THE UNIVERSITY OF MANITOBA

ECONOMIC STATUS AND THE ILLNESS OF THE OLDER PERSON

A Study of the Economic Burden of Illness Presented by the Aged Group in the Public Wards of the Winnipeg General Hospital.

Being the Report of a Research Project Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Social Work.

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TABLE OF CONTENTS

CHAPTER		PAGE
	LIST OF TABLES	ii
	LIST OF FIGURES	iv
I.	INTRODUCTION	1
II.	BACKGROUND	9
III.	METHOD	23
IV.	ANALYSIS OF RESULTS	29
V.	CONCLUSIONS	52
BIBLIOGRAPHY		57
APPENDIX		60
	Tables	61
	Schedule	63

LIST OF TABLES

TABLE — PAGE

I. Yearly Earnings by Sex and Marital Status 31

II. Average Monthly Income for the Aged Group for the Month Prior to Entering Hospital by Marital Status 31

III. Number of Old People by Income and Marital Status 32

IV. Average Monthly Income of Patients Twenty-five Years and Over by Age Group 34

V. Number of Old People with Savings and Debts by Sex and Marital Status 35

VI. Type of Treatment. Average days' stay, Average Medical Costs and Average Total Cost of Illness by Type of Treatment 36

VII. Average Length of Present Hospital Stay, by Age and Sex 39

VIII. Number of Patients and Average Number of Days in Present Hospital Stay by Age 40

IX. Average Cost of Present Illness by Marital Status 41

TABLE		PAGE
X.	Average Total Cost of Illness by Age Groups	43
XI.	Length of Hospital Stay in the Past Five Years by Sex . .	44
XII.	Costs of Present Illness and Monthly Income by Marital Status	45
XIII.	Number of Patients with Insurance and Savings by Expectation of Payment of Hospital Bill	46
XIV.	Hospital Costs to be Paid by Municipalities	48
XV.	Living Accommodation of the Single Aged . . .	Appendix 61
XVI.	Employment Status by Sex and Marital Status . .	Appendix 61
XVII.	Type of Hospital Accommodation Used in the Past Five Years by Sex	Appendix 62
XVIII.	Use made of Out-Patient Department by Sex . . .	Appendix 62
XIX.	Family Doctor Retained by Old People by Sex . .	Appendix 62

LIST OF FIGURES

FIGURE PAGE

1. Number of Old People by Source of Income 33

2. Comparison of Average Monthly Income, Average Hospital Cost, Average Total Cost of Illness of Patients Twenty-five Years and Over by Age Groups 50

CHAPTER I

INTRODUCTION

Life's expectancy, lengthened beyond the span of man's economically productive years, social change and illness has worked hardships for older people. The process of aging, combined with illness and reduced economic status has constituted problems not only for the individual but for the community and nation. Society has become conscious of a responsibility towards old people and the ever increasing financial burden of this responsibility has caused concern. The economic status and health of the aged have become important issues. For this reason, this report has chosen to analyse the economic status and pattern of illness of the older group using the facilities of the public wards in the Winnipeg General Hospital. It attempted to focus and answer two questions. How heavy an economic burden was illness in advancing years? Was the cost of illness met by the financial resources of the aged, and if not by whom?

Preventive medicine, over the past half century, has made it possible for more infants to grow into adulthood, more adults into old age. Old people have become more numerous. But, industry has not kept pace with medicine in recognizing the potentials of the older individual. Policies of early retirement have remained in force. Employment opportunities for those still capable of giving service have been scarce. The bulk of the aged has been caught within this social lag. Since few have retained their place in labour markets and few are provided for through

pension plans, a high percentage have had to be content with drastically reduced financial resources. Yet in their declining years, they have had to cope with rising costs, failing health and increased need for hospital and medical attention. Social legislation to some extent has attempted to bridge the gap with such measures as Old Age Security, Old Age Assistance and health service programs. The task in this study, then, will be to explore the magnitude of the problem of illness facing the aged, observe their resources and see what part social measures have had in the economic affairs of the aged.

This topic, along with others, emerged from a query made by the Economic Committee of the Medical Staff of the Winnipeg General Hospital as to whether the use of the public wards was changing. Evidence revealed that it had become practice to put patients of questionable paying ability in public ward care rather than risk loss through failure to collect payment for a private bed. The extent to which the general public were being encouraged to use the public wards had never been gauged. The number of patients falling under various categories and their economic and social status were not known. Also, the responsibility assumed by government, the hospital's outlay in service and the medical profession's contribution in dollars and cents by the loss of these people as private patients were all unknown quantities. Furthermore, it was thought, the new type of public wards plus free medical services, may have far reaching effects upon the use of the public wards. This usage may have repercussions upon administration, as well as upon the finances of both the hospital and its medical staff.

As a consequence, the Economic Committee of the Medical Staff made a request to the Director of the School of Social Work, University of Manitoba, for a study of the socio economic status of public ward patients of the Winnipeg General Hospital.

It was accepted as a pilot project. The scope of the investigation was to see who used the public wards; to calculate the costs of their hospital and medical care; to analyse their economic and financial status; to examine the resourdes of these people by which both hospital and medical services might be paid; and to appraise to what extent these patients, themselves, paid for accommodation and services used.

For this purpose, a schedule was prepared. With the assistance of the Social Service Department and the co-operation of the nursing staff, each patient discharged from the public wards during the month of November 1956 was interviewed by a team of second year social work students and trained social workers.

This report selected to examine in detail the economic status of the aged group in the public wards in relation to the pattern and costs of their illness. The object is to estimate the resources of these old people, gauge the burden of their illness and to see whether they could pay the cost of illness and what was the source of any necessary assistance. In attempting to establish the economic statue of these old people attention will be focused on their employment situation, their yearly earning power, monthly income, debts and savings. The economic burden of illness will be estimated from an analysis of the

department of the hospital where the type of treatment was given and of the cost of treatment required, length of stay in hospital, costs of illness as well as frequency and duration of past hospital admissions. The resources from which the costs of illness would be financed will be studied and the number of patients requiring assistance with their hospital costs will be estimated.

Many questions had to be answered to draw a picture of the old person's financial circumstances, the burden which illness imposed upon him and how the costs of illness were to be met. How many of these old people were still gainfully employed? What was the amount of their yearly earnings? What were the major sources of revenue? What was the average monthly income? How did it compare with the monthly income of the younger working-age groups? How many had liquid assets? Were there other resources, such as hospital insurance with which the costs of illness could be met? What were some of the factors involved in illness that influenced the cost of it? How heavy were these costs? How did they compare with the costs of illness of the younger age groups? Were the expenses of illness paid from the resources of the aged patient? If not, by whom were they paid? Answers to these, helped give a fair estimate of the financial resources of the aged, the burden of illness with which they had to cope and from which a calculation could be made as to the amount of assistance required from the Municipalities.

Some interesting facts about the aged living in Winnipeg were uncovered in a recent survey made by the Committee on Services for the Aged of the Welfare Council of Greater Winnipeg. As a preventative

measure, aimed at reducing the necessity for institutionalization, the Committee's report brought out the need for better organized out-patient and diagnostic services for the aged. This far-sighted recommendation is one which hospital authorities might take into account when evaluating preventive programs. In the wake of the building program and the re-organization of the Winnipeg General Hospital, administrators might wish to give consideration to the revision of services offered to the older patient. In order to judge the direction any change should take, to weigh the quality and quantity of the services needed by the elderly, the use made of existing facilities would have to be fully explored. It is hoped this study will assist in this by furnishing some information about the problem facing the aged group using public ward care and inspire further investigation into the out-patient and clinical service to see what improvements would be necessary to serve the aged of our community more effectively.

Some terms appearing repeatedly in this report should be defined. "The aged group" and its equivalent the "old people" refer to those within the age range of sixty-five years of age and over. This age range was chosen as it is the age range used in the Census of Canada and in many industrial retirement policies. Old Age Assistance is granted to those sixty-five and over whose need is proven, while every one seventy years and over is entitled to Old Age Security. The local survey on the aged included those sixty-five and over. This age range was also used in the Canadian Sickness Survey 1950-51.

"Illness" refers to the present sickness which brought the

patient into hospital. "Type of treatment" is classified according to the specialization of the doctor ultimately responsible for treatment. The "medical cost" means the fee which the patient would have had to pay the attending doctor. The "hospital costs" includes the cost of hospital room and board, drugs and extras, while the "total cost of illness" includes both the medical cost and the hospital costs.

"Economic status" takes into consideration the amount of earnings in the last twelve months before entering hospital, monthly income during the month preceding hospitalization, debts and assets of the patient. It also weighs the manner in which the current hospital bill is to be paid and whether or not there is any hospital insurance or assistance expected.

Canadian hospitals have recorded few socio-economic studies of the aged patient. For this reason, it was regrettable there had to be so many limitations in this effort. It would have been more satisfying to have been able to interview the aged group in the whole hospital; to have prepared a schedule that would have brought forth sufficient information to analyse their background, personality, economic status and standard of living. The different financial levels could have been compared to discover if financial security had any effect on the pattern of illness. It would have been interesting to observe the relation of sickness to standard of living, housing, nutrition; to evaluate how much of their sickness was due to the psychological effects of loneliness, inactivity and maladjustment; and how often hospitalization was an escape from either financial or emotional

insecurity. These and many other questions about the process of aging might have been investigated. However, the investigation called for an analysis of the people in the public wards. Attention had to be confined to the aged occupying "teaching" beds where medical services were given free of charge. Since it included only those receiving free medical care and was not a cross section of the aged group in the entire hospital, it might be expected those interviewed fell largely within the low income level, and would include many among the non-earning group. Background information, which could be gathered about these old people, was further restricted by a schedule prepared to serve the purposes of the larger project. Little could be gleamed about the standard of living of the older group. Still less could be found about their emotional needs. Observations in this particular study were narrowed down to an analysis of the economic burden of illness found in the aged under public ward care.

Data, about the person and his economic status were obtained through direct interview. The medical staff and the medical records office recorded the type of treatment given and the cost of such treatment. The accounting department of the hospital filled in the length of stay and the cost of hospital care.

Basic information will be compiled so that a general view can be had of the older people, their sex, marital status and residence by municipality. Their employment status, earning power, monthly income, debts and savings will be analysed. Comparison will be made of the monthly income of the aged group with that of the younger age groups.

Special circumstances, in which the old people found themselves, will be taken into consideration.

An attempt will be made to show the burden which illness imposes upon the aged by looking at the length and frequency of hospitalization and the costs of illness. A comparison will be made of the aged group with the younger age groups as to length of hospital stay for present illness, hospital costs and the total costs of illness.

Observations will be directed to show up how the costs of illness were to be financed. How many expected to pay their own expenses and how many did not? An analysis of the financial resources, including hospital insurance, will indicate the extent to which municipal assistance was necessary for this group.

Chapter two will discuss some of the problems of the aged. A review will be made of some factors affecting their economic status, the national health pattern of the older age group as reported by the Canadian Sickness Survey 1950-51, medical services available to old people and some concerns of gerontology.

Later chapters will describe the method by which information about the aged group in the public wards will be analysed, will present the analysis and give the conclusions.

CHAPTER II

BACKGROUND

Two problems occurring frequently in old age are dependency and illness. For many the declining years are not the happy aftermath of a life well spent, but years of forced retirement, new found insecurity and illness. Medical science has learned to prolong life in spite of degenerative illness and ailments that impair productivity and ability to be self-supporting. It has not been able to prevent chronic illness which afflicts the aging to a greater degree than any other age group. Industry has rationalized its negative attitudes toward employing older workers by magnifying this declining aspect of age rather than using the positive qualities of the elderly worker. Old people have had to stop working at a time when financial resources are needed the most. The vicious circle of dependency and illness may begin here, for gainful employment is the cornerstone of our economy. Unemployment in later years can result in dependency. And while, it is recognized that illness may be the cause of unemployment and dependency, it is also conceivable that the psychological, economic and social effects of dependency may cause illness.

Illness and dependency are only two of the many hardships that befall the aged, but they are prevalent, affect the economic status of the older person and make more difficult the solution of other problems of the aging. They are important factors in the nation's economy, for the financial burden of the dependency and cost of illness of the aged

must fall upon the younger working group if the old people do not have the resources to meet their own needs. The aged in our population have been increasing and will continue to do so in the future, and so will the burden of their up-keep. The economic status of the aged in general, their dependency, burden of illness and how the costs of their illness are to be met, must be known before corrective measures can be taken.

Over a hundred years ago the population of Canada totalled 2,436,000 persons. Fifty years later, in 1901 the census figures indicated that population had doubled and in 1951 it was almost six times the figure of 100 years ago. At the turn of the century the proportion of aged persons in the population was estimated to be 7.7 per cent. B.R. Blishen, Chief of Institution Section, Dominion Bureau of Statistics in an address made June1955 in Edmonton pointed out that this proportion of the aged now stands at 11.4 per cent and is expected to continue to increase with the years.[1] A comparison of the Federal Census figures for 1901 and 1951 of the Manitoba population is even more revealing of what this increase can mean for a given area. The percentage of the Manitoba population of these sixty-five years and over in 1901 was 2.39 per cent but in 1951 it was 8.43 per cent of the increased population.[2] The large influx of adult immigrants, the falling birth rate and the decline in mortality were contributing factors in swelling the numbers

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[1] B.R. Blishen, M.A., "The Aged and Hospital Resources". Canadian Hospital. February 1956. p. 35, Vol. 33, issue No. 2.

[2] Dominion Bureau of Statistics, Census of Canada 1951, Vol. 1, Population. Tables 1 and 19.

of older people. To narrow this increase down to our own community, the Greater Winnipeg survey on our older citizens, the first of its kind made in any Canadian city, brought out the startling fact that "one person in 11 in Greater Winnipeg is sixty-five years of age or older, as contrasted with 1 in 17 in 1941".[1]

Since employment is one of the main sources of revenue, the problem facing the older person becomes sharply focused when it is considered that only 4 out of every 10 males over sixty-five were gainfully employed in 1951 and 1 out of 19 women over sixty-five[2] were still working. Early retirement policies, age restrictions and employer's prejudices against the employment of older workers have been some of the obstacles confronting the older person still capable of giving service in gainful occupation. There are indications that increasing numbers of old people are withdrawing from or being rejected by the productive section of society. In 1951 the ratio of aged employed to the total labour force was only six per cent.[3] Only now is the policy of early retirement as good business being challenged and the older person's place in the labour market being acclaimed. But while, both labour and government have taken up the struggle of the older worker and are attempting to widen employment opportunities for them, the change in industry's attitudes will come slowly.

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[1] Committee on Service for the Aged. Age and Opportunity. The Welfare Council of Greater Winnipeg, 1956. p. 1.

[2] H.G. Page, "Our Older Population". Canadian Welfare, May 1955 p. 6. Vol. XXXI, No. 1.

[3] Ibid., p. 6.

The national picture of their earnings shows more pointedly the status the older person has had to accept. "Among wage-earner families where the head of the family was over sixty-five one-third earned less than $1500 per year, while an additional 20% earned less than $2000. In almost 6 out of 10 such families the head earned less than $2000 per year and 9 out of 10 less than $3000 a year."[1] The Winnipeg survey showed that among the older women in employment, two-thirds had part-time jobs. A third earned less than $250 annually and one-half less than $500.[2] The median wage for the aged in Winnipeg was $1606. Four couples it was $2036; for single men $866; for single women $331.[3]

Earnings are the leading source of income for persons sixty-five to sixty-nine years of age, also for the married couples seventy to seventy-four. However, Old Age Security becomes an important source for those over seventy, and the chief source for those over eighty. Again, according to the Winnipeg Survey, three-quarters of the elderly people of this city had incomes of less than $1000, almost one-third had an income between $1000 and $2999 and a few over $3000.[4]

Older people with the lowest incomes depend primarily on Old Age Security and Old Age Assistance for money income. Out of a population of

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[1] Ibid., p. 7.

[2] Committee on the Services of the Aged, Age and Opportunity, The Welfare Council of Greater Winnipeg, 1956, p. 19.

[3] Ibid., p. 19.

[4] Ibid., p. 19.

65,468 old people in Manitoba, approximately 48,000 received Old Age Security cheques during the survey month of this hospital project (November 1956), while 4,800 were given Old Age Assistance in this same month.[1] Only 12,668 or about nineteen per cent of the aged of this province had not applied for the old age security pension or assistance from the government.

The effects on the health and well-being of the aged of a low standard of living, inadequate diet, and insecurity cannot be stressed too strongly. It can result in illness, which if not properly attended can incapacitate and saddle the aging person with medical and hospital bills he cannot afford.

Many old people are faced with forced retirement, small pensions, unemployment, higher costs and increased sickness. Group annuities, employer-employee pension plans, income-endowment insurance schemes are comparatively new to our national economy. Such plans are not compulsory. Some firms have them, others do not. Many offer small benefits because of the limited time in which contributions have been made before retirement. The inadequacy of $480 per year received from Old Age Security or Old Age Assistance "as the only income of a single person" was dramatized by the reporter who wrote the series entitled

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[1]Figures received from Mr. L. McNeill, Chairman of the Old Age Assistance and Blind Pension's Allowance Board, Winnipeg. The Old Age Security figures were verified by the office of Mr. C. Howden, Reginal Director of Old Age Security, Winnipeg.

"Life on Forty" for the Winnipeg Tribune.[1] If the economic resources, upon which the aged must rely for their livelihood and medical care, are inadequate, the logical conclusion is that a large proportion of aged have insufficient finances to meet the crisis of prolonged illness.

At the initiation of the Canadian Sickness Survey 1950-51, about seventeen out of every one hundred men over sixty-five years of age were found ill. This was over fifty per cent higher prevalence than among the younger age group of forty-four to sixty-four and four times as high as among children. Twenty-one women in every hundred of those sixty-five were ill, which was almost five times the prevalence among girls.[2]

Dr. Robert Kohn points out, in his analysis of the volume of illness as presented in the Canadian Sickness Survey report, that the block of years added to life's expectancy over the past fifty years has contained an increasing proportion of sick time. He warns that "every new year of life we add now will be made up of more and more sickness and less and less health .... if we do not succeed in reducing

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[1] Committee on the Services of the Aged, Age and Opportunity. The Welfare Council of Greater Winnipeg, 1956. p. 26.

[2] H.G. Page, "Our Older Population". Canadian Welfare, May 1955, p. 6. Vol. XXXI, No. 1.

the disease of old age".[1]

The health pattern of the aged as drawn by the survey indicates that it was the older age group, representing 7.6 per cent of the population, that accounted for about "double the proportion in terms of disability, bed and complaint days".[2] These disability periods included all days that the person discontinued his usual activity until the day such activities were resumed, regardless of whether the person was up and around at home, laid up in bed at home or in hospital. The average number of such sick days per period steadily increased with age. The average number of days per period varied with the age range as following: ages 1-15, 8.4 days; ages 25-44, 9.9 days; ages 45-64, 17.5 days; and 65 and over 28.9 days.[3] The survey further indicated, that as age advances the prevalence of illness increases, while the incidence of new illness decreases. The illnesses suffered by the aged seem to be of a chronic long-term and recurring nature. The young age group, one to fifteen years, report the largest number of new illnesses. It might be pointed out that the prevalence of illness among older people would appear to reflect the longer duration of their illness. The proportion of complaint periods with hospital care increased consistently from 2.7 per cent for the fifteen year olds and younger to 7.4 per cent for the sixty-five and over group. The average length of hospital stay for the children was eight days with the hospital periods lengthening out

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[1] Robert Kohn, M.A., Ph. D., "Volume of Illness". Public Health Journal, August 1956, p. 339. Vol. 47, No. 8.

[2] Canadian Sickness Survey 1950-51, Volume of Sickness. p. 12.

[3] Ibid., p. 13.

for the middle aged group and reaching a high average of twenty-eight days per hospital period for the aged. Only 47 of every 1000 of the older group under-go surgery, but the attention required of physicians rises sharply with advance of age. The female in the child bearing age range of twenty-five to forty-four reports the highest, with the age group fifteen to twenty having the least need for doctor's services.

This same investigation into the pattern of sickness of Canadians showed that "the health amongst persons in the low income group was more seriously affected than amongst those with a medium or high income".[1] The evidence for this statement was taken not so much from the number of times persons of various income groups were ill as it was from the amount of disability reported in the lower income group. Aged persons with low incomes generally reported a far higher average number of disability days than persons with medium or high incomes, the difference being greater particularly among males. Illness and disability could have been responsible for the poor income. On the other hand, inadequate income could have been the reason for lack of proper medical attention and the result being illness and disability.

The percentage of aged people reporting doctor's care in the medium income level was low compared to other income levels. A relatively high percentage of doctor's attention went to those in the low

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[1]Canadian Sickness Survey, No. 9, Volume of Health care for selected Income Groups. p. 13.

income group. This, undoubtedly, reflects the care given by government and welfare agencies. It also raises the question as to whether the aged, even in the medium income level, have sufficient financial resources to meet the costs of more extensive use of medical services.

In a government survey of the use made of hospital services in Saskatchewan, it was "amply demonstrated that the curve of hospital utilization is higher at both ends of the life span".[1] Old people have more need of medical services and hospital care, but less money to pay for these services.

Voluntary prepayment health schemes may be one way of securing protection against high medical and hospital costs. However, the study of the non-profit plans in Canada undertaken by the Department of National Health and Welfare shows a small proportion of the older group were included in these schemes. "Since elderly persons are considered to be poor insurance risks, because of the pattern of illness and the nature of the medical services they require, membership under the non-profit plans has to date largely been limited to the working population and their dependents".[2] The group contracts offered in the Manitoba plan, the Blue Cross and the Manitoba Medical Services, are extended only to employed persons through their firms. The unemployed and the

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[1] F.B. ROTH, M.D., M.S. Acker, M.D., M.I. Roemer, M.D. and G.W. Myers, "Some Factors influencing H ospital Utilization". Public Health Journal. August 1955. p. 313. Vol. 46, No. 8.

[2] Department of National Health and Welfare, Voluntary Medical Care Insurance. Ottawa. April 1954. p. 67.

older person, who was not previously covered during employment or before he reached the age of sixty-five, are excluded. At retirement, a person may continue to carry the policy on an individual basis at higher rates, but a person sixty-five or over cannot take out a new contract. Those, with neither a prepaid plan or the resources to pay the expense of illness, must rely on the treatment and care provided by public assistance programs.

Medical care for the sick poor has been a public responsibility as long as there has been a poor law. Such responsibility may be shared by many public agencies. Provincial and local municipal health departments provide diagnostic services and treatment in cases of infectious diseases, custodial care for the mentally ill and out-patient-departments supply free care for the needy. Each province has its own system of handling the costs of care given the medically indigent. These, according to the American Medical Association, are people "unable, in the place in which he resides, through his own resources to provide himself and his dependents with proper medical, dental, nursing, hospital, pharmaceutical, therapeutic care without depriving himself or dependent .... of the necessities of life."[1] The recipients of Old Age Assistance and the aged who have little income other than Old Age Security come within this category. As such, some provinces have made special provision for them. British Columbia, Alberta, Saskatchewan and Ontario provide medical services to Old Age Assistance

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[1]Hilary M. Leyendecker, Problems and Policy in Public Assistance. New York: Harper and Brothers Publishers 1955. p. 129.

recipients, also to persons seventy years of age and over on a means test basis.

The medical services offered by the different provinces varies. In British Columbia, by arrangement with the B.C. Medical Association for a per capita fee of $18.50 a year per person, medical services include doctor's services at home, office or hospital, including surgery; drugs; dental care; optical services and glasses and payment of the costs of hospitalization.

In Alberta, hospital and medical services include public ward care in hospital; dental services with half the cost of new dentures being paid by patient; optical services and glasses; also special services approved by the Director of Hospital Services.

In Saskatchewan, the services include doctor's attention (including surgery) at home, office or hospital; special nursing care; physiotherapy; optical services; surgical appliances; dental care and the payment of hospital insurance premiums which entitles the elderly patient to hospital care as covered by the Saskatchewan Hospital Plan. Fifty dollars for dentures is also given along with certain drugs such as insulin. However, the aged patient is expected to pay twenty per cent of all other costs incurred in hospital.

In Ontario, the Government has made special arrangements with the Medical Association for the payment of a per capita fee of 83¢ per month which provides home and office visits for doctor's services to the aged and those on public assistance. In addition certain drugs are added.

The other provinces have no special arrangements. Some municipalities in Manitoba have municipal doctors through which certain medical and health services are given to all municipal residents. The aged may take advantage of these services. The only other way old people in this Province can get necessary medical attention, is through the out-patient-departments and public wards of the hospitals. If the hospital bill cannot be met by the medically indigent patient, it is paid by the municipality of the person's residence, which has the policy of requiring reimbursement from the patient when possible.

Both the Canadian Sickness Survey and the Saskatchewan Hospital Survey have shown that as a group, old people require more hospital services than the younger age groups and at the same time are less able to pay for hospital care. Thus, it can be seen how and why the problems involved in financing hospital care for the aged are a major concern to both hospital and public. Contributing to this is the fact that the proportion of the aged in the population is rising steadily, and because of the advance in diagnostic and therapeutic methods, it can be expected an ever increasing use will be made of hospital services by the whole community including its elderly people.

With this prospect in view, the American Hospital Association sponsored the organization of the Committee on Financing of Hospital Care which conducted a two year study of the costs of providing adequate hospital services and of how to determine the best possible system of payment for such services. In the course of this study the nonwage and low income groups including the aged were brought under scrutiny. Their

findings about volume and prevalence of illness of the aged were very similar to those of the Canadian Sickness Survey. A comparison of the average hospital bill of the nonworking aged with their estimated income suggested the possible severity of the problem experienced by the group in paying for hospital care. Less than half of those still working had prepaid protection against hospital costs, less than a quarter of the aged not in the labor force were covered and for those who were employed but who did not have prepaid care six per cent needed help in financing their hospitalization.[1]

This study concentrated on how present services could be financed. Another whole question concerning the adequacy and effectiveness of services offered to the aged in both hospital and community was opened in England, in 1949, by a special Committee of the British Medical Association. Revolutionary changes were suggested in the arrangement for a full diagnostic investigation of each elderly patient. Rehabilitation was to be the key-note of treatment and care. The framework of their care program included short stay hostels where the patient would stay during diagnostic procedures and "half-way houses"[2] in the form of convalescent hospitals. This was not only an approach to the crucial problem of keeping hospital beds free for the acutely ill, but it also provided active treatment for the aged patient.

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[1]Harry Becker ed. Financing Hospital Care for Nonwage and Low Income Groups. Commission on Financing of Hospital Care. Vol. 3., New York: McGraw-Hill Book Company, Inc. 1955 p. 12-32.

[2]Report of a Special Committee of the British Medical Association. The Care and Treatment of the Elderly and Infirm. London: 1949. p. 34.

This is a new trend and more will be heard of it in the future. However, the question which concerns this report is the burden of illness for the aged, their economic status and the extent of their dependency and need of assistance in meeting the costs of illness. While the aged group in the public wards of the General Hospital may not provide the basis for a generalization about the aged group as a whole, it will give a picture of the health pattern, costs of illness and financial resources of the aged using these facilities. The next chapter will present the method by which the data about these old people will be analysed.

CHAPTER III

METHOD

For the original project data was collected through personal interview, conducted by trained social workers, with public ward patients discharged from the Winnipeg General Hospital during the month of November 1956. An interview schedule was filled out for each patient, a copy of which is to be found in the appendix. Parents of patients who were minors were interviewed for the required information. In the cases of the aged where it was necessary and possible, a responsible member of the family or in some cases the nursing homes gave the personal details about the old person's affairs. All information was acquired from the patient except that covering treatment and costs of present illness. Here the diagnosis, type of treatment, and medical costs were filled in by the medical staff and the medical records office, while information about length of hospital stay and costs of hospital care was supplied by the accounts department of the hospital.

Out of the three hundred and seventy-one completed schedules, this report selected to study the data concerning ninety-nine of the patients who were sixty-five years of age and over. The object was to sift the information about this aged group so as to evaluate what economic resources they had with which to meet the costs of illness, obtain an estimate of the burden of their illness in terms of length of stay in hospital, costs of present illness, approximate frequence of hospital admissions in the past five years and see how and by whom their

present hospital bill was to be paid.

Identifying information will be presented, as will a brief description of the living accommodation of single old people.

Economic Status

The economic status of the aged will be built up out of an evaluation of their employment situation, stated earnings for the past year, income received in the month prior to entering hospital, debts and savings.

Employment and Earnings. An employment picture will be drawn by counting the employed, those who stated themselves to be unemployed and the retired by sex and marital status. The yearly earnings will be analysed by sex and marital status.

Income. From information about income received the month before entering hospital, the average monthly income by marital status will be calculated and the major sources of it shown. This monthly income of the aged group will be compared with that of those in the working group within the age ranges of 25-44 and 45-64.

Savings and Debts. A table of the assets and debts by sex and marital status will be prepared and analysed in order to estimate what contribution they make to the economic status of the aged group.

Burden of Illness.

In order to get a clear conception of the burden of illness, data concerning it will be arranged under four headings;

Types of Treatment. Data supplied by the medical staff and the

medical records office made it possible to put the patients into five broad classifications according to the specialization of the doctor responsible for treatment. These classifications were General Medicine, Surgery, Gynaecology, Psychiatry and Obstetrics. Therefore the length of stay, medical costs and total cost of illness of those receiving the different types of treatment will be analysed and compared by marital status.

Length of Stay in Present Hospital Admission. Here the average number of days' stay by sex will be calculated. The long-term patients will be counted by sorting out those who had been in hospital thirty (30) days or more. This period was chosen because it was the stipulated length of hospital stay used by the American Commission of Chronic Illness in their definition of a long term patient who suffered a chronic disease or impairment.[1] This period of thirty days' hospitalization seemed best for this present purpose of establishing a long term disability period than that used by the Canadian Sickness Survey in which a disability period was stated to be any number of consecutive days of illness cared for at home or in hospital which kept a person from their usual occupation.[2]

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[1] The Long Term Patient. Proceedings from a conference of Presidents and Executives of Jewish Federation Agencies and Institutions. (June 1955) New York. P. 1, Appendix.

[2] Canadian Sickness Survey 1950-51, Series No. 5 Volume of Sickness. National Estimates. p. 6.

The average number of days will be calculated for the different age ranges of 65-69, 70-79 and 80 and over to see if hospital stay lengthens with advancing years. A break down will be made of the married and single persons with the average number of hospital days found for each. A married person will be regarded as one living with spouse, while the single group include the widowed, divorced and the separated. For the purpose of comparison, the average number of hospital days will be calculated for the patients of all ages. The age ranges 1-15, 16-24, 25-44, 45-64 and 65 and over which will be used are the same as used in the Canadian Sickness Survey 1950-51.[1]

Costs of Illness. A table will be prepared of the average costs of present illness by marital status. This will show the average medical costs, which is the doctor's medical charges for treatment given; the average hospital costs, which includes hospital room and board, drugs and extras; and the average total cost of illness, which combines both the medical and hospital costs.

For the sake of comparison, the average total cost of illness for each of the younger age ranges above mentioned will be calculated.

Frequency and Duration of Hospital Admissions in Past Five Years. Only admission to the Winnipeg General Hospital could be checked for accuracy. Therefore, the calculations of frequency and duration of past hospitalizations can only be approximate. However, the average frequency of hospitalization will be calculated from available information. The

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[1] Ibid. p. 8.

average number of days spent in hospital in the past five years by sex will be estimated. A table will be prepared to show approximate duration of previous hospital visits.

A break-down will be made of the hospital accommodation used by the aged group in the past; the number using out-patient department; and how many had family doctors.

Payment of Hospital Bill and Assistance Required.

Since the third major concern of this report was about how the hospital bill was to be paid, the data received from the elderly patients, as to whether they expected to pay these costs themselves, will be tabulated showing the number having savings and/or hospital insurance. The group who said they could not pay hospital costs will be singled out from those who said they expected to pay them. For those who said they could not pay, data will be tabulated and analysed according to their average income, the number having hospital insurance, the number with savings and the average hospital cost. The table will also indicate the number of medically indigent patients and the average amount of the hospital cost which the municipalities will have to pay. For those who said they expected to pay their own bill, resources and circumstances will be checked to evaluate realistically the possibility of these old people being able to fulfill this intention.

A bar figure will be prepared comparing the average monthly income, the average hospital cost and the average total cost of illness of the patients twenty-five years of age and over.

This chapter has indicated the pattern in which the factual material concerning the aged group will be analysed in the next chapter. Economic status will be discussed in relation to the burden of illness in terms of what resources the old people have to meet the problem of financing the necessary costs of illness. The number of medically indigent patients will give indication of the assistance required from the municipalities. It should be noted here that in some of the data, the numbers of old people involved are too small for general application to the aged group as a whole, and must be attributed only to this particular group.

CHAPTER IV

ANALYSIS OF RESULTS

This analysis is concerned with the ninety-nine old people, sixty-five years of age and over, who were among the three hundred and seventy-one patients interviewed before being discharged from the public wards of the Winnipeg General Hospital in November 1956.

Of these ninety-nine aged people, thirty-eight were female and sixty-one male. Twenty-three of the men were married, one had four dependents, another three dependents, the rest had just their wives as dependents. In the single group, including the widowed and separated, there were twenty widows and eighteen widowers, fifteen single people and nine separated persons.

Eighty of the ninety-nine old people lived in the City of Winnipeg, nineteen came from other municipalities. Out of these nineteen from other municipalities, fourteen were from rural points in Manitoba and five from districts included in the Metropolitan area of Greater Winnipeg.

The living accommodation was recorded only for single people to see how they were situated. It was found that twenty of the aged in the single group lived alone in rooms; thirteen lived with relatives; another twenty were in domicilary care, either in private residence where they received board and room, in nursing homes, convalescent homes or institutions for the aged; nine had other accommodation of which two were old men who lived alone in hotel rooms. From this, it would appear

that thirty-three or one-third of the old people in the public wards came from accommodation where housekeeping and meal services were provided. Approximately twenty-nine were on their own in rooms or had other comparable arrangements. Thirty-seven married people presumably had the help and companionship of partners and were able to manage their own domestic chores. This break down is important to the analysis of their present illness in as much as it points up the number who were able to take care of themselves before hospitalization and those who were not so self-sufficient.

Economic Status.

In looking at the economic status of these old people with a view to determining how adequate their resources were to cope with costs incurred by past and present illness, special attention was given to employment and earnings of these old people, their monthly income, and the debts or savings they may have accumulated.

Employment and Earnings. For the population as a whole, employment is a major source of income and substantially affects economic status. It was not surprising, therefore, that the age group fell within the lower economic level when the findings showed that only two were fully employed while nine had occasional work. Seven, most of whom were in their seventies, considered themselves in the labour market though unemployed, while eighty-one of the ninety-nine were retired. There were more men than women employed.

As was to be expected their earnings contributed little to the financial situation. Eighty-three old people had no earnings within

the past twelve months, thirteen received less than $1000, nine less than $500. Only two earned over $1000. It would appear that this aged group is largely a non-earning or low earning group.

TABLE I

YEARLY EARNINGS BY SEX AND MARITAL STATUS

Yearly Earnings	Male		Female		Total
	Married	Single	Married	Single	
None	16	33	13	21	83
$1-499	2	4	1	2	9
500-999	3	-	-	1	4
1000-1999	1	-	-	-	1
2000-2500	1	-	-	-	1
Unstated	1	-	-	-	1

Monthly Income. When the average of their income for the month prior to entering hospital was calculated, it was found, that of the married group, thirty-six had income and one was unstated. The average income among them was $72.76. In the single group, sixty-one persons had an income with one unstated. The average monthly income for the single group was $52.53.

TABLE II

AVERAGE MONTHLY INCOME FOR THE AGED GROUP[(a)] FOR THE MONTH PRIOR TO ENTERING HOSPITAL BY MARITAL STATUS

Marital Status	Number with Income	Number with Income Unstated	Average Income
Married	36	1	$72.76
Single	61	1	$52.53
Total	97	2	$60.06

[(a)] In title of tables "Aged Group" is used for the public ward patient sixty-five years of age and over.

The principle source of their incomes was Old Age Security with sixty-three people out of ninety-nine in receipt of this $40.00 a month pension given by the Federal Government to all Canadians seventy years of age and over. The income of eighteen persons came from Old Age Assistance, a Federal-Provincial assistance program which gives $40.00 a month to those sixty-five to sixty-nine years of age when need can be proven. Table III gives an indication as to where income of the majority of these old people falls. The median for the forty-three in the single group was $40.00. This amount probably coming from either Old Age Security or Old Age Assistance. For the thirty in the married group $80.00 was the median. This would indicate that in the case of many elderly couples both husband and wife were in receipt of Old Age Security or Old Age Assistance.

TABLE III

NUMBER OF OLD PEOPLE BY INCOME AND MARITAL STATUS

Income	Married	Single	Total Number
$1-49	4	43	47
50-99	30	16	46
100-149	2	-	2
150-199	-	2	2
Unstated	1	1	2

Twenty-seven of the total group of old people received public assistance. This included the eighteen who were in receipt of Old Age Assistance and the nine old people on Old Age Security whose income was supplemented by municipal assistance, as can be seen in Figure I.

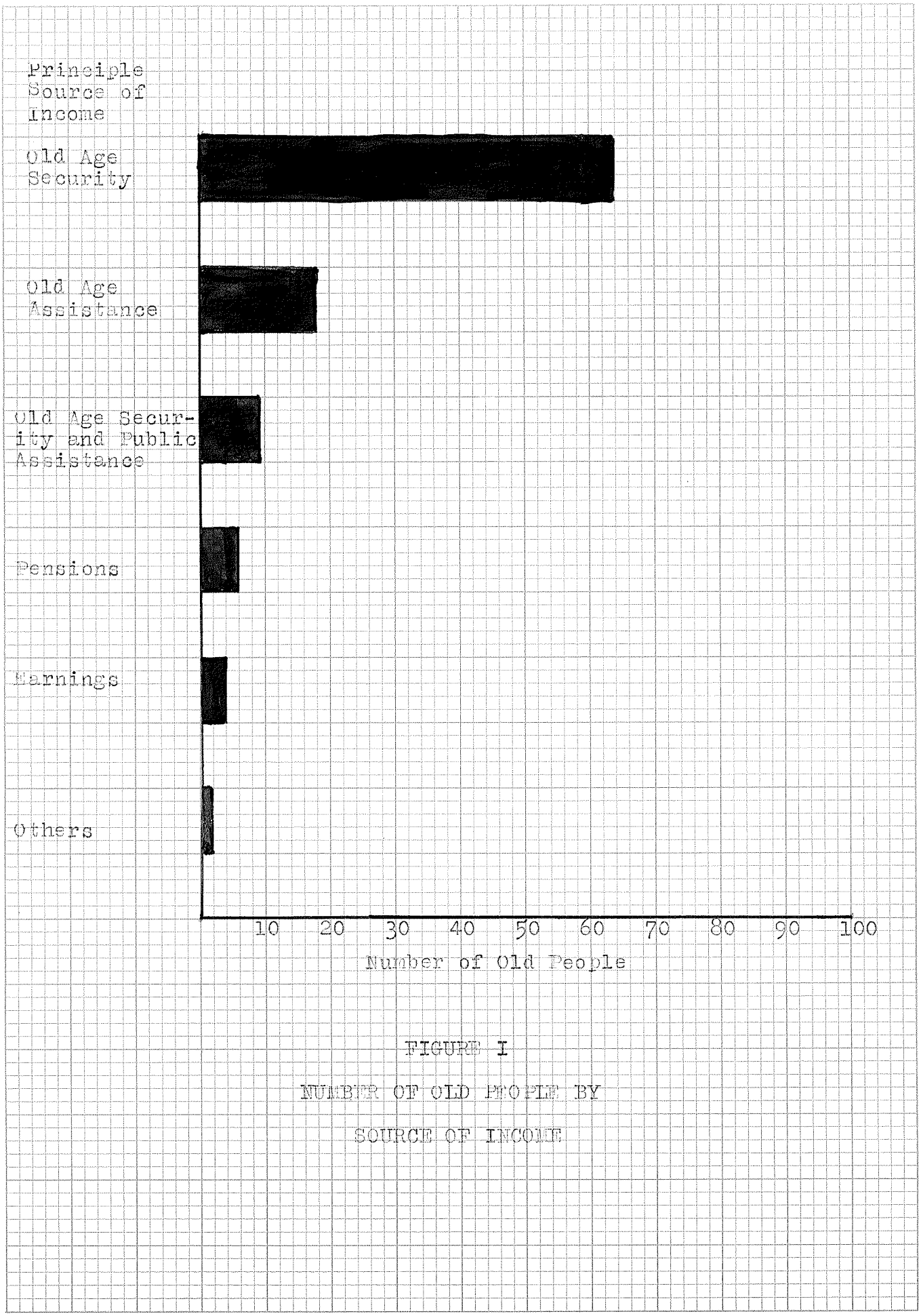

FIGURE I

NUMBER OF OLD PEOPLE BY SOURCE OF INCOME

One reason for the necessity of this supplementary assistance was that living expenses had to be augmented when the old person resides in an institution for the aged, a nursing or convalescent home.

The pensions received by six of the old people were either from industrial annuities or War Veteran's pensions.

Of those receiving Old Age Security, only four added to their income by earnings, another four had small pensions, two derived extra cash from property and eight reported help from children.

When, a comparison was made of the average income of the patients twenty-five years of age and over, it was found that a gradual decrease was evident, as the years advanced.

TABLE IV

AVERAGE MONTHLY INCOME OF PATIENTS
TWENTY-FIVE YEARS AND OVER
BY AGE GROUP

Age Group	Average Income
24-44	$148.87
45-64	95.31
65 and over	60.06

Savings and Debts. Debts and savings were not significant in rounding out the economic status of the aged group. Seventy-three per cent had no savings. For those who had, two hundred dollars was the median. The highest amount of savings was seven thousand, five people had one thousand dollars and the lowest eight dollars and fifty cents. Several specifically indicated that their savings were for funeral

expenses.

As for the debts, thirty per cent had debts, but the amounts were small or negligible.

TABLE V

NUMBERS OF OLD PEOPLE WITH SAVINGS AND DEBTS
BY SEX AND MARITAL STATUS

	Married		Single		
SAVINGS	Male	Female	Male	Female	Total
Savings	6	5	8	5	24
No Savings	17	9	28	19	73
Unstated	-	-	2	-	2
DEBTS					
Debts	8	6	11	5	30
No Debts	14	8	27	17	66
Unstated	1	-	-	2	3

Burden of Illness.

The burden of illness was analysed in relation to the present hospitalization in terms of type of treatment given, length of stay in hospital, and costs of illness. The frequency, with which hospitalization occurred in the past five years and approximate duration, gave further indication of the financial pressure which a number of hospital visits would put on the old person's resources. Cost of illness refers to medical costs, which is the Doctor's charge for treatment but does not include, consultation; hospital costs, which is the cost of hospital room and board, drugs and other hospital costs; and total costs of illness, which is the combined amount of the medical cost and the hospital cost.

Types of treatment. Here the different types of treatment were analysed to see if there was any significant relationship between the types of treatment and the length of stay in hospital; between the costs of the various types; and to see how the treatment contributed to the total cost of illness.

Of the five types of treatment listed by the Doctors, two seemed to record the largest number of elderly patients. The medical accounted for twenty-four females and thirty-two male patients, surgery for twelve women and twenty-eight men, gynaecology and psychiatry each reported one patient, while obstetrics had none of the older patients in treatment.

TABLE VI

TYPE OF TREATMENT

AVERAGE DAYS STAY, AVERAGE MEDICAL COSTS AND AVERAGE TOTAL COST OF ILLNESS BY TYPE OF TREATMENT.

Type of Treatment	F	M	Average Number of Days	Average Medical Costs	Average Total Cost of Illness
Gen. Medicine	24	32	22.3	$ 60.62	$302.05
Surgery	12	28	29.2	127.73	470.93
Gynaecology	1	-	28	75.00	584.20
Psychiatry	1	-	43	90.00	380.02
Obstetrics	-	-	-	---	---

The medical wards treated sixty-three per cent of the elderly women and fifty-three per cent of the old men, while surgery was done on thirty-one per cent of the women and forty-five per cent of the men. The average length of 29.2 days stay was longer for surgical patients than those under medical care whose stay averaged 22.3 days. Thus, it

would seem that the patient in surgery stayed an average of 6.9 days longer than those under medical treatment. It must also be noted that the medical costs, or the surgeon's fees were double those of the Doctor's charges for medical treatment. Although Table VI may appear to indicate that psychiatric treatment prolonged hospital stay for an average of thirty-four days and that the average total cost of the illness treated in the department of gynaecology was the most expensive, it must be pointed out that these were individual cases and the numbers too small for generalization. Between the medical and surgical wards the latter had the longer hospital stay, higher Doctor's fee and greater total cost of illness. While there were more people treated in the medical ward (sixty-six per cent), the greater financial strain would be felt by the forty per cent requiring surgical attention. It should be further noted that despite free medical services given patients using public ward facilities, those undergoing surgery still have the largest bill to pay due to the longer stay in hospital and the drugs and extras required. Should these old people have to meet all expenses incurred by an illness necessitating surgery the total cost of illness would average $479.93, almost half as much again as the total cost of illness calling for medical treatment such as given to fifty-six per cent of the aged group and for which the average total cost was $302.05.

Length of stay in present hospital admission. The average number of days stay in the present hospitalization was found to be 25.7 days for thirty-eight women and 25.2 for the sixty-one men in the aged group. When

this group was broken down by marital status a curious contradiction was discovered to the commonly accepted idea that single old people stayed in hospital longer because they had no one to care for them during their convalescent period. From the length of present hospital stay, it was revealed that the married group thirty-seven in number stayed a few days longer (an average of 27.1 days) than the single group of sixty-two men and women whose stay averaged 23.9 days. One explanation for this might have been thought to lie in the fact that one-third of the single group were able to return to domicilary care after hospitalization and thereby shortened the average stay of the group. However, the twenty-nine single persons whose living arrangements were comparable to the married, i.e., those who were living in the community, showed an average of 20.7 days hospital stay compared to 27.1 for the married group.

Furthermore, it was found, that thirteen females out of thirty-eight had hospital stays of over thirty days. Eighteen males out of sixty-one were also in hospital over thirty days. Thus, it would appear that almost 1 out of 3 old people were in hospital over thirty days and according to the definition formulated by the American Commission of Chronic illness could be described as long term patients.

Since aging is presumably a slow process of gradual decline hospital stay might be expected to lengthen with age. However, the average number of days stay calculated for the age ranges of 65-69 70-79, 80 and over showed that this was not true for this group

of patients. A difference was found between the men and women.

TABLE VII

AVERAGE LENGTH OF PRESENT HOSPITAL STAY, BY AGE AND SEX.

Age	Average Number of Days' Stay	
	Male	Female
65-69[a]	18.6	30.7
70-79[b]	22.7	22.8
80 and over[c]	34.4	23

[a]Number of males 11, females 14. [b]Number of males 33, females 21. [c]Number of males 17, females 2.

The men showed a gradual lengthening in the average number of days' stay starting with an average of 18.6 days in, the age range of 65-69, increasing to 22.8 days for those between the ages of 70-79 and climbing to an average of 34.4 days for those in their eighties. The women, on the other hand, showed a levelling off of the average number of days in hospital for those over seventy. They showed a higher average of 30.7 days for those in the 65-69 age range, closely matching the men in the 70-79 age range with an average of 22.8 days and then levelled off to an even average of 23 days' stay for those in their eighties.

Speculation could be made about the picture presented by Table VII. It may indicate that women are physically stronger than the men. They may have taken better care of themselves. Or here again, the number may have been too small to give a true picture. Whatever the reason for this shorter recovery period of the women in this group of old people, the thing to be noted for the purpose of this analysis is that the aging individual required a fairly large number of days in

which to recover from the illness which necessitated his hospitalization. And when the average number of hospital days were calculated for the aged group and compared with the average number of hospital days required by the younger age groups, it was found that there was a gradual increase in hospital days with the advance in years.

A comparison of the average number of days' hospital stay of all the patients from the new born to those sixty-five and over, arranged in age groups, showed the same trend toward an increased number of hospital days with advancing years as reported by the Canadian Sickness Survey 1950-51.

TABLE VIII

NUMBER OF PATIENTS AND AVERAGE NUMBER OF DAYS IN PRESENT HOSPITAL STAY BY AGE.

AGE	Number of Patients	Average Number of Days
1-15	26[a]	17.7
16-24	39	12.7
25-44	125	16.9
45-64	79	19.02
65 and over	99	25.4

[a]three patients with age unstated were included in this group.

Children from the ages of 1-15 had a relatively larger number of days in hospital (an average of 17.7 days) while the young adults 16-24 showed a low average of 12.7 days. A steady increase was indicated throughout the other adult age ranges reaching a high average of 25.4 days for the group sixty-five and over.

Further analysis of the average number of days in hospital stay

for the various age groups might have revealed much more precise information. For instance, in the maternity cases of the child bearing age groups of 16-24 and 25-44, the infant's hospital days were added to those of the mother. Had they not been, the hospital days for the mothers would have been lower and might have caused a slight drop in the average number of hospital days for these age groups than was shown.

Cost of Illness. Since the married and single groups showed a difference in both income and length of stay in present hospital admission, the average total cost of illness was calculated by marital status to see the relationship in this area. The married group appeared to have the largest bill, an average of $433.59. The average total cost of illness for the single group was $343.88. This total cost of illness included the doctor's medical fee, the cost of hospital board and room as well as drugs plus extras. The proportionately higher cost of illness for the married group may in part be explained by the greater number of days they were in hospital and in part by the fact that fifty-one per cent of the married group underwent surgery which involved not only longer hospitalization but higher medical costs.

TABLE IX

AVERAGE COSTS OF PRESENT ILLNESS BY MARITAL STATUS

Type of Costs	Married	Single	Total
Medical Cost	$ 112.04	$ 77.21	$ 90.46
Hospital Costs	263.80	322.87	285.83
Total Cost of Illness	433.59	343.88	374.35

With the total cost of illness being greater for the married group, it could be expected that their medical costs would also be higher than the single group. At this point it would be well to point out that medical costs are the doctor's fees charged for each specific treatment as listed by the Manitoba Medical Services. The average medical cost for the married group was found to be $112.04, and more than half that amount, $77.21, for the single group.

Strangely enough, despite the greater number of hospital days used by the married group, the average hospital bill was less than for the single group. The average of these costs for the married group was $263.80 and $322.87 for the single group.

This would seem to indicate that the high costs of illness for the married group stemmed from the high cost of medical services required by them rather than from the length of hospitalization.

When the averages of these various costs were calculated for the total aged group, the medical cost was found to be $90.46, the average cost of hospital $285.83 and the average total cost of the illness was $374.35. After the age of fifteen the comparison of the average of the total cost of illness for the aged group with that calculated for the younger age groups showed a steady

increase in the cost of illness as the years advanced.

TABLE X

AVERAGE TOTAL COST OF ILLNESS BY AGE GROUPS

Age	Average Total Cost of Illness
1-15	$ 226.10
16-24	207.08
25-44	261.64
45-64	327.92
65-up	374.35

The slightly higher cost of illness for children than for the young adult in the age range of 16-24 should be observed for it can be accounted for by the larger number of days children spent in hospital as seen in Table VIII.

Frequency of Hospital admissions in the past five years. It was calculated that sixty per cent of the aged recorded an average of 2.1 hospitalizations in the past five years. Out of thirty-eight old women, twenty-four reported being hospitalized within this period, ten had no hospital admissions and four did not answer this question. The average total number of days in hospital over the five year period for the women was 44.2 days. The same average for the men was somewhat higher. Twenty-three out of sixty-one had no hospital admissions, two were unstated, while the remaining thirty-six had an average of 46.7 days in hospital during the past five years.

In attempting to estimate the approximate duration of these past hospital stays, it was found that fifty per cent of the old

people had been in hospital between three weeks and three months. This was comparable with the present hospital stay of 25.2 days.

TABLE XI

LENGTH OF HOSPITAL STAY IN THE PAST FIVE YEARS BY SEX

Length of Hospital Stay	Male	Female	Total
No stays	23	10	33
1 to 7 days	1	3	4
8 to 14 days	6	-	6
15 to 21 days	3	3	6
22 to 30 days	6	6	12
31 to 60 days	12	7	19
61 to 90 days	4	4	8
91 days & up	4	1	5
Unstated	2	4	6

A look at the accommodation used in the past hospitalizations, as shown in Table XVII in the appendix, indicated that eighty-three per cent of those who were in hospital within the past five years used public ward facilities. Furthermore, seventy-four per cent had no family doctors and fifty-four per cent used the Out-Patient-Department regularly (see Tables XVIII and XIX in the appendix). If they used the public ward of the Winnipeg General Hospital, no charge would have been made for medical services. Thus, with similar accommodation used and the length of stay the same, the past and present hospital costs would be similar. This would mean that more than half the aged group had costs of illness similar to the present hospital costs three times (two past hospital admissions and the present one) in the past five years.

Payment of Hospital Bill and Assistance Required. In relating costs of illness to the income of these old people, the costs were broken down into the average medical cost, the average hospital cost and the average total cost of illness.

These amounts were compared with the average income received in the month prior to entering hospital.

TABLE XII

COSTS OF PRESENT ILLNESS AND MONTHLY INCOME BY MARITAL STATUS

Average Costs and Income	Married Group	Single Group
Medical Costs	$112.04	$ 77.21
Hospital Costs	263.80	322.87
Total Cost of Illness	433.59	343.88
Last Monthly Income	72.96	52.53

From Table XII it became clear that while the income of the married group was larger than that of the single, the cost of illness in proportion to income was high for both. In the married group, the medical cost alone was almost double the monthly income. The hospital costs, which are the costs those using the public wards would be expected to pay if they were able, were 3.7 times larger than the monthly income. The total costs of illness rose to almost six times (5.9) the average monthly income. In the single group, the $77.21 average medical cost was only half as much again as their average income of $52.53, but the hospital costs sored to six times the income while the total cost of illness showed only a slight increase to 6.7 times the average income.

Even with this financial pressure, some of the aged stated they expected to pay their own hospital bill. In order to establish the number who though they could pay and those who could not, the two groups were counted out and personal resources which could be drawn upon for payment of hospital expenses, such as hospital insurance and savings, were checked.

TABLE XIII

NUMBER OF PATIENTS WITH INSURANCE AND SAVINGS BY EXPECTATION OF PAYMENT OF HOSPITAL BILL.

Proportion of Bill Expecting to Pay	Number of Patients	Number with Insurance	Number with Savings
In full	11	2	7
In part	8	1	3
None	80	3	14

It was found only eleven expected to pay in full, eight thought they could manage part of the bill, while eighty of the ninety-nine old people could not meet hospital expenses. Of those who expected paying bill in full, fifty per cent had savings, but only sixteen per cent of those who could not pay hospital bill had any savings. Six out of the total group of ninety-nine old people were covered by insurance.

Voluntary prepaid hospital insurance is one protection against the high costs of hospital care. But, the few old people having this protection indicates that it is not within the reach of the aged in this non-earning lower income level. Group hospital insurance would have had to be taken out before the elderly person reached sixty-five years of

age and still employed. Then after retirement it would be carried at a higher rate as an individual policy. When each of the six cases with insurance was investigated, only four had hospital insurance, two had their hospital bill covered by car accident insurance carried in someone else's name.

In a closer scrutiny of the eleven who expected to pay in full, several cases were found in which payment of their costs of illness was obviously impossible. Three such cases had but $40.00 income, no insurance, no savings and yet had stated they expected no help. Another old gentleman, eighty-two years of age, on supplemented Old Age Security in a convalescent home, no insurance and a bill of $685.00, reported he expected no help from any source.

As a consequence, it was expected eighty-four aged patients would require assistance with their hospital costs from the municipality of their residence. The items charged to the municipality by the hospital accounting department included such costs as board, room, drugs and extras. A special twenty-five per cent discount was allowed municipalities on all x-rays, certain laboratory charges and specific drugs administered to patients while in hospital.

In evaluating and comparing the income and personal resources with the hospital cost, the financial burden created for the aged by this cost could be seen, and the number requiring municipal assistance

with hospital expenses could be estimated.

TABLE XIV

HOSPITAL COSTS TO BE PAID BY MUNICIPALITIES

Number and Amount of Hospital Expenses to be Paid by the Municipalities and the Average Income, Hospital Insurance and Savings of the Patients Requiring Assistance with Hospital Bill.

Municipalities	No. Requiring Assistance	Average Hospital Bill	Average Income	No. with Insurance	No. with Savings
Winnipeg	65[a]	$284.34	$55.86	2	11
Other Municipalities	18[b]	352.10	57.23	1	5

[a]one in this group unstated as to hospital insurance and one unstated as to whether there were any savings.

[b]one unstated as to income.

Only two out of the sixty-six patients, for whom the City of Winnipeg may have to pay hospital bill, had hospital insurance. Eleven had savings, the median of which was $200.00. The average income was $55.59 a month, while the average hospital bill probably to be paid by the City was $284.34. It would take the elderly patient's complete monthly income for five months to pay this hospital bill. The income of those from other municipalities was comparable to those living in the City, but the average hospital bill was large.

In analysing the economic resources of the fifteen old people who expected to handle their own hospital expenses, a comparable picture

of financial strain was seen to exist for the majority. Eight were found to be in circumstances which made the probability of them fulfilling their intentions questionable. Of the remaining seven who said they expected to pay, only three had incomes larger than the average for the total aged group, two of these three had protection against hospital costs. In one of these three larger income cases, the last monthly income prior to entering hospital was $180.00. While there was no personal hospital insurance, hospitalization was caused by car accident and costs would be covered by the motorist's care insurance policy. There were also seven thousand dollars in savings. The other two cases, in which last average income was $100.00 and $160.00 respectively, only the latter was covered by hospital insurance but both had savings.

In the comparison made of the average monthly income, the average hospital cost and the average total cost of illness for the patients twenty-five years of age and over, a very graphic picture could be seen as to how income went down with the advance of years while costs of illness went up. This also means that the different age groups carry varying financial burdens of illness. In the age group 25-44, the hospital cost, which the patient would be expected to pay, was one and a half times their monthly income. For the aged group (65 and over), the hospital cost was four times their monthly income. If these same people had been in a hospital where they had to pay medical costs also, the total cost of illness would have been a heavier burden. The total cost of illness for the 25-44 age group would have been 1.7 times the

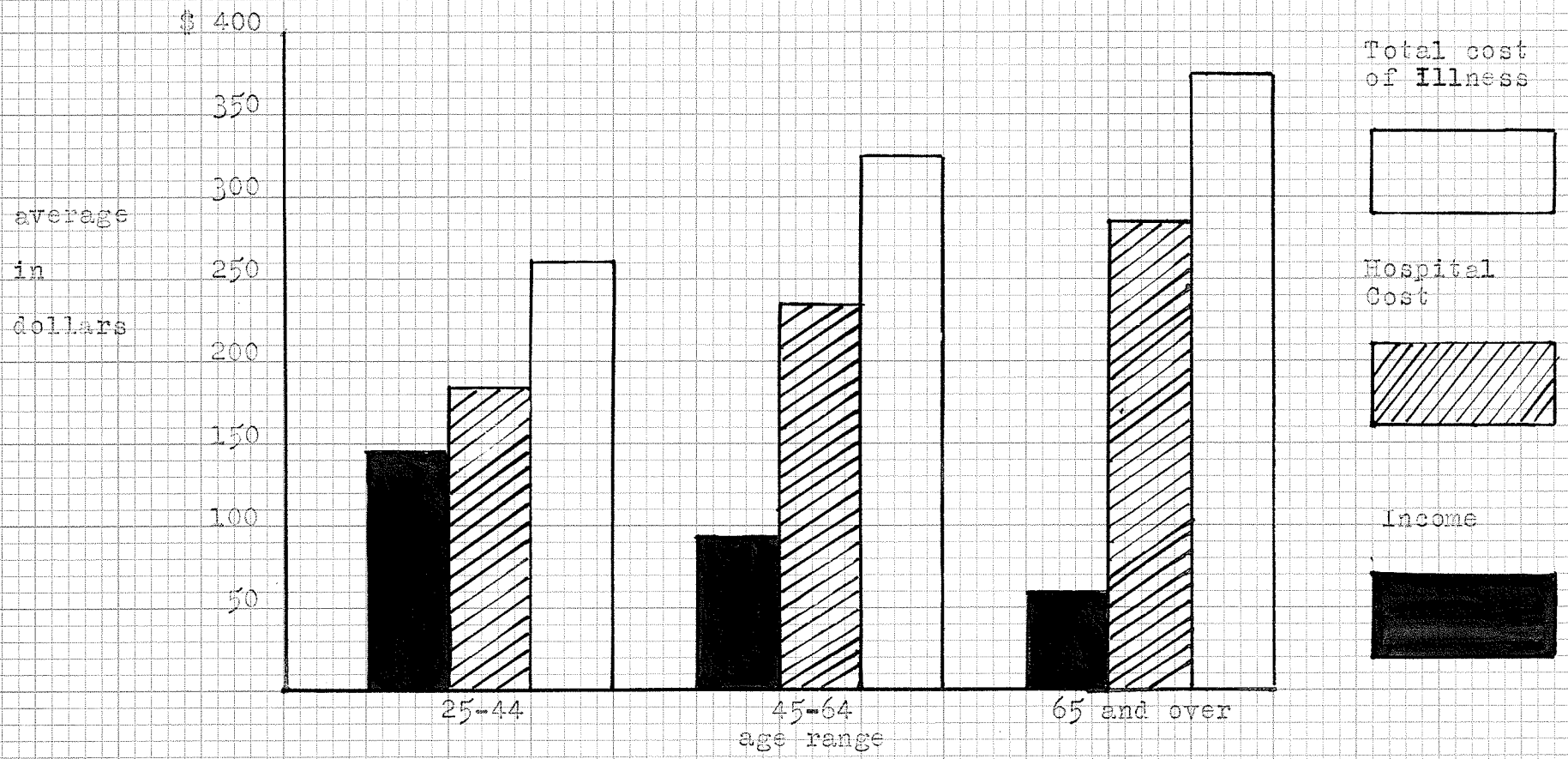

FIGURE II

COMPARISON OF AVERAGE MONTHLY INCOME, AVERAGE HOSPITAL COST,

AVERAGE TOTAL COST OF ILLNESS OF PATIENTS

TWENTY-FIVE YEARS AND OVER BY AGE GROUPS

monthly income; the 45-64 age group 3 times the monthly income and the aged group (65 and over) 6 times their monthly income.

CHAPTER V

CONCLUSIONS

The economic burden of illness with which the aged group has had to cope was indicated, in the comparison with the younger age groups, by the facts that hospital stay lengthened with age, both cost of hospital and total costs of illness increased with advancing years but income decreased as the people grew older and were excluded from the labour force of society.

The employment status of this particular aged group showed that they were essentially a non-working group. Earnings were non-existant for eighty-three per cent of these old people. The income level of the whole aged group was the lowest of any of the other age groups, and yet the costs of illness for them was the highest. Personal resources contributed little to the financing of their illness. Only twenty-six per cent had savings, the median of which was two hundred dollars. Four per cent had hospital insurance and none had any medical insurance.

In identifying these old people, it was found, there were more men (61) in the public wards than women (38). There were more single people (62) than married (37). Eighty per cent were from the city of Winnipeg, five per cent from municipalities adjacent to Winnipeg and fourteen per cent from rural Manitoba.

Eighty-three of the older patients were retired and out of the labour market. The earning power of those still gainfully employed was low. Only one per cent had yearly earnings over $2000; thirteen per

cent less than $1000; nine per cent less than $500 and the eighty-three retired had none.

Their income range showed a median of $40 for approximately forty-seven per cent of the group whose income was between $1 - $49, and a median of $80 for approximately forty-six per cent whose income fell between $50 - $99. Only four per cent had an income between $100 and $200. The fact that the Old Age Security and Old Age Assistance programs were the major sources of income accounted for the frequency of the $40 incomes which would be the Old Age Security pensions and the Old Age Assistance received by the single people and many aged couples would be in receipt of $80 joint pension or assistance. The average monthly income prior to entering hospital for the single person was calculated to be $52.53 and $72.76 for the married person.

The comparison of the average monthly income for patients twenty-five years of age and over showed a marked decline as years advanced. The income of the young working group was almost two and a half times that of the group sixty-five and over; and the middle aged working group's income about one and a half that of the aged group.

Thus, the data collected and analysed in this study conclusively indicated a marked reduction in income as age increased. This study has shown further, that while income of the aged was less, the costs of illness and the burden of it was greater. Also, as the people advanced in years, their incomes gradually decreased while cost of illness gradually increased.

The old people were shown to have a high average of twenty-five

days in hospital. One out of every three could be called a long-term patient because they had been in hospital thirty days or more. Those from convalescent, nursing and institutions for the aged averaged a stay of 28.1 days. Of the group living independently in the community, the married group averaged 27.1 days, while the single group averaged 20.7 days' stay in hospital during present illness. It might have been interesting to investigate further into the reasons for this variation in length of stay to see whether it was related to living accommodation, but only limited information about living accommodation was recorded.

In calculating the average length of stay for the different age ranges of those sixty-five and over, the number of patients in some of the age ranges was too small to permit any general conclusions to be drawn. However, when the averages were worked out, for this specific group in the public wards at this particular time, they seemed to indicate that the men stayed longer the older they got, while the women had a high peak of 30.7 days at the age of sixty-five to sixty-nine and then levelled off to 23 days' stay for those seventy and over.

The comparison of the average hospital stay for the present illness by age ranges of the younger groups with that of the older group was most revealing and corresponded with the findings of the Canadian Sickness Survey in showing that the length of hospital stays increased with age.

In estimating the costs of illness, it was found that of the two types of treatment (medicine and surgery) which recorded the most patients, surgery had the greater average number of days' stay in

hospital and the higher average total cost of illness. Average total cost of present illness (medical and hospital costs combined) for the ninety-nine old people was $374.35, with the expenses for the married group being greater than the single group.

The hospital cost, which the public ward patient would be expected to pay to the extent to which he was able, was $322.87 for the present hospital period. Taking into consideration the duration of stay and medical and hospital facilities used, the cost of past hospitalizations was comparable to the present one. This cost represented five times the patient's average monthly income. Such expenses were incurred three times within the past five years by fifty per cent of this aged group.

Under such circumstances, the financial resources of these old people could not be relied upon to meet their costs of illness. On first count of those who said they could not pay, it was estimated the municipality would have to pay the hospital costs for some eighty-four old patients. But, among the remaining fifteen who expected to pay their own bill or get help with it, special circumstances, affecting eight of these old people, made the probability of their fulfilling this intention questionable.

Thus, it would seem certain that out of the total group of ninety-nine elderly patients, there were ninety-two for whom the municipality would have to pay the hospital bill.

One regrettable limitation of this project was that no comparison could be made between this low income aged group and the aged group using

other hospital accommodation.

Since the length of hospital stay seems to be at the core of the of the high costs of hospital care, a further study in this area might prove profitable in cutting costs. The effects of early diagnosis and treatment of chronic conditions might also come in for further study as a possible means of seeing how the aged could be kept better able to care for themselves.

However, the object of this study was to analyse the economic status and illness of the aged group using the public wards of the Winnipeg General Hospital. It endeavoured to present the extent of the burden of illness on the old people and examine their economic status to see how far they could be expected to meet costs of illness. It showed that in the adult age groups the burden of illness increased with age; that ninety-two per cent of the aged group studied would have to rely upon the municipality of their residence to pay for the hospital attention they required, and despite low income and limited resources seven per cent said they expected to pay their own hospital bill to the extent to which they were able.

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APPENDIX

TABLE XV

LIVING ACCOMMODATION OF THE SINGLE AGED

Accommodation	Male	Female	Total
Living with Relatives	5	8	13
Rooming	13	7	20
Board and Room	2	4	6
Nursing Home	2	4	6
Institute for Aged	2	3	5
Convalescent Home	2	1	3
Hotel	2	-	2
Other	5	2	7

TABLE XVI

EMPLOYMENT STATUS BY SEX AND MARITAL STATUS

Employment Status	Male		Female		Total
	Married	Single	Married	Single	
1. Full time	1	1	-	-	2
2. Part time	1	2	-	2	5
3. Casual	3	-	-	-	3
4. Seasonal	-	-	1	-	1
5. Unemployed	2	3	1	-	7
6. Retired	18	30	12	21	81

TABLE XVII

TYPE OF HOSPITAL ACCOMMODATION USED
IN PAST FIVE YEARS BY SEX

Accommodations Used	Male	Female	Total
Public Wards	30	20	50
Semi-private or other	6	4	10
Unstated	2	4	6
Not in hospital	23	10	33

TABLE XVIII

USE MADE OF OUT-PATIENT DEPARTMENT BY SEX

How Used	Male	Female	Total
Regularly	31	23	54
Occasionally	3	3	6
Not at all	26	11	37
Unstated	1	1	2

TABLE XIX

FAMILY DOCTOR RETAINED BY OLD PEOPLE BY SEX

Family Doctor Retained	Male	Female	Total
Family Doctor	17	7	24
No Family Doctor	43	31	74
Unstated	1	-	1

STUDY OF PATIENTS IN THE PUBLIC WARDS OF THE WINNIPEG GENERAL HOSPITAL

November, 1956

Interviewer:

Surname _____

Sex _____

Lenth of Interview _____

Date _____

I. Identifying Information

1. Code Number _____ (of patient) 2. Sex _____ 3. S.M.W.D. Sep. _____

4. Address _____ (street or P.O. address) 5. _____ (municipality)

6. Age at last birthday _____

7. Relationship to patient of person interviewed _____

8. Relationship to patient of person responsible _____

9. Address _____ (Street or P.O. address) 10. _____ (Municipality)

Note Sections II, IV, V, VI apply either to the patient or to the person responsible for his expenses, if this is someone other than the patient.

II. FAMILY

11. Number of dependent children _____

12. Number of other dependants _____

_____
(give relationship)

For single person: 13. Living with relatives _____

14. Rooming _____ Boarding _____ in Institution _____

Other _____ Describe _____

15. Has hospitalization necessitated any special arrangements at home?

Describe _____

_____

_____

_____

III. Medical

16. Patient referred by _____
(include name of physician or agency)

17. Why is patient using the Public Ward?

18. Has patient a family physician _____ 19. Has he ever had ____

20. Does patient or his family usually receive medical care from O. P. D. here? _____

_____

_____

21. No. of times patient has been in hospital in last 5 years _____

22. Year	23. Type of Illness	24. Approximate Stay in days	25. Type of Accom.	26. Name of Hospital
____	_____	_____	_____	_____
____	_____	_____	_____	_____
____	_____	_____	_____	_____
____	_____	_____	_____	_____

27. How many times have members of the patient's family been in hospital in the last 5 years:

28. Year	29. Type of Illness	30. Approximate Stay in days	31. Type of Accom.	32. Name of Hospital
____	_____	_____	_____	_____
____	_____	_____	_____	_____
____	_____	_____	_____	_____
____	_____	_____	_____	_____
____	_____	_____	_____	_____
____	_____	_____	_____	_____

(Answers to questions 33 to 39 not to be secured from the patient)

33. Diagnosis _____

_____

_____

34. Cost of Medical Treatment $ _____

35. Cost of hospital room and board $ _____

36. Other hospital costs including drugs $ _____ (Specify)

37. Length of stay in hospital _____ days. 38. Cost $ _____

39. Prognosis: Complete recovery _____ handicapped _____

Illness likely to recur _____

IV. Employment

40. Last occupation before entering hospital _____

_____

41. Employed: full time _____ part time _____ casual _____

seasonal _____ retired _____ unemployed _____

42. Is he in receipt of public assistance _____
(name of program)

43. Can he return to the same job _____

44. Can he return to another job in the same firm _____

45. Name of firm where he is employed _____
(please print)

46. About how many employees are there _____

47. Is there a union in the firm _____

48. Is there any kind of group insurance for hospital care _____

49. Is there any kind of group insurance for medical care _____

V. Financial Status

50. Does person responsible own his own home _____

51. business _____ 52. farm _____

53. What is the amount of the unpaid mortgage _____

54. What is the amount of the monthly mortgage payments _____

55. Amount of money owing for hospital _____

medical _____

furnishings _____

groceries _____

car _____

Other _____
(specify)

_____

_____

56. Total Debts $ _____

57. Have any of these debts been amalgamated through a finance company _____

58. Amount owing monthly to finance company _____

59. How much did he pay last month on these _____
(or last month before entering hospital)

60. Amount of savings _____ 61. bonds _____

62. Other assets (specify) _____

63. Number of bushels and type of grain in storage _____

_____

64. Does he expect to be able to pay the hospital bill

in full _____ in part _____

65. Does he expect to get help in paying it from:

children _____ relatives _____

municipality _____ Other _____
(specify)

_____

VI. Earnings and Income

66. Amount of earnings in last 12 months (including those of spouse) $ _____

67. Amount of last month's income from:

earnings _____

old age security _____

annuity or pension _____

public assistance _____

rental of property _____

roomers and/or boarders _____

children or relatives _____

other sources (describe) _____

_____

_____

68. Total Income $ _____

VII. Insurance

69. Is there any kind of insurance which will help pay for hospital care _____ 70. medical care _____

Name of Insurance Company — No. of Policy

71. Individual _____ _____

72. Group _____

If there is an insurance policy, record name and initials of holder _____

73. If patient is in hospital through a car accident, does he expect that his expenses will be paid through car owners policy _____

Name & initials of policyholder _____

Name of Insurance Company _____

No. of Policy _____

VIII. Health Organizations

74. Do you expect to get help from any of the following organizations:

S.C.A.A. _____ Red Cross _____ Cancer R.R.I. _____

C.A.R.S. _____ M.S. Society _____

If any of the above organizations are helping, record patients name and initials

_____

75. or from:

government insitution _____
(specify)

municipality _____

IX. General

76. Note any special circumstances which would affect the person's ability to pay his hospital bill:

77. Note any circumstances which you believe may have affected the interview.