
riavor (comunaca)	Travel related to volunteering
	Travel related to volunteer activities, n.e.c.*
	Travel related to phone calls
	Travel rel. to phone calls, n.e.c.*
	Travel related to personal care
	Travel related to personal care, n.e.c.*
	Travel related to housework
	Travel related to food & drink prep., clean-up, & presentation
	Travel related to interior maintenance, repair, & decoration
	Travel related to exterior maintenance, repair, & decoration
	Travel related to lawn, garden, and houseplant care
	Travel related to care for animals and pets (not vet care)
	Travel related to vehicle care & maintenance (by self)
	Travel related to appliance, tool, and toy set-up, repair, & maintenance (by self)
	Travel related to household management
	Travel related to household activities, n.e.c.*
	Travel related to taking class
	Travel related to extracurricular activities (ex. Sports)
	Travel related to research/homework
	Travel related to registration/administrative activities
	Travel related to education, n.e.c.*
	Travel related to using financial services and banking
	Travel related to using limitalists services
	Travel related to using real estate services
	Travel related to using veterinary services
	Travel rel. to using prof. & personal care services, n.e.c.*
	Travel related to using household services
	Travel related to using home main./repair/décor./construction svcs
	Travel related to using pet services (not vet)
	Travel related to using lawn and garden services
	Travel related to using vehicle maintenance & repair services
	Travel related to using household services, n.e.c.*
	Travel related to using government services
	Travel related to civic obligations & participation
	Travel rel. to govt svcs & civic obligations, n.e.c.*
	Travel related to relaxing and leisure
	Travel related to arts and entertainment
	Travel rel. to socializing, relaxing, & leisure, n.e.c.*
	Travel related to participating in sports/exercise/recreation
	Travel related to attending sporting/recreational events
	Travel related to sports, exercise, & recreation, n.e.c.*
	Travel related to religious/spiritual practices
	Travel rel. to religious/spiritual activities, n.e.c.*
	Security procedures related to traveling
	Security procedures related to traveling, n.e.c.*
	Traveling, n.e.c.*
Grooming	Washing, dressing and grooming oneself
y	Grooming, n.e.c.*

	TABLE A1 (continued)		
Activity	Activity Detail		
Food Preparation	Food and drink preparation		
	Food presentation		
	Kitchen and food clean-up		
	Food & drink prep, presentation, & clean-up, n.e.c.*		
Socializing	Socializing and communicating with others		
	Socializing and communicating, n.e.c.*		
	Attending or hosting parties/receptions/ceremonies		
	Attending meetings for personal interest (not volunteering)		
	Attending/hosting social events, n.e.c.*		
	Waiting associated with socializing, n.e.c.*		
	Socializing, relaxing, and leisure, n.e.c.*		
Shopping	Grocery shopping		
	Purchasing gas		
	Purchasing food (not groceries)		
	Shopping, except groceries, food and gas		
	Waiting associated with shopping		
	Shopping, n.e.c.*		
	Comparison shopping		
	Researching purchases, n.e.c.*		
	Security procedures rel. to consumer purchases		
	Security procedures rel. to consumer purchases, n.e.c.*		
	Consumer purchases, n.e.c.*		
Household Sewing, repairing, & maintaining textiles			
Maintenance	Storing interior hh items, inc. food		
	Housework, n.e.c.*		
	Interior arrangement, decoration, & repairs		
	Building and repairing furniture		
	Heating and cooling		
	Interior maintenance, repair, & decoration, n.e.c.*		
	Exterior cleaning		
	Exterior repair, improvements, & decoration		
	Exterior maintenance, repair & decoration, n.e.c.*		
	Lawn, garden, and houseplant care		
	Ponds, pools, and hot tubs		
	Lawn and garden, n.e.c.*		
	Vehicle repair and maintenance (by self)		
	Vehicles, n.e.c.*		
	Appliance, tool, and toy set-up, repair, & maintenance (by self)		
	Appliances and tools, n.e.c.*		
	Household activities, n.e.c.*		
Cleaning	Interior cleaning		
Communication	HH & personal mail & messages (except e-mail)		
Financial/Legal	Financial management		
Affairs	Household & personal organization and planning		
	Home security		
	Household management, n.e.c.*		
Physical	Doing aerobics		
Recreation	Playing baseball		
	Playing basketball		
	Biking		
	Playing billiards		

	TABLE A1 (continued)			
Activity	Activity Detail			
Physical	Boating			
Recreation	Bowling			
(continued)	Climbing, spelunking, caving			
, ,	Dancing			
	Participating in equestrian sports			
	Fencing			
	Fishing			
	Playing football			
	Golfing			
	Doing gymnastics			
	Hiking			
	Playing hockey			
	Hunting			
	Participating in martial arts			
	, ,			
	Playing racquet sports			
	Participating in rodeo competitions			
	Rollerblading			
	Playing rugby			
	Running			
	Skiing, ice skating, snowboarding			
	Playing soccer			
	Softball			
	Using cardiovascular equipment			
	Vehicle touring/racing			
	Playing volleyball			
	Walking			
	Participating in water sports			
	Weightlifting/strength training			
	Working out, unspecified			
	Wrestling			
	Doing yoga			
	Playing sports n.e.c.*			
	Sports, exercise, & recreation, n.e.c.*			
Laundry	Laundry			
Health-Related	Health-related self-care			
Self-Care	Self-care, n.e.c.*			
Phone Use	Telephone calls to/from family members			
	Telephone calls to/from friends, neighbors, or acquaintances			
	Telephone calls to/from salespeople			
	Telephone calls to/from paid child or adult care providers			
	Telephone calls to/from education services providers			
	Telephone calls to/from professional or personal care svcs providers			
	Telephone calls to/from household services providers			
	Telephone calls to/from government officials			
	Telephone calls (to or from), n.e.c.*			
	Waiting associated with telephone calls			
	Waiting associated with telephone calls, n.e.c.*			
	Telephone calls, n.e.c.*			
	Telephone calls, fi.e.c.			

	TABLE A1 (continued)		
Activity Activity Detail			
Caring for Others	Physical care for hh adults		
Caring for Others	Looking after hh adult (as a primary activity)		
	Providing medical care to hh adult		
	Obtaining medical and care services for hh adult		
	Waiting associated with caring for household adults		
	Caring for household adults, n.e.c.*		
	Helping hh adults		
	Organization & planning for hh adults		
	Picking up/dropping off hh adult		
	Waiting associated with helping hh adults		
	Helping household adults, n.e.c.*		
	Caring for & helping hh members, n.e.c.*		
	Physical care for nonth adults		
	Looking after nonhh adult (as a primary activity)		
	Providing medical care to nonth adult		
	Obtaining medical and care services for nonthh adult		
	Waiting associated with caring for nonthh adults		
	Caring for nonhh adults, n.e.c.*		
	Housework, cooking, & shopping assistance for nonth adults		
	House & lawn maintenance & repair assistance for nonth adults		
	Animal & pet care assistance for nonth adults		
	Vehicle & appliance maintenance/repair assistance for nonth adults		
	Financial management assistance for nonth adults		
	Household management & paperwork assistance for nonth adults		
	Picking up/dropping off nonth adult		
	Waiting associated with helping nonhh adults		
	Helping nonhh adults, n.e.c.*		
	Caring for & helping nonhh members, n.e.c.*		
	Physical care for hh children		
	Reading to/with hh children		
	Playing with hh children, not sports		
	Arts and crafts with hh children		
	Playing sports with hh children		
	Talking with/listening to hh children		
	Organization & planning for hh children		
	Looking after hh children (as a primary activity)		
	Attending hh children's events		
	Waiting for/with hh children		
	Picking up/dropping off hh children		
	Caring for & helping hh children, n.e.c.*		
	Homework (hh children)		
	Meetings and school conferences (hh children)		
	Home schooling of hh children		
	Waiting associated with hh children's education		
	Activities related to hh child's education, n.e.c.*		
	Providing medical care to hh children		
Obtaining medical care for hh children			
	Waiting associated with hh children's health		
Activities related to hh child's health, n.e.c.*			
	Physical care for nonhh children		
	Reading to/with nonhh children		

	TABLE A1 (continued)
Activity	Activity Detail
Caring for Others	Playing with nonhh children, not sports
(continued)	Arts and crafts with nonhh children
,	Playing sports with nonhh children
	Talking with/listening to nonhh children
	Organization & planning for nonhh children
	Looking after nonhh children (as primary activity)
	Attending nonhh children's events
	Waiting for/with nonhh children
	Dropping off/picking up nonhh children
	Caring for and helping nonhh children, n.e.c.*
	Homework (nonhh children)
	Meetings and school conferences (nonhh children)
	Home schooling of nonthh children
	Waiting associated with nonth children's education
	Activities related to nonhh child's educ., n.e.c.*
	Providing medical care to nonth children
	Obtaining medical care for nonthh children
	Waiting associated with nonth children's health
	Activities related to nonhh child's health, n.e.c.*
Work/Volunteering	Work, main job
Trong rolandoning	Work, other job(s)
	Security procedures related to work
	Waiting associated with working
	Working, n.e.c.*
	Socializing, relaxing, and leisure as part of job
	Eating and drinking as part of job
	Sports and exercise as part of job
	Security procedures as part of job
	Waiting associated with work-related activities
	Work-related activities, n.e.c.*
	Income-generating hobbies, crafts, and food
	Income-generating performances
	Income-generating services
	Income-generating rental property activities
	Waiting associated with other income-generating activities
	Other income-generating activities, n.e.c.*
	Job search activities
	Job interviewing
	Waiting associated with job search or interview
	Security procedures rel. to job search/interviewing
	Job search and Interviewing, n.e.c.*
	Work and work-related activities, n.e.c.*
	Organizing and preparing
	Reading
	Telephone calls (except hotline counseling)
	Writing
	Fundraising
	Administrative & support activities, n.e.c.*
	Food preparation, presentation, clean-up
	Collecting & delivering clothing & other goods
	Providing care

	TABLE A1 (continued)			
Activity	Activity Detail			
Work/Volunteering	Teaching, leading, counseling, mentoring			
(continued)	Social service & care activities, n.e.c.*			
,	Building houses, wildlife sites, & other structures			
	Indoor & outdoor maintenance, repair, & clean-up			
	Indoor & outdoor maintenance, building & clean-up activities, n.e.c.*			
	Performing			
	Serving at volunteer events & cultural activities			
	Participating in performance & cultural activities, n.e.c.*			
	Attending meetings, conferences, & training			
	Attending meetings, conferences, & training, n.e.c.*			
	Public health activities			
	Public safety activities			
	Public health & safety activities, n.e.c.*			
	Waiting associated with volunteer activities			
	Waiting associated with volunteer activities, n.e.c.*			
	Volunteer activities, n.e.c.*			
Computer Use	Computer use for leisure (exc. Games)			
	HH & personal e-mail and messages			
	Computer use (volunteer activity)			
Service Use	Using meal preparation services			
	Waiting associated with using household services			
	Using household services, n.e.c.*			
	Using home maint/repair/décor/construction svcs			
	Waiting associated w/ home main/repair/décor/constr			
	Using home maint/repair/décor/constr services, n.e.c.*			
	Using lawn and garden services			
	Waiting associated with using lawn & garden services			
	Using lawn and garden services, n.e.c.*			
	Using vehicle maintenance or repair services			
	Waiting associated with vehicle main. or repair svcs			
	Using vehicle maint. & repair svcs, n.e.c.*			
	Using household services, n.e.c.*			
	Using interior cleaning services			
	Banking			
	Using other financial services			
	Waiting associated w/banking/financial services			
	Using financial services and banking, n.e.c.*			
	Using legal services			
	Waiting associated with legal services			
	Using legal services, n.e.c.*			
	Activities rel. to purchasing/selling real estate			
	Waiting associated w/purchasing/selling real estate			
	Using real estate services, n.e.c.*			
	Security procedures rel. to professional/personal svcs.			
	Security procedures rel. to professional/personal svcs n.e.c.*			
	Professional and personal services, n.e.c.*			
	Using police and fire services			
	Waiting associated with using police/fire services			
	Using clothing repair and cleaning services			
	Using health and care services outside the home			
	Using in-home health and care services			

	TABLE A1 (continued)			
Activity	Activity Detail			
Service Use	Waiting associated with medical services			
(continued)	Using medical services, n.e.c.*			
	Using paid childcare services			
	Waiting associated w/purchasing childcare svcs			
	Using paid childcare services, n.e.c.*			
	Using personal care services			
	Waiting associated w/personal care services			
	Using personal care services, n.e.c.*			
	Using veterinary services			
	Waiting associated with veterinary services			
	Using veterinary services, n.e.c.*			
	Using pet services			
	Waiting associated with pet services			
	Using pet services, n.e.c.*			
	Using social services			
	Obtaining licenses & paying fines, fees, taxes			
	Using government services, n.e.c.*			
	Waiting associated w/obtaining licenses			
	Waiting assoc. w/govt svcs or civic obligations, n.e.c.*			
	Security procedures rel. to govt svcs/civic obligations			
	Security procedures rel. to govt svcs/civic obligations, n.e.c.*			
	Government services, n.e.c.*			
Other	Sleeplessness			
	Personal/Private activities			
	Personal activities, n.e.c.*			
	Personal emergencies			
	Personal care emergencies, n.e.c.*			
	Personal care, n.e.c.*			
	Care for animals and pets (not veterinary care)			
	Pet and animal care, n.e.c.*			
	Taking class for degree, certification, or licensure			
	Taking class for personal interest			
	Waiting associated with taking classes			
	Security procedures rel. to taking classes			
	Taking class, n.e.c.*			
	Extracurricular club activities			
	Extracurricular music & performance activities			
	Extracurricular student government activities Waiting associated with extracurricular activities			
	Waiting associated with extracurricular activities Education-related extracurricular activities, n.e.c.*			
	,			
	Research/homework for class for degree, certification, or licensure Research/homework for class for pers. interest			
	Waiting associated with research/homework			
	Research/homework n.e.c.*			
	Administrative activities: class for degree, certification, or licensure			
	<u> </u>			
	Administrative activities: class for personal interest Waiting associated w/admin. activities (education)			
	Administrative for education, n.e.c.*			
	Education, n.e.c.*			
	Civic obligations & participation			
	· · · · · · · · · · · · · · · · · · ·			
	Civic obligations & participation, n.e.c.*			

TABLE A1 (continued)			
Activity	Activity Detail		
Other (continued)	Waiting associated w/civic obligations & participation		
	Attending religious services		
	Participation in religious practices		
	Waiting associated w/religious & spiritual activities		
	Security procedures rel. to religious & spiritual activities		
	Religious and spiritual activities, n.e.c.*		
	Insufficient detail in verbatim		
	Missing travel or destination		
	Recorded simultaneous activities incorrectly		
	Respondent refused to provide information/"none of your business"		
	Gap/can't remember		
	Unable to code activity at 1st tier		
	Data codes, n.e.c.*		

TABLE A2. Detailed Participation and Time Use				
Activity	Participation	Mean, in Minutes		
·		Full Sample	Participants	
Sleeping	99.9%	527	528	
Eating	97.8%	82	84	
Leisure, Watching Television	87.5%	231	263	
Leisure, Reading for Personal Interest	52.7%	60	114	
Leisure, Relaxing/Thinking	29.5%	41	138	
Leisure, Other	22.3%	29	131	
Travel, Eating	23.6%	8	35	
Travel, Socializing	20.4%	6	32	
Travel, Shopping	38.0%	14	37	
Travel, Health-Related Self-Care	7.9%	2	31	
Travel, Caring for Others	13.9%	6	44	
Travel, Work/Volunteering	13.2%	5	37	
Travel, Other	34.3%	13	38	
Grooming	70.0%	37	53	
Food Preparation	61.2%	43	70	
Socializing	39.9%	45	113	
Shopping	38.4%	25	64	
Household Maintenance	36.5%	46	125	
Cleaning	33.2%	28	84	
Communication (mail)	16.4%	5	30	
Financial/Legal Affairs	18.5%	12	66	
Physical Recreation	17.9%	14	76	
Laundry	17.3%	13	73	
Health-Related Self-Care	15.0%	11	76	
Phone Use, Socializing	14.5%	5	38	
Phone Use, Shopping	0.4%	0	22	
Phone Use, Caring for Others	0.0%	0	80	
Phone Use, Other	7.9%	3	38	
Caring for Others, Physical, HH Adult	3.5%	3	94	
Caring for Others, Helping, HH Adult	3.2%	1	29	
Caring for Others, Physical, nonHH Adult	1.7%	2	97	
Caring for Others, Helping, nonHH Adult	7.9%	4	52	
Caring for Others, HH Child	1.1%	1	110	
Caring for Others, nonHH Child	5.5%	6	109	
Working/Volunteering	18.3%	52	282	
Computer Use, Leisure	5.7%	6	102	
Computer Use, E-mail	4.7%	2	47	
Computer Use, Volunteering	0.6%	1	122	
Service Use, Household Maintenance	2.4%	2	71	
Service Use, Cleaning	0.1%	0	127	
Service Use, Financial/Legal	4.4%	1	29	
Service Use, Laundry	0.5%	0	8	
Service Use, Health-Related	6.3%	6	92	
Service Use, Other	2.8%	2	72	
Other	42.9%	40	93	

TABLE A3. Measures of Activities of Daily Living in Select National Surveys				
Survey	Question Does this person have any of the following long-lasting	Activities Not applicable		
American Community Survey (ACS); 1999 and later	conditions: A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?	ногаррисавіе		
	Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities (fill in activity):	Dressing, bathing, or getting around inside the home		
Health and Retirement Study (HRS); 1995 and later	Respondents who report one or more functional limitations are asked: Because of a health or memory problem, do you have any difficulty (fill in activity)? For transferring and walking (all respondents asked	Bathing or showering Dressing including putting on socks and shoes Eating such as cutting up your food		
	regardless of difficulty): Do you ever use equipment or devices such as a cane, walker or railing when (walking/transferring)?	Getting in our out of bed Using the toilet including getting up and down		
	Respondents who report difficulty: Does anyone ever help you (fill in activity)?	Walking across a room		
Medicare Current Beneficiary Survey (MCBS); 1992 and later (community sample)	Now I'll ask about some other everyday activities. I'd like to know whether (you have/sampled person has) any difficulty doing each one by (yourself/himself/herself) and without special equipment. Because of a health or physical problem, do you have any difficulty (fill in activity)?	Bathing or showering Dressing Eating Getting in or out of bed or chairs Using the toilet		
	If doesn't do activity: "Is this because of a health or physical problem?"	Walking		
	For those who report difficulty, ask: You said (your/sampled person's) health makes (fill in activity) difficult/You said that (fill in activity) is something (you don't/sampled person doesn't do) do. (Do you/Does sampled person) receive help from another person with (fill in activity)?			
	If respondent does not receive help ask: Does someone usually stay nearby just in case (you need/sampled person needs) help with (fill in activity). That is, does someone usually stay or come into the room to check on (you/him/her)?			
	For those who report difficulty, ask: (Do you/does sampled person) use special equipment or aids to help (you/him/her) with (fill in activity)?			
Medical Expenditure Panel Survey (MEPS-Long-Term Care Supplement); 1997 and later	Household Component Survey Does anyone in the family receive help or supervision with personal care such as bathing, dressing, or getting around the house?	Not applicable		
	Long-Term Care Supplement We have some questions about everyday activities such as bathing and eating. We are interested in the kinds of help people receive, not just hands on help but instructing or prompting or being there just in case help is needed. Because of an impairment or physical or mental health problem, did (reference person) receive help (fill in activity) in the past month?	Bathing or showering (including getting to the bath or shower and turning on the water) Dressing (that is getting clothes and putting them on) Getting to the toilet or using the toilet Getting out of bed or chair Eating (not including meal preparation)		
	If received help: look at this card and tell me which types of help (reference person) received. (1. Hands on; 2. Instruction or prompting; 3. Staying in room in case help is needed.)			
National Health and Nutrition Examination Survey (NHANES); 1999- 2000	The next questions ask about difficulties (you/sampled person) may have doing certain activities because of a health problem. By health problem we mean any long-term physical, mental or emotional problem or illness (not	Walking ¼ mile Walking from one room to another on same level Getting in or out of bed		
	including pregnancy). By (yourself/himself/herself) and without using any special equipment, how much difficulty (do you/does sampled person) have (fill in activity). (1. No difficulty; 2. Some difficulty; 3. Much difficulty; 4. Unable to do.)	Eating, like holding a fork, cutting food or drinking from a glass Dressing (yourself/himself/herself) including tying shoes, working zippers and doing buttons		
National Health Interview Survey (NHIS); 1997 and later ¹	Because of a physical, mental, or emotional problem, (do you/does anyone in the family) need the help of other persons with personal care needs, such as eating, bathing, dressing, or getting around inside this home? Who is this? (Anyone else?) (If yes, ask for each person identified:) (Do you/Does reference person) need the help of other persons with (fill in activity)?	Bathing or showering? Dressing? Eating? Getting in or out of bed or chairs? Using the toilet, including getting to the toilet? Getting around inside the home?		

TABLE A3 (continued)				
Survey	Question	Activities		
National Long-Term Care Survey (NLTCS); 1982 and later (community sample)	Screener I'd like to ask about (sampled person's) ability to do everyday activities without help. By help I mean either the help of a person, including people who live with (sampled person), or the help of equipment. Does (sampled person) have any problem (fill in activity) without help?	Eating Getting in and out of bed Getting in and out of chair Walking around inside Going outside Dressing		
	You said that (sampled person) has a problem (Read ADL's marked "Yes"). Have you had (this problem/any of these problems) for 3 months or longer? If no: Do you expect that (this problem/any or these problems) will last for the next 3 months or longer? If no: Altogether, from beginning to end, will (this problem/any of these problems) have lasted 3 months or longer?	Bathing Getting to the bathroom or using the toilet Controlling bowel movements or urination or ever having accidents		
	Main Questionnaire (Asked to those who reported an ADL or IADL problem that lasted longer than 3 months in the screener.) During the past week (since last (day)), did any person help (sampled person) (fill in activity) or did (sampled person) not	Bathe Dress, that is getting and putting clothes on Eat Get in and out of bed Get to the bathroom or use the toilet Get around inside		
	(fill in activity)? Did (sampled person) use special equipment like (name special equipment) to (fill in activity)?	Cet dround histor		
	Did someone usually stay nearby just in case (sampled person) might need help? About how long has (sampled person) had help or used (name			
	special equipment) / been unable to (fill in activity)? If no help received: Does (sampled person) need help with (fill in activity)?			
Survey of Income and Program Participation (SIPP); 1991 and later	Because of a physical or mental health condition, does (reference person) have difficulty doing any of the following by him/herself (exclude the effects of temporary conditions)? Exclude the effects of temporary conditions - If an aid is used, ask whether the person has difficulty even when using the aid.	Getting around inside Going outside home Getting in/out of bed/chair Taking a bath or shower Dressing Walking		
	If difficulty with activity is reported in difficulty question, respondents are asked: Does (reference person) need the help of another person with (fill in activity)? Mark yes if person sometimes or usually needs help.	Eating Using or getting to the toilet		
Supplement on Aging (SOA); 1995	These questions are about some other activities and how well you are able to do them by yourself and without using special equipment. Because of a health or physical problem, do you have ANY difficulty (fill in activity)?	Bathing or showering Dressing Eating Getting in or out of bed or chairs Using the toilet, including getting to the toilet Walking Getting outside		
	Ask if doesn't do: Is this because of a health or physical problem? If yes, mark box 1; if no, mark box 3.	Getting outside		
	By yourself and without using special equipment, how much difficulty do you have (fill in activity), some, a lot, or are you unable to do it?			
	Do you use any special equipment or aids in (fill in activity)? Do you receive help from another person in (fill in activity)? Is this hands-on help?			
	How often do you have hands-on help with (fill in activity)? Would you say always, sometimes, or rarely? Do you need (more) hands-on help with (fill in activity)?			
1. The NHIS also asks whet	her because of a health problem the reference person has any difficul	Ity walking without using any special equipment.		

	sures of Instrumental Activities of Daily Livin	
Survey	Question	Activities
American Community Survey (ACS); 1999 and later	Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities (fill in activity):	Going outside the home alone to shop or visit a doctor's office
Health and Retirement Study (HRS); 1995 and later ¹	Please tell me whether you have any difficulty with each activity I name. If you don't do the activity at all, just tell me so. Exclude any difficulties that you expect to last less than three months. Because of a health or memory problem, do you have any difficulty (activity)?	Using a map to figure out how to get around a strange place Preparing a hot meal Shopping for groceries Making phone calls Taking medication Managing money, such as paying your bills and keeping track of expenses Work around the house or yard ²
	If can't do or don't do: Is that because of a health or memory problem? If yes, don't know or refused and for those that can't or don't do	
	because of a problem: Does anyone help you (fill in activity)? (Besides any help you have told me about) Do you get any help	
	with (activity) because of your health problems?	Librar the Asianhan
Medicare Current Beneficiary Survey (MCBS); 1992 and later (community sample)	Now I'm going to ask about some everyday activities and whether (you have/sampled person has) any difficulty doing them by (yourself/himself/herself). Because of a health or physical problem, do you have any difficulty (fill in activity)? If don't do activity: Is this because of a health or physical	Using the telephone Doing light housework (like washing dishes, straightening up, or light cleaning) Doing heavy housework (like scrubbing floors or washing windows)
	problem?"	Preparing own meals
	You said that (fill in activity) is something that (you have difficulty/you don't do/sampled person has difficulty doing/sampled person doesn't do's). (Do you/does sampled person) receive help from another person with (fill in activity)?	Shopping for personal items (such as toilet items or medicines) Managing money (like keeping track of expenses or paying bills)
Medical Expenditure Panel Survey (MEPS-Long-Term Care Supplement); 1997 and later	Household Component Survey The next few questions are about difficulties people may have with everyday activities such as getting around, bathing or taking medications. We are interested in difficulties due to an impairment or a physical or mental health problem.	Not applicable
	Does anyone in the family receive help or supervision using the telephone, paying bills, taking medications, preparing light meals, doing laundry, or going shopping?	
	Long-Term Care Supplement Now I would like to ask about a few (more) daily activities which some people have difficulty with.	Shopping for groceries. Please do not include help in getting to or from the store Getting around the community outside of
	(Do/Does) (reference person) receive help or supervision (fill in activity) because of an impairment or a physical or mental health problem?	walking distance Preparing meals Taking medication Managing money, such as keeping track of expenses or paying bills Doing laundry Doing light housework, such as straightening up, putting things away or washing dishes
National Health and Nutrition Examination Survey (NHANES); 1999- 2000 ³	The next questions ask about difficulties (you/sampled person) may have doing certain activities because of a health problem. By health problem we mean any long-term physical, mental or emotional problem or illness (not including pregnancy).	Managing money Doing chores around the house (vacuuming, sweeping, dusting, etc) Preparing (your/his/her) own meals
	By (yourself/himself/herself) and without using any special equipment, how much difficulty (do you/does sampled person) have (fill in activity) [1. no difficulty; 2. some difficulty; 3. much difficulty; 4. unable to do]	
National Health Interview Survey (NHIS); 1997 and later ³	Because of a physical, mental, or emotional problem, {do/does} {you/anyone in the family} need the help of other persons in handling ROUTINE NEEDS, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes?	Not applicable

TARLE A4 (continued)				
TABLE A4 (continued)				
Survey	Question Screener [INSTRUCTIONIf a person does not do, but is able to	Activities Propore mode without help		
National Long-Term Care Survey (NLTCS); 1982 and later (community sample)	do, an activity listed below, mark "Yes" for the activity.] Are you able to (fill in activity)?	Prepare meals without help Do laundry without help Do light housework such as washing dishes Shop for groceries without help Manage money such as keeping track of bills and handling cash. Take medicine without help		
	Does a disability or a health problem keep (sampled person)			
	from (read activity marked "No" in item above)? Which of these activities is (sampled person) unable to do			
	because of a disability or health problem (read IADL's marked "No" above)? Mark (1) all that apply.	Make phone calls without help		
	You said that (sampled person) has a problem (Read IADL's marked "Yes"). Have you had (this problem/any of these problems) for 3 months or longer?			
	If no: Do you expect that (this problem/any or these problems) will last for the next 3 months or longer?			
	If no: Altogether, from beginning to end, will (this problem/any of these problems) have lasted 3 months or longer?			
	Main Questionnaire Does (sampled person) usually do (fill in activity)?	Heavy work around the house Light work around the house such as		
	If no, ask: If (sampled person) had to (fill in activity), coulddo it?	straightening up, putting things away, or washing dishes?		
	If had to do activity, but couldn't, ask: What is the reason (sampled person) cannot do (fill in activity)- is that because of disability or health problem, or is there some other	Own laundry Prepare own meals Shop for groceries		
	reason? (1. Disability or health problem; 2. Other reason) Does someone usually help (sampled person) with (fill in activity)	Get around outside Go places outside of walking distance		
	or do it for (sampled person)?	Manage money Take medicine		
	Does (sampled person) need any help (fill in activity)?	Make telephone calls		
Survey of Income and Program Participation (SIPP); 1991 and later	Because of a physical or mental health condition, does (sampled person) have difficulty doing any of the following by him/herself?	Keeping track of money and bills Preparing meals Doing light housework such as washing dishes or sweeping a floor		
	Exclude the effects of temporary conditions - If an aid is used, ask whether the person has difficulty even when using the aid.	Taking the right amount of prescribed medicine at the right time		
	If difficulty with activity is reported in difficulty question, respondents are asked: Does (sampled person) need the help of another person with (fill in activity)? Mark yes if person sometimes or usually needs help.			
Supplement on Aging (SOA); 1995	These questions are about some other activities. Please tell me about doing them by yourself.	Preparing own meals Shopping for personal items (such as toilet items or medicines)		
	Because of a health or physical problem, do you have any difficulty (fill in activity)?	Managing your money (such as keeping track of expenses or paying bills) Using the telephone		
	Ask if doesn't do, Is this because of a health or physical problem? If yes mark box 1 if no mark box 3.	Doing heavy housework (like scrubbing floors or washing windows)		
	If doesn't do for other reason, ask: Does someone else regularly do this for you?	Doing light housework (like doing dishes, straightening up, or light cleaning)		
	Ask the following for each activity marked "yes"	Getting to places outside of walking distance Managing your medication		
	By yourself, how much difficulty do you have (fill in activity)? (1. Some; 2. A lot; 3. Unable)			
	Do you receive help from another person in (fill in activity) ?]		
	Is this hands on help?	_		
	How often do you have hands-on help with (fill in activity)? Would you say always, sometimes, or rarely			
4 Th. 4004 LIDO L4000	Do you need (more) hands-on help with (fill in activity)?			

- The 1994 HRS and 1993 AHEAD also included items but working differed.
 Difficulty question not asked for work around the house or yard.
 The NHANES and NHIS also ask about the amount of difficulty with leisure activities such as: Going out to things like shopping, movies, or sporting events; Participating in social activities (visiting friends, attending clubs or meeting, or going to parties); and Doing things to relax at home or for leisure (reading, watching TV, sewing, listening to music).

To obtain a printed copy of this report, send the full report title and your mailing information to:

U.S. Department of Health and Human Services Office of Disability, Aging and Long-Term Care Policy Room 424E, H.H. Humphrey Building 200 Independence Avenue, S.W. Washington, D.C. 20201

FAX: 202-401-7733

Email: webmaster.DALTCP@hhs.gov

RETURN TO:

Office of Disability, Aging and Long-Term Care Policy (DALTCP) Home [http://aspe.hhs.gov/_/office_specific/daltcp.cfm]

Assistant Secretary for Planning and Evaluation (ASPE) Home [http://aspe.hhs.gov]

U.S. Department of Health and Human Services Home [http://www.hhs.gov]