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Human Resources
Division

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FEBRUARY 8, 1980

To the Chairman and the Ranking Minority Member Special Committee on Aging SENOSSOO United States Senate



Subject: Comparison of Well-Being of Older People in Three Rural and Urban Locations (HRD-80-41)

In the Committee's August 21, 1978, letter and later discussions with your office, we were asked to provide information about the well-being of older people in rural and urban areas. We are providing information about the well-being of older people living in three locations—Cleveland, Ohio (urban); Lane County, Oregon (rural and urban); and Gateway Health District, northeastern Kentucky (rural). These locations were chosen because comparable data were available for people 65 years old and older living there.

In summary, our comparison of rural and urban older people in these three locations shows:

- --People in rural northeastern Kentucky were generally in worse condition--with respect to health, security, loneliness, and outlook on life--than people in Cleveland or in rural and urban Lane County.
- --Older people in rural and urban Lane County were less impaired than people in either Cleveland or rural northeastern Kentucky. We defined a person as impaired if the person could not do one or more daily tasks, such as preparing meals, bathing, walking, and eating even if helped.
- --At all locations, a significant percentage of the older people--ranging from 58 percent in urban Lane County to 84 percent in rural northeastern Kentucky--needed one or more kinds of help.

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- --Many older people needing help were not receiving all the help needed. This unmet need ranged from 47 percent of those people needing help in rural Lane County to 71 percent in rural northeastern Kentucky.
- --The predominant source of help in rural Lane County and northeastern Kentucky was the family and friends. Help in urban Lane County and Cleveland was more likely to come from a combination of agency and family and friends.

Enclosure I contains detailed information in the question and answer format agreed to by your office. The data for older people in these locations come from three studies of people 65 years old and older not residing in institutions. All three studies used the Older Americans Resources and Services questionnaire developed by a multidisciplinary team headed by Dr. Eric Pfeiffer at the Duke University Center, in collaboration with the Administration on Aging, the former could Administration of the Department of Health Resources Administration of the Department of Health, Education, and Welfare. The questionnaire contains 101 questions about an older person's well-being in five areas of functioning—social, economic, mental, physical, and activities of daily living. The demographic characteristics of each sample are in enclosure II.

As requested by your office, we did not obtain comments on this report from the Department of Health, Education, and Welfare.

As arranged with your office, we will send copies of this report to the Secretary of Health, Education, and Welfare and the Commissioner of the Administration on Aging. Copies will be available to others upon request.

This report and our report to you, "The Potential Need for and Cost of Congregate Housing for Older People" (HRD-80-8, Oct. 15, 1979), conclude our work undertaken pursuant to your August 21, 1978, request,

Gregory J. Ahart

Director

Enclosures - 3

QUESTIONS AND ANSWERS ABOUT PEOPLE

65 YEARS OLD AND OLDER

IN THREE LOCATIONS

DESCRIPTION OF DATA BASES

The data for our comparative analyses come from three studies that included information about people 65 years old and older not residing in institutions. The older people in the samples lived in Cleveland, Ohio; Lane County, Oregon; and the Gateway Health District, northeastern Kentucky. Using U.S. Bureau of Census definitions of rural and urban, we classified the data from Cleveland as urban, the data from Lane County as rural and urban, and the data from northeastern Kentucky as rural.

In our comparative analyses we applied appropriate statistical tests to determine if the differences we observed between locations were statistically significant. These statistical tests consider the sample sizes. When we state differences between locations in answering the questions, these differences are statistically significant.

Although the older people in the three locations were interviewed at different times, our statistical procedures made it possible to compare the information. We did not compare people by income, sex, or race because the total number of people in these comparisons was too small to be statistically meaningful.

Cleveland, Ohio

We took a statistical sample from over 80,000 people in Cleveland who were 65 years old and older and were not in institutions, such as nursing homes. In our study, 1,609 older people were interviewed by Case Western University in 1975, and 1,311 were reinterviewed a year later. This analysis uses data on the 1,311 older people interviewed in 1976. We refer to these people in the analyses as urban Cleveland.

Lane County, Oregon

The Lane County study was conducted by the University of Oregon and the Lane County Community Health and Social Services Department. The Oregon study was initiated to develop a comprehensive data base for planning programs for persons 60 years old and older living in the county. The county, located in west-central Oregon, contains two

adjacent cities, Eugene and Springfield, that had a 1976 combined population of about 132,000 (54 percent of the county). The county also contains four other incorporated areas each with a population over 2,500.

The selection process for the Oregon study involved a statistical sample of 1,197 people from six subareas of the county. The people sampled were interviewed in 1978. Data from the study are to be used for planning and evaluation with a capability to study rural and urban differences.

We segregated data on 868 persons 65 years old and older from the Lane County sample. We divided these data into three groups, which we refer to as rural Lane County, Oregon; urban Lane County, Oregon; and Lane County, Oregon (town). They are described as follows:

- --Rural Lane County, Oregon--426 older persons who live in unincorporated areas consisting of farms, timber-land, or open space or in incorporated areas with a population less than 2,500 people.
- --Urban Lane County, Oregon--318 older persons who live within the corporation limits of Eugene and Springfield, Oregon. Over 60 percent of Lane County's residents who are 65 years old and older live in these two cities.
- --Lane County, Oregon (town)--124 older persons who live in three small towns--Florence, Cottage Grove, and Oakridge. These towns have populations of 3,050, 6,900, and 3,930, respectively.

Gateway Health District, Kentucky

The Gateway Health District studied the demographic characteristics and needs of people 60 years old and older living in the district. This district consists of five counties in northeastern Kentucky (Bath. Menifee, Montgomerv, Morgan, and Rowan) within the Cumberland Plateau. The district is a severely economically depressed rural area consisting of small communities and homes dispersed over a large area of mountainous terrain in Appalachia. In 1970, this five-county area had a population of 55,678.

A statistical sample of people 60 years old and older living in the five-county area was selected for interviews. This sample included people from rural and urban areas and people in institutions. People not in institutions were interviewed in 1977. Data on 128 people 65 years old and

older, not in institutions and living in an unincorporated or incorporated areas of fewer than 2,500 people, were segregated by us from this sample and used in our comparative analyses. We refer to these 128 people as rural northeastern Kentucky.

QUESTIONS AND ANSWERS

1. <u>Ouestion</u>: What is the well-being (personal conditions) of older people living in the three locations?

Answer: We defined, measured, and compared selected personal conditions—health, security, loneliness, and outlook on life—for older people living in the three locations. The comparisons showed that for all four conditions, older people in rural northeastern Kentucky were in a significantly worse condition than older people elsewhere. Over half the people in rural northeastern Kentucky were in the worst overall condition, compared to 21 percent in Cleveland and 17 percent or less in rural and urban Lane County, as shown in the following table.

| | Urba | n | Lane | Ru | ıral |
|------------------|-----------|---------|-----------|---------|------------|
| Level of | | Lane | County, | Lane | North- |
| conditions | | County, | | County, | eastern |
| (note a) | Cleveland | Oregon | (town) | Oregon | Kentucky |
| | | | | | |
| | | (| percent). | | |
| Health: | | | | | |
| Best | 51 | 57 | 51 | 52 | 28 |
| Marginal | 28 | 27 | 29 | 27 | 25 |
| Worst | - 21 | 16 | 20 | 21 | 4 7 |
| Security: | | | | | |
| Best | 53 | 64 | 65 | 60 | 24 |
| Marginal | 25 | 22 | 24 | 25 | 28 |
| Worst | 22 | 14 | 11 | 15 | 48 |
| Loneliness: | | | • | | |
| Best | 60 | 73 | 68 | 66 | 39 |
| Marginal | 28 | 19 | 22 | 25 | 32 |
| Worst | 12 | 8 | 10 | 9 | 29 |
| Outlook on life: | | | | | |
| Best | 25 | 35 | 26 | 29 | 11 |
| Marginal | 51 | 46 | 54 | 49 | 4.5 |
| Worst | 24 | 19 | 20 | 22 | . 44 |
| Overall: | | | | | _ |
| Best | 31 | 44 | 3 3 | 37 | 9 |
| Marginal | 48 | 40 | 56 | 46 | 38 |
| Worst | 21 | 16 | 11 | 17 | 53 |

a/For a description of conditions and level of conditions, see enclosure III.

Older people in urban Lane County were in a significantly better personal condition than older people in Cleveland at all levels. For example, 44 percent of the people in urban Lane County were in the best overall condition, compared to 31 percent in Cleveland.

Also, older people in rural Lane County were in a better personal condition than older people in Cleveland at the security, loneliness, and overall levels. For example, 60 percent of the older people in rural Lane County were in the best security condition, compared to 53 percent in Cleveland.

Illnesses contributed to the worse overall personal condition of people in rural northeastern Kentucky. We focused our analyses on illnesses that interfered a great deal with a person's activities of daily living. Activities of daily living include preparing meals, bathing, walking, eating, and shopping. One of every three older people (34 percent) in rural northeastern Kentucky had three or more illnesses, compared to 1 of 11 older people (9 percent) in rural Lane County and Cleveland, as shown in the following table.

| Number of illnesses areatly inter- | Urb | an | Lane | Ru | ıral |
|-------------------------------------|---------------|---------------------------|-----------------------------|---------------------------|-------------------------------|
| fering with daily living activities | Cleveland | Lane County, Oregon | County, Oregon (town) | Lane County, Oregon | North- eastern Kentucky |
| | | (| percent)- | | |
| None One Two Three or more | 63 19 9 | 65 23 8 4 | 66 19 10 · | 60 22 9 | 37 19 10 34 |
| Total | 100 | 100 | 100 | 100 | 100 |

People 75 years old and older tended to have more illnesses that interfered with activities of daily living. For
example, a higher percentage of people 75 years old and older
had illnesses interfering with activities of daily living,
compared to people 65 to 74 years old at all locations, as
shown in the following table.

| Number of illnesses greatly inter- | []r | b an | Lane | . | ural |
|---|-------------|-------------|-----------------------------|-----------------|-------------------------------|
| fering with daily living activities | Cleve- | Lane | County, Oregon (town) | Lane County, | North- eastern Kentucky |
| | | | (percent) | | |
| None: | | | | | |
| 65 to 74 years old 75 years old | 68 | 70 | 75 | 67 | 48 |
| and older One: | 56 | 57 | 53 | 48 | 20 |
| 65 to 74 years | | | | | |
| old | 18 | 20 | 14 | 19 | 17 |
| 75 years old and older | 21 | 28 | 27 | 27 | 21 |
| Two or more: 65 to 74 years | | | | | |
| old | 7 | 7 | 8 | 7 | 9 |
| 75 years old and older Three or more: | 13 | 10 | 12 | 13 | 12 |
| 65 to 74 years | | | | | |
| old | 7 | 3 | 3 | 7 | 26 |
| 75 years old and older | 10 | 5 | 8 | 12 | 47 |

In northeastern Kentucky, a greater percentage of people 75 years old and older had three or more illnesses compared to the other locations. As shown, 47 percent of the people 75 years old and older in northeastern Kentucky had three or more illnesses, compared to 12 percent or less at all other locations.

Mental impairments and arthritis most frequently interfered with activities of daily living. As shown in the following table, the percentage of people with mental impairments interfering with activities ranged from 10 percent in urban Lane County to 37 percent in northeastern Kentucky. For arthritis, the range was from 14 percent in urban Lane County to 34 percent in Kentucky.

| Illness | Urba | n | Lane | Ru | Rurai | |
|---|-----------|---------------------------|-----------------------------|---------------------------|-------------------------------|--|
| greatly inter- fering with activities | Cleveland | Lane County, Oregon | County, Oregon (town) | Lane County, Oregon | North- eastern Kentucky | |
| , | | | (percent) | • | | |
| Mental impair- | | | | | | |
| ment | 12 | 10 | 10 | 14 | 37 | |
| Arthritis | 18 | 14 | 15 | 20 | 34 | |
| Circulation | 10 | 5 | 5 | 7 | 21 | |
| Heart trouble | 7 | 5 | 5 | 8 | 20 | |
| High blood | | | | | | |
| pressure | 5 | 4 | 5 | 3 | 16 | |
| Stroke | 4 | 2 | 2 | 2 | 5 | |

2. <u>Question</u>: What percentages of older people in the three locations are impaired; that is, people who are unable to do one or more daily tasks even if helped?

Answer: Older people in rural and urban Lane County were less impaired than people in either Cleveland or rural northeastern Kentucky. We defined impairment in terms of a person's ability to perform activities of daily living. If older people could not do one or more of these tasks even if helped, they were considered impaired. As shown in the following table, the percentage of people 65 years old and older who were impaired in rural and urban Lane County is less (7 to 10 percent) than the percentages in Cleveland (15 percent) and in rural northeastern Kentucky (17 percent).

| | Urba | n | Lane | Rural | |
|---|-----------|---------------------------|-----------------------------|-------|-------------------------------|
| Ability to do daily tasks | Cleveland | Lane County, Oregon | County, Oregon (town) | - | North- eastern Kentucky |
| | | | (percent) | | |
| Can do all without help Can do all, but only with | 59 | 75 | 68 | 74 | 35 |
| help in one or more Cannot do one | 26 | 18 | 26 | 16 | 48 |
| or more even with help | 15 | | 6 | _10 | <u>17</u> |
| | 100 | 100 | 100 | 100 | 100 |

Because age affects a person's ability to do daily tasks, we analyzed the samples by comparing two age groups, 65 to 74 years old and 75 years old and older. At all locations, a greater percentage of people 75 years old and older needed assistance in daily tasks than people 65 to 74 years old. For example, 28 percent of the people 65 to 74 years old in Cleveland either needed some help or were totally unable to do one or more active daily living tasks. Of the people 75 years old and older in Cleveland, 56 percent needed help—twice the percentage of the younger group. The table below shows the comparative ability to do daily tasks for the two age groups.

| | Ur | ban | Lane | Rui | cal |
|---|----------------|---------------------------|-----------------------------|-------|-------------------------------|
| Ability to do daily tasks | Cleve- land | Lane County, Oregon | County, Oregon (town) | | North- eastern Kentucky |
| | | · | (percent |) ——— | |
| Can do all without help: 65 to 74 years | | | | | |
| old 75 years old | 72 | 83 | 85 | 81 | 48 |
| and older | 44 | 61 | 43 | 60 | 16 |
| Can do all, but only with help in one or more: 65 to 74 years | | | | | |
| old | 20 | 12 | 14 | 14 | 46 |
| 75 years old and older | 34 | 29 | 45 | 22 | 51 |
| Cannot do one or | 28 | | • | | |
| more even with help: | 56 | | | | |
| 65 to 74 years old | 8 | 5 | 1 | 5 | 6 |
| 75 years old and older | 22 | 10 | 12 | 18 | . 33 |

3. Question: What percentages of the people in the three locations are (1) not in need of services and (2) in need of services? For those in need of services, are they receiving all the help needed?

Answer: We determined the help needed by older people and compared their needs to the help they indicated they were receiving. This comparison shows the extent of unmet needs by kinds of help. At all locations, a significant percentage of the older people (58 to 84 percent) needed one or more kinds of help. About half or more of these people (47 to 71 percent) were not receiving all the help needed, as shown in the table on the following page.

The need for medical treatment was the greatest unmet need at all locations except for Cleveland. In Cleveland, the need for both medical treatment and developmental help was the greatest unmet need—23 percent. The need for this help ranged from 34 percent of the people in Lane County (town) to 63 percent in rural northeastern Kentucky. A range of 20 percent of the people in urban Lane County to 43 percent in rural northeastern Kentucky were not receiving all the help needed.

Older people in rural northeastern Kentucky had the greatest unmet need when compared to other locations. Overall, about 7 of every 10 persons (71 percent) in rural northeastern Kentucky had an unmet need for one or more kinds of help, compared to about 5 of every 10 people at other locations (47 to 57 percent).

The greatest percentage of people needing more than one kind of help was in rural northeastern Kentucky--nearly double that of the other locations. Sixty-eight percent of the people in that area needed more than one kind of service, compared to 31 percent in rural Lane County and 39 percent in Cleveland, as shown in the following table.

| | Urban | | Lane | Rural | |
|--------------------------------|----------------|---------------------------|-----------------------------|---------------------------|-------------------------------|
| Number of types of help needed | Cleveland | Lane County, Oregon | County, Oregon (town) | Lane County, Oregon | North- eastern Kentucky |
| | | | (percent |) ——— | , |
| None One Two or more | 33 28 39 | 42 24 34 | 27 41 32 | 41 28 31 | 16 16 68 |
| Total | 100 | 100 | 100 | 100 | 100 |

| | | | | | Percent of sampled in need | | |
|----------------|-------------------|-----------------------------|-------------|--------|----------------------------|----------------------|--|
| | Definition | | Percent of | sample | Receiving all | Not receiving all | |
| Kind of help | ōĘ need | Locat ion | Not in need | | the help needed | the help needed | |
| Medical treat- | Have illness | Cleveland | 63 | 37 | 14 | 23 | |
| ment | that interferes | Urban Lane County, Oregon | 65 | 35 | 15 | 20 | |
| | a great deal | Lane County, Oregon (town) | 66 | 34 | 14 | 20 | |
| | with activities | Rural Lane County, Oregon | 60 | 4.0 | 15 | 25 | |
| | | Rural northeastern Kentucky | 37 | 63 | 20 | 43 | |
| Compensatory | Cannot do daily | Cleveland | 59 | 41 | 20 | 21 | |
| | task without help | Oregon Lane County, Oregon | 75 | 25 | 11 | 14 | |
| | · | Lane County, Oregon (town) | 68 | 32 | 14 | 18 | |
| | | Rural Lane County, Oregon | 74 | 26 | 11 | 15 | |
| | | Rural northeastern Kentucky | 35 | 65 | 35 | 30 | |
| Social | Infrequent social | Cleveland | 85 | 15 | 1 | 14 | |
| recreational | contacts | Urban Lane County, Oregon | 87 | 13 | 1 | 12 | |
| | | Lane County, Oregon (town) | 81 | 19 | 2 | 17 | |
| | | Rural Lane County, Oregon | 86 | 14 | 0 | 14 | |
| | | Rural northeastern Kentucky | 77 | 23 | 0 | 23 | |
| Caregiving | No one available | Cleveland | 86 | 14 | 3 | 11 | |
| | to help if become | Orban Lane County, Oregon | 80 | 20 | 6 | 14 | |
| | sick or disabled | Lane County, Oregon (town) | 79 | 21 | 10 | 11 | |
| | or help available | Rural Lane County, Oregon | 90 | 10 | 5 | 5 | |
| | only now and then | Rural northeastern Kentucky | RO | 20 | 7 | 13 | |
| Developmental | Negative outlook | Cleveland | 76' | 24 | 1 | 23 | |
| | on life | Urban Lane County, Oregon | 81 | 19 | 2 | 17 | |
| | | Lane County, Oregon (town) | 80 | 20 | 3 | 17 | |
| | | Rural Lane County, Oregon | 78 | 22 | 1 | 21 | |
| | • | Rural northeastern Kentucky | 56 | 4 4 | 3 | 41 | |
| Overall | One or more of | Cleveland | 33 | 67 | 12 | 55 | |
| | the above | Urban Lane County, Oregon | 42 | 58 | 9 | 49 | |
| | • | Lane County, Oregon (town) | 27 | 73 | 16 | 57 | |
| | | Rural Lane County, Oregon | 41 | 59 | 12 | 47 | |
| • | | Rural northeastern Kentucky | 16 | 84 | 13 | 71 | |

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4. Question: Who provides the predominant source of help to people?

Answer: The predominant source of help in rural areas comes from family and friends, compared to a combination of family and friends and agencies in urban areas. In rural Lane County and rural northeastern Kentucky, people who needed help in activities of daily living and received all help needed received about 90 percent of this help from family and friends only. In contrast, people in Cleveland and urban Lane County received about 68 percent of their help from family and friends only, and the rest from agencies or a combination of family and friends and agencies, as shown in the following table:

| | Urba | an | Ru | ral |
|---|---------------|---------------------------|---------------------------|--------------------------------------|
| Source of help | Cleveland | Lane County, Oregon | Lane County, Oregon | North- eastern <u>Kentucky</u> |
| | | —— (per | cent)—— | |
| Family and friends only Agency only Both | 68 7 25 | 68 9 <u>23</u> | 89 2 9 | 91 2 |
| Total | 100 | 100 | 100 | 100 |
| Number in sample | 264 | 35 | 45 | 4 4 |
| Total sample | 1,311 | 318 | 426 | 128 |
| Percent of sample | 20 | 11 | 11 | 34 |

We also analyzed data about people who needed help in activities of daily living and did not receive help for all their needs. At all locations, about one-third of the people who needed help received none, as shown in the following table.

| | Urba | an | Rural | | |
|-------------------------------|-----------|---------------------------|---------------------------|-------------------------------|--|
| Category | Cleveland | Lane County, Oregon | Lane County, Oregon | North- eastern Kentucky | |
| | | (per | cent) | | |
| Needed help but received none | 7 | 4 | 5 | 9 | |
| Needed help and received some | 14 | 10 | 10 | 20 | |
| All who needed help | <u>21</u> | 14 | <u>15</u> | 29 | |

For people who needed help and received some, the percentage of this help from agencies or the combination of family and friends and agencies was similar at all the locations, as shown in the following table.

| | Urba | ann | Ru | ral |
|---|------------------------|---------------------------|---------------------------|-------------------------------|
| Source of help | Cleveland | Lane County, Oregon | Lane County, Oregon | North- eastern Kentucky |
| | | (per | cent) | |
| Family and friends only Agency only Both | 74 5 · <u>21</u> | 72 3 25 | 68 7 25 | 69 4 27 |
| Total | 100 | 100 | 100 | 100 |
| Number in sample | 180 | 32 | 44 | 26 |
| Total sample | 1,311 | 318 | 426 | 128 |
| Percentage of total sample | 14 | 10 | 10 | 20 |

Contrasting the two source of help tables (pp. 10 and 11), the percentage of people receiving agency services or a combination of agency and family and friend help was similar in urban areas. However, in rural areas, those getting all the help needed received more help from their family and friends than those who did not receive all the help they needed.

DEMOGRAPHIC CHARACTERISTICS OF SAMPLES

| | Urban | | Lane | Rural | |
|-----------------|-----------|---------------------------|-----------------------------|---------------------------|-------------------------------|
| Characteristics | Cleveland | Lane County, Oregon | County, Oregon (town) | Lane County, Oregon | North- eastern Kentucky |
| | | | -(percent |) | |
| Sex: | | | | | |
| Male | 38 | 43 | 40 | 50 | 30 |
| Female | 62 | 57 | 60 | 50 | 70 |
| Age: | | | | | |
| 65-74 | 54 | 65 | 59 | 64 | 60 |
| 75 and older | 46 | 35 | 41 | 36 | 40 |
| Education: | | | | | |
| Less than | | | | | |
| 12 years | 75 | 53 | 56 | 62 | 97 |
| 12 years or | | | | 2.0 | |
| more | 25 | 47 | 44 | 38 | 13 |
| Race: | | | | | |
| White | 72 | 99 | 100 | 98 | 98 |
| Black | 28 | 1 | 0 | 2 | 2 |
| Marital status: | | | | | |
| Married | 38 | 59 | 55 | 67 | 61 |
| Widowed | 48 | 32 | 4 0 | 25 | 37 |
| Single | ·14 | 9 | 5 | 8 | 2 |
| Income: | | | | | |
| Less than | | | | | |
| \$3,000 | 32 | 13 | 15 | 14 | 52 |
| \$3,000 to | | | | - 1 | 4.0 |
| \$6,999 | 50 | 44 | 50 | 51 | 40 |
| More than | 1.0 | 4.2 | 2.5 | 2 5 | 8 |
| \$7,000 | 18 | 43 | 35 | 3 5 | Ō |
| Sample size | 1,311 | 318 | 124 | 426 | 128 |

METHODOLOGY

The information contained in this report is based on our study of the personal conditions of older people in Cleveland, Ohio. Five other reports have been issued on this study entitled (1) "The Well-Being of Older People in Cleveland, Ohio" (HRD-77-70, Apr. 19, 1977), (2) "Conditions of Older People: National Information System Needed" (HRD-79-95, Sept. 20, 1979), (3) "Home Health-The Need for a National Policy to Better Provide for the Elderly" (HRD-78-19, Dec. 30, 1977), (4) "Conditions and Needs of People 75 Years Old and Older" (HRD-80-7, Oct. 15, 1979), and (5) "The Potential Need for and Cost of Congregate Housing for Older People" (HRD-80-8, Oct. 15, 1979). Following are the details of the data gathering and analytical methodology from the two-phase study.

WELL-BEING STATUS AND SERVICES DATA BASES

We took a sample from over 80,000 people in Cleveland, Ohio, who were 65 years old and older and were not in institutions, such as nursing homes. In our study, 1,609 older people were interviewed by Case Western Reserve University personnel from June through November 1975. A year later, 1,311 of these older people were reinterviewed.

In interviewing, we used a guestionnaire containing lol questions developed by a multidisciplinary team at the Duke University Center, in collaboration with HEW's Administration on Aging, former Social and Rehabilitation Service, and Health Resources Administration. The questionnaire contains questions about an older person's well-being status in five areas of functioning--social, economic, mental, physical, and activities of daily living.

To identify factors that could affect the well-being of older people, we

- --developed specific definitions of services being provided to older people and dimensions for quantifying the services;
- --identified the providers of the services--families and friends, health care providers, and over 100 social service agencies;

--obtained information about the services provided to each person in our sample and the source and intensity of these services; and

--developed an average unit cost for each of the 28 services.

In defining and quantifying the services, we used a format developed by the Duke University Center to define 28 different services. These services are defined in appendix V of our prior report. 1/ Services are defined according to four elements: purpose, activity, relevant personnel, and unit of measure. For example, meal preparation was defined as follows:

Purpose: To regularly prepare meals for an

individual.

Activity: Meal planning, food preparation, and

cooking.

Relevant

personnel: Cook, homemaker, family member.

Unit of

measure: Meals.

Examples: Meals provided under 42 U.S.C. 3045

(supp. V, 1975), the Older Americans Act,

and meals-on-wheels programs.

To quantify the service, we used the unit of measure along with the duration, or number of months, during which the service was received.

We also developed an average unit cost for each service based on the experience of 27 Federal, State, local, and private agencies in Cleveland between October 1976 and March 1977. We compared these costs to similar costs in Chicago, Illinois, and Durham, North Carolina. As discussed in our prior report, the family and friends are also important sources of services. In their absence, any services received would have to be from an agency. Therefore, we assigned the same cost to family and friend services that we found for agencies.

^{1/&}quot;The Well-Being of Older People in Cleveland, Ohio,"
April 19, 1977, HRD-77-70.

Each piece of data was collected so that it could be related to an individual in our sample. This included the questionnaire data, data on the 28 services provided by social service agencies, and data on the services provided by health care providers. By relating these data to the individual, we were able to do comparative analyses of sampled older people for over 500 different variables.

ANALYTICAL TECHNIQUES

In our prior report, we combined the five areas of functioning—(1) social, (2) economic, (3) mental, (4) physical, and (5) activities of daily living—into a well-being status because we wanted to consider the entire person. We described well-being status as (1) unimpaired, (2) slightly impaired, (3) mildly impaired, (4) moderately impaired, (5) generally impaired, (6) greatly impaired, (7) very greatly impaired, or (8) extremely impaired.

The Duke University Center's questionnaire is unique in that data from the questionnaire can be aggregated into a number of useful measures, each with a specific purpose. As previously discussed, the questionnaire can provide a five-dimensional functional assessment or be combined into a well-being status that we used in our first report. This assessment was not designed, however, for determining the benefits of help for older people. Through our analyses, we were able to develop useful measures of personal conditions of, problems of, and help available to older people. The conditions of older people used in this report—health, security, loneliness, and outlook on life—are described on the following page.

Health condition

An older person's health condition is the ability to do daily tasks. In categorizing a person's ability to do daily tasks, we considered his or her responses to questions on 13 different tasks. For example, regarding meal preparation, each person was asked "Can you prepare your own meals * * * without help, with some help, or are you completely unable to prepare any meals?" We then categorized each person based on the number of the 13 tasks they needed some help with or were completely unable to do. For most of this report we used three categories—(1) can do all 13 tasks without help, (2) need help with one or more but can do all with help, and (3) cannot do any even with help.

| Level of condition | Illness | Health Ability to do daily tasks (note_a) | Overall | Security | Loneliness | Outlook on life | Overall personal condition |
|--------------------|--|---|--|------------------------|------------------------------|--|---|
| Rest | No illness that inter- feres a great deal with activities | Can do all 13 daily tasks without help | In best category for both illness condition and ability to do daily tasks | Worries hardly evet | Feels lonely almost never | Poes not feel useless and finds life exciting | (1) In best category for all 4 conditions or (2) Best for 3 and mar-qinal for the other |
| Marginal | One illness that inter- feres a great deal with activities | Can do all 13 daily tasks but only with help in one or more | (1) In best category for illness condition or ability to do daily tasks and marginal in other or (2) in marginal category for both | Worries fairly often | Feels lonely sometimes | (1) Finds life exciting but feels use- less or (2) Does not fee useless but finds life dull or routine | (1) In mar- qinal category for 2 or I more con- ditions and best for other(s) or (2) In worst category for only one con- dition |
| Worst | Two or more illnesses that inter- fere a great deal with activities | Can't do at 'least one task even with help | In worst cate- gory for cither illness condition or ability to do daily tasks | Worries very often | Feels lonely quite often | feels useless and finds life routine or dull | In worst category for 2 or more conditions |

a/Daily tasks include preparing meals, bathing, walking, shopping, eating, etc. Details on these daily tasks are described on pages 57 to 59 of appendix IV of our April 19, 1977, report, "Well-Being of Older People in Cleveland, Ohio" (HRD-77-70).

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Sugar Library

If an older person is not in the best health condition, illnesses were used in defining the person's problems. In categorizing an older person's illness situation, we considered whether an older person had any of 27 different illnesses, including mental illnesses, and how much the illness interfered with his or her activities. For example, each person was asked if he or she had heart trouble. If the person said "yes," he or she was then asked "how much does it interfere with your activities—not at all, a little (some), or a great deal?" We then categorized each person based on the number of illnesses that interfered with his or her activities a great deal. For most of this report we used three categories—(1) those with no illnesses bothering them a great deal, (2) those with one, and (3) those with two or more.

Security condition

A person's security condition can be described by how often a person worries. How often a person worries can be related to the amount of income and caregiving help a person receives. In developing a person's security condition, we used the following question in the questionnaire:

-- "How often would you say you worry about things--very often, fairly often, or hardly ever?"

In defining security problems, we used the following three questions. To define a money problem, we asked:

-- "How well does the amount of money you have take care of your needs--very well, fairly well, or poorly?"

And these questions were used in defining caregiving problems:

- --"Is there someone who would give you any help at all if you were sick or disabled? If 'yes,' * * *"
- --"Is there someone who would take care of you as long as needed, or only a short time, or only someone who would help you now and then * * *?"

Loneliness condition

A person's loneliness condition was identified using the following guestion:

-- "Do you find yourself feeling lonely quite often, sometimes, or almost never?"

The information for identifying loneliness problems was obtained from the following questions:

- -- "About how many times did you talk to someone-friends, relatives, or others--on the telephone in the past week?"
- --"How many times during the past week did you spend some time with someone who does not live with you * * * not at all, once, two to six times, once a day or more?"

Using these questions, the following table shows information combined to establish a loneliness problem variable called social contacts.

| | How often | a week vis | sits with | someone |
|--------------------|-----------|------------|-----------|------------|
| | Once a | Two to | | Not |
| How often a week | day or | six | | at |
| talks on telephone | more | times | Once | <u>all</u> |
| Once a day or | | | | |
| more | High | High | Medium | Medium |
| Two to six | | | | |
| times | High | Medium | Medium | LOW |
| Once | Medium | Medium | Low | Low |
| Not at all | Medium | Low | Low | Low |

Using high, medium, and low activity as a measure of intensity of social contacts, this variable was related to loneliness condition.

Outlook on life condition

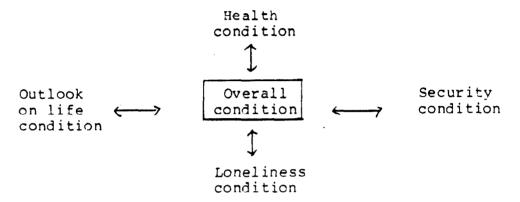
The outlook on life condition is obtained by defining life view using information from the questions shown in the following table.

| | Feel useles: | s at times |
|-------------------|--------------|------------|
| Life is generally | Yes | No |
| Exciting | Fair | Good |
| Pretty routine | Poor | Fair |
| Dull | Poor | Fair |

Using this information, we were able to define three levels of outlook on life condition-good, fair, and poor.

Overall condition

Because a person is at all times in some overall condition which results from the integration of each of the four conditions, we constructed a composite condition of a person illustrated as follows.



Our methodology and analytical results show that a useful measure of the conditions of a person can be developed. In some instances, such as the outlook on life condition, the amount of data for constructing this variable is minimal. Nevertheless, methodological concepts and analytical results show the existence of this condition. Further, our measures are logically equivalent to the five-dimensional functional assessment used in our prior report based on the Duke University Center's questionnaire. The health condition is equivalent to the mental, physical, and activities of daily living dimensions; the security condition is related to the economic dimension; and the loneliness condition is related to the social dimension.