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Ohio Long-Term Care Research Project

THE ECONOMICS OF LONG-TERM CARE IN OHIO

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The Economics of Long-Term Care in Ohio

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Abstract

In Ohio, for 1990, it is estimated that slightly more than 250,000 older people were so disabled as to require long-term care. Of this total, about 84,000 were receiving care in institutions. The remaining 168,000 were receiving care at home. Only about 5,500 of these home-care recipients were served by publicly funded programs such as PASSPORT or home health care agencies. The remainder of the care was largely uncompensated care provided by family members.

It is also estimated that in 1990 the overall economic value of long-term care to these 250,000 disabled older Ohioans was $7 billion. Of this total, the value of family care accounted for 79 percent; 14.5 percent ($1.2 billion) was in the form of publicly funded services, mostly nursing home care funded by Medicaid; and 6.5 percent came from private sources, mostly out-of-pocket payments to nursing homes by elders or their families.

Because such a large amount of care and its financing are currently provided in elders' homes by the family, and because demographic and economic trends indicate difficulty in maintaining family home care at this high level as the older population ages, the State of Ohio is economically vulnerable to increasing costs. These increases are due not only to health care inflation and growth in the number of disabled older Ohioans, but also to a growing proportion of elders in need of publicly supported services. Therefore it is imperative that the state explore and expand relatively low-cost types of care for disabled elders.

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Introduction

The soaring cost of state-funded long-term care services to older adults is currently one of the most urgent issues facing state governments throughout the United States. These increases are due mainly to runaway inflation in health care costs; growing numbers of people in the oldest age brackets, where need for long-term care is most prevalent; concentration of state-funded long-term care in nursing homes--a very expensive type of long-term care; and failure of a wide variety of government efforts to contain escalation of health care costs.

In 1990 the State of Ohio spent more than $1 billion to finance long-term care services to older Ohioans, but that is only part of the story.

In 1990 the State of Ohio spent more than $1 billion to finance long-term care services to older Ohioans, but that is only part of the story. Ohio's public expenditures for long-term care must be seen in a context that includes expenditures by other government programs, by private insurers, by older people and their families, and by charitable organizations. We also must consider the economic value of long-term care services provided by older people's family and friends and the income lost to caregivers because they must reduce employment to perform the caregiver role.

The goal of this report is to provide estimates of 1) the number of older people in Ohio receiving long-term care, 2) the economic value of that care, and 3) the sources of economic support for that care. Using data from a wide variety of sources, we developed estimates of the total economic value of long-term care services provided to older Ohioans in 1990, broken down by type of provider and source of economic support.

No single private or public agency collects all the data needed to address the issues identified above. Many agencies collect part of the data, but significant gaps remained, for which we had to make estimates. We collected data from the Ohio Departments of Health, Human Services, and Aging; the Ohio General Assembly; the Office of Budget and Management; and United Way of Ohio. We also examined data from national surveys that could be used to estimate various parameters. No such process can be error-free, but we have taken great pains to indicate exactly how we developed our estimates.

THE NUMBER OF OLDER OHIOANS RECEIVING LONG-TERM CARE

Ascertaining the number of people receiving long-term care in nursing homes or from community-based formal agencies was a relatively straightforward task, even though the data were collected by several agencies and sometimes were not strictly comparable. The most difficult aspects of this study were estimating the number of people who needed long-term care and were receiving it from informal sources, such as family, and then estimating the economic value of that care. Without estimates of the economic value of informal care, we would substantially

overstate the role of government-funded long-term care.

We began with the assumption that need for long-term care is related to disability. Nearly all older people who receive sustained long-term care services need not only health care but also assistance with activities of daily living (ADLs) such as eating, bathing, dressing, remaining continent, and transferring in and out of bed or chair. They also may need help with instrumental activities of daily living (IADLs) such as walking, meal preparation, shopping, housekeeping, or using transportation. Cognitive impairment, such as inability to remember one's home address or forgetting to take medication, also is related to the need for assistance. We assumed that older people who had at least one ADL impairment, two IADL impairments, or cognitive impairment were so disabled as to require long-term care services.

Based on Ohio's 1990 older population by five-year age-sex categories (U.S. Bureau of the Census 1991) and five-year age-specific disability rates developed by Kunkel and Applebaum (1992), we estimated that in 1990, 252,073 Ohioans age 65 and older were in need of long-term care services (see Table 1). Then we examined the data on the number of people receiving care in various types of long-term care programs. A total of 83,764 older people were in institutions: 77,044 in nursing homes and rest homes and 6,720 in adult care facilities. We estimated that nearly all of the remaining 168,309 people received care from informal providers such as family, friends, or neighbors. Of the estimated 168,309 older people receiving care in the community, 5,461 also received case-managed care from PASSPORT (Ohio's 2176 Medicaid waiver program) and 40,331 received limited care from certified home health agencies. Older people also received services from four other types of programs: Options for Elders; the federal Administration on Aging's Eldercare Initiative, administered by Area Agencies on Aging; programs funded by the United Way; and Adult Foster Care through the Optional State Supplement (OSS) program. Although data on the total funds spent by these agencies were available, we could not determine the number of unduplicated clients served by these programs.

In Ohio the proportion of older people served in institutions was much larger than in neighboring states.

In Ohio the proportion of older people served in institutions was much larger than in neighboring states. In 1986, for example, Ohio spent 96 percent of its public funds for long-term care on people in institutions, compared to 74 percent in Illinois, 81 percent in Michigan, and 91 percent in Pennsylvania (Lewin/ICF and Alpha Center, 1991, Chapter 2, p. 9). However, a large majority of older Ohioans received care at home; most of their care typically was provided by family and friends. The community-based formal care system was largely undeveloped in 1990, although this situation has improved with the expansion of PASSPORT to cover the entire state. Nevertheless, funding for formal community-based services is still a small fraction of the funding provided for institutional care.

Table 1
Estimated Number of Older Ohioans in Need of Long-Term Care and Value of Long-Term Care Services, by Type of Provider, 1990

Provider	Persons Served		Economic Value of Services	
	Number	%	Millions of Dollars	%
Long-Term Care Institutions				
Nursing homes, homes for the aged, rest homes	77,044 [a]	30.6	1,603.03 [g]	22.7
Nursing home regulation and training			.82 [p]	-
Adult care facilities	6,720 [b]	2.7	50.90 [h]	.7
Subtotal	83,764	33.3	1,654.75	23.4
Community-Based Services				
PASSPORT	5,461 [c]	2.2	38.71 [i]	.5
Pre-admission screening			2.43 [q]	-
Options for Elders			4.00 [j]	-
ElderCare Initiative			9.93 [k]	.1
Adult foster care (OSS)			2.52 [r]	-
United Way			3.25	-
Home health agencies	40,331 [d]	16.0	71.87 [l]	1.1
Subtotal			132.73	1.8
Informal Care				
Family, friends, neighbors	168,309 [e]	66.7	5,270.24 [k]	74.8
Subtotal	168,309	66.7	5,270.24	74.8
Total	252,073 [f]	100.0%	$7,057.72	100.0%

Please see note section (pp. 10-11).

THE TOTAL ECONOMIC VALUE OF LONG-TERM CARE TO OHIO'S ELDERS

We estimated that the total economic value of long-term care to older people in Ohio in 1990 was more than $7 billion (see Table 1). When this total was broken down by type of care, the value of institutional care was nearly $1.7 billion, the value of community-based formal services was $.13 billion, and the value of care provided by family, friends, and neighbors was $5.2 billion. Thus, in terms of economic value, by far the largest component of long-term care was informal care provided in the home, followed at a distance by the value of care in institutions. Community-based formal long-term care services accounted for a very small proportion of the total. Some of the informal care consists of services purchased by older people or their families directly from individual service providers or formal service agencies, but data on the prevalence of privately arranged services were unavailable.

The economic values assigned to institutional care and formal community-based care were computed from reports submitted by the organizations providing services. Most of these reports came from three Ohio Departments: Health, Human Services, and Aging. To estimate the value of informal services, we multiplied the number of people we estimated to be receiving such services by average service hours and hourly pay rates obtained from a large national survey of community-based care. We also estimated the value of income lost by caregivers because they had to reduce employment. (See the appendix for details of these computations.)

SOURCES OF ECONOMIC SUPPORT FOR FORMAL LONG-TERM CARE SERVICES

Economic support for long-term care services to older people is either public or private. Table 2 shows that of the total $1.8 billion value of long-term care services provided by organizations in 1990, $1.2 billion (65.8%) came from public sources and $.6 billion (34.2%) from private sources. In per capita terms, in 1990 the State of Ohio's public long-term care expenditure for the population age 65 and over was $860, of which $750 came from the Medicaid program. The privately paid per capita long-term care expenditure for *formal* services was $448.

In per capita terms, in 1990 the State of Ohio's public long-term care expenditure for the population age 65 and over was $860, of which $750 came from the Medicaid program.

Medicaid was the most important public source, accounting for 82 percent of public funding. Medicare accounted for 8 percent of public funding; the remainder was shared by funding from state and local government, the Older Americans Act, Social Services Block Grants, and the Veterans Administration, in that order.

Private economic support of long-term care came mostly from out-of-pocket costs paid by older people or their families (80% of private support), followed by long-term care insurance, other private sources, and private charitable assistance, in that order.

Table 2
Sources of Economic Support for Formal Long-Term Care in Ohio, 1990

Source	Amount in Millions of Dollars	Percentage of All Long-Term Care Payments
Public		
Medicaid	993.30 [g,l]	54.1
Medicare	95.97 [g,l]	5.2
Older Americans Act	39.25 [n]	2.1
Social Service Block Grants	10.67 [o]	.6
State and local government	60.94 [h+p+i+q+j+k+r+l]	3.3
Veterans Administration	9.62 [g]	.5
Subtotal	1,209.75	65.8
Private		
Long-term care insurance	80.15 [g]	4.4
Charitable organizations	11.27 [g,s]	.6
Out-of-pocket payments by elderly individuals or their families	502.15 [g,h,l]	27.3
Other	34.09 [g,l]	1.9
Subtotal	627.66	34.2
Total	$1,837.41	100.0%

Please see note section (pp. 10-11).

When economic support for long-term care services was broken down into institutional care and formal community-based care, by source of economic support (see Table 3), it became clear that Medicaid and Medicare were used primarily to fund care in institutions and medical home care. Long-term care insurance and VA benefits also were focused on funding of institutional care. Private charitable assistance played a very minor role in long-term care, mostly by funding nursing home care for residents of sectarian homes for the aged. True home-delivered long-term care was funded by Medicaid (PASSPORT) and the Older Americans Act at very modest levels, particularly in comparison with the total value of economic support for long-term care.

In Ohio institutional care accounted for 90 percent of formal care, significantly higher than the U.S. average of 82 percent.

In Ohio institutional care accounted for 90 percent of formal care (Table 3), significantly higher than the U.S. average of 82 percent (Scanlon 1992, p.45). Medicaid paid 53.6 percent of institutional care expenditures in Ohio (Table 3), just over 10 percent higher than the U.S. average of 43 percent (Scanlon 1992, p.45).

VALUE OF SERVICES PROVIDED BY INFORMAL CAREGIVERS

The majority of chronically disabled elders live in the community, not in nursing homes or other institutions. In Ohio we estimated that 168,309 disabled older people were living in the community and depending on the services of "informal caregivers." These elders represented 12 percent of the older population and 67 percent of the disabled older population.

The majority of chronically disabled elders live in the community, not in nursing homes or other institutions.

Informal caregivers are family members, friends, and neighbors who assist disabled older adults with transportation, meal preparation, housework, money management, continuous supervision, and personal care. Agencies or formal caregivers (e.g., Area Agencies on Aging, and home health agencies) are more likely to provide nursing care, physical therapies, and adult day care. In appraising the value of the services provided by informal caregivers, we must assess both the value of the services performed and the income lost because of caregiving.

To place a monetary value on the services provided by informal caregivers, we had to estimate the number of hours of care received by each disabled older person per day, as well as the economic value of this service had it been performed by a paid provider. Based on national home-care data sources, we estimated that moderately disabled elders require 5 hours of home care per day and severely disabled elders require 7.5 hours. We estimated that of the 168,000 disabled older people receiving care at home, 46,000 were severely disabled and 122,000 were moderately disabled. We estimated the unit cost of each service from national and state data on service costs. The assumptions we used to make these estimates are described in detail in the appendix.

Table 3
Total Economic Support to Formal Long-Term Care Service Providers in Ohio by Source of Support, 1990

Source of Economic Support	Total Value (in Millions of Dollars)	Percentage of Total by Source
Long-Term Care Institutions		
Medicaid	984.26 [g]	53.6
Medicare	43.28 [g]	2.4
Private pay (no insurance)	494.03 [g,h]	26.9
Long-term care insurance	80.15 [g]	4.4
Veterans Administration	9.62 [g]	.5
Other	32.06 [g]	1.7
Charitable assistance	8.02 [g]	.4
State	3.34 [h,p]	.2
Subtotal	1,654.76	90.1
Community-Based Formal Services		
Medicaid	9.03 [l]	.5
Medicare	52.69 [l]	2.9
Private pay	8.12 [l,m]	.4
Older Americans Act	39.25 [n]	2.1
Social Service Block Grants	10.70 [o]	.6
State and local government	13.93 [j,k]	.8
PASSPORT	38.71 [i]	2.1
PASSPORT screening	2.43 [g]	.1
Adult foster care (OSS)	2.52 [r]	.1
Charitable assistance (United Way)	3.25 [s]	.2
Managed care, subsidized care	2.03 [l]	.1
Subtotal	182.66	9.9
Total	$1,837.42	100.0%

Please see note section (pp. 10-11).

We then multiplied the number of hours of daily service at a given level of disability by the number of recipients at each level of disability, and multiplied that total by 365 days in a year to arrive at an estimated total of 349 million hours of family-provided care. The total economic value of this care at the appropriate unit cost was estimated at $4.6 billion.

We also included the value of income lost by families who had to reduce hours of employment in order to provide care. We estimated that nearly 47,000 caregivers had to reduce employment by an average of four hours a day in order to provide care. The economic value of this loss (at $10.70 per hour) amounted to $683 million in 1990. Again, the basis for these estimates is given in the appendix.

Although the economic value of home care that was informally arranged, financed, and provided was very large, we believe that our estimates are conservative. For example, some proportion of informal care is arranged privately by families through service agencies that charge considerably more than the unit cost we estimated to provide services, and many caregivers lose much more than $10.70 per hour in income.

Implications

This study found that a large proportion of the economic support for long-term care took the form of informal care provided by family and friends. As a result, government programs limited their liabilities to less than 17 percent of the total economic value of long-term care to older people. Government funding is focused largely on institutional care; only a small proportion is devoted to community-based care. Conversely, private long-term care focuses on care at home by families and friends; formal service providers play only a minor role, despite the substantial increase for PASSPORT and funding by a large collection of other government programs.

In the future, a greater proportion of the older population will reach the advanced ages at which the need for long-term care is greatest. Although the immediate future generation of elders can rely on larger numbers of children for help, families in the future may find it more difficult to maintain the high levels of economic support for long-term care that occurred in 1990 because of the growing trend for all adult members of households to be in the labor force. If people must work longer hours and more jobs to maintain their level of living, providing family care for elders may be less feasible in the future. As a result, state government will be faced with a rapidly growing number of disabled elders; in addition, a greater proportion may need publicly funded formal services.

If there is to be any prospect for containing the escalating costs of publicly supported long-term care, alternative sources of support must be expanded and new government resources must be shifted to less expensive modes of care. In 1990, for example, most long-term care insurance was paying for institutional care, not home care. Long-term care insurance may have a role in funding home care, but if this is to occur, policies must include home care benefits. Likewise, to cope with the increase in the numbers of elders needing long-term care, the state cannot continue to spend more than 90 percent of its funds for long-term care on nursing homes. The state must find ways to increase the array of alternatives, including adult day care, adult foster care, adult care facilities, and assisted living, in addition to nursing homes, rest homes, homes for the aged, and continuing care retirement communities. If people indeed choose the least restrictive alternative (which usually is also less costly), it is to the public's advantage to have the greatest possible array of choices.

NOTE: The figures presented in all tables are for the period from January 1 to December 31, 1990; however, Ohio's fiscal year runs from July 1 to June 30. To find the budget allocation for each program, we added one-half of the funds allocated for the period from July 1, 1989 to June 30, 1990 to one-half of the funds allocated for the period from July 1, 1990 to June 30, 1991.

a: The actual number of persons age 65 and older living in nursing homes, rest homes, and homes for the aged in Ohio in 1990. Source: Ohio Department of Health (1991a).

b: Estimated number of older residents in adult care facilities in Ohio during 1990. We reduced the total estimated population of these facilities by 20 percent to represent residents age 65 and older only. Source: Adult Care Facility Survey in Ohio (Scripps Gerontology Center 1991).

c: Estimated number of persons in the PASSPORT program during 1990. This number is calculated on the basis of the monthly PASSPORT expenditure from A Study of Ohio's PASSPORT Program (Applebaum, Atchley, and Austin 1987) and the total budget appropriation for PASSPORT in 1990, from Amended Substitute House Bill 111 (Ohio General Assembly 1989, pp. 297-98).

d: Estimated number of persons age 65 and older who used home health agency services for *chronic* conditions. According to the report Use of Home and Community Services by Persons Age 65 and Older with Functional Difficulties (Department of Health and Human Services 1990), only 16 percent of the older population with functional difficulties used home health agency services. These results are based on the 1987 National Medical Expenditure Survey.

e: Estimated number of persons receiving informal care. This figure includes all persons with functional limitations who live in the community, including PASSPORT clients. The home health recipients also are included because the informal care is rarely medical care.

f: Based on Ohio's 1990 older population by five-year age-sex categories (U.S. Bureau of Census 1991) and five-year age-specific disability rates developed by Kunkel and Applebaum (1992).

g: Total payments by all sources to nursing homes, rest homes, and homes for the aged were reduced by 16.94 percent (the percentage of nursing home residents age 64 or younger) to estimate the amount paid to these facilities for residents 65 and older. Sources: Annual Survey of Long-Term Care Facilities (Ohio Department of Health 1991a) and Medicaid Cost Report Annual Survey (Ohio Department of Human Services 1990).

h: Estimated payments to adult care facility operators by residents. This figure is based on the average payment, so it probably under estimates the actual amount. Source: Adult Care Facility Survey in Ohio (Scripps Gerontology Center 1990).

i, j, k: Source: Ohio General Assembly (1989, pp. 297-98).

l: Estimated number of persons age 65 and older who used home health agency services for *chronic* conditions. According to the report Use of Home and Community

Services by Persons Age 65 and Older with Functional Difficulties (Department of Health and Human Services 1990), only 16 percent of the older population with functional difficulties used the home health agency services. These results are based on the 1987 National Medical Expenditure Survey and on Ohio Certified Home Health Agencies Annual Registration Report: Home Health 1990 (Ohio Department of Health 1991b).

m: Estimated costs of providing basic services such as homemaking, meal preparation, transportation, and adult day care services. Detailed procedure and sources are presented in the appendix.

n: Source: Ohio General Assembly (1989, p. 298).

o: Source: Ohio General Assembly (1989, p. 376). Note: Only 12 percent of Social Services Block Grant money is used for long term care services (Austin 1989, p. 30); therefore only 12 percent of the total Social Services Block Grant is entered here.

p: Source: Ohio General Assembly (1989, pp. 368-370). This is the total amount allocated to the Board of Examiners of Nursing Home Administrators, Nursing Home Training, and Nursing Home Certificates of Need.

q: Source: Ohio General Assembly (1989, p. 374).

r: Source: Ohio General Assembly (1989, p. 375).

s: Source: Ohio United Way.

Table A-1		
Average Hours of Care per Day by All Caregivers of Disabled Elders		
	Average Hours of Care per Person	
Age Category of Care Recipient	**Moderately Disabled**	**Severely Disabled**
65-69	6.29	8.84
70-74	5.72	7.70
75-79	4.86	7.05
80-84	4.33	7.58
85-89	5.24	6.97
90+	5.39	7.58
Overall Average	5.15	7.50

Source: Channeling Demonstration Project: Baseline and Baseline Caregivers. Tabulated by the authors from Baseline and Baseline Caregivers data file.

Appendix

Most elders have more than one informal caregiver, although one person usually is referred to as the "primary caregiver" and undertakes most of the responsibilities. The Channeling Demonstration Project survey of informal caregivers measured the number of hours of care provided by the primary caregiver as well as the total care provided by all caregivers. Table A-1 presents a cross-tabulation of care recipients by age, level of disability, and average hours of care by all caregivers.

The average number of hours of care per day for a severely disabled person is between 6.9 and 8.8. A moderately disabled person required almost two hours less care at each age category. However, the number of hours of care provided did not appear to be related to the care recipient's age. Accordingly we used averages of 7.5 hours of informal care per day for the severely disabled and five hours for the moderately disabled.

Of the estimated 252,073 disabled persons living in Ohio in 1990, 123,182 were classified as severely disabled (had at least two ADL disabilities) and the remaining 128,891 as moderately disabled (one ADL and at least two IADL disabilities). If we assume that all the nursing home residents are severely disabled, 46,138 severely impaired persons (123,182 - 77,044, older residents of nursing homes) and 122,171 moderately disabled persons (128,891 - 6,720, board and care older residents) were living in the community. Therefore we estimated the total hours of care per severely disabled older person for each year at 2,737

Table A-2

Unit Cost of Each Service

Tasks	Cincinnati Area Council on Aging, PASSPORT, Unit Cost per Hour	Area Agency 10B, Unit Cost per Hour	Southeast Florida Center on Aging, Unit Cost per Hour
Medical	$54.72 [a]	$71.43 [b]	$38.79 [c]
Personal	13.25	6.35	11.55
Meal preparation	4.71 (per meal)	2.21 (per meal)	3.33 (per meal)
Housekeeping	11.84	6.35	10.88
Chores	-	9.87	13.00
Transportation	-	1.11 (per mile)	11.41
Money management	-	-	-

Sources: a. The Council on Aging of the Cincinnati Area (1990).
b. Annual Report of Area Agency on Aging 10B.
c. Munroe et al. 1991.

(365 x 7), and the total hours of care provided by informal caregivers to the 46,138 severely disabled elders living in the community during 1990 at 126,279,706. We calculated the total hours of care for the 122,171 moderately disabled older persons living in the community to be 222,962,075 (5 x 365 x 122,171).

Next it was necessary to establish the unit cost of each hour of service provided. Table A-2 presents three different approaches.

The unit cost of each service varies considerably from one area to another, even in Ohio, and unit costs for some services were not available. For comparison, we took the unit cost of each service for 1990 from a study by the Southeast Florida Center on Aging. Although the Florida costs may not be relevant for Ohio, the relative cost of one service to another was helpful in estimating unit costs. In the Florida study, the costs of personal care, housekeeping, and transportation were very similar, and chores were slightly more expensive. The unit cost of meals was always expressed as cost per meal, but we considered meal preparation as a housekeeping task for purposes of computing hourly cost. The time spent on money management was estimated to be equivalent to the unit cost for chores, the most costly personal service.

Table A-3				
Total Value of the Care Provided by All Informal Caregivers to Severely Disabled Elders Living in the Community				
Tasks Performed by Caregivers	**Percentage of Time Spent on Each Task**	**Number of Hours Spent on Each Task by All Caregivers**	**Unit Cost Assigned to Each Task**	**Total Cost of Each Task If Performed by a Hired Helper**
Medical	12.5 [a]	15,784,963	$38.00	$599,828,603
Personal	16.3	20,583,593	9.80	201,719,202
Meal preparation	17.7	22,351,507	9.80	219,044,778
Housekeeping	18.9	23,866,864	9.80	233,895,271
Chores	11.4	14,395,887	11.80	169,871,461
Transportation	13.2	16,668,921	9.80	163,355,428
Money management	10.0	12,627,971	11.80	149,010,053
Total	100.00%	126,279,706		$1,736,724,796

Source: a. Channeling Demonstration Project, Baseline Caregivers.

The information in the two previous tables, combined with the data from the Channeling Demonstration Project reflecting the percentage of caregivers' time spent on each task, was used to generate the total economic value of informal care as presented in Tables A-3 and A-4. Therefore we estimated the economic value of informal caregiving in 1990 at $4,586,626,035 (1,736,724,796 + 2,849,901,239).

The direct economic value of care is only part of the picture, however. The value of informal care also must include the value of income lost because of caregiving. In the National Long-Term Care Survey of Caregivers tabulated by the authors 26 percent of the caregivers had to reduce the number of hours they worked in order to perform the caregiving role. To estimate income lost by caregivers, we first estimated the number of hours of care provided by primary caregivers and their hourly wage rate. Table A-5 shows the average hourly wage rates of primary unpaid caregivers in the 1983 Long-Term Care Channeling Demonstration Study.

The overall average hourly pay rate of primary caregivers in the channeling demonstration project was $8.25 in 1983. After adjusting for wage increases that occurred between 1983 and 1990 (U.S. Bureau of The Census 1984 through 1991), we estimated the average hourly rate at $10.70 and used this rate to calculate income loss of primary caregivers due to caregiving. On the average, *primary* caregivers spend

Table A-4

Total Value of the Care Provided by All Informal Caregivers to Moderately Disabled Elders Living in the Community

Tasks Performed by Caregivers	Percentage of Time Spent on Each Task	Number of Hours Spent on Each Task by All Caregivers	Unit Cost Assigned to Each Task	Total Cost of Each Task If Performed by a Hired Helper
Medical	9.0	20,066,587	$38.00	$762,530,296
Personal	13.7	30,545,804	9.80	299,348,881
Meal preparation	18.0	40,133,173	9.80	393,305,100
Housekeeping	21.7	48,382,770	9.80	474,151,148
Chores	13.2	29,430,994	11.80	347,285,728
Transportation	15.4	34,336,160	9.80	336,494,363
Money management	9.0	20,066,587	11.80	236,785,723
Total	100.00%	222,962,075		$2,849,901,239

about 4 hours per day providing care (Munroe et al. 1991, Chapter 2, p. 4). Therefore a primary caregiver spends 1,460 hours (4 x 365) a year to provide care for a disabled older person. If 26 percent of primary caregivers had to reduce their working hours because of caregiving, the primary caregivers of 43,760 persons (.26 x 168,309) had to reduce the number of hours of paid employment in order to provide care. This calculation translated to an estimate of $683,618,720 (43,760 x 1,460 x $10.70) in income that was lost because of caregiving in 1990.

The total value of informal care is thus the value of the care provided ($4,586,626,035) plus the value of income lost as a result of caregiving ($683,618,720) for a total estimated value of $5,270,244,755 for informal care.

A person who chooses to be a caregiver for a relative, a friend, or a neighbor always looses leisure time. Participation in caregiving tasks also causes some stress and fatigue, but we chose not to place a monetary value on these negative aspects of caregiving. By the same token we did not evaluate in monetary terms the satisfaction that one feels from assisting an aging parent or an older friend. These mental and physical health aspects of caregiving probably have economic implications, but we had no basis for estimating them.

Table A-5	
Average Hourly Wage Rate (from their employment) of Informal Caregivers to the Disabled Elderly	
Age Category of Care Recipient	**Average Rate of Pay**
65-69	$8.16
70-74	$7.14
75-79	$8.58
80-84	$8.74
85-89	$8.40
90+	$8.52

Source: Channeling Demonstration Project, Baseline and Baseline Caregivers.

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