

*Health Research Opportunities
in Welfare Records*

Herbert Notkin, M.D., M.P.H.

Research  *Series 8*

HEALTH INFORMATION FOUNDATION
RESEARCH SERIES

1. *The Behavioral Scientists and Research in the Health Field—a questionnaire survey*, Odin W. Anderson, Ph.D., and Milvoy Seacat, M.A. 1957.
2. *An Examination of the Concept of Medical Indigence*, Odin W. Anderson, Ph.D., and Harold Alksne, M.A. 1957.
3. *The Prescription Pharmacist Today*, Wallace Croatman and Paul B. Sheatsley. 1958.
4. *The Public Looks at Hospitals*, Eliot Freidson and Jacob J. Feldman. 1958.
5. *Public Attitudes Toward Health Insurance*, Eliot Freidson and Jacob J. Feldman. 1958.
6. *The Public Looks at Dental Care*, Eliot Freidson and Jacob J. Feldman. 1958.
7. *The Medical Care Price Index*, Harry I. Greenfield, Ph.D. and Odin W. Anderson, Ph.D. 1959.
8. *Health Research Opportunities in Welfare Records—a preliminary report on illness and economic dependency*, Herbert Notkin, M.D., M.P.H. 1959.

FOREWORD

Speculation about the impact of illness and the costs of adequate medical care on the ability of the family to cope successfully with daily problems but without becoming insolvent and turning to public assistance has been going on for a long time. Attempts to measure this impact, however, have been difficult and not particularly rewarding, and therefore methods that show promise should be encouraged.

At any given time in the United States, over 6 million people receive public assistance in the various categorical programs of Aid to Dependent Children, Aid to the Blind, Old Age Assistance, Aid to the Permanently and Totally Disabled, and General Assistance. It is generally recognized that many on the assistance rolls are there for reasons precipitated by illness. If it were possible to determine the nature and magnitude of this problem, it might be reasonably assumed that adequate health insurance before assistance was sought, or physical and social rehabilitation applied after assistance was received, might help in keeping people off public assistance rolls.

The pilot study by Dr. Herbert Notkin, Medical Director of the Onondaga County (N. Y.) Department of Public Welfare, which investigated the possibility of using welfare case records to determine the impact of illness on applications for public assistance, appears fruitful. It is with this hope that Health Information Foundation made a modest grant for the study and has published the report as part of its Research Series.

ODIN W. ANDERSON, PH.D.
Research Director
HEALTH INFORMATION FOUNDATION

New York City
June, 1959

THE MAJOR PURPOSE OF THIS STUDY was to make a preliminary survey of the role of illness, disability and premature death in producing formal economic dependency—that is, reliance on public assistance for food, shelter, clothing and medical care. A secondary purpose was to see whether a larger and more definitive study of the problem would be worthwhile.

Although there have been many studies of the relationship between illness and poverty, very few have attempted to analyze welfare case records as this one does in order to determine the role of medical conditions in producing economic dependency.

The relationship of disease and poverty, however, has been recognized at least since the 18th century, when it was pointed out by Johann Peter Frank, in a speech he gave in 1790.¹ The 19th century studies by Chadwick and others helped to clarify this relationship, primary attention being given at that time to the communicable diseases.

In modern times, this area was explored by the Committee on Costs of Medical Care in at least two of its publications.²⁻³ The second of these publications (*Illness and Dependency*) quotes from approximately fifteen studies of the relationship, conducted between 1891 and 1930. All testify to a positive correlation

¹Sigerist, Henry, *Landmarks in the History of Hygiene*, pp. 47-63, Oxford University Press, 1956.

²Falk, I. S.; Klem, Margaret C., and Sinai, Nathan, *The Incidence of Illness and the Receipt and Costs of Medical Care Among Representative Family Groups*. Publications of the Committee on the Costs of Medical Care: No. 26, University of Chicago Press, 1933.

³Bruno, Frank J., *Illness and Dependency*, Miscellaneous Contributions on the Costs of Medical Care: No. 9, Washington, D. C. March 1, 1931.

between illness and poverty. The U. S. Public Health Service also showed interest in this field in the 1930s.⁴

In fact, the economic depression of the 1930s gave rise to many studies on the specific relationship between illness and indigence carried out primarily through the cooperative efforts of the Public Health Service and the Milbank Memorial Fund.⁵⁻¹¹ Other significant studies of the period were conducted under the auspices of the Federal Emergency Relief Administration.¹²⁻¹³ A little later in the same decade, the National Health Survey produced some valuable data on the subject.¹⁴⁻¹⁵ Also prominent in this field of endeavor were the Hagerstown Health Studies which had been carried out intermittently from 1921 to 1951.^{16,17}

In recent years, the relationship between ill-health and low incomes has been confirmed by studies done in Canada,¹⁸ Balti-

more,¹⁹ and California.²⁰ Bradley Buell and his associates explored the problem in the broader social setting of the multi-problem family.²¹ This study was followed by a three-year research program on the prevention and control of indigent disability in Hagerstown, Maryland.²² The final report has recently been published,²³ and its findings may well prove significant in the realignment of community agencies working in this field. Other studies of recent vintage worth noting are those of the University of Pittsburgh School of Public Health,²⁴ and of Health Information Foundation.²⁵ This is by no means a comprehensive list of such studies, but is indicative of some of the major efforts in this area.

The Social Security Act of 1935 (with a number of later revisions) established public assistance as an integral part of government on all levels. Since that time, there has been a specific and legal definition of one form of poverty. While it is quite obvious that all poor people are not dependent on public assistance, it is equally obvious that anyone who is, is poor by definition. This makes special studies possible within a well-defined population group. The Social Security Act now recognizes four categories of public assistance recipients, all of whom must meet specific eligibility requirements in addition to the financial and residential criteria set up by state and local governments. These are:

Old Age Assistance—In order to qualify for this category, the individual must have reached the age of 65.

Aid to Dependent Children—This form of welfare is restricted to children deprived of parental support or care by reason of death, continued absence or incapacity (physical or mental).

⁴Collins, Selwyn D., *Economic Status and Health*, Public Health Bulletin No. 165, U. S. Public Health Service, 1927.

⁵Perrott, G. St. J.; Collins, Selwyn D.; and Sydenstricker, Edgar, "Sickness and the Economic Depression," Preliminary Report on Illness in Families of Wage Earners in Birmingham, Detroit, and Pittsburgh, *Public Health Reports*, Vol. 48, Oct. 13, 1953, pp. 1251-1264.

⁶Collins, Selwyn D. and Perrott, G. St. J., *The Economic Depression and Sickness*, Proceedings of the American Statistical Association, March, 1934, pp. 48-51.

⁷Perrott, G. St. J. and Collins, Selwyn D., "Sickness and the Depression," A preliminary report upon a survey of wage-earning families in ten cities, *Milbank Memorial Fund Quarterly*, Vol. 12, July, 1934, pp. 1-7.

⁸Perrott, G. St. J. and Collins, Selwyn D., "Sickness Among the 'Depression Poor,'" *American Journal of Public Health*, Vol. 24, February, 1934, pp. 101-107.

⁹Perrott, G. St. J. and Collins, Selwyn D., "Relations of Sickness to Income and Income Change in 10 Surveyed Communities" (Health and Depression Studies No. 1 - Method of Study and General Results for each Locality), *Public Health Reports*, Vol. 50, May 3, 1935, pp. 1-28.

¹⁰Sydenstricker, Edgar and Perrott, G. St. John, "How Unemployment Affects Illness and Hospital Care," *The Modern Hospital*, Vol. 42, March, 1934, pp. 41-44.

¹¹"Health and Welfare Issues in Community Planning for the Problem of Indigent Disability," Report of a Three-Year Study and Experiment Planned and Conducted by Community Research Associates, Inc. *American Journal of Public Health*, Vol. 48, November, 1958, Part II - pp. 1-49.

¹²Perrott, G. St. J. and Sydenstricker, Edgar, "Causal and Selective Factors in Sickness," *American Journal of Sociology*, Vol. 40, May, 1935, pp. 804-812.

¹³*Disabilities in the Urban Relief Population*, May, 1934 (Preliminary Report), Federal Emergency Relief Administration; Research Section, Research Bulletin Series I No. 8, May 22, 1935, Processed, p. 24.

¹⁴Perrott, G. St. J. and Griffin, Helen C., "An Inventory of the Serious Disabilities of the Urban Relief Population," *Milbank Memorial Fund Quarterly*, Vol. 14, July, 1936, pp. 213-241.

¹⁵National Health Survey, 1935-36, Preliminary Reports, Sickness and Medical Care Series, U. S. Public Health Service.

(a) *Disability from Specific Causes in Relation to Economic Status*, Bulletin 9, 1938, 13 pp. Processed.

(b) *Illness and Medical Care in Relation to Economic Status*, Bulletin 2, 1938 (Rev. 1939), 7 pp. Processed.

¹⁶Perrott, G. St. J., "Health Problems of Low Income Families," *Health Officer*, Vol. 2, Feb. 1938, pp. 488-495.

¹⁷Lawrence, P. S., "Chronic Illness and Socio-Economic Status," *Public Health Reports*, Vol. 63, Nov. 19, 1948, pp. 1507-1521.

¹⁸Lawrence, P. S., "Some Conditions Leading to Medical Dependency in Hagerstown," *Public Health Reports*, Vol. 66, Oct. 19, 1951, pp. 1351-1360.

¹⁹*Canadian Sickness Survey 1950-51*, No. 8, Permanent Physical Disabilities (National Estimates), Dominion Bureau of Statistics and Department of National Health and Welfare, Ottawa, Feb., 1955.

¹⁹*Chronic Illness in a Large City*, Commission on Chronic Illness, Vol. IV, Harvard University Press, Cambridge, Mass., 1957.

²⁰*Health in California*, Summary of California Health Survey of 1954-55, State Department of Health, Berkeley, California, 1958.

²¹Buell, Bradley and Associates, *Community Planning for Human Services*, Columbia University Press, New York, N. Y., 1952.

²²*The Prevention and Control of Indigent Disability in Washington County, Maryland*, Community Research Associates, July, 1954, 78 pp., processed.

²³"Health and Welfare Issues in Community Planning for the Problem of Indigent Disability," Report of a Three-Year Study and Experiment Planned and Conducted by Community Research Associates, Inc., *American Journal of Public Health*, Vol. 48, November, 1958, Part II, pp. 1-49.

²⁴Ciocco, Antonio et al., "On the Association Between Health and Social Problems in the Population" Part I—"Methods and Preliminary Findings," *Milbank Memorial Fund Quarterly*, Vol. 31, July, 1953, pp. 265-290.

Part II—"The Influence of Medical Care Problems," *Milbank Memorial Fund Quarterly*, Vol. 32, July, 1954, pp. 247-261.

²⁵Anderson, Odin W. and Alksne, Harold, *An Examination of the Concept of Medical Indigence*, Health Information Foundation Research Series #2, October, 1957, 14 pp.

Aid to the Blind—This category is restricted to people who meet the legal definition of blindness.

Aid to the Permanently and Totally Disabled—This category is designed for the individual who is prevented from working because of long-term illness or disability.

In addition to these four categories, most states and localities also make some provision for *general assistance* (also called home relief) for people who have insufficient income or resources, but who do not meet the requirements of any of the federally-aided categories. These might include transients, the unemployed and people on strike. In some states, only unemployable individuals are eligible for this category.

Methodology

For the study described in this report a sample of cases was taken from three of the five public assistance categories in the files of the Onondaga County (N. Y.) Welfare Department—namely, Home Relief, Aid to Dependent Children and Old Age Assistance. Aid to the Blind and Aid to the Permanently and Totally Disabled were omitted since disability contributes to economic dependency by definition in these categories. All cases were selected from those in the agency's file of cases that were currently inactive, but that had been actively receiving public assistance at some time since 1947. The sample represented approximately 4 per cent of inactive Home Relief, 6 per cent of inactive Aid to Dependent Children and 11 per cent of inactive Old Age Assistance cases in the file.

The case records were read by a medical student with previous experience as a welfare caseworker in the same agency, so that she was familiar with the record system. The pertinent data were recorded on a form, which was then reviewed by a physician in order to analyze the importance of medical factors.

Several basic definitions were used in the study, as follows:

A *medical condition* was defined as an illness, a disability, premature death, or a condition requiring medical services.

Such a condition was defined as a *precipitating* cause of economic dependency if the condition itself immediately caused the welfare application. Examples might be the hospitalization of a family member resulting in an application for defrayment of hospital expenses; or an illness which resulted in loss of a job and subsequent loss of income.

Such a condition was defined as a *contributory* cause if some other factor immediately caused the application for assistance, with the medical factor playing a subsidiary role. For example, a person with a disability precluding employment may have been supported by a relative for some time, but the cause of the welfare application was the relative's inability to support the disabled person any longer.

Three methodological problems quickly became apparent in the course of the study, all of which must be rectified if any future studies of this type are to be made in a more definitive fashion. One of these was the impossibility, for administrative reasons, of selecting a truly random sample of cases. The second problem was that much important information was missing because records were not designed for study purposes. The third was the fact that only one person reviewed this information, thus decreasing the objectivity of the study.

Findings

Somewhat more than one-third (35.6 per cent) of all recipients in the three categories had medical conditions that were precipitating factors in the original application (see Table I, page 13). Another fifth (19.8 per cent) had medical conditions as contributing factors. In total, then, over one-half (55.5 per cent) of all welfare recipients in these three categories had medical conditions as factors in contributing to economic dependency, a clear indication of the importance of illness in the public welfare situation.

Home Relief—Home Relief (general assistance) recipients have often been regarded as individuals who are on public assistance primarily for economic and vocational reasons, such as lay-

offs and lack of job skills.* It may be of particular interest then, to study the role of medical conditions in welfare applications for this group. Over one-third (36.3 per cent) of the group had medical conditions as precipitating factors in producing economic dependency, with somewhat less than one-fifth (17.5 per cent) having such conditions as contributing factors (Table II). Illness or disability was a factor in over half of the group (53.9 per cent) . . . a high proportion considering that these persons are often thought to be on public welfare basically for economic reasons.

Table II also shows the relative importance of medical factors in families in various age groups (using the age of the head of the family as an index). In the various age groups from the twenties through the forties, no particular pattern of differential factors appears. However, for families whose head was over 50, the importance of medical factors increases sharply. The three younger age groups cluster around 33 per cent, while just about half of those over 50 have medical conditions as precipitating factors in the welfare application.

Table III shows the relationship of family size and medical factors in producing economic dependency. No consistent pattern is seen. For example, when the role of medical conditions as precipitating factors is examined, the single-person family and the families with six or more members stand out as the highest, both being over 40 per cent. In families with 2 to 5 members, the pattern is quite inconsistent, with some tendency for a decrease in the importance of medical factors as size of families increases. This finding is not too easily explained.

Table IV shows the relationship of the date of the first welfare application and the importance of medical factors. Contrasted here are three periods of relative prosperity (the 1920s, the 1940s, and the 1950s) with one period largely characterized by economic depression (the 1930s). It is clearly seen that the general economic conditions prevailing at the time of application have a definite effect on the relative importance of medical factors. In the three prosperous periods, medical conditions were

precipitating factors in from 44 to 50 per cent of the cases. In the depression period, medical conditions were precipitating factors in less than 20 per cent of the cases. Actually, it may be more accurate to state, not that medical factors become more important in prosperous eras, but that economic factors become less important, thus increasing the relative magnitude of the medical problem.

Aid to Dependent Children—One of the reasons for the ADC program is to help take care of the family when a parent is ill, disabled, or has died prematurely. Therefore, it might be expected that these families would have many more medical reasons for economic dependency than home relief families. This does not seem to be borne out by the findings, which show slight, and probably insignificant differences between the groups. Table V shows that medical conditions were precipitating factors in 40 per cent of the Aid to Dependent Children families, compared to 36.3 per cent of the Home Relief cases. When we look at medical factors as contributory, 17.5 per cent of the Home Relief cases fall in this category, as compared to 15.6 per cent for Aid to Dependent Children. The totals show that medical factors played a role in 53.9 per cent of Home Relief cases, compared to 55.6 per cent of Aid to Dependent Children cases, a differential of less than 2 per cent.

Table V also shows the relationship of age of family head to the importance of medical conditions. In sharp contrast to the Home Relief cases, increasing age seems to affect the frequency with which medical conditions help in producing economic dependency. For the age group below 29, 23 per cent of the families had medical conditions as precipitating factors in their welfare applications. This rose to about 46 per cent in the 30-39 year age group and to nearly 64 per cent in the over-40 age group. There seems to be no simple explanation for the differences between the Home Relief and Aid to Dependent Children groups in this regard.

Table VI is concerned with the relationships between size of family and medical factors in economic dependency. Again, there are sharp differences between the Home Relief and Aid to Dependent Children in this relationship. In Aid to Dependent Chil-

* This refers only to those states (including New York) that accept employable individuals for this category.

dren, the importance of medical factors as precipitating causes rises steadily with increasing size of family. There is a steady progression from 21 per cent in families of 2, to 86.5 per cent in families of 6 or more. Again, this difference between Aid to Dependent Children and Home Relief families is not easily explained.

Another analysis was made of the applications for assistance in the Home Relief and Aid to Dependent Children categories. The purpose here was to see whether (in those cases where medical conditions played a role), the application was made primarily because of interference with income or to defray medical costs. (This analysis was not made for Old Age Assistance because of the difficulty in disentangling the effects of age versus illness in interfering with income.) Table VII again shows a marked difference between the Aid to Dependent Children and Home Relief groups. In the former, only 58 per cent applied because a medical condition interfered with earning a living, compared to over 90 per cent of Aid to Dependent Children cases. A possible explanation is the difference in family composition. Most Home Relief families have two parents, so that one can work if the other is ill. Approximately 80 per cent of Aid to Dependent Children families have only one parent in the constellation, so that illness of this parent almost automatically interferes with the source of income.²⁶ This may make inability to earn a living relatively more important than in Home Relief families.

Old Age Assistance—Table VIII shows the relationships of medical factors and economic dependency in Old Age Assistance recipients. Less than 30 per cent of these cases have a medical condition as a precipitating factor. Adding those cases in which it was a contributing factor, the total is nearly 58 per cent, just slightly higher than Home Relief and Aid to Dependent Children. Judging from the case record summaries, it seems probable that ill-health actually plays a much more important role than this in causing application for welfare. However, the inadequacy of the records, plus the difficulties of separating the relative roles of illness and old age make it hard to assess this problem accurately. The figures given here are probably minimal.

²⁶Brightman, I. J. et al. "Knowledge and Utilization of Health Resources by Public Assistance Recipients," Part I, "Public Health and Preventive Medical Resources," *American Journal of Public Health*, February, 1958, pp. 188-199.

Table VIII also shows the effect of age, using two broad age groups—65-74 and over 74. The role of medical conditions as precipitants of economic dependency varies little between these two age groups. However, the role of ill-health as a contributing factor is seen in only 25 per cent of the group below 75 while it rises to 38 per cent for the group over 75.

Table IX is concerned with the effect of year of application on the importance of medical factors in creating economic dependency. In the period before 1940 (almost all cases in the 1930s), only 11.4 per cent of the cases showed a medical condition as a precipitating factor. This rose sharply to 23.3 per cent in the 1940s and to 38.3 per cent in the 1950s. However, the pattern of medical conditions as contributing factors shows no such regularity. In looking at the reverse of the coin, namely those cases without medical factors present, no consistent pattern is seen. This is in some contrast to the Home Relief group, which showed that medical factors became more important by comparison in prosperous times.

Subsequent Applications—In the Aid to Dependent Children and Home Relief categories, a substantial number of cases re-applied at various intervals. Table X shows the medical factors in these re-applications. Over-all, 94 Home Relief cases had medical problems on at least one re-application. When we add this to the 200 whose medical problems contributed in some way to their first application, we find that 79.7 per cent of all Home Relief cases had medical conditions that precipitated or contributed to at least one welfare application. The comparable figure for Aid to Dependent Children is 65 per cent.

Conclusions

Obviously, this preliminary study has numerous defects from a scientific viewpoint. However, a few preliminary conclusions may be drawn from its findings. Briefly, these are:

1. A very large amount of formal economic dependency is due in one way or another to medical conditions. For example, approximately 80 per cent of Home Relief cases had medical problems which precipitated or contributed to at least one welfare application.

2. There seem to be some basic differences in Home Relief and Aid to Dependent Children families in terms of their applications for welfare related to medical reasons. This shows up in the analyses by family size, by age of family head, and by specific reason for application (medical need versus income loss).

3. It is probable that Old Age Assistance recipients have more medical problems related to application than shows up in this study.

4. A clearer elucidation of some of the health and medical factors contributing to economic dependency can be discovered only by a different type of study.

The State Department of Public Assistance in Washington has been making studies of reasons for opening cases at least since 1952.²⁷ These have been reviewed for comparison with the current study, but they have proven to be incomparable because of a basic difference in the definitions involved. The Washington studies are built around the economic, rather than the medical factors in the situation. However, the fact that two out of three generally comparable studies show results quite similar to the current one adds validity to this study.

Comparable studies

A few studies of a generally similar nature have been identified and compared with this study in terms of methodology and results. A recent nationwide study analyzed more than 6,500 Aid to Dependent Children families in detail, including the reason for application to welfare departments.²⁸ In terms of the crisis causing the immediate application, 42 per cent applied because of death or incapacity of a parent. This compares to the 40 per cent of ADC families in the current studies for which medical conditions were precipitating factors in applications.

²⁷*Reasons for Opening and Closing Cases*, State Department of Public Assistance, Olympia, Washington, Informational Circulars Nos. 487 and 582, January, 1955 and 1958.

²⁸Blackwell, Gordon W. and Gould, Raymond F., *Future Citizens All*, American Public Welfare Association, Chicago, Ill., 1952.

A 1955 study done in Chicago was concerned with the reasons for opening new General Assistance (Home Relief) cases²⁹; illness, disability or the need for medical care accounted for only 14.7 per cent of the applications, with the great majority of new cases being opened for reasons related to lack of employment. This figure is markedly different from any of those found in the current study, which shows a much higher proportion of cases opened for medical reasons. While all the differences are not clear, some of the discrepancies may be accounted for. The Chicago study dealt only with cases opened in January and February, a time of year when employment is traditionally low. Secondly, the Chicago study did not involve itself with medical conditions as contributory factors, but was concerned only with their role as precipitating factors in the applications.

A nationwide study of Characteristics of Aid to Dependent Children families, conducted by the Bureau of Public Assistance, analyzed more than 500,000 such families in 1953 and 1956.³⁰ In 1953, 38.4 per cent of the fathers were incapacitated or dead, and in 1956, 35.1 per cent of the fathers were in this classification. Although the methodology was basically different, these figures compare fairly closely to the 40 per cent of families in which medical conditions precipitated dependency, as shown in the current study.

Future studies

In terms of the findings in the study described here, it seems wise to delve further into this relationship, with emphasis on the preventable aspects of the situation. It is proposed, therefore, that a prospective study be designed along the following lines:

1. A scientifically designed sample of new applicants for public welfare.
2. Each client in the sample to be interrogated as to the presence of medical factors related to his application for public assistance.

²⁹*Study of New Cases Opened for Receipt of General Assistance—Chicago Department of Welfare (January-February, 1955)*, Research and Statistics Division, Illinois Public Aid Commission, May, 1955.

³⁰*Characteristics of Aid to Dependent Children, Early 1956*, Bureau of Public Assistance, Department of Health, Education, and Welfare, August 23, 1957.

3. Each client with identifiable medical factors to be interviewed in greater depth by a trained medical social worker.

4. In each case, previous medical information to be obtained from the sources of medical care (physicians, clinics and hospitals).

5. When indicated, medical examinations to be performed.

6. Judgments to be made by an appropriate team of physicians and social workers concerning the preventability of the medical and social conditions uncovered, the specific available techniques of prevention, the optimum time for bringing assistance and methods of case finding.

7. If the findings so indicate, an action program along these lines to be put into effect in the welfare department.

Summary

A pilot study of welfare applications in a county welfare department clearly shows (as have previous studies) that illness and disability are common factors in causing economic dependency. The study has proven to be comparable to other studies of the same general type. It is proposed to continue this study in greater depth in order to ascertain if preventive social or medical techniques could have reduced the number of individuals applying for public welfare.

Table I
Medical Conditions as Factors Contributing to Economic Dependency
 Recipients of Home Relief, Aid to Dependent Children, and Old Age Assistance, Onondaga County

Category	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Home Relief	135	36.3	65	17.5	200	53.9	171	45.2	371	100.0
ADC	110	40.0	43	15.6	153	55.6	122	44.3	275	100.0
OAA	65	29.1	64	28.7	129	57.9	94	42.1	223	100.0
Totals	310	35.6	172	19.8	482	55.5	387	44.5	869	100.0

*This column should not be added in calculating horizontal totals.

Table II
Medical Conditions as Factors Contributing to Economic Dependency
 By age of head of family:
 First application of Home Relief recipients, Onondaga County

Age group	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Below 29	46	34.4	25	18.6	71	44.1	63	47.0	134	100.0
30-39	31	32.2	19	19.0	50	52.9	46	47.8	96	100.0
40-49	27	33.7	11	13.7	38	47.5	42	52.5	80	100.0
Over 50	31	50.8	10	16.4	41	67.2	20	32.8	61	100.0
Totals	135	36.3	65	17.5	200	53.9	171	45.2	371	100.0

*In the sample, there were 20 families whose head was under 20, and 20 whose head was over 60 years of age.
 **This column should not be added in calculating horizontal totals.

Table III
Medical Conditions as Factors Contributing to Economic Dependency
 By size of family
 First application of Home Relief recipients, Onondaga County

No. in family	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
1	53	47.3	14	12.5	67	59.8	45	40.1	112	100.0
2	24	36.3	19	28.7	43	65.1	23	34.8	66	100.0
3	12	26.6	10	22.2	22	48.8	23	51.1	45	100.0
4	11	22.9	5	10.4	16	33.3	32	66.6	48	100.0
5	5	17.8	10	35.6	15	50.8	13	46.4	28	100.0
6 or more	20	41.6	6	12.5	26	52.4	22	45.8	48	100.0
Not recorded	10		1		11		13		24	
Totals	135	36.3	65	17.5	200	53.9	171	45.2	371	100.0

*This column should not be added in calculating horizontal totals.

Table IV
Medical Conditions as Factors Contributing to Economic Dependency

By date of first application
Home Relief recipients, Onondaga County

Year of first application	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Before 1929	9	50.0	2	12.2	11	61.1	7	38.8	18	100.0
1930-1939	23	18.7	18	14.6	41	33.3	82	66.6	123	100.0
1940-1949	34	45.3	11	14.6	45	60.0	30	40.0	75	100.0
1950-1958	69	44.5	34	21.9	103	66.4	52	33.6	155	100.0
Totals	135	36.3	65	17.5	200	53.9	171	45.2	371	100.0

*This column should not be added in calculating horizontal totals.

Table V
Medical Conditions as Factors Contributing to Economic Dependency

By age of family head¹

First applications for Aid to Dependent Children recipients, Onondaga County

Age group	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Below 20	29	23.2	24	19.2	53	42.4	72	57.6	125	100.0
30-39	39	45.8	12	14.1	51	60.0	34	40.0	85	100.0
Over 40	35	63.6	7	12.7	42	76.3	13	23.5	55	100.0
Not recorded	7		0		7		3		10	
Totals	110	40.0	43	15.6	153	55.6	122	44.3	275	100.0

¹This sample contained 13 families whose head was under 20 and 20 whose head was over 50 years of age.

*This column should not be added in calculating horizontal totals.

Table VI
Medical Conditions as Factors Contributing to Economic Dependency

By size of family

First application of Aid to Dependent Children recipients, Onondaga County

Size of family	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
2	16	21.0	10	12.9	26	33.7	51	66.2	77	100.0
3	17	25.7	14	21.2	31	46.9	35	53.0	66	100.0
4	15	32.6	14	30.4	29	63.0	17	36.9	46	100.0
5	17	50.0	5	14.7	22	64.7	12	35.2	34	100.0
6 and more	45	86.5	0	00.0	45	86.5	7	13.5	52	100.0
Totals	110	40.0	43	15.6	153	55.6	122	44.3	275	100.0

*This column should not be added in calculating horizontal totals.

Table VII
Specific Medical Reason for Welfare Application
First application of Home Relief and Aid to Dependent Children clients, Onondaga County

Category	Medical condition interferes with source of income		To defray medical costs		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent
HR	116	58.0	84	42.0	200	100.0
ADC	140	91.5	13	8.5	153	100.0
Totals	256	72.5	97	27.5	353	100.0

Table VIII
Medical Conditions as Factors Contributing to Economic Dependency
By age

First application of Old Age Assistance recipients, Onondaga County

Age groups	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
65-74	49	29.7	42	25.4	91	52.2	74	44.8	165	100.0
75 Plus	16	27.6	22	37.9	38	66.5	20	34.5	58	100.0
Totals	65	29.1	64	28.7	129	57.9	94	42.1	223	100.0

*This column should not be added in calculating horizontal totals.

Table IX
Medical Conditions as Factors Contributing to Economic Dependency
First application of Old Age Assistance recipients, Onondaga County

Year of first OAA application	Medical conditions as a precipitating factor		Medical conditions as a contributing factor		Total of* two previous columns		No medical factors present		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Before 1940	4	11.4	14	40.0	18	51.4	17	48.6	35	100.0
1940-1949	17	23.3	18	24.6	35	48.0	38	52.0	73	100.0
1950-1958	44	38.3	32	27.8	76	66.2	39	33.8	115	100.0
Totals	65	29.1	64	28.7	129	57.9	94	42.1	223	100.0

*This column should not be added in calculating horizontal totals.

Table X
Medical Conditions as Factors Contributing to Economic Dependency
The importance of medical factors in subsequent welfare applications, Home Relief and Aid to Dependent Children, Onondaga County

Category	Cases without medical problems on first application		Cases with subsequent applications		Subsequent applications with medical conditions as contributing factors	
	No.	Per cent*	No.	Per cent*	No.	Per cent**
HR	171	81.5	163	81.5	94	57.5
ADC	153	45.1	69	45.1	28	40.5
Totals	324	75.0	232	75.0	122	52.5

*This is a percentage of cases without medical problems at first application.

**This is a percentage of cases with subsequent applications.