



use of general hospitals

Factors in Outpatient Visits

MAURICE E. ODOROFF, M.A.

LESLIE MORGAN ABBE, B.S.

AS PART of a study of the use of general hospitals, the level of use of outpatient facilities in relation to various personal, geographic, and economic factors has been investigated. Data were obtained through interviews of about 27,000 households, including about 90,000 persons of all ages, drawn from the civilian, noninstitutional population of every State in the United States. Selected highlights of the findings on outpatient visits are reported here as advance information.

In the course of each interview, the respondent was asked whether anyone in the household had received care in any hospital without staying overnight, "for example, in a hospital clinic, emergency room, outpatient department, etc." For each person identified as having received outpatient care, the name and location of hospitals visited and the number of visits made for outpatient care during the previous 12 months were recorded. Personal characteristics of each member of the household and the income level of each household were also

Mr. Odoroff is chief, and Mr. Abbe is assistant chief, Program Evaluation and Reports Branch, Division of Hospital and Medical Facilities, Public Health Service.

learned. In tabulating results, particular attention was given to determining the place of care with respect to the type of place of residence (metropolitan, urban, or rural) of the patient.

The survey findings are limited by the exclusion of institutional populations, the absence of data on hospital use by persons who died, emigrated, or entered the armed services before the survey date, and the normal variability of sampling. In addition, note should be made of the possibility of errors in response with respect to the data on outpatient visits. The frequency of outpatient visits may not be remembered as completely as the frequency and extent of inpatient care. Earlier experience in health surveys indicates a considerable loss of recall when the period of time elapsed between the occurrence and the reporting is extensive, unless the event was important in itself to the person interviewed or was associated with significant points in time or other distinguishing factors (1, 2). In this survey differentials in use are more important than definitive levels of use. Accordingly, while under-reporting may affect the general level of use, it is considered of minor consequence.

Two basic measures have been selected to

This paper is the second interim report setting forth provisional findings of a national household survey of the use of general hospitals. The first, published in the May 1957 issue of Public Health Reports (pp. 397-403), briefly described the survey procedure and presented findings on demographic and ecologic factors in the use of inpatient facilities. Analysis and interpretation of the data will be included in a summary monograph when the study is completed.

The survey is considered a first step in defining more precisely appropriate standards of need for general hospitals in the light of changing medical practice and changing patterns of care. It is expected to point the way to more intensive studies of the real need for physical facilities for adequate care of a known and described population. The survey was conducted for the Division of Hospital and Medical Facilities of the Public Health Service in September 1956 by the Bureau of the Census in connection with its monthly current population survey.

describe the level of outpatient visits in varying circumstances. These are the number of outpatients receiving care annually per 1,000 population and the number of outpatient visits annually per 1,000 population. The volume of outpatient care reflected by these measures is set forth in comparison with three types of factors. One group of factors, relating to personal characteristics, may be considered demographic factors. Another group relates to the nature of the geographic and social setting of the place of residence and the place of care. In this study, these are called ecologic factors. A third factor is family or individual income.

Demographic Factors

Sex and race have very little effect on the number of outpatients cared for, but they do affect greatly the number of outpatient visits (table 1).

Outpatient visits of white persons number 151 annually per 1,000 population, while visits of nonwhite persons amount to 238 per 1,000 population. For the nonwhite population,

similar contrasts appear between men and women; nonwhite males report 188 visits, while nonwhite females report 285 visits. In the white population, only small differentials appear between visits of men and women.

Age affects the number of outpatients only slightly, except that a higher rate is found for children, but total outpatient visits rise substantially with age (table 2).

For children under 14 years of age, the number of outpatients, 58 per 1,000 population, is well above that of other age groups and the average (47) for all ages.

The number of outpatient visits is highest for the age groups above 45 years. The maximum is 251 visits for the age group 55-64 years, as compared with 161 visits for all ages and 98 visits for adolescents and young adults (ages 14-24 years).

Table 1. Outpatient care in general hospitals, by sex and race

Sex and race	Annual number of outpatients per 1,000 population	Annual outpatient visits per 1,000 population
Both sexes.....	47	161
White.....	47	151
Nonwhite.....	45	238
Male.....	47	151
White.....	48	146
Nonwhite.....	43	188
Female.....	47	170
White.....	47	156
Nonwhite.....	48	285

Table 2. Outpatient care in general hospitals, by age

Age groups, in years	Annual number of outpatients per 1,000 population	Annual outpatient visits per 1,000 population
All ages.....	47	161
Under 14.....	58	136
14-24.....	43	98
25-34.....	42	169
35-44.....	40	153
45-54.....	43	204
55-64.....	45	251
65 and over.....	41	193

Veteran status has minor effect on the number of outpatients cared for, but considerable effect on total outpatient visits (table 3).

Veterans of World War II report 188 outpatient visits annually, as compared with 109 visits for other veterans and 141 visits for non-

Table 3. Outpatient care in general hospitals for males 14 years old and over, by veteran status

Veteran status	Annual number of outpatients per 1,000 population	Annual outpatient visits per 1,000 population
All males 14 years old and over.....	41	148
Veterans.....	38	161
World War II veterans.....	41	188
Other veterans.....	32	109
Nonveterans.....	43	141

Table 4. Outpatient care in general hospitals for persons 14 years old and over, by employment status and industry

Employment status and industry	Annual number of outpatients per 1,000 population	Annual outpatient visits per 1,000 population
All persons 14 years old and over.....	42	171
In labor force.....	39	126
Employed.....	39	123
Agriculture.....	32	83
Nonagricultural industries.....	39	128
Wage and salary workers.....	40	130
Mining ¹	66	173
Construction.....	42	115
Manufacturing.....	39	125
Transportation, etc.....	33	116
Trades.....	38	109
Services.....	41	152
Professional.....	42	132
Other services.....	41	167
Public administration.....	50	157
Self-employed workers.....	34	108
Unpaid family workers.....	38	151
Unemployed workers.....	56	222
Not in labor force.....	47	235
Keeping house.....	47	231
Going to school.....	38	87
Unable to work.....	67	822
Other nonworkers.....	48	249

¹ Includes forestry and fisheries.

veterans, among all males 14 years old and over.

Employment status and industry are accompanied by substantial differences both in the number of outpatients and in total outpatient visits (table 4).

For all persons 14 years of age and over, the number of outpatients cared for annually is 42 per 1,000 population. Within the labor force the number ranges from 32 for those employed in agriculture to 66 for wage and salary workers in mining (including forestry and fisheries). A similar high rate of 67 patients per 1,000 population is reported for persons unable to work because of a long-term illness or disability.

Total outpatient visits vary even more widely. The average rate for all persons employed is 123 visits annually per 1,000 population. Persons in agriculture report only 83 visits per 1,000 population, with a maximum among employed persons of 173 visits for wage and salary workers in mining. Unemployed workers and persons keeping house report a rate of visits of 222 and 231 per 1,000

Table 5. Outpatient care in general hospitals, by region and type of residence

Region	Type of residence		
	All types	Urban	Rural
	Annual number of outpatients per 1,000 population		
All regions.....	47	49	44
Northeast.....	46	50	38
North Central.....	45	50	36
South.....	48	48	49
West.....	49	44	58
	Annual outpatient visits per 1,000 population		
All regions.....	161	179	132
Northeast.....	195	234	81
North Central.....	121	147	82
South.....	157	137	177
West.....	190	200	172

Table 6. Annual outpatient visits in general hospitals per 1,000 population, by residence and place of care

Residence	Place of care						
	All places	Standard metropolitan areas ¹		Other metropolitan areas	Urban (nonmetropolitan)		Rural
		Metropolitan area of residence			Places 10,000-50,000	Places under 10,000	
		Central city	Outside central city				
All areas.....	161			9	20	14	18
Metropolitan areas.....	179	148	24	4	2	1	1
Central city.....	232	222	3	5	1	2	(²)
Urban fringe.....	143	86	48	4	4	(²)	2
Rural nonfarm.....	104	56	44	3	1	1	(²)
Rural farm.....	69	47	12	1	10	(²)	(²)
Urban (nonmetropolitan).....	123			23	62	32	6
Places 10,000-50,000.....	133			30	98	5	1
Places under 10,000.....	112			15	19	65	12
Rural (nonmetropolitan).....	145			17	35	31	62
Nonfarm.....	144			19	41	27	57
Farm.....	146			15	25	37	69

¹ Includes a central city of at least 50,000 population with contiguous counties socially and economically integrated therewith, as defined by the Bureau of the Census.

² Less than 0.5.

population. Persons unable to work report an annual rate of 822 outpatient visits, an average of slightly more than 1 visit per month per person in this group receiving care.

Ecologic Factors

Geographic region and type of residence have a limited effect on the number of outpatients but a very substantial effect on the number of outpatient visits (table 5).

The number of outpatients among persons who live in rural areas is low in the Northeast and North Central regions of the country (38 and 36 annually per 1,000 population), but is well above national averages in the South and West (49 and 58 annually per 1,000 population).

These differentials apply also to total outpatient visits of rural people. On the other hand, urban residents in the Northeast and West have a comparatively high number of outpatient visits annually (234 and 200 per

1,000 population). Rates are well below the national average for urban persons in the North Central region and in the South (147 and 137 visits annually per 1,000 population).

Type of residence and place of care, as they reflect accessibility, materially affect the level of outpatient visits (table 6).

The annual rate of outpatient visits from all types of residence in all places of care is 161 per 1,000 population.

Persons living in the central city of metropolitan areas report a rate of 232 visits. Outpatient visits drop to 143 for urban fringe residents and reach a low of 69 for persons from farms in the outer limits of metropolitan areas.

Outpatient visits by persons living in cities of 10,000-50,000 population not in metropolitan areas are reported at 133, while visits by persons living in nonmetropolitan rural areas are reported at 145 per 1,000 population.

Residents of the urban fringe of metropolitan areas make about three-fifths of their

total outpatient visits within the central city of the metropolitan area in which they live. Urban and rural residents of nonmetropolitan areas obtain the major portion of their outpatient care in their home communities, although from 10 to 20 percent of such care is obtained in metropolitan areas.

Economic Factor

Income and family status have a substantial relation to the level of outpatient care received, at least with respect to the number of visits (table 7).

Among members of primary families, that

is, persons related by blood, marriage, or adoption to the head of the household in which they live (³), the maximum number of outpatient visits is made by persons in the lowest income groups. The rate for all members of primary families decreases from 199 visits per 1,000 population for income groups under \$1,000 to 106 visits for the income range \$5,000–\$10,000. Families with incomes over \$10,000 are reported at an increased rate of 144 visits.

Children under 14 years of age in the lowest income group (under \$1,000) have a very low rate of visits (59 per 1,000 population), although adults in families in this income group

Table 7. Outpatient care in general hospitals, by income, family status, and age

Income ¹	Family status ² and age			
	Members of primary families			Primary individuals
	All members	Members 14 years and over	Members under 14 years	
	Annual number of outpatients per 1,000 population			
All incomes.....	46	42	57	60
Under \$1,000.....	41	46	27	81
\$1,000–\$1,999.....	49	47	53	65
\$2,000–\$2,999.....	50	47	56	45
\$3,000–\$3,999.....	49	43	62	42
\$4,000–\$4,999.....	48	42	60	35
\$5,000–\$7,499.....	45	37	61	51
\$7,500–\$9,999.....	46	41	61	
\$10,000 and over.....	44	43	48	26
Income not reported.....	34	29	52	
	Annual outpatient visits per 1,000 population			
All incomes.....	151	160	128	328
Under \$1,000.....	199	256	59	545
\$1,000–\$1,999.....	197	202	185	395
\$2,000–\$2,999.....	194	211	156	183
\$3,000–\$3,999.....	146	139	159	152
\$4,000–\$4,999.....	177	200	133	144
\$5,000–\$7,499.....	106	102	114	89
\$7,500–\$9,999.....	105	110	90	
\$10,000 and over.....	144	167	68	47
Income not reported.....	119	126	97	

¹ For members of primary families, "income" includes money income of all members of the family; for primary individuals, it includes personal income only.

² Primary family members include persons related by blood, marriage, or adoption (one of these persons being the head of the household). Primary individuals are heads of households not living with relatives (see reference 3).

report a level more than 4 times as great. Except for this lowest income group, the data reported for primary families show rather close parallels for annual outpatient visits by children and adults.

Primary individuals, that is, heads of households not living with relatives (3), with incomes under \$2,000 report a rate of outpatient visits greatly in excess of the outpatient visits made by adults in primary families with similar incomes. The rate reported among primary individuals in the income group under \$1,000 is 545 visits per 1,000 population; among those in the group \$1,000-\$1,999, it is 395 visits per 1,000 population.

Summary

This is the second interim report on a national household survey of the use of general hospitals by a known population. Data have been compiled from a sample comprised of about 27,000 families, including about 90,000 persons of all ages. This report records provisional findings on factors related to the level of outpatient visits to general hospitals. These factors include demographic, ecologic, and economic aspects.

The most significant contrasts in level of outpatient use appear for variations in income levels. Families with incomes below \$2,000 are reported as making about 200 outpatient

visits annually per 1,000 population, while those with incomes between \$5,000 and \$10,000 report about one-half of this rate. Primary individuals (household heads not living with relatives) in the income groups below \$2,000 report outpatient visits at a level double that of adults in primary families with the same income.

Substantial differences in the rate of outpatient visits accompany variations in race, sex, age, and employment status. Place of residence appears also to have a considerable effect on the rate of outpatient visits. The rate is highest for residents of the central city in metropolitan areas and lowest for the rural farm population in metropolitan areas. The rate of outpatient visits for the farm population outside metropolitan areas is only slightly below the national average for all persons.

REFERENCES

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- (2) Mauldin, W. P., and Marks, E. S.: Problems of response in enumerative surveys. *Am. Sociol. Rev.* 15: 649-657, October 1950.
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New Site for National Library of Medicine

The proposed new building for the National Library of Medicine will be constructed on the grounds of the Public Health Service's National Institutes of Health in Bethesda, Md. Selection of a site for the library was made by the board of regents of the library at its second meeting on April 29, 1957.

Factors leading to the choice of the specific site were its proximity to two large medical centers, the availability of sufficient land, a good network of transportation, and established supporting services and facilities.