University of Louisville

ThinkIR: The University of Louisville's Institutional Repository

Electronic Theses and Dissertations

5-1946

The problem of the chronically ill in Louisville, Kentucky, 1946.

Dinard S. Carr

University of Louisville

Follow this and additional works at: <https://ir.library.louisville.edu/etd>

Part of the [Social Work Commons](#)

Recommended Citation

Carr, Dinard S., "The problem of the chronically ill in Louisville, Kentucky, 1946." (1946). *Electronic Theses and Dissertations*. Paper 1874.

<https://doi.org/10.18297/etd/1874>

This Master's Thesis is brought to you for free and open access by ThinkIR: The University of Louisville's Institutional Repository. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of ThinkIR: The University of Louisville's Institutional Repository. This title appears here courtesy of the author, who has retained all other copyrights. For more information, please contact thinkir@louisville.edu.

UNIVERSITY OF LOUISVILLE

THE PROBLEM OF THE CHRONICALLY ILL IN
LOUISVILLE, KENTUCKY, 1946

A DISSERTATION
SUBMITTED TO THE FACULTY
OF THE RAYMOND A KENT SCHOOL OF SOCIAL WORK
In Partial Fulfillment of the
Requirements for the Degree
Of Master of Science in Social Work

By

Dinard S. Carr

1946

NAME OF STUDENT: Dinard S. Carr

TITLE OF THESIS: The Problem of the Chronically Ill in
Louisville, Kentucky, 1946

APPROVED BY READING COMMITTEE COMPOSED OF THE
FOLLOWING MEMBERS:

NAME OF DIRECTOR: John J. Cronin

DATE: May 29, 1946

THE PROBLEM OF THE CHRONICALLY ILL IN
LOUISVILLE, KENTUCKY, 1946

TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
INTRODUCTION	2
CHAPTER I. CHRONIC DISEASE: A COMMUNITY PROBLEM.	11
CHAPTER II. THE STUDY OF LOUISVILLE GENERAL HOSPITAL	
PATIENTS	37
1927 Study	38
1937 Study	42
1945 Study	47
Method of present study	49
The number of chronically ill	56
Sex and race	57
Age	59
Marital status	60
Diagnoses	67
Condition	77
Prognosis	78
Duration of illness	81
Hospital admissions	83
Cost of care	86
Patients contribution towards the cost of care	87
Income	91
Occupation	93
Housing	99
Medical care in the hospital	103
Clinics	105
Medical care recommended	107
Patients plans for medical care	108
Patients known to social service	115
CHAPTER III. COMMUNITY RESOURCES FOR MEETING THE NEEDS OF THE CHRONICALLY ILL	125
Home care:	
1. medical	125
clinics	125
city physicians	126
nursing	127
2. other	131
housekeeping aides	131
social agencies	133
insurance	136
vocational rehabilitation	139
sheltered work	140
3. chronically ill children in their own homes; schools	145
4. foster homes	147

TABLE OF CONTENTS - (Continued)

	Page
Nursing Homes	147
Institutions:	
1. municipal	157
Home for the Aged and Infirm	159
Jefferson County Home for the Aged.	173
2. Benevolent institutions	175
Hospitals:	
1. Kings Daughters Home for Incurables	180
2. Crippled children	182
3. Children with rheumatic fever	184
4. Louisville General Hospital	185
5. Chronic Hospitals	190
standards of chronic hospital care	196
nursing	204
occupational therapy	205
physical therapy	206
medical social service	207
Prevention	212
Federal participation	215
CONCLUSIONS AND RECOMMENDATIONS	221
BIBLIOGRAPHY	228
APPENDIX	
1. Copy of schedule used in the present study	235
2. Description of Montefiore Hospital and the Chronic Disease Hospital on Welfare Island, New York	238
3. Copy of letter used in the present study	244
4. Copy of application for permit to operate a nursing home	247

LIST OF TABLES

	Page
Table 1. Chronic Cases Reported as Living in Own Homes, Temporarily in General Hospital, and Institutions for Long Time Care, Louisville, Kentucky, 1937.....	44
Table 2. Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by diagnosis and Percent.....	54
Table 3. Chief Disease Groups of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Race.....	58
Table 4. Occupation of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Race.....	58
Table 5. Age of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Sex, Race, and Marital Status.....	59
Table 6. Marital Status of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Sex.....	61
Table 7. Housing of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Number in Household and number of children.....	62
Table 8. Housing of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through 14th, 1946, by Number of Rooms, whether Room to Self, Sleeping alone.....	65
Table 9. Diagnosis of Patients in The Psychiatric Wards Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Condition, Prognosis, and Disposition.....	69
Table 10. Chief Disease Groups of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Number of Previous Admissions.....	71
Table 11. Chief Disease Groups of Chronically Ill Patients Admitted to Louisville General Hospital February 4th Through February 14th, 1946, by Duration of Illness....	72
Table 12. Chief Disease Groups of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Condition.....	76

	Page
Table 13. Chief Disease Groups of Chronically Ill Patients Admitted to Louisville General Hospital February 5 th Through February 14th, 1946, by Prognosis of Patients on Ward at Time of Study.....	80
Table 14. Previous Admissions to other Hospitals, Nursing Homes, and Institutions of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946,.....	84
Table 15. Number of Previous Admissions of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Total Hospital Days Per Patient.....	85
Table 16. Monthly Income of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Ward and Hospital Classification, A,B, or C.....	88
Table 17. Source of Income of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Amount.(monthly) ...	90
Table 18. Primary Source of Income of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Additional Source of Income.....	94
Table 19. Last Known Occupation of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by time of last employment.	96
Table 20. Monthly Income of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, by Monthly Rent, Own Home, or Living in Institution.....	100
Table 21. Treatment Received by Chronically Ill Patients Admitted to Louisville General Hospital February 5th through February 14th, 1946.....	103
Table 22. Louisville General Hospital Clinics Attended, regularly or Occasionally, Chronically Ill Patients Admitted to Louisville General Hospital, February 5th Through February 14th, 1946, (prior to Hospitalization)	105
Table 23. Type of Care Recommended for Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14, 1946, by Whether Chronic Hospital is Indicated for Their Care.....	109

Table 24. Type of Care Recommended for Patients on the Psychiatric Wards Admitted February 5th Through February 14th, 1946, Louisville General Hospital, by Place Where This Care Should be Secured.....	110
Table 25. Probable Discharge Plans, desired Discharge Plans, Whether Someone at Home to Help out, Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, on Ward at Time of Study.....	111
Table 26. Plans to continue Medical Care of Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, Discharged From Hospital at Time of Study.....	113
Table 27. Facilities for Medical Care Preferred to Present Arrangement (if available) by Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946.....	114
Table 28. Extent of Medical Social Service to Chronically Ill Patients Admitted to Louisville General Hospital February 5th Through February 14th, 1946, as Indicated by Form of Recording.....	117
Table 29. Chronic Patients Cared for by Visiting Nurse Association, by Cases and Visits, Louisville, Kentucky, 1943.	129
Table 30. Disabilities of Persons Employed at Goodwill Industries, February, 1946.....	143
Table 31. Work Classification of Persons Employed at Goodwill Industries, February, 1946.....	144
Table 32. Diagnosis of Population of Nursing Homes in Louisville and Jefferson County, June, 1945.....	154
Table 33. Duration of Stay of Population of Nursing Homes in Louisville and Jefferson County June, 1945.....	154
Table 34. Source of income, own or public assistance of Population of Nursing Homes in Louisville and Jefferson County June, 1945.....	155
Table 35. Condition of Population of Nursing Homes in Louisville and Jefferson County June, 1945.....	155
Table 36. Type of care Received, Population of Nursing Homes in Louisville and Jefferson County November, 1945, by whether Temporary or Permanent Resident.....	156

Table 37. Population of Public and Endowed Institutions in Louisville and Jefferson County May-September, 1945, Sex and Race.	161
Table 38. Population of Public and Endowed Institutions in Louisville and Jefferson County May-September, 1945, by Duration of Stay.....	161
Table 39. Population of Public and Endowed Institutions in Louisville and Jefferson County May-September, 1945, by Diagnosis.....	163
Table 40. Population of Public and Endowed Institutions in Louisville and Jefferson County May- September, 1945, by Condition.....	165
Table 41. Population of Public and Endowed Institutions in Louisville and Jefferson County November, 1945, by Type of Care Received and Resident Status.	166
Table 42. Population of Public and Endowed Institutions in Louisville and Jefferson County November, 1945, by Support.....	167
Table 43. Distribution of Cost of Institutional Care, Public Assistance, and Health and Welfare Services by Local, State, and Federal Governments.....	172
Table 44. Chronically Ill Patients in Endowed and Public In- stitutions, Private Nursing Homes, and In Own Homes, Louisville, Kentucky, November, 1945.....	177
Total 45. Support of Chronically Ill Patients In Endowed and Public Institutions, Private Nursing Homes and In Own Homes, Louisville, Kentucky, November, 1945.....	178
Total 46. Type of Care Required by Chronically Ill Patients in Endowed and Public Institutions, Private Nursing Homes, and in Own Homes, Louisville, Kentucky, November, 1945.....	178
Table 47. Hospitals in Louisville, Kentucky, by Bed Capacity...	179

INTRODUCTION

INTRODUCTION

Although the problems and implications of chronic illness will be discussed in their broader outlines, the purpose of this study is to see more specifically how chronic illness affects a particular group of patients. The questions, what are the problems and the needs of the chronically ill, what is the community doing to meet those needs, what are the facilities and what should they be, will be related to a representative sample of Louisville General Hospital patients.

Many civic groups in Louisville have been articulate in expressing the need for planning for better convalescent and chronic care, among them the Hospital Committee of the Louisville Area Development Association and the Health Council of the Community Chest. Health and Welfare reports have stressed the need for improving and enlarging facilities. The latest contribution is contained in the report of Dr. A. C. Bachmeyer, who, by careful analysis of the patients in Louisville General Hospital on June 5, 1945 found that 47 or 15% were in need of prolonged institutional care because of chronic disease.¹

Louisville's first serious attempt to learn the size of the problem was made in 1927 by a hospital advisory committee of six members appointed by Mayor A. G. Will. The subjects to be studied

¹Bachmeyer, A. C., Confidential Report - preliminary draft, to Dr. John Phair, Commissioner of Health, January 5, 1946.

by the subcommittee were divided into:

1. Chronically ill in hospitals for acute cases.
2. Institutions for chronics and so called incurables and homes for the aged.
3. Various homes for the aged under the auspices of churches, etc.
4. Care of chronically ill in their own homes.
5. Occupational therapy and rehabilitation.
6. Medical and nursing programs for institutions caring for the chronically ill.

An enumeration of chronics in 1937 brought up-to-date the study of 1927, but did not include patients of Louisville General Hospital clinics, and the Public Health Nursing Association within its scope. In both studies chronic disease patients from low income groups only were enumerated. The estimated number needing chronic hospital care was determined, but plans for such a hospital were made in pretty general terms and nothing came of it.

Dr. F. R. Bradley made a preliminary survey of hospital facilities in November 1945 at the invitation of the Health Council and Louisville Area Development Association to determine the need for expansion after the war and consider the question of constructing a chronic hospital in the Louisville area.¹

It is the plan of this study to determine from patients

¹Bradley, F. R. and Raper, R. E., Preliminary Louisville Area Hospital Survey. St. Louis, Mo., November 1945.

admitted to the wards of Louisville General Hospital during the week of February 5, 1946 through February 14, 1946, how many are chronically incapacitated or prevented from leading productive self-sufficient lives because of prolonged illness or physical debility; what proportion of total admissions they represent; what specific diseases and conditions are responsible for their incapacity; what type of care these patients need and what they receive; whether these patients desire a different type of care from that which they receive; what percentage are known to social agencies and the hospital social service department; what are the social and economic complications resulting from their illness; what institutional and community resources are available to meet their needs.

The ten-day period February 5th through February 14th is chosen arbitrarily and because the brief intervening period separating the time of admission from the time that the investigation was conducted, when the chronic experience did not lie dormant but was uppermost in the life of each patient studied makes it possible to secure a true picture of the chronic situation.

This choice of time was made with the knowledge that some of the patients would still be in the hospital and would be thinking of the adjustment they would have to make when they left, and that the remainder having been discharged, would have already experienced some of the problems of adjustment and would have definite opinions on the plans they had had to make (how they fitted into the existing community framework) and what they really

desired in the way of care.

To secure all the necessary information, it was decided to divide the patients into two main groups; those in the hospital at the time of the study, and those at home.¹ A more desirable method of procedure would have been to follow the same group through the hospital experience and after discharge to their homes but this was not possible due to limitations of time. Instead, two groups were studied, and it is felt that a continuous picture may be seen by the integration of these two groups. Patients interviewed in the hospital were asked their plans upon discharge; probable, what patient would desire, if to return home was there anyone to help out? Patients interviewed at home were asked whether they attended clinic, received nursing service, had a private physician, took medicaments, whether they had ever applied for or considered institutional care, and what arrangements they would prefer if available; Home for the Aged and Infirm, private nursing home, old age benevolent (church) homes, better nursing at home, chronic hospital, other.

For all patients studied the medical history was secured from the medical chart at the hospital. Another reason for selecting recent admissions, many of whom were still in the wards, was because the medical recommendations could be discussed directly with the doctors who were familiar with the case, and much valuable interpretation which is lacking in the records, could be secured. Broad questions of policy and general medical interpretation were sometimes referred to the staff men and the residents, but in the

¹See Appendix I for a copy of the schedule used.

main it was found that the most satisfactory opinions for individual patients could be secured from the doctor working directly with the patient, usually an intern.

It is true that many patients admitted during a given week may reflect the influence of the weather or a disease or condition that may happen to be prevalent in the community at the time, e.g., pneumonia. However, these would for the most part be acute illnesses and would be discarded in the selection of cases for the purpose of this study, except where the patient is admitted for an acute manifestation of a chronic illness or an intermittent acute illness and it can be definitely determined from the medical history that the patient is a chronic.

Admissions were studied in preference to discharges for the reasons enumerated above, but there is one major disadvantage to this method. Many persons were admitted on observation or with provisional diagnoses, and a final diagnosis not recorded until the patient was discharged, therefore, in cases where the patient was still in the ward there may have been no definite diagnosis. However, chronicity as explained above, is not defined entirely by diagnosis. In selecting the chronic cases from among all admissions for the week of February 5 through February 14 it was necessary to define chronic illness in order that there be basic uniformity and differentiation from acute illness. Cases not conforming to the definition decided upon were eliminated as subjects of the study. Definitions used in various studies and

articles were considered, among them:

Dr. F. R. Bradley - definition of chronic beds;

"These given to the care of patients who are in either the residual or terminal stage of a disabling or incurable disease who do not require active medical care and whose duration of stay ranges upward of six months"¹

This definition was discarded on several counts, primarily because of the philosophy of defeatism and hopelessness (as evidenced by the use of the words residual, terminal, incurable) which is entirely contrary to our thinking. We will show in the body of this paper, that most of these patients do require, and can benefit from medical care. We would agree only with the time factor--of six months.

Dr. Ernst P. Boas:

"Illness lasting a period of three months or more which prevents the patient from following his accustomed daily routine and which necessitates medical or nursing care in an institution"²

Mary C. Jarrett:

"Persons who have been or are likely to be incapacitated by disease for a period of at least three months, that is, unable to follow the daily routine of the average normal person, whose incapacity will probably continue for an indefinite period"³

The definition of choice is that used in a study prepared for the General Assembly in Hartford, Connecticut in 1944 to determine the need for a state infirmary. This definition reads:

¹Bradley, F.R., and Raper, R.E., op. cit.

²Boas, Ernst P., "Chronic Diseases", Social Work Year Book, ed. F.S. Hall, Russell Sage Foundation, New York, 1929. pp. 79-81.

³Jarrett, Mary C., Chronic Illness in New York City. 2 vols., (Columbia University Press, 1933) vol. 1., pp. viii - ix.

"A disease or condition of the body or personality which has been present at least six months or which may be expected to continue at least six months, and which interferes with one's occupation and normal physical and social life."¹

It was verbally approved by Dr. John Walker Moore, Chief of medical staff, Louisville General Hospital on February 7, 1946.

It is not the sole intention of this survey to discover every chronically ill person in Louisville General Hospital during the period February 5 through February 14 in order to define quantitatively the extent of chronic illness. It is interesting to see what percentage of the population they form on a given day or during a given week, but no permanent significance can be attached to these figures. The figures are purposeful however, in that they are indicative of the trends and serve to point up the needs in provision for the chronically ill.

General Hospital patients are for the most part indigent patients and can afford to pay little or nothing toward their medical care. They are, therefore, representative of the entire chronic group in the city for whom planning must be done. Chronic illness occurs among the higher income families as well, but these people are not directly the concern of society as they can take care of themselves. One of the most striking facts revealed by the National Health Survey was that one in every twenty family heads in the relief population was unable to work because of chronic disability, as contrasted with only one in 250 heads of

¹Need for a State Infirmary for the Cure and Treatment of Aged, Infirm, and Chronically Ill Persons. A report to 1945 General Assembly by the Public Welfare Council. Hartford, Conn., B44, p. 4.

families with incomes of \$3,000 and over, or phrasing this another way, the frequency of chronic disabling disease is 87% higher among relief clients than among families with annual incomes over \$3,000; in days of chronic disability a ratio of 3:1.¹

Prevalence of chronic disease may be studied in relation to the entire population by house to house canvass, but it is more common to study the chronically ill whose incapacity constituted a major problem for a welfare agency. For example, the census for New York City in the spring of 1928 included chronically ill persons under the care of medical and social agencies of the city, with the exclusion of tuberculosis and mental diseases.

¹The Nations Health. Interdepartmental Committee to Coordinate Health and Welfare Activities. Washington, D. C., 1939. p. 43.

CHAPTER I

CHRONIC ILLNESS: A COMMUNITY PROBLEM

CHAPTER I

CHRONIC ILLNESS: A COMMUNITY PROBLEM

Aside from certain psychological satisfaction derived from illness, in general it may be said that no one likes to be sick. Acute illness is an expensive commodity; the purchase of medical care is high, and in terms of incapacity, dependency upon others, loss of earnings, disruption of family life, discomfort, pain, and the possibility of death, it is an unpleasant and undesirable experience. But when it is over, the patient, if he has survived, breathes a sigh of relief and after a period of convalescence resumes the normal pattern of living. Either he gets well or he dies: it is as simple and final as that. This is not so with the chronically ill. The patient is uprooted for a longer period of time, perhaps until the end of his life, which may be years after the onset of his illness.

Medical science has also made remarkable advances in the combatting of the acute, infectious diseases. Infant mortality and death from communicable diseases have been reduced, due to the organized efforts of public health officials, adding many years to the average life expectancy. Society has opened its purse wide for this work, remembering with terror the wholesale slaughter inflicted by the plagues and scourges that have sometimes destroyed whole populations.

The chronic diseases have not been so dramatic in their manifestations; the chronically ill individual has not had to wear a bell warning others of his approach, like the lepers of the

middle ages. He suffers quietly, unobtrusively in his home, in the so-called homes for the incurables, private nursing and convalescent homes, public almshouses, homes for the aged, or in hospitals intended for the acutely ill. Chronic diseases do not occur in cycles, or at any specific age. Its beginning may be insidious, its origin often unknown, its presence often unsuspected, its development prolonged, its prognosis usually poor. Damage once done to body cells is never repaired, but the process may be arrested. It is the irrevocability of the damage inflicted that has given rise to the belief that the chronic diseases are incurable. This is true in a limited sense, for the cells cannot be restored to normal, but the patient himself can always be benefited by medical relief, and can often be rehabilitated and returned to some form of useful activity. "The chief aim of treatment of the chronic disabilities in which complete restitution to normal can no longer be expected, is to arrest the progress of the disease and to enable the patient to maintain or resume his accustomed place in society and in his family."¹

The burden of chronic illness is not confined to the patient alone. It soon has very serious repercussions within the family setting and spreads to include the entire community. It might almost be said that chronic illness is more of a social and economic problem than it is a medical problem, for not only must the individual become adjusted to his illness, but so must his family. Prolonged illness is apt to cause irritability, feelings of depression, sacrifice on the part of other family members,

¹Boas, Ernst P., The Unseen Plague Chronic Disease. J.J. Augustin New York, 1940. pp. 22.

friction and emotional strain. The meeting of cost for medical supervision, medicaments, diets, and sick room supplies in case of unexpected acute illness may call for a little ingenuity on the part of the homemaker in keeping the budget on an even keel, but no homemaker, no matter how skilled, can stretch limited income or savings for an indefinite period without serious deprivation and suffering. Even when the sick person is not the wage earner, the never ending expenditures for doctors, medicine, etc., strains the family purse. Here is where the community takes over the role of provider. Family dependency and chronic disease go hand in hand. It is also an unfortunate corollary that the lowest income families are the ones suffering from the most chronic disease. The National Health Survey found that two persons on relief were disabled for one week or longer by chronic disease for every person in the middle and highest income groups.¹

The chronically ill come to the attention of the community too often not as medical but rather as welfare problems. They have been provided with whatever care the community happens to have available; have been fitted into the existing framework of outdoor relief and various assortments of institutional care. The almshouse opens its arms wide to receive this dependent group into its family of unfortunates.

Chronic invalidity is increasing. Between 1920-1930 in New York City the death rate from chronic diseases increased 32.5% while the population increased 23%. There are several things accounting for this; the larger population of older people, improvement in

¹Ibid., p. 30.

recording diagnoses on death certificates, and some actual increase of these diseases.

There is considerable variation in the definition of a chronic disease. What differentiates chronic from acute? Can we say that all heart disease is chronic, every illness of three or six months duration is chronic, every disease whose outlook is bleak is chronic? How simple if chronicity could be absolutely classified by diagnosis, duration, prognosis; but chronicity is a relative concept. Some acute infectious diseases give rise to chronic disability (e.g. tuberculosis, syphilis) or they may occur intermittently with chronic illnesses, or there may be acute manifestations of a latent chronic condition. One cannot judge by diagnosis alone whether a disease is chronic or not.

Duration depends upon the nature of the disease, how early the diagnosis is made and treatment begun, and the accuracy of the diagnosis. Brights disease, for example, may kill in a few days or may cause invalidism for years.

It has been brought out that chronic patients are commonly regarded as incurable patients but this is not always true because medicine often has a great deal to offer the chronically ill.

In the face of all this variation it would be unwise to venture an absolute definition, yet it seems to be generally agreed that one of the main differences between acute and chronic illness is the self-limited course of the former, the slowly progressive morbid process of the latter. Mary C. Jarret feels that there is little homogeneity among the chronically ill, except for the fairly

uniform neglect of society to study their problems and provide for their care.¹

According to the findings of the National Health Survey, a given chronic disease may have varying significance in terms of prevalence, disability, and mortality. No one disease ranks first when considered from these criteria. Heart disease ranks first as a cause of death but rheumatism is most prevalent and the nervous and mental diseases cause the greatest disability.²

Mortality figures, while illuminating, do not tell the whole story for they show nothing of the years of suffering the patient may have undergone. In this respect chronic diseases listed as causes of disability are more revealing. Rheumatism, second in disability, cripples and causes far more invalidity than cancer which ranks second as a cause of death. Rheumatism is also the most prevalent chronic disease but fourteenth as a cause of death.³

Chronic disease is all about us. There are few families in the entire nation that are not affected by chronic disease at one time or another.

The first serious attempt to estimate the prevalence of chronic disease was made by the Welfare Council of New York city in 1928. A census was made for one week in 1928 of all the chronically ill under the care of 218 medical and social agencies. Twenty-thousand and seven-hundred cases were recorded, representing a ratio to the population of one in 310. It was estimated that

¹Jarrett, M.C., op. cit., p. 5.

²Boas, E.P., op. cit., p. 11.

³Ibid., p. 11.

this figure represented only the dependent chronically ill or one-third of the chronically ill in the entire city. Therefore, one percent of the population was disabled by chronic disease. Tuberculosis and mental diseases are excluded.¹

The state of Massachusetts made chronic disease surveys in 1929, 1930, and 1931. By actual house to house canvass of large population groups it was found that ten to twelve percent of the population were suffering from some form of chronic disease, including tuberculosis and mental disease.²

The National Health Survey undertaken by the United States Public Health Service in 1935 gave more complete information about the prevalence of chronic illness than was ever done before. Three-quarters of a million families comprising almost three million individuals were studied by careful sampling methods.³ Almost 10% of persons with chronic illness were children under the age of fifteen, 35.1% were young adults from twenty-five to forty-four years of age, 33% were between forty-five and sixty-four years of age, and 15.6% were sixty-five years of age and older. With 70% of cases occurring in persons under fifty-five years of life, it can be seen that the problem is one of the productive years of life.

It was found that 177 persons per thousand were suffering from a chronic disease or impairment, or almost one in every five persons.

¹Jarrett, M. C., op. cit., Vol. I., p. xi.

²Boas, E. P., The Unseen Plague Chronic Disease

³Perrott, George St. J. and others, The National Health Survey. Reprint No. 2098 from the Public Health Report, pp. 1-3.

Diseases, the symptoms of which were stated to have been present for three months or longer, whether or not disabling, were classified as chronic. It was found that among the diseases of childhood, the ratio of acute to chronic was twelve to one, but among persons aged sixty-five and over, the majority of the serious illnesses were chronic, the ratio of acute to chronic illness being 0.6 to one.

Among persons aged sixty-five and over who were chronically ill, about one-third were classified as invalids, but there were also many chronic invalids in the younger age groups. Half of the invalids in the study were below the age of fifty-five.¹

About two percent of the population enumerated were reported to have a permanent orthopedic impairment of such a serious nature that they were considered to be partially or completely crippled, deformed or paralyzed. About twenty percent of this group were incapacitated throughout practically the whole year.²

Two of the most significant facts that stand out among the findings of the survey are first, that 17.7 percent of persons were reported to have a chronic disease or impairment, and second, that 11.7 percent were chronic invalids.

More recent studies have been done in various communities, among them a survey of white families in the Eastern Health District of Baltimore in 1940.

¹Britten, Rollo H. and others, The National Health Survey. Reprint No. 2143 from The Public Health Reports, p. 8-16.

2. Ibid., p. 17.

In 1943 the Connecticut General Assembly directed the State Public Welfare Council to make an investigation to study the need for infirmity care for dependent persons with chronic and incurable disease for whom no proper provision was available in the almshouses or general hospitals.

The surveys conducted in Louisville to determine how many chronically ill there are, and what the facilities are for their care, will be discussed at a later point.¹

The National Health Survey and other studies done locally have shown the magnitude of the problem, and yet it is entirely taken for granted and accepted as is spring following the winter. Unfortunately, this complacency does not seem to be confined to the lay public alone, but is commonplace among the medical profession, whose task it should be to combat the "unseen plague"--chronic disease.² In the hospitals, and in private practice alike, many of the illnesses with which the physicians come in contact, are the chronic illnesses.

There are several courses open for the patient with a chronic disease. He may treat himself, he may avoid seeking medical treatment believing that it will not help him, he may not think his condition serious enough to require medical care, he may not have the means to pay for the care and, therefore, not pursue it, he may not have faith in doctors and neglect his condition

¹Chapter II.

²Boas, E.P., The Unseen Plague Chronic Disease

for that reason, or convinced that someone will be able to help him, may go from doctor to doctor in search of health.

The indifference of the medical profession may be explained by several factors. One of the most important of these is the belief in the incurability of chronic disease, and the idea that chronic disease is peculiar to the aged and, therefore, beyond the scope of medical science. In answer to the former, it need only be pointed out that many diseases which only a few short years ago were looked upon with dread, and which meant almost certain death, now have treatments adequately described in the medical texts and routinely carried out with high percentage of success. Tuberculosis, cancer, heart disease, if diagnosed and cared for early are highly amenable to successful treatment. "The lack of a specific remedy has been too much lamented while there has been all too little utilization of the effective measures we possess. Actually there are but few specific remedies within the entire realm of therapeutics".¹ Many diseases, although not lending themselves to precise logical therapy, such as insulin for diabetes, liver extract for pernicious anemia, penicillin for pneumonia, can nevertheless be treated. The cause of a disease may be known, but not the means to treat it, or we may successfully treat a disease without knowing its etiology. Boas points out that in the great majority of illnesses treatment is not strictly curative, but is directed along three main lines: removal of the causative

¹ Margolis, H. M., Diagnosis and Treatment of Arthritis and Allied Disorders. Paul B. Hoeber, Inc. New York, 1941. p. vii.

agent, restoration of functional capacity, and dealing with the structural abnormalities resulting from disease.¹ We know that patients with cancer of the stomach can often be helped tremendously through proper dietary regimen; that various forms of physiotherapy relieve the arthritic's pains and help to restore function; that diuretic therapy is often of aid in cardiac failure. The very minimum of accomplishment is relief of pain through medicaments or surgical measures, and often a great deal more can be done in the treatment of the various chronic diseases. "Treatment can be successful even when it is not strictly etiological, by attempting to restore normal psychosomatic functioning".²

Age is another reason offered for condoning the defeatist attitude. Disabilities caused by chronic disease are ascribed to old age when in fact the two are not synonymous. True aging is a phenomenon occurring after the age of seventy and most of the disabilities occurring at an earlier age are due to chronic disease and not to old age. "Age is a matter of adjustment, not years".³ Dr. Lewellyn Barker speaks of two kinds of old age; physiological, which is a very gradual process of atrophy or decline in functional capacity; and pathological, which is a condition caused by disease.⁴ Too often pathological old age is confused for physiological, and the rubber stamp diagnosis "senile"

¹Boas, E.P., The Unseen Plague Chronic Disease. p. 20.

²Ibid., p. 21

³Statement by Dr. John D. Trawick, Assistant Director of Health, Louisville and Jefferson County; personal interview February 12, 1946

⁴Barker, Lewellyn F. "On the Care of the Aged". The Canadian Hospital. May 1941. pp. 31-38.

attached to the ailment. A clear distinction should be made between senescence, which refers to normal old age, and senility, the synonym for abnormal old age. Geriatrics is that department of medicine which treats of the clinical problems of senescence and senility.¹

It is pretty generally agreed that if the diagnosis of senility was broken down into its more specific components, better medical study and treatment would result. The misconception that nothing can be done increases with patients who are labelled incurable or senile.

Another reason for the indifference of the medical profession is the fact that the chronic diseases lack the glamor and excitement of the acute. The chronic services attract fewer physicians to their calling than do the acute. This is a serious problem in recruiting the staff for a chronic disease hospital. Young doctors in selecting internships are not willing to devote their entire course of study to the chronic diseases. Chronic patients on the wards of an acute disease hospital are likely to be the most neglected. As their condition may show little change from day to day, the doctors give them less and less attention, while answering the challenge of the acute diseases. Often feeling helpless before the sufferings of those they cannot help, they turn eagerly to those for whom there is specific therapy.

A third factor accounting for the indifference of the medical profession is their feeling that they are working piece-meal with

¹Dorland, W.A. Newman. The American Illustrated Medical Dictionary. W. B. Saunders Co., Philadelphia, 1944.

the chronic patient; that his medical treatment is only part of it, but that something else is lacking which prevents them from getting the patient well. Although this thinking is apparently not entirely crystallized in the minds of many physicians, they do experience some misgivings in planning treatment for this patient because they know that the kind of life he lives will have as much effect upon his physical condition as will specific medical therapy. Chronic disease creates more social and economic problems than acute illness does. The social factors in treatment must be given greater consideration than is being done. The patient must be seen as a whole person, not as an ache or pain in a localized area. Sometimes this integration of medical and social treatment is done with the assistance of a medical social worker, but again there is danger of the doctor partitioning off the medical from the social, and with a great sigh of relief, assigning the latter to the social worker. A medical-social plan cannot begin to operate effectively unless there is perfect coordination between physician and social worker with the patient and his problems as the focus, not as an object to be divided up as so much medical and so much social material.

Health and illness are relative terms. While it is accepted without question that an individual who experiences certain somatic or psychic disorders is ill, the prefix "chronic" is usually not attached to his malady unless it is of long duration (in the Massachusetts surveys the median period of disability was found to be one and one-half years but twenty-two percent of the

group were disabled over a five-year period;¹ in the New York City study the period of disability was 5.8 years²), shows an insidious onset, is progressive in its course, is destructive of the body cells, and will leave traces of permanent injury. Some diseases almost always follow this pattern and are, therefore, classified as chronic without regard to individual deviations (e.g. heart disease, cancer, tuberculosis), but other diseases may be considered acute in one case, chronic in another, depending upon the duration, the progress of the disease, and other developmental factors (e.g. intestinal disorders, diseases of the skin, gynecological disorders). "Chronic invalidism is often the result of discontinuance of medical care when the acute symptoms have been relieved".³

Even after the patient's condition has been described as chronic, there is considerable variation in the amount of incapacity that is involved to the individual patient. One way to measure incapacity is by the objective standard, days lost from work. The National Health Survey showed that 6.3 days per person were lost annually from work or other usual pursuit by reason of chronic disease which disabled for one week or more.⁴ Two patients lying side by side on the ward, both having diabetes,

¹Boas, E.P., The Unseen Plague Chronic Disease. p. 7.

²Jarrett, M.C., op. cit., vol. 1, p. 117

³Ibid., vol. 1, pp. 2-3.

⁴Britten, R. H., op. cit., p. 15.

may be experiencing different levels of incapacity; the one having frequent admissions for diabetic coma because he neglects to take his insulin, the other getting along sufficiently well on a dietary regimen and not needing insulin. A third person on the ward, also a diabetic, may have had a toe amputated as a result of gangrene following infection.

All chronics are not invalids. "There are many degrees of chronic illness lying between a disease so well controlled that it causes no practical inconvenience and one that results in complete helplessness".¹

To conform to the varying degrees of chronic illness are various levels of treatment ranging from simple custodial care to medical services of a skilled specialist. Dr. Ernst Boas has conveniently classified the different types of care according to their medical needs.²

Class A - Patients requiring medical care for diagnosis and treatment

Class B - Patients requiring chiefly skilled nursing care

Class C - Patients requiring only custodial care

Class A may be illustrated by a patient with a heart disease who has had an attack of heart failure and needs constant medical surveillance with a trained nurse to look after him and carefully follow the physician's orders. Another patient in this class is one suffering from hemiplegia (paralysis of one side of the body) as a result of a stroke. If neglected he may never regain the

¹Jarrett, M.C., op. cit., vol. 1, p. 2

²Boas, E.P., The Unseen Plague Chronic Disease. p. 24

use of the side of his body but with good care and some physio-therapeutic measures properly applied, may be taught to walk within several months.

A class B patient is one who has passed the active stage of therapy but the disease is still progressing or is stationary with little chance for recovery, or the patient is on the way to recovery and still needs active nursing care. As examples of this class there is inoperable carcinoma, osteomyelitis, neurological conditions. The encephalitis victim, for example, may be completely helpless. His mind may be alert, but he is unable to turn in his bed and needs expert care to relieve his suffering, to prevent bed sores, and to help him to carry on necessary bodily functions. These patients may need bakings, massage, sedative baths, enemas, and irrigations, at various times. There may be need for a special diet whose contents need to be changed as the patient's condition changes. This group is usually the smallest of the three.

Class C contains that group of patients who have passed beyond the B stage. Their disease is no longer active. The disease process has been arrested but it has left the patient with permanent disability which makes it necessary for him to have some attendant care. Expert medical and nursing care is not needed, and this patient may only require assistance in bathing, dressing, and eating. He may need an occasional aspirin or APC tablet, but no other medication.

- It should be emphasized that these classifications are not

intended as guides to indicate where types A, B, and C needs may best be met. At first glance it might seem that hospital care is imperative for groups A and B, and a custodial institution for group C, but such is not the case. Care for all three types may be given in a hospital, other institution, clinic, or at home. A class A patient may be, and usually is, cared for in a hospital but he may receive intensive care in a clinic or by a private physician as well. Class B care may be given in a hospital and also by a trained nurse under a doctor's supervision, at home. Class C care is usually given in an institution for economic more than for medical reasons, but when the home is suitable, custodial care may be provided there, by a competent member of the family. In the New York city study it was found that three-fifths needed medical care, but of these only one-third required hospital care. For the rest, clinic service was sufficient. Two-fifths of all these people needed custodial or attendant care.¹

These classifications, while not stating where each type of patient should be cared for, are helpful in that they show the various categories of medical need. In planning for the chronically ill patient, there should be flexibility in considering the needs of the patient at any particular point in his illness. There is nothing stationary about illness. Even when it is said that the disease process has stopped in class C patients, such a statement is relative and is not cognizant of the fact that nothing in life ever comes to a standstill while there is life. A patient may require

¹Jarrett, M.C., op. cit., p. 117.

class A care for several days, and having had active medical treatment, gone on to class B under the care of a skilled competent nurse. He then reaches the point where the disease is arrested but the disability has become permanent and he will require assistance in performing necessary physical duties. On the other hand, a class C patient may suddenly have an acute exacerbation of his illness or an acute intermediary disease which may bring him back to the A stage, and the process is repeated. In planning for the chronic patient these things must be kept in mind, lest the patient find himself pigeonholed in one group and not receiving the care he needs at a particular point in his illness.

There is also the danger that valuable facilities may be wasted when a patient is receiving a more complex type of care than his condition requires. It is an economic loss to the community when a custodial patient is occupying valuable space in a general hospital. He is depriving other patients of the class A care that they need, as well as depriving himself of the recreational and occupational facilities a good custodial institution should offer. Some of the chronically ill receive unnecessarily expensive care, and others do not receive adequate care suited to their conditions. In the New York city study of 20,700 people one-fifth were found to be receiving inadequate care, and one-tenth a more skilled form of care than they required.¹

When we speak of a chronic hospital we mean a modern hospital which possesses all the facilities used in caring for the acutely

¹Ibid., p. xiii.

ill, if not more, but has the additional advantage of offering care for long periods of time. A chronic hospital offers a broad plan of treatment that considers all the aspects of the illness and can be carried on for as long a period as is necessary. In some cases, early hospitalization for a few months may limit the further progress of the disease. On the admission slips in hospitals for the acutely ill we find notations reading "Known diabetic for many years", "Old arthritic case--several previous admissions", These patients should properly be admitted to a chronic hospital. Other logical candidates for the chronic hospital are the people whose poor home conditions prohibit any measure of recovery, and those who are seemingly not benefited by clinic visits for one reason or another.

There can be little continuity in clinic treatment when the patient is seen by a different physician each time, and when treatment is directed without consideration for the home to which the patient will be returning. The patient may spend nearly 168 hours in his home, and only a few minutes each week in the clinic. The doctor in heart clinic is sincere in his efforts to help the man with early hypertensive cardio vascular disease, but there is little he can do about the three flights of stairs leading up to a dingy, windowless room on the top floor of a rooming house to which the man must return after getting a refill of digitalis and leaving the clinic. Added to that, the man may be holding down a job as a laborer. He soon becomes a fit candidate for a chronic hospital.

There are few institutions in the United States devoted solely to the care of the chronically ill. One of the most outstanding of these is the Montefiore Hospital, a voluntary hospital in New York City with bed capacity of about 714. New York City is also fortunate in having the first municipally owned and operated institution for chronic patients in America, the Hospital for Chronic Diseases on Welfare Island. Appendix II contains a description of Montefiore Hospital and the Hospital for Chronic Diseases on Welfare Island.

Some administrators are of the opinion, however, that there should not be separate accommodations for chronic patients, and that they should continue to be cared for in hospitals for the acutely ill, with the concession that there be separate wards for chronic patients. "The best way to plan for the chronic disease patient is to integrate his care with the care of the acutely sick patient in the general hospital scheme".¹ Several arguments are advanced in favor of retaining the chronically ill in the general hospital:

- 1 - A chronic disease section is less expensive to maintain than an independent chronic disease hospital.
- 2 - Chronic patients require the same diagnostic and therapeutic facilities as do acutely ill patients.
- 3 - A disease process consists of several phases, acute, chronic, and incurable, and, therefore a single phase cannot be isolated for study.
- 4 - Although it is true that chronic patients in a general hospital are neglected by the staff, "independence, is,

¹Bluestone, E.M., "Chronic Disease Patients - Planning for Their Care". The Modern Hospital. Vol. 54. No. 1. January, 1940, p. 66.

however, an expensive and unnecessary luxury".¹

5 - In the general hospital facilities are available for prompt treatment of emergencies.

6 - Doctors are more likely to be alert to acute symptoms than is the case in an institution solely for chronic diseases.

7 - Few doctors and nurses like to work in a hospital devoted solely to the care of the chronically ill.

In the Springfield General Hospital, Springfield, Massachusetts, a ward in the hospital is reserved for chronic disease patients where they are given the same examinations, medical work up, and treatment as acute patients. It was found that the mean average stay per patient was 243 days. The median per admission was 65 days.²

In a city the size of Louisville, one chronic disease ward could hardly begin to meet the existing need. About twice the size of Springfield, Massachusetts, Louisville could fill a thousand bed hospital two weeks after completion.³

Hospital care is not the only answer to the problem of the chronically ill. In the New York city survey three-fifths of all the chronically ill needed medical care, but of these only one-third required hospital care; for the remainder clinic service was sufficient. Two-fifths of the entire group needed custodial or attendant care.⁴ Not all of the chronically ill need institutional

¹Ibid., p. 66.

²Walker, Eugene and Dixon, Jennie, "Chronic Disease Ward Ten Years After". The Modern Hospital. vol. 64. No. 6. June, 1945, p. 55.

³Statement by Dr. John D. Trawick, Asst. Director of Health, Louisville & Jefferson County, Personal Interview, Feb., 12, 1946.

⁴Jarrett, M.C., op. cit., p. 117.

care, medical or custodial, and a relatively small percentage need to be hospitalized. "Economic and social expediency, not medical need is by far the major reason for institutional care of the chronically ill, particularly among the aged".¹ "It would be possible for state institutions to be built to house and care for all dependent chronically ill, but a more acceptable social philosophy would hold that such institutions are really signs of failure to prevent the disorders that necessitated institutionalization. Therefore, consideration should be given to the questions of providing adequate medical care in the home or home community, with the institution as the last resort or facility for such care as cannot be provided otherwise".²

Some patients can be treated at home after a relatively short stay at a chronic hospital, some do not need hospitalization at all, others could continue earning a living while having private physician care or attending clinic, and others can be in foster homes or nursing homes or benevolent institutions. All of these are desirable "as long as they are not intended as means of circumventing necessary hospitalization".³

The danger lies in the failure to provide chronic hospital care when it is needed, and in not evaluating the needs of each

¹Mason, Clifford V., "Lets Keep the Old Gray Mare in Harness". The Modern Hospital. Vol. 62. No. 2. February, 1944, p. 82

²Need for a State Infirmary, p. 36.

³Rosenfield, Isadore, "Care of the Chronic Sick". Hospitals, November, 1944, p. 50.

individual in the light of what his illness means to him and how he can best be helped. Facilities should be chosen with consideration for the age of the patient, the degree and nature of the disability, his mental capacity and temperament. It is obvious that children should never be housed with senile patients, that adolescents and young adults grow easily restless and must be kept occupied, that elderly but mentally alert adults are unhappy when kept with mentally deteriorated, senile, noisy, or offensive patients their own age. Patients on their way to recovery do not like to share one ward with terminal cases as such a situation is extremely depressing; ambulant cases and bedridden patients do not make good company as the former is active and may spend time outdoors if the hospital has well kept grounds with adequate supervision for this purpose, and the other grows tired and complaining of having to spend long boring hours in one place. Most patients who have had active lives and many interests, and if they are not too sick, want to be in company that is stimulating to them, in an environment which offers opportunity to continue with their old interests or develop new ones. They object to radical changes in their living pattern, to being in the company of other patients who are quarrelsome, noisy, demanding.

Obviously, the best place to satisfy the temperaments of the different patients is right in their own homes. And unless these homes have never been a source of satisfaction or cannot now fulfill the minimal qualifications as a place for medical treatment, it should be the aim of everyone who plans the facilities for the chronically ill to list the patients own home as the number one

resource. In the home, medical treatment is either brought to the patient in the form of a private physician or city physician, or he goes outside to the appropriate clinic to receive his treatment there. A nursing service is considered as another means for securing care in the home. Another important resource, and often overlooked, is the housekeeping aide. These will be discussed more fully at a further point.

The obstacles to home care are the physical make-up of the home, uncooperative family (whether intentionally or not), poor nursing, and insufficient public assistance. The New York City survey revealed that probably one-fourth of those living at home should have been in institutions, and that the majority of persons not properly cared for at home would not need institutional care if their home condition could be adjusted, but about one-third could receive suitable care only in an institution.¹ Three sets of factors were considered in judging whether the home was suitable for the patient's care: the physical condition of the home, family attitudes (towards the patient, and the patient's attitude towards the family), the make-up of the family (ability of the members of the family to attend to the needs of the sick person).

Foster homes, nursing or boarding homes, benevolent institutions, are also parts of a program for the care of the chronically ill; the nursing or boarding home being of a semi-institutional nature. They are a desirable substitute for the patient's own home in that they offer the facilities which the patient's home has failed to provide.

¹Jarrett, M.C., op. cit., vol. 1, p. 50.

A well regulated system of foster home and nursing and boarding home care is less expensive than institutional care. The tendency has been to think in terms of foster homes for children, well or otherwise, but such a plan has often times proved successful when attempted with aged people who are not psychotic or mentally defective or senile. The Montefiore Home in Cleveland, Ohio, which is devoted to the care of Jewish aged and infirm, has as a regular part of its program the placing of well aged in foster homes.¹

With facilities for chronic care so limited, it has been quite common practice to utilize for the chronically ill patient, those facilities reserved for the convalescent recovering from an acute illness. Convalescent care is, as a rule, in greater demand for patients from the surgical wards than from the medical wards and we find that a much larger proportion of chronic patients come from the medical wards. It would seem, therefore, that the use of facilities intended for the convalescent patient, usually surgical, by the chronic patient, is not a very wise plan while convalescent resources are also quite limited. The New York City survey found that one-fourth of the people in convalescent homes were chronically ill.² In the Louisville Home for the Aged and Infirm twenty beds are reserved for convalescent care, but with the steady increase through the years in the number of chronically ill admitted to the home, there has been no strict distinction made between the chronic and the convalescent patient, and chronic patients are occupying

¹ Weil, Julius, "The Aged Ill Need a Specialized Staff. Hospitals, March, 1945.

²Jarrett, M.C., op. cit., vol. 1, p. 53.

some of these beds intended for another purpose. Social workers are guilty of promoting this practice and shall in all likelihood continue to make such referrals until the time when there shall be separate and adequate resources for caring for the chronically ill.

"Thus we find a very confused picture; patients at home who should be in hospitals, patients in hospitals who should be in less complex institutions, patients in homes for the aged that are not prepared to minister to their needs, patients in convalescent homes occupying beds needed for another purpose. A mad confusion of patients and institutions--the patients scrambling to find refuge wherever they may, the institutions admitting them grudgingly, and having admitted them not giving them the care best adapted to their needs". ¹

¹Boas, E.P., The Unseen Plague Chronic Disease. p. 75.

CHAPTER II

THE STUDY OF LOUISVILLE GENERAL HOSPITAL PATIENTS

CHAPTER II

THE STUDY OF LOUISVILLE GENERAL HOSPITAL PATIENTS

The problem of chronic illness is widespread but makes no lasting impression when described from the viewpoint of the nation as a whole. The tuberculosis rate is high for the entire nation, but Kentucky residents were much more impressed by the incidence of the disease when they were informed by the Committee for Kentucky that their state had the third highest incident rate in the nation. It is, therefore, the purpose of this paper to bring the problem of chronic disease down to the local level by surveying a representative group of patients in Louisville General Hospital, the city's only general tax-supported hospital.

The problem of chronic illness has long been of concern to the people of Louisville but as yet no formal program of planning for the chronically ill has been initiated. Planning must, of course, be preceded by careful study, and such study has been attempted at various times by health and social groups. This study attempts to integrate some of their findings and to relate them to a group representing the larger community for whom chronic facilities must be planned; the chronically ill patients of Louisville General Hospital. By means of case study on an illustrative basis it is intended to point up the needs in this area. Some measure of the prevalence of chronic illness is obtained in the present study, but more revealing for this purpose are the 1927 and 1937 studies sponsored by the Health Council of the Community Chest.

The 1927 study was done in answer to requests from two different groups of the Community Chest; the Advisory Council and the Budget Committee. The Advisory Council was interested in seeing the whole question of inadequate chronic facilities taken up by a joint Chest committee; the Budget Committee on the other hand asked that the Health Council study the provision for chronic and incurable patients, since an expansion of the Kings Daughters Home for the Incurables had been contemplated. A Hospital Advisory Committee of six members was appointed by Mayor A. A. Will, composed of the following subcommittees: on chronic illness in hospitals for acute cases; on institutions for chronically ill and so-called incurables and homes for the aged; on various homes for the aged under the auspices of churches and other groups; on care of the chronically ill in their own homes; on occupational therapy and rehabilitation; and one on the medical and nursing program for institutions caring for the chronically ill.

By definition a chronically ill person was accepted as being disabled and requiring three months or more of institutional care, either at a hospital or special institution, in which case one may hope for functional restoration and physical ability on the part of the patient to take his place in the community, as distinguished from the incurable patient who will not be improved by institutional or medical care.

The study was done in two parts, the first part consisting of the study of chronic patients known to social agencies, free institutions, and in the medical and surgical wards and clinics of the Louisville

hospitals for a three week period, February 7 through February 28, 1927; the second part of the study conducted by Dr. John Walker Moore being a one-day survey of chronic and incurable patients at Louisville General Hospital May 2, 1927. No distinction was made between chronic and incurable patients in the three weeks study, while in the one-day survey particular attention was paid to incurables as distinguished from chronic patients, and to the number of both types of patients having no homes.

Much more complete information was gathered from Louisville General Hospital where the study was done by the social service department in conjunction with the medical staff, than from the other participating hospitals. The total number of adult patients in the medical and surgical wards and clinics of Louisville General Hospital was 1980. Of these 323 or 17% were chronically ill. Of the 323, 140 or 45% were not in need of the type of care which a hospital equipped to care for the acutely ill is in a position to give, including both the ward and the clinic patients. The clinic patients were in need of more care than the clinic could provide but not the type of care which required admission to the hospital proper. Twenty-five of the 140 patients could have been cared for in a well-constructed home for the aged, but the remainder needed the special care which a chronic institution could offer. Twenty of the 25 patients needing home for the aged care were occupying beds in the wards, 17 in the medical and three in the surgical. The remaining five patients were attending the medical clinic. It was found that the medical wards were getting the largest percentage of the chronic patients.

Analysis of the 115 patients requiring chronic hospital care showed that 26 were twenty-five years of age and under, 23 were twenty-six and under forty years of age, and 25 were sixty years of age and over. Therefore, less than 25% of these patients were sixty years of age and under while almost 50% were under forty years of age. Over 75% were men, 25% women.

The other hospitals reported only 27 chronic cases who should be provided for in a special chronic hospital or institution. Other reporting agencies were Waverly Hills Sanatorium, eight persons; Kings Daughters Home for Incurables, 17 persons; Home for the Aged and Infirm, 41 persons; Jefferson County Home for the Aged, two persons; and Public Health Nursing Association, Family Service Organization, Jewish Welfare Federation, combined, 41 persons. The total number of chronically ill in Louisville as reported by social agencies, free institutions, Louisville General and other hospitals during the three weeks survey in 1927 was 276.

In the one-day survey of Louisville General Hospital patients, 102 patients or 26.2% of the total population of 388 were found to be chronic or incurable. The proportion of chronically ill in the one-day survey was, therefore, higher than in the three weeks study. Inclusion of clinic patients in this study would probably not have altered the picture very much. Eighty were incurable patients, 22 chronics. The three-week survey made no such distinction. In order to determine the number of chronic and incurable patients in Louisville General Hospital for whom chronic hospitalization or institutional care was necessary an attempt was made in the one-day survey to indicate those patients with no home. A home was defined

as "That residence either maintained by an individual, wife, or husband, or own child". Nine of the 22 chronics, and 47 of the 80 incurables had no home. Fifty-six patients with no home constituted slightly over 50% of the chronically ill and incurable in the hospital.

Having shown that at least 276 persons (The one-day survey based on persons having no homes showed that at least 56 chronic and incurable patients needed special facilities but these cannot be considered as additional to the patients in the three weeks group) need chronic hospital or other institutional care, the Hospital Advisory Committee went on to study the existing facilities in Louisville for chronic care, and concluded its report by making several important recommendations. In summarized form, its findings were: That the city and county homes for the aged as well as the 16 homes conducted by churches and affiliated groups and private corporations are caring for chronic and incurable inmates without medical and nursing service; that there is need in the community of facilities for the care of pay, part pay, and free patients suffering from chronic and incurable diseases; that there is no provision for the colored chronic and incurable patients; that there is lack of adequate rehabilitation service as a result of which the community is building up an unending bill in relief for chronic and incurable patients and their families. With adequate rehabilitation service it is possible for many of the patients to become self-supporting. Practically 50% of the chronic patients in Louisville General Hospital at the time of the study were under 40 years of age and 75% of them were males.

The Committee recommended that a chronic hospital be built as an extension of Louisville General Hospital where expert medical and nursing supervision could be secured; that provisions be made for pay, part pay, and free patients; that adequate social service, occupational therapy, and rehabilitation be developed; that the homes for the aged and other institutions develop more adequate facilities; and that home care be continued where it is adequate to care for the needs of the patient.¹

1937 Study

In July, 1937 Dr. Hugh Leavell, City Health Director, asked the Health Council to bring up-to-date the figures of the chronic disease survey made in Louisville in 1927 to help to determine how large a hospital for chronic patients would be needed. Dr. Leavell stated at this time, "At the present time no funds are available or in view for this purpose. However, Mayor Miller has asked that tentative plans for a chronic hospital be made so that he might pass the project on to his successor. It is his idea that such study and plans should be made ready in case money might become available from any source."²

Again, only chronic disease patients from low income groups were enumerated, but excluded from the study were homes for the aged (because they claim they do not accept people with a known chronic condition), Louisville General Hospital clinics, Waverly Hills Clinic, and persons known to the Public Health Nursing Associa-

¹Health and Family and Child Welfare Councils of the Community Chest. "Study of the Provision for Chronic and Incurable Patients" Louisville, Ky. 1927.

²Bulletin, Council of Social Agencies of the Louisville Community Chest. "Chronic Illness in Louisville", No. 14, Oct 23, 1937

tion. A chronic patient was defined as "A person with any disease or abnormal condition which had necessitated loss of work, absence from school, or material change in normal activities for a period of three months or more". This time the social agencies reported many more chronic patients than in 1927, probably due to more careful study and case finding rather than an actual increase in the number of the chronically ill.

A total of 1405 cases were reported, 1000 by the various social agencies, 112 by the hospitals including General, and 293 by Home for the Aged and Infirm, Kings Daughters, Kosair, Ormsby Village, and Waverly Hills. The distribution of patients is shown in Table I.

Of the 1405 chronic cases reported, 555 or 40% were recommended for chronic hospital care, and of this group 158 patients would require constant nursing care since many of them were completely helpless. The remaining 850 or 60% of patients could continue in their own home. In 1927, 276 or 60% of total chronics were recommended for institutional care, therefore, there was a complete reversal in the 1937 findings. This might possibly have been due to stricter standards used in 1937 in determining which chronic patients need long time hospital care. Under the supervision of clinics, city physicians, and public health nurses many chronic patients could receive adequate care at home. The number of cases recommended for hospital care varied considerably with the diagnosis. Mental abnormality accounted for almost one-fourth of the cases. This corresponds closely with the findings of the present study in which 21 of 76 chronic patients admitted to the General Hospital

TABLE I

CHRONIC CASES REPORTED AS LIVING IN
OWN HOMES, TEMPORARILY IN GENERAL
HOSPITALS, AND INSTITUTIONS FOR
LONG TIME CARE, LOUISVILLE, KY. 1937

Agency		Chronic Cases
Total		1405
Living in Own Homes		
	1000	
Childrens Agency		23
Family Service Organization		67
Jewish Welfare Federation		35
Mothers Aid		31
Municipal Bureau of Social Service		706
Old Age Assistance		54
Relatives of Ormsby Village Children		69
St. Vincent de Paul Society		15
Temporarily in General Hospitals		
	112	
Childrens Free Hospital		6
Louisville General Hospital		90
Jewish Hospital		1
Norton Infirmary		11
St. Anthony Hospital		3
St. Mary and Elizabeth Hospital		1
Institutions for Long Time Care		
	293	
Home for the Aged and Infirm		129
Kings Daughters Home for Incurables		39
Kosair Crippled Childrens Hospital		6
Ormsby Village		72
Waverly Hills Sanatorium		47

during a ten-day period were suffering from mental disease. The physically crippled (arthritis, amputations, paralysis) in 1937 accounted for almost another 25% of the chronic illnesses. Cardiac conditions were another 16% of the total. (In the present study this figure is much higher with 33% having cardiac conditions, but this includes anemia and other diseases of the circulatory system

which were counted separately in the 1937 census). Tuberculosis was another 6%, syphilis 6%, blindness 6%, and conditions making up the remaining 16% were cancer, diabetes, nephritis, and others.

It was felt that half the mental patients would be proper subjects for institutional care. With the state functioning as eustodian for mental patients requiring institutional care, the responsibility for the care of medical, orthopedic, and tuberculosis chronics is left to the city. Based upon the findings of the 1937 survey this would leave 379 patients who should be accommodated in a city chronic hospital. Of these 71% were White and 29% Negro; 197 were males and 182 females. Of the total 1,405 chronic patients 51% were male, 49% female, 68% White and 32% Negro. Seventeen percent were under twenty-one years of age, and about 25% were over sixty-five years of age. The New York City survey and the National Health Survey showed a higher proportion of chronically ill in the younger age groups and fewer in the older age groups. In the present study of February, 1946, excluding mental patients, only seven percent are under the age of twenty-one and almost one-fourth are over the age of sixty-five. The number of White chronic patients and Negro chronic patients is almost the same, with only one White patient more than Negro. Fifty-four and one-half percent are males, 45.5% females. Louisville's study of 1937 showed only three percent cardiacs under the age twenty-one while in New York City 27% of cardiacs were under sixteen years of age. About one-third of the cardiacs in each city were over sixty-five years of age. New York City reported 40% of its cardiacs in the normally active period of early adulthood and middle age, whereas 67% of Louisville's cardiac

cases were in this period.

New York City found that Negroes were five percent of its chronics, almost the same proportion as in its general population. Louisville reported 37% of its chronics as Negroes, although they made up only 16% of the general population.

New York City's proportion of low income chronics to the population in 1933 was one in each 310 persons, excluding mental diseases and tuberculosis. On a similar basis, Louisville's proportion in 1937 was one in each 371 persons. It is estimated that this group would comprise about one-third of the total number of chronics in the community; the other two-thirds being unreported or financially able to take care of themselves. The fewer number of chronically ill in Louisville might be explained by better living conditions and warmer climate, but on the other hand it is more likely that there were some unreported cases in Louisville. Louisville reported a higher percentage of bedridden cases than New York. Forty-one percent of Louisville's hospital cases were bedridden. In the present study one-fourth of hospital patients, excluding the mentally ill, are bedridden. If the mentally ill are included, the percentage is even lower, 17% as none of these patients are bedridden.

The recommendations of the 1937 study were:

- 1 - A tax supported chronic disease hospital to provide adequate medical care for many patients suffering in their own homes.

Such a hospital would:

- a. Relieve general hospitals of the care of low income chronic patients now occupying beds intended for acute cases and permit admission of more acute cases.
- b. Reduce the per diem cost of care of chronic disease

patients needing medical care in a chronic institution.

c. Provide better care for certain chronics than they can receive in their own homes.

- 2 - A program of rehabilitation. While the city may be satisfied in providing merely medical, nursing, and custodial care for older chronics, there should be more constructive, educational provision made for younger chronics who have a long life ahead of them.
- 3 - Conversion of the Home for Incurables into a vocational guidance institution for handicapped young people, and transfer of the aging population of the home to a tax supported chronic hospital.
- 4 - A program of prevention. All social agencies, and particularly those administering relief, should encourage the greater use of facilities for health examinations in order that chronic disease may be discovered in its earlier remedial stages.¹

1945 Studies

At the invitation of the Health Council and the Louisville Area Development Association, Dr. F. R. Bradley and R. E. Raper made a preliminary survey of Louisville's hospital facilities to determine the need for expansion after the war, and reported their findings in November, 1945. Chronic beds were defined as "Those given to the care of patients who are in either the residual or terminal stage of a disabling or incurable disease who do not require active medical care and whose duration of stay ranges upward of six months". The question of constructing a

¹Haines, Anna, Chronic Enumeration. Louisville Health Council, 1937

chronic or convalescent hospital in the Louisville area, as well as arranging for convalescent care within the institutions already in existence was taken up. It was estimated that to meet the needs in the Louisville area, at least 400 chronic beds would be required.¹

Dr. A. C. Bachmeyer in June, 1945 surveyed the facilities for the care of chronic diseases and in January, 1946 a preliminary draft of his report to the Commissioner of Health stated that 15% of Louisville General Hospital patients were in need of prolonged institutional care because of chronic disease. This finding was based on careful analysis made of the patients in the hospital on June 5, 1945. Forty-seven or 15% were in need of prolonged institutional care. Of these 19 were children (all but four victims of poliomyelitis). The remaining 28 were classified into two groups; group A, those who with proper care can be restored to comparatively good health, or in other words, who can be rehabilitated sufficiently to permit their return to their homes and normal positions in the community; and group B, those whose disabilities are of permanent nature and who will require continued domiciliary or custodial care. It was thought that 100 or more beds could readily be used for group A patients, and that the number of beds for group B would vary according to the number of patients with a permanent disability but who also require medical and nursing care. Several hundred additional beds would be needed for these patients. The two groups roughly

¹Bradley, F. R. and Raper, R.E., op. cit.

approximate Boas' three classes, but they seem to be classified according to degree of disability while Boas' classification is based upon categories of medical need.

The survey also makes reference to the data on nursing and convalescent homes collected by the Louisville and Jefferson County Health Department in the latter half of 1945. This material will be discussed in the chapter on resources for the chronically ill.¹

METHOD OF PRESENT STUDY

With this material as a background we shall now turn to the survey of 76 chronic patients admitted to Louisville General Hospital during the ten-day period, February 5 through February 14 in an endeavor to learn what their problems are. The succeeding chapter will consider how the community is equipped to help them.

The 76 patients studied were selected from the complete list kept by the record room of the hospital of patients admitted to the hospital during February 5 through February 14. The patients' name and ward to which admitted were listed and it was, therefore, possible to eliminate some of the cases at a glance, by ward. Patients in obstetrical and isolation wards were immediately discarded as were those who had died, although some of the latter might have been chronic patients. The diagnosis was not known at this point. The five patients who died during the course of the study were included in the total cases.

¹Bachmeyer, A.C., op. cit.

Also excluded were patients treated in the new federally constructed and financed fifty-bed rapid treatment center located in the hospital.

The elimination of obstetrical, isolation, and rapid treatment wards and deceased patients left the medical, surgical, baby, and psychiatric wards to be surveyed for chronic patients. At the beginning, the medical records of all these patients were carefully studied but due to the large volume of records this proved to be a costly procedure in terms of the examiner's time and the time of the record room staff who pulled the records, and this method had to be abandoned.

A card for each patient admitted to the hospital, containing the provisional diagnosis in addition to other factual data was available in the social service department and by use of these cards the obvious acute cases could be eliminated, leaving those with a definite or possible chronic condition. Further definition as to chronicity, considering other factors such as duration and incapacity, besides diagnosis was then obtained by careful study of the medical record, as in the first method, for those patients suspected of being chronic. Had it been feasible to complete the case finding by means of the first method, in other words, to have studied each medical record, possibly more chronic cases would have been found than the 76 included in the study. The diagnosis on the card may, in some instances, have indicated only the acute manifestation of the chronic condition, but not the contributing chronic cause. Gangrene of a limb, for example, may

have been discarded as acute condition, when a study of the medical chart might have revealed a patient with a diabetic history of several years duration. In other instances, however, the notation on the chart read "Gangrene of right foot--diabetic".

In the original screening process undiagnosed cases were also discarded although upon further investigation these might also have proved chronic. Only the medical records of the patients already discharged at the time of the study were on file in the record room, having been sent there from the ward after the patients discharge. Medical records are always kept in the ward when the patient is in the hospital and these records, for the patients still in the hospital at the time of study were available there. To determine chronicity, an interview with the doctor or nurse was more revealing than were the records, and this was done whenever possible. Conditions which could be cured by surgery or which were not very incapacitating, such as hemorrhoids, hernia, chronic tonsillitis, keratitis (inflammation of the cornea of the eye), chronic appendicitis, rheumatic fever inactive for a long period of time, and certain of the gynecological conditions, were discarded.

It was particularly difficult to distinguish between the acute and chronic among the gynecological conditions, and individual circumstances had to be carefully considered in each case. The most common gynecological conditions are chronic salpingitis, endometrial hyperplasia, fibroid uterus, cancer of the cervix, chronic endometritis, and chronic cervicitis. Chronic salpingitis is most common in young Negro women in the low income groups and is caused by an early gonorrheal infection. Its course always seems to follow the same

development: an acute attack of pelvic inflammatory disease which often goes untreated because it is not so severe as to keep the victim away from her job, followed by another attack with fever that causes the patient to seek medical advice, at which time the doctor may prescribe sulfathiazole and discharge the patient because examination fails to show any abnormality. Anytime from six months to three years later a thickening of the internal genitalia takes place followed by repeated attacks with severe pains in the side. Finally the pain becomes so severe that the patient cannot work and at this time the physician may recommend surgery when the condition is not in the acute stage. The condition is chronic in that it is not self-limiting but follows a slowly progressive course leading to frequent incapacitation. The inflammatory adhesions always remain in the pelvis and may be revived by childbirth, gonorrheal reinfection, and other things. On the other hand, this patient may be able to work between attacks and may tell you that she is feeling fine.

Fibroid uterus or leiomyoma is another condition occurring frequently among Negro women which often goes untreated for years. It is an excessive growth of the wall of the uterus. Endometrial hyperplasia, a glandular condition, is an overgrowth of endometrium which may be treated by ovarian extracts and thyroid to secure endocrine balance, and also by surgical means; dilation and curettage to scrape out the wall of the uterus. Such a condition may cause great social embarrassment, due to the excessive loss of blood, it often precipitates an anemic condition. Cancer of the cervix is a serious condition with poor prognosis for recovery if radical surgery involving

removal of the entire internal genitalia and lymph glands is not done early, after the diagnosis has been confirmed by biopsy. Without such treatment the patient may die within three to five years after the condition develops. Radium and x-ray therapy are also used in treatment. Treatment is often neglected because the patient frequently ignores the early minor symptoms of burning, constipation, etc. and is often unaware of the condition. At a later stage nothing can be offered the patient besides sedation. Constant nursing care, or class B care, is extremely important for the comfort of the patient and should be continued until death. Chronic endometritis is a low grade chronic infection which may be treated with penicillin, and like chronic cervicitis, an erosion or chronic infection of the glands of the cervix, causes little trouble.

It can be seen from the brief foregoing description that gynecological conditions range from those that cause some discomfort but little incapacity, to those which almost inevitably result in death. In the present study three gynecology cases are included; chronic salpingitis, endometrial hyperplasia, and pelvic inflammatory disease (a form of salpingitis). A case of carcinoma of the cervix with metastasis is included under the disease grouping "cancer and other tumors" as shown in Table 2. This patient had had three previous admissions to General Hospital since July of 1945, this being her fourth. Her prognosis was "very poor". A cervicectomy had been done, and radium treatment given.

Patients admitted to the psychiatric wards had varied diagnoses, all of which are considered chronic. These patients present a different planning problem from those on the medical and surgical

TABLE 2

CHRONICALLY ILL PATIENTS^a ADMITTED TO
LOUISVILLE GENERAL HOSPITAL, FEBRUARY 5th
THROUGH FEBRUARY 14th, 1946 by
DIAGNOSIS AND PERCENT

	Diagnosis		Percent (primary diagnosis)
	Primary	Secondary	
Total	55	13	100
Epidemic and Communicable	4	2	7
Polioomyelitis	1	0	
Pulmonary Tuberculosis	1	1	
Non-Pulmonary Tuberculosis	1	0	
Venereal Disease	1	1	
Cancer and Other Tumors	5	0	9
Diabetes	4	1	7
Chronic Alcoholism	1	0	1.5
Osteomyelitis	4	0	7
Heart and Circulatory System	18	4	33
Heart	14	3	
Arteriosclerosis	1	0	
Anemia	2	1	
Other	1	0	
Nervous System and Sense Organs	6	3	11
Epilepsy	1	0	
Tabes Dorsalis	1	0	
Cerebral Hemorrhage	0	1	
Hemiplegia - other paralysis	2	0	
Loss of vision	1	1	
Other	1	1	
Respiratory System (non-tuberculosis)	2	0	4
Asthma	1	0	
Chronic bronchitis	1	0	
Digestive System	3	0	6
Gall bladder	1	0	
Ulcers of stomach	1	0	
Cirrhosis of liver	1	0	
Genito-Urinary System	3	2	6
Gynecological	3	2	
Endocrine Disorders	0	1	0
Skin and Cellular Tissue	1	0	1.5
Deformities, Malformations	4	0	7
Orthopedic	2	0	
Congenital	2	0	

^aExcluding Patients on Psychiatric Wards

wards, since a mental institution and not a chronic hospital is indicated for their care, but they were included in order that a statistically correct picture of all chronic patients admitted to the hospital during this ten-day period might be presented. A schedule (see Appendix 1) for these patients was not filled out, and they were not interviewed in the wards or at home as were the others, but instead information concerning their diagnosis, prognosis, condition, and disposition was secured from one of the resident physicians in psychiatry. Financial data was secured, as for the other patients, from the admissions office. Epileptic patients are included in this group with the exception of one epileptic who was admitted to the medical ward. The difference is that the former have epilepsy with psychosis.

The social service files, and interviews with the social workers in the medical, surgical, orthopedic and pediatric services supplied information on the number of patients known to the social service department and what the contact had been.

After the cases had been selected, they were divided into two groups; those still in the wards, and those discharged to their home or place of residence. The medical record of each patient was gleaned for necessary information, a doctor was interviewed for each patient still in the ward for confirmation of diagnosis, patients condition and prognosis, and recommendations concerning the kind of medical care the patient requires and where such care should be secured. An attempt was made to interview each patient in the wards. In a few instances it was not possible to talk with the

patient because he was either too sick or was incoherent, or had lost the power of speech following paralysis. Whenever practicable a relative was seen instead. Home visits were made to the remaining patients and to the relatives of children patients, except those living in institutions or outside the city limits, and relatives were interviewed when the patient was not at home. Telephone calls were made to secure information on the two institutional cases who had been discharged, one at the Home for the Aged and Infirm, the other at the Kings Daughters Home for Incurables. (Two inmates of the Home for Incurables were still in the wards). A letter contained in Appendix 3, incorporating some of the questions covered in the schedule was sent to the five patients living outside the city limits. One reply was received.

THE NUMBER OF CHRONICALLY ILL

There were 440 patients admitted to Louisville General Hospital from February 5 through February 14, 1946. Of the total, 76 or more than one-sixth were chronically ill. In the 1927 study 17% of ward and clinic patients over a three-week period were found to be chronically ill and 26.2% of ward patients studied on a single day. In 1937 the hospital reported a proportion of about one in every five patients, or 20%. Dr. Bachmeyer's study in 1945 revealed 15% of patients in need of institutional care because of chronic illness. As not all the chronically ill need institutional care, we can assume that the actual number of chronically ill was even higher than 15%. The one-day survey in 1927 found that 50% of all chronically ill need institutional care. Figured on a similar basis, the actual proportion of chronically ill in General Hospital during June 1945 was 30% of total patients. The present figure of more than one-

sixth or about 17% is lower than that of previous studies. There are fewer chronic patients in Louisville General Hospital than there were chronic patients occupying ward beds in the hospitals in New York City in 1928. In Louisville the figure is one out of every six patients; in New York City the proportion was one out of every five patients.

SEX AND RACE

Of the total patients excluding the psychiatric thirty or 54.5% were males, twenty-five or 45.5% were females. Of the total 1,405 chronic patients in the 1937 study 51% were male, 49% female. The number of White and Negro patients are almost the same, 28 and 27 respectively, with only one White patient in excess of Negro. New York City reported a small number of Negroes among its chronic cases, only five percent of all cases, but this was in proportion to its population. In 1937 Louisville reported 37% of its chronics as Negroes, or twice as many as the proportion of its Negro population. This figure is even higher in the present study with 50% of all cases being Negro. Approximately 15% of the entire Louisville population in July 1944 were Negroes. Poor housing, poor food and poor living conditions in general might easily account for the excessive rate of chronic illness among the Negro population. As shown in Table 3 it is significant that 11 of the eight heart and circulatory conditions occurred among the Negro patients and all of the gynecological cases including carcinoma of the cervix were among Negroes. Three out of four epidemic and communicable diseases were among negroes. This disease group includes poliomyelitis, tuberculosis, and venereal disease. The rate for diabetes, osteomyelitis, and diseases of the

TABLE 3

CHIEF DISEASE GROUPS OF CHRONICALLY ILL PATIENTS^a
 ADMITTED TO LOUISVILLE GENERAL HOSPITAL
 FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
 BY RACE

Disease Groups	Total	Race	
		White	Negro
Total	55	28	27
Epidemic and Communicable	4	1	3
Cancer and other Tumors	5	4	1
Diabetes	4	2	2
Osteomyelitis	4	2	2
Heart and Circulatory System	18	7	11
Nervous System and Sense Organs	6	4	2
Respiratory System	2	1	1
Digestive System	3	2	1
Genito-urinary System	3	0	3
Deformities, Malformations	4	4	0
Others	2	1	1

TABLE 4

OCCUPATION OF CHRONICALLY ILL PATIENTS^a
 ADMITTED TO LOUISVILLE GENERAL HOSPITAL
 FEBRUARY 5th THROUGH FEBRUARY 14th, 1946 BY RACE

Occupation	Total	Race	
		White	Negro
Total	55	28	27
Unknown	1	0	1
Own Housework	4	3	1
School or Institution	2	1	1
Craftsmen and Foremen	6	5	1
Operative and Kindred	9	7	2
Service Workers	6	2	4
Domestic	9	3	6
Unskilled labor	11	2	9
Farming	2	1	1
None	5	4	1

^aExcluding patients on psychiatric wards

respiratory system was the same for both Negro and White. White patients had more cancer, conditions of the nervous system and sense organs, diseases of the digestive system, and deformities and malformations than did the Negroes as shown in table 4. One-third of the Negroes were last employed as unskilled laborers, and the next largest number were domestic workers. Only two of the White patients were unskilled laborers as against nine Negroes doing this type of work. There were twice as many Negro domestics as there were White domestics.

The median age¹ of the 55 patients exclusive of the psychiatric patients was 43.5 years. The youngest patient was five years old, the oldest eighty-seven years of age. Both suffered a heart disease,

TABLE 5

AGE OF CHRONICALLY ILL PATIENTS^a ADMITTED TO
LOUISVILLE GENERAL HOSPITAL FEBRUARY 5th
THROUGH FEBRUARY 14th, 1946 BY SEX, RACE,
AND MARITAL STATUS

Age	Total	Sex		Race		Marital Status					
		M	F	W	N	Single	Married	Divorced	Separated	Widow	Widower
Total	55	30	25	28	27	14	21	3	7	5	5
0-9	2	1	1	2	0	2	0	0	0	0	0
10-19	1	0	1	0	1	1	0	0	0	0	0
20-29	10	5	5	5	5	7	1	0	2	0	0
30-39	6	3	3	2	4	1	4	0	1	0	0
40-49	9	3	6	3	6	0	5	2	2	0	0
50-59	6	2	4	2	4	0	2	1	1	1	1
60-69	12	10	2	8	4	2	6	0	1	2	1
70-79	8	6	2	5	3	1	3	0	0	1	3
80-89	1	0	1	1	0	0	0	0	0	1	0

^aExcluding patients on Psychiatric wards

¹The median average is used throughout this study except otherwise indicated.

the five-year-old rheumatic heart disease and the eighty-seven year-old hypertensive cardio vascular disease. As shown in Table 5, more than one-fifth of the chronic patients were between the ages of sixty to sixty-nine years, and about 18.5% were between the ages of twenty to twenty-nine. Seven percent of the patients were under twenty-one years of age and almost one-fourth were over the age of sixty-five. In other studies, including the National Health Survey, the New York City study of 1928, and the Louisville study of 1937, the proportion was higher for the lower age groups and lower for the higher age groups. The Louisville 1937 study showed 17% under the age of twenty-one and about 25% over age sixty-five. Dr. Bachmeyer's study of General Hospital patients on June 5, 1945 revealed 19 cases of chronic disease among children but 15 of these were poliomyelitis victims. Louisville had had an epidemic of poliomyelitis between May and December of the previous year and this would probably account for the excessive number of poliomyelitis cases in the wards at this time.

MARITAL STATUS

The greatest number of the chronically ill patients, about 38% exclusive of the psychiatric, were married. About one-fourth were single, and half of this number, 12.5% were separated as shown in Table 5. Almost 6% were divorced. The same number were widows as were widowers, nine percent. A knowledge of the marital status of the chronically ill is meaningful when examined in terms of home responsibility and effect upon health. It is safe to assume that the married patients had not only themselves to look after but also a marital partner and sometimes children. Of the 21 married patients,

16 were men and five were women as shown in Table 6. All of the males had some gainful occupation and at least five had worked outside the home up until the present hospital admission. Others

TABLE 6

MARITAL STATUS OF CHRONICALLY ILL PATIENTS^a
 ADMITTED TO LOUISVILLE GENERAL HOSPITAL
 FEBRUARY 5th THROUGH FEBRUARY 14th, 1946 BY SEX

Marital Status	Total	Sex	
		Male	Female
Total		30	25
Single	14	8	6
Married	21	16	5
Divorced	3	0	3
Separated	7	1	6
Widow	5	0	5
Widower	5	5	0

^aExcluding patients on psychiatric wards.

were living on public assistance. Several had applied for public assistance since leaving the hospital. The responsibility for support of the family rested with the man who was the head of the family except in a few instances where the wife was in remunerative employment. In four-fifths of the total of 55 cases, the income was derived from the patient himself, whether in the form of earnings, savings, insurance, public assistance, etc. and the proportion would be even higher for married males. These were comparatively few children to be taken care of. Only those patients with children in the home or

very much in the picture (i.e. contributing to the patients' support or helping in other ways) were recorded. It was found as shown in Table 7 that 34 of the 55 patients had no children at

TABLE 7

HOUSING OF CHRONICALLY ILL PATIENTS^a ADMITTED
TO LOUISVILLE GENERAL HOSPITAL FEBRUARY
5th THROUGH FEBRUARY 14th, 1946, BY
NUMBER IN HOUSEHOLD AND NUMBER OF CHILDREN^b

Housing	Total	Un- known	1	2	3	4	5	6 ^c or More	None	1	2	3	4 ^d or More
Total	55	8	6	11	12	6	5	7	34	11	3	4	3
Alone	5	0	5	0	0	0	0	0	5	0	0	0	0
With Relatives	42	4	0	11	10	5	5	7	21	11	3	4	3
With Friends	1	0	0	0	1	0	0	0	1	0	0	0	0
Boarding	3	0	1	0	1	1	0	0	3	0	0	0	0
Institution	4	4	0	0	0	0	0	0	4	0	0	0	0

^aExcluding patients on psychiatric wards.

^bLiving at home or very much in the picture

^cOne patient lived in a household of twelve people

^dOne patient had ten children

home or in the picture, 11 patients had one child, and one patient had as many as ten children. The age of the children was tabulated but there is nothing significant in the findings. A great many patients had grown children who were married and out of the home and who were, therefore, not tabulated. The picture, then, is of a great many more married men than women patients who have wives

but not children to support and to whom in all likelihood the support of the family comes before their own physical needs.

Of the five married women patients, two were employed outside the home just prior to the present hospitalization for the partial support of the family, and the balance were supported entirely through their husbands' earnings. It is significant as shown in Table 4 that the number of women (of all marital status) who did their own housework were few, only four out of 25 or about one-sixth. Of the remainder, some had not been employed for varying periods of time due to illness, others had been invalids for many years and had never been employed either inside or outside their homes, but the balance were working outside the home as domestics, in laundries, etc. At least seven females were employed outside the home up until the time of the present admission. The two married women who were employed outside the home were domestics. One of these women had ten children. It is not surprising that her medical diagnosis was hypertensive cardio vascular disease, for the triple job of caring for some else's household as well as her own, and seeing to her ten children would be a strain upon anyone's heart. Excessive family responsibility in itself is serious where there is chronic illness, but unfavorable economic circumstance added to it makes for an impossible situation. Unfavorable economic circumstances may precipitate the chronic condition, but it is more likely that poverty is brought on as a result of chronic incapacitation. When the man is the chronic disease sufferer the wife may be torn between the need to remain at home to care for him, and the equally urgent need

to seek employment outside the home to offset the costs of the illness. The situation is serious when chronic illness affects the chief wage earner but equally serious when the wife is stricken, in terms of disorganization of the household, neglect of children and various other products of illness.

However, difficult as it may be for two people to combat the hardships of chronic illness, it is even more of a problem for the individual who has no marital partner; the single, divorced, separated, the widow, and the widower. Other relatives, such as parents, may be helping but there is a limit to what they can do. The widows and widowers often live with a grown child who has a family of his own and it is not uncommon to find the parent making his home with several different children during the course of a year. Family relationships are strained as a result of the various personal services demanded, the additional financial burden, and the crowding, (as shown in Table 8, the average number of occupants per household was 2.8 while the average number of rooms was 2.4,) arising from having a chronic invalid in the home. The situation is equally unpleasant for the patient and for the relatives. The patient may not be getting the kind of care his illness calls for but on the other hand, the children may not be equipped to give better care.

Of the ten widowed patients, seven were living in the household of their children, one was an institutional case, and two maintained their own homes. One of the seven living with a child had lived alone prior to this hospitalization, but she planned to convalesce at her daughter's home upon discharge. Another patient had lived alternately with a sister and with his daughter's family, and planned

TABLE 8

HOUSING OF CHRONICALLY ILL PATIENTS^a ADMITTED
TO LOUISVILLE GENERAL HOSPITAL FEBRUARY
5th THROUGH FEBRUARY 14th, 1946, BY
NUMBER OF ROOMS, WHETHER ROOM TO SELF, SLEEPING ALONE

Housing	Total	Un- known	Number of Rooms						Room to Self			Sleeping Alone		
			1	2	3	4	5	6 or More	Un- known	Yes	No	Un- known	Yes	No
Total	55	12	7	7	12	9	3	5	13	26	16	9	33	13
Alone	5	0	3	1	0	0	1	0	0	5	0	0	5	0
With Relatives	42	8	1	6	12	9	1	5	9	17	16	9	20	13
With Friends	1	0	1	0	0	0	0	0	0	1	0	0	1	0
Boarding	3	0	2	0	0	0	1	0	0	3	0	0	3	0
Institution	4	4	0	0	0	0	0	0	4	0	0	0	4	0

^aExcluding patients on psychiatric wards

to return to the home of his sister because the daughter's home was so crowded; nine people living in three rooms. This very amiable old man, age 75, with cancer of the rectum stated that his daughter's home was crowded and noisy as she had six young children. Living with the infirm sister, ninety-one, did not seem to be a much better solution as the patient was often in the position of having to help his sister while his own needs went unattended. Another patient, a widow suffering two chronic conditions, cholecystitis and diabetes mellitus, lived with a daughter who had six children of her own. The oldest patient, a widow aged eighty-seven, lived with a daughter and three children but the daughter was employed outside the home and the patient, feeble and suffering from heart disease, cared for the three children.

The problem of getting the children to support their parents was

not an important factor with these patients although it often arises among relief agency clients. Four of the ten widowed patients were receiving old age grants and one had applied for Municipal Bureau of Social Service assistance upon leaving the hospital. These patients were, therefore, not entirely economically dependent upon their children but with grants being between \$10 and \$19 a month it can be seen that a good deal of supplementation by the children was necessary.

Almost all of the separated and divorced patients were women. All three of the divorced patients were women, and six of the seven who had separated from their spouse were women. This leads us to wonder whether the chronic condition had been instrumental in causing rupture of the family ties, and if there is any correlation between marital happiness and the health of the marital partners.

The financial problems of the separated and divorced patients especially because they were nearly all women, were more serious than they were among the married and single patients. Two of these patients were employed prior to the present hospitalization, one as a cook, the other as a switchboard operator. One woman patient was an institutional case, and another received public assistance. One patient was being supported by a friend, and the remainder by relatives. None of the divorcees had been granted support by the terms of the divorce, and the husband of one woman contributed occasionally to the support of his wife from whom he was separated.

There were eight single male patients as against six female patients. Most of these patients were unmarried by virtue of age, the median age being twenty-five. More than one-fourth were under the age of twenty-one. Three patients aged sixty-five and over had never married, and were not employed, all receiving public assistance. Of the younger age

group only three were employed outside the home just before hospitalization. One had been in service and was receiving a disability pension, two were children (one living with grandparents, the other with parents who received public assistance). Two were institutional cases. The remaining three were being supported by relatives. Chronic illness occurring during the early productive years is a particularly serious problem. Adjusting to a prolonged, incapacitating disease is difficult at any age but especially when the individual is in young adulthood and the illness will be of much longer duration than are the illnesses of the present aged population. Too, they are potentially of greater expense to the community. The young unmarried patients in this study were suffering from ankylosis of the wrists, knees, and ankles, a congenital deformity, chronic hepatitis, diabetes, poliomyelitis with atrophy of almost all of the muscles of the body, chronic pelvic inflammatory disease, chronic salpingitis, endometrial hyperplasia, chronic alcoholism¹, rheumatic heart disease, a congenital orthopedic condition, and osteomyelitis. One of these patients had been institutionalized for 17 years, another for three years. The possibility of courtship, marriage, and having a family of their own seems very remote for most of these patients. Rheumatoid arthritis, not represented in this study, is another disease which occurs most frequently among young adults with crippling effects. Deformity which can often be averted by early adequate treatment often becomes progressively worse if untreated, causing a good deal of fear, anxiety and unhappiness.

DIAGNOSES

By far the largest number of chronically ill, almost half, were

¹This patient was in the Medical Ward, with secondary diagnosis of bronchopneumonia.

found in the medical wards. The psychiatric were the next largest group, making up over one-fourth of the total 76 patients. There were 17 patients or less than one-fourth in the surgical wards and only two patients or about three percent in the baby wards as shown in Table 2.

Almost one-fourth of the mental cases were suffering from a form of psychoneurosis and the next largest group in numerical importance were the schizophrenics. Manic depressive psychosis, arteriosclerosis, (generalized and cerebral), and senile psychosis each claimed two persons, and the remaining conditions, involutional melancholia, Korsakoff's psychosis, epilepsy, alcoholism, frontal lobe removal, conduct disturbance, and mental deficiency were each experienced by one patient. The primary diagnosis, therefore, ran the whole gamut of mental disease, from psychoses to mental deficiency as shown in Table 9.

Psychopathic personality was not a primary diagnosis in any of these cases, but in two individuals accompanied another condition.

The diagnoses of the medical, surgical, and baby ward patients is divided into major disease groupings; epidemic and communicable, cancer and other tumors, arthritis and rheumatism, diabetes, chronic alcoholism, osteomyelitis, heart and circulatory system, nervous system and sense organs, respiratory system, digestive system, genito-urinary system, endocrine disorders, skin and cellular tissue, and deformities and malformations. In table 2 they are further broken down into the specific diseases that comprise the chief disease groups. Fifty of the total diagnoses were confirmed; five were provisional or

TABLE 9

DIAGNOSIS OF PATIENTS IN THE PSYCHIATRIC WARDS
 ADMITTED TO LOUISVILLE GENERAL HOSPITAL
 FEBRUARY 5th THROUGH FEBRUARY 14th, 1946,
 BY CONDITION, PROGNOSIS, AND DISPOSITION

Diagnosis	Total	Condition	
		Ambulatory	Partially Ambulatory
Total	21	18	3
Schizophrenia	3	3	0
Manic-depressive	2	1	1
Involutional Melancholia	1	1	0
Korsakoff's Psychosis	1	1	0
Epilepsy	1	1	0
Arteriosclerosis (generalized and cerebral)	2	0	2
Alcoholism	1	1	0
Frontal lobe removal	1	1	0
Psychoneurosis	5	5	0
Conduct disturbance	1	1	0
Senile Psychosis	2	2	0
Mental deficient	1	1	0

TABLE 9--Continued

Prognosis			Disposition		
Poor	Fair	Other	Returned Home	Discharged to Lakeland	Other
11	6	4	13	4	4
2	1	0	3	0	0
1	1	0	0	1	1
0	0	1	1	0	0
1	0	0	0	1	0
1	0	0	0	1	0
2	0	0	1	0	1
0	0	1	1	0	0
1	0	0	1	0	0
1	3	1	3	0	2
0	1	0	1	0	0
2	0	0	1	1	0
0	0	1	1	0	0

in the process of study. Fifty-five patients¹ had as their primary diagnosis one of the 26 diseases. Diseases of the heart and circulatory system were first in numerical importance, affecting 18 out of 55 patients, or one-third. Heart disease accounted for the largest number of hospital admissions, three times as many as any other disease as shown in table 10. The duration of illness among cardiac patients was longer than among other conditions with over one-third of cardiacs having had this condition between five and ten years. Two cardiac patients as shown in table 11 reported between ten and fifteen years duration of illness, one patient between fifteen and twenty years, and one between twenty and thirty

¹Unless otherwise stated, total patients referred to in the discussion are the 55 medical, surgical, and pediatric patients and do not include the psychiatric.

TABLE 10

CHIEF DISEASE GROUPS OF CHRONICALLY ILL
PATIENTS^a ADMITTED TO LOUISVILLE GENERAL
HOSPITAL FEBRUARY 5th THROUGH FEB-
RUARY 14th, 1946, BY NUMBER
OF PREVIOUS ADMISSIONS^b

Disease groups	Total	Total Admission Each disease	Number of Pre- vious Admissions			
			0	1	2	3 or Over ^c
Total	55	79	28	12	5	10
Epidemic and Communicable	4	0	4	0	0	0
Cancer and other tumors	5	13	1	2	0	2
Diabetes	4	11	2	0	0	2
Osteomyelitis	4	11	0	1	2	1
Heart and Circulatory System	18	30	9	5	0	4
Nervous System & Sense Organs	6	5	4	1	0	1
Respiratory System	2	1	1	1	0	0
Digestive System	3	3	1	1	1	0
Genito-urinary System	3	3	1	1	1	0
Deformities, malformations	4	2	3	0	1	0
Other	2	0	2	0	0	0

^aExcluding patients on psychiatric wards

^bFor same or allied diagnosis

^cThree patients each had eight previous admissions

years (1940-1945). Next in importance, but occurring only one-third as frequently as the heart and circulatory diseases were the diseases of the nervous system and sense organs, including epilepsy, tabes dorsalis, hemiplegia, loss of vision due to glaucoma, and an ill-defined neurological condition possibly caused by a spinal cord tumor.

Cancer was the third largest category accounting for nine percent of all illness. Epidemic and communicable diseases, including poliomyelitis, pulmonary and non-pulmonary tuberculosis, and venereal disease, diabetes, osteomyelitis, and deformities and malformations

TABLE 11

CHIEF DISEASE GROUPS OF CHRONICALLY ILL
 PATIENTS^a ADMITTED TO LOUISVILLE GENERAL
 HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
 BY DURATION OF ILLNESS

Disease Groups	Total	Duration of Illness		
		Under 1 month	1 Month under 1 year	1 year under 5 yrs.
Total	55	8	8	13
Epidemic and Communicable	4	0	0	3
Cancer and other tumors	5	0	1	2
Diabetes	4	2	0	2
Osteomyelitis	4	0	0	0
Heart and Circulatory System	18	2	3	2
Nervous System and Sense Organs	6	2	0	3
Respiratory System	2	0	0	0
Digestive System	3	0	2	1
Genito-urinary System	3	1	1	0
Deformities and Malformations	4	0	1	0
Other	2	1	0	0

^aExcluding patients on psychiatric wards

TABLE 11--Continued

Duration of Illness, Cont.		
5 Years under 10 Years	10 Years under 20 years	Over 20 Years ^b
16	6	4
0	0	1
1	0	1
0	0	0
2	2	0
7	3	1
1	0	0
1	0	1
0	0	0
1	0	0
2	1	0
1	0	0

^bOne patient had been ill for forty years.

were each responsible for seven percent of chronic illness. Six percent of chronic illness was due to digestive system and six percent to genito-urinary system disorders. Asthma and chronic bronchitis, respiratory diseases accounted for four percent, chronic alcoholism and skin and cellular tissue for one and one-half percent each. There were no cases of arthritis and rheumatism in this study but the National Health Survey showed rheumatism to be the most prevalent disease, with heart disease ranking first as a cause of death, and the nervous and mental diseases causing the greatest disability.

The data in this study does not contain as complete a set of criteria for determining which disease ranks first in order of mortality and disability as might be desired, but it clearly shows that heart disease is the most prevalent. Five of the 55 patients died while the study was in progress, three of cardiac conditions, one of cerebral accident, and one of cancer. In 1945 the leading causes of death in Louisville and Jefferson county in order of importance were: diseases of the heart, cancer, cerebral hemorrhage, tuberculosis, chronic nephritis, pneumonia, diseases of early infancy, arteriosclerosis, accident falls, and automobile accidents. It is important to note that of the first ten leading causes of death, six were chronic diseases.¹

The amount of disability caused by a particular disease can be judged by various factors; duration of illness, condition (whether the patient is ambulatory, needs crutches or a cane in walking or is so disabled as to be confined indoors, uses a wheelchair, or is bedridden), and whether the individual is prevented from carrying on normal pursuits. According to our definition, all chronic disease is of relatively long duration and interferes with one's occupation and normal physical and social life but there is a difference in the actual average duration of each illness and in the degree to which it interferes with normal living. Patients with heart disease had the longest duration of illness, over one-third having been ill for five to ten years. There were more bed ridden cardiacs than there were

¹Courier-Journal (Louisville), February 21, 1946

bedridden patients in any other disease grouping and this was also true of the partially ambulatory. Two thirds of all cardiacs were partially ambulatory and bedridden as shown in table 12. Among the nine individuals whose last gainful employment had been over five years before the present hospitalization, five were victims of heart and circulatory system diseases, two had diseases of the nervous system and sense organs, and two had cancer. It therefore appears that heart disease caused more disability among the patients of this study, as measured by duration of illness, condition of patient, and interference with occupation than did any other disease. Of the few known deaths, more were caused by cardiac conditions than by any other disease, and heart disease was almost one half as prevalent as all others combined. In terms of prevalence, mortality, and disability, heart disease ranks first. Cancer ranks second as a cause of death, second as a cause of disability, and third in prevalence. The nervous system diseases were second in prevalence, and shared second place with cancer as a cause of disability. The mortality rate for this group is not known but one can suspect that it is low.

Nearly one fourth of patients excluding the psychiatric had two or more chronic conditions simultaneously. The second condition might have been entirely unrelated to the first, but more usually it was a result or complication of the first condition, e.g. anemia resulting from the primary diagnosis, endometrial hyperplasia. The one causing the greatest disability or the more active, or the one that resulted in hospitalization was

TABLE 12

CHIEF DISEASE GROUPS OF CHRONICALLY
ILL PATIENTS^a ADMITTED TO LOUISVILLE
GENERAL HOSPITAL FEBRUARY 5th THROUGH
FEBRUARY 14th, 1946 BY CONDITION

Disease Groups	Total	Condition	
		Un- known	Ambula- tory
Total	55	1	28
Epidemic and communicable	4	0	2
Cancer and other Tumors	5	0	2
Diabetes	4	0	3
Osteomyelitis	4	0	2
Heart and Circulatory System	18	1	5
Nervous System and Sense Organs	6	0	4
Respiratory system	2	0	1
Digestive system	3	0	3
Genito-urinary system	3	0	3
Endocrine disorders	0	0	0
Deformities, malformations	4	0	1
Other	2	0	2

^aExcluding patients on psychiatric wards

TABLE 12--Continued

Condition, Cont.		
Partially Ambulatory	Wheel-chair	Bed-ridden
11	2	13
0	1	1
2	0	1
0	0	1
1	0	1
7	0	5
0	0	2
1	0	0
0	0	0
0	0	0
0	0	0
0	1	2
0	0	0

considered the primary diagnosis and the condition next in importance, the secondary diagnosis. Frequently the medical record contains what appears to be a secondary but is really intended to serve as additional explanation and clarification of the primary diagnosis, e.g. chronic hepatitis--lipoidosis of liver. Table 2 lists the secondary diagnosis but does not show their relationship to the primary diagnosis. Heart disease again heads the list of secondary diagnosis in terms of prevalence.

CONDITION

A total of 28 patients, or one half excluding the psychiatric

as shown in table 12. The next largest group of patients, one fourth, were bedridden. One fifth were partially ambulatory (using cane, crutches or confined indoors), and a small number, about four percent were wheelchair patients. As mentioned above, more of the cardiac patients were bedridden and partially ambulatory than any other disease group. The cardiacs were one third of total patients, and two thirds of all cardiacs were partially ambulatory and bedridden. There were ambulatory patients in every disease grouping, partially ambulatory among the cancer, osteomyelitis, heart disease, and diseases of the respiratory system patients, wheelchair among the epidemic and communicable disease and deformity and malformation patients, and bedridden among the epidemic and communicable, cancer, diabetes, osteomyelitis, cardiac, nervous system, sense organ, and deformities and malformations patients.

PROGNOSIS

The prognosis was learned for the 30 patients exclusive of the psychiatric who were in the wards at the time of the study from the doctor of each patient. The prognosis, or forecast of the course of the disease was poor in almost half of the cases and very poor in five or one sixth. The prognosis was considered fair in only three cases and good in four. Combined, good and fair or favorable made up less than one fourth of total prognoses. The outlook for more than two thirds of patients was poor or very poor; unfavorable. Doctors would not venture an opinion on the prognosis of four patients. In several instances of very poor prognoses the doctors added "ultimate death". It would appear, if these prognoses were correct, that there is little that can be accomplished in the way of rehabilitation for these patients. However, many factors play a part in deciding whether the

patient will get well; including the patient's emotional adjustment, whether he continues treatment upon leaving the hospital, the kind of home he returns to, and whether he is receiving the kind of care that his condition calls for. The condition of the hemiplegia patient is often the most pitiful of all in the hospital. Hemiplegia, usually the result of cerebral hemorrhage, embolism, or thrombosis, consists of paralysis of one side of the body and is usually accompanied by loss of speech and incontinence of bladder and bowel movement. The patient's mind is alert, but unable to give voice to his thoughts, he nevertheless attempts to do so by emitting unnatural guttural sounds. He is usually placed in a separate room off the ward reserved for the seriously ill and his bed is surrounded by boards to prevent him from falling out. A very poor prognosis may be pronounced and yet some of these patients leave the hospital with speech and almost full motion restored. One such patient, visited after his discharge from the hospital, was found seated in the warm sun on the porch of his home, happily relating the miracle that had been wrought. When discharged he had been regaining the use of his extremities and he continued to feel improvement every day. It would be a long time however, if ever, before the patient could hope to return to his former employment as a laborer for a railroad. This patient's improvement would be greatly enhanced by the services of a skilled nurse or physiotherapist to administer massage to aid in muscular coordination, strengthening of the weak muscles and stretching of the stronger spastic ones.¹ Table 13 shows prognosis by various disease groups.

¹Erickson, Don J. And Krusen, Frank J., "Physical Therapy Comes to the Aid of the Aged," The Modern Hospital. Vol.62. No.5. May, 1944, p. 90.

CHIEF DISEASE GROUPS OF CHRONICALLY
ILL PATIENTS^a ADMITTED TO LOUISVILLE
GENERAL HOSPITAL FEBRUARY 5th THROUGH
FEBRUARY 14th, 1946, BY PROGNOSIS OF PATIENTS
ON WARD AT TIME OF STUDY

Disease Groups	Total	Prognosis	
		Un- known	Very poor
Total	30	4	5
Epidemic and communicable	2	0	0
Cancer and other Tumors	4	0	1
Diabetes	2	0	0
Osteomyelitis	3	1	0
Heart and Circulatory System	7	0	3
Nervous System and Sense organs	5	1	1
Respiratory system	1	0	0
Digestive system	3	1	0
Genito-urinary system	0	0	0
Deformities, malformations	3	1	0

^aExcluding patients on psychiatric wards

TABLE 13--Continued

Prognosis, Cont.		
Poor	Fair	Good
14	3	4
2	0	0
3	0	0
0	0	2
1	0	1
4	0	0
3	0	0
1	0	0
0	2	0
0	0	0
0	1	1

In the New York City study of chronic patients in 1928 the outlook for recovery was favorable for only one tenth of the adults under sixty years of age, and for 25% of the children which is a much lower percentage of favorable prognoses than in the present study, but 70% of adult patients were ambulant, in comparison with 50% of chronic patients at General Hospital in Louisville.

DURATION OF ILLNESS

Duration of the illness was counted from the time that the patient first became aware of the difficulty or when the diagnosis was confirmed by a physician. In not all cases was this identical, as a condition may have existed but gone undiagnosed and untreated for a period of years. However, the patient's clinical history would usually show

that the present and past complaints were related to the same condition and the date when the patient first felt the symptoms of the disease (not the acute symptoms of the present attack) would be a reasonable measure of the onset of the illness. This method is not accurate in all situations, for example, among some of the gynecological diseases such as salpingitis, fibroid uterus, and cancer of the cervix, the patient is often unaware that the condition exists until a large mass is felt in the pelvis. One gynecology patient reported the onset of the condition (chronic pelvic inflammatory disease) to be two weeks prior to coming to the hospital, but the medical record showed an admission in 1939 for gonorrheal vaginitis. These complaints were definitely related, and the duration of the illness was therefore tabulated as seven years. Similarly, the other gynecology cases were reported to be of brief duration ranging from sever days for one, to under one year for another. Squamous cell carcinoma of the cervix had been diagnosed seven months previously but by this time it had metastasized. When the disease has progressed insidiously the date of onset is often difficult to determine.

The median average duration of illness was four and one half years. In New York City the average period of disability was 5.8 years. Almost one third of total patients excluding the psychiatric had been ill between five to ten years as a result of chronic illness. Table 11 shows the distribution with the next largest group of patients reporting the duration of their illness to be between one and two years. The duration of illness ranged from less than one week to 40 years, with one patient at each extreme, the former having diabetes and the latter cancer. The diagnosis of diabetes was not made until the

patient had attended bench clinic complaining of gynecological and eye disorders and had been given a thorough work up. The patient was unaware of the condition until this time, and the approximate onset of the disease was fixed at under one week, when in all probability it was much before this. Eleven of the 16 heart and circulatory system patients with known duration of illness were ill between five to 20 years, seven of these between five to ten years. The diseases which appeared to have the shortest duration, exclusive of diabetes and gynecological, were those of skin and cellular tissue, digestive system, and the epidemic and communicable. As the median average does not take the extreme figure into account, cancer also had a short duration of illness, averaging only eight months. Diseases of long duration were chronic alcoholism, osteomyelitis, deformities and malformations, and cardiac conditions.

HOSPITAL ADMISSIONS

The total days of hospital care and the total number of hospital admissions at Louisville General Hospital, per patient, not including the psychiatric, were calculated for all admissions for the same or allied diagnosis, excluding the present. This is a revealing item because it gives some indication of the extent to which General Hospital is being used as a center for chronic care for the city's indigent population. Only eight patients of the entire 55 had ever been admitted to any other hospital in the city, and one to an institution for chronic care (Central State Hospital for mental disease). Total admissions to all other hospitals for the same or allied diagnosis were eleven, as shown in table 14, in comparison with a total of 79 admissions (not including the present) to Louisville General Hospital.

TABLE 14

PREVIOUS ADMISSIONS TO OTHER HOSPITALS,
NURSING HOMES, AND INSTITUTIONS OF CHRONICALLY
ILL PATIENTS^a ADMITTED TO LOUISVILLE GENERAL
HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946

Previous Admissions	Number
Hospitals	
None	47
Red Cross	3
St. Joseph	2
St. Anthony	1
St. Mary and Elizabeth	1
Army	1
Kosair	1
Deaconess	1
Childrens Free	1
Nursing Homes	
None	55
Institutions	
None	53
Ormsby Village	1
Lakeland	1

^aExcluding patients on psychiatric wards

However, as 28 patients had not had any previous admission to General Hospital, the median average of total previous admission per patient is only .8. The median average admission for only those patients who had had previous admissions is 2.3, and including the present admission, 3.3. Three patients who had been discharged were readmitted during the course of the study. Cardiac patients accounted for 30 of the 79 previous admissions, cancer patients for about half of this number, and respiratory for only one previous admission. There were no previous admissions for diseases of skin

and cellular tissue. Previous admissions for the secondary and other diagnoses were not recorded but add up to a sizeable number. Table 10 shows the previous admissions for each disease group.

The total number of hospital days per patient, previous admissions, ranged from none to 204 days, as shown in table 15, with the median average days per patient, 5.8 days, not including the psychiatric.

TABLE 15

NUMBER OF PREVIOUS ADMISSIONS^a
OF CHRONICALLY ILL PATIENTS^b ADMITTED TO LOUISVILLE
GENERAL HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
BY TOTAL HOSPITAL DAYS PER PATIENT^c

Number of Previous Admissions		Total Hospital Days Per Patient			
	Total	Under 10	10 Under 30	30 Under 90	Over 90 ^d
Total	55	35	9	8	3
None	28	28	0	0	0
1	12	7	5	0	0
2	5	0	2	3	0
3 or over	10	0	2	5	3

^aFor some or allied diagnosis

^bExcluding patients on psychiatric wards

^cExcluding present hospitalization

^dTwo patients each had over 200 hospital days

It was not possible to include the average days of the present hospitalization as more than one half the patients were still in the hospital at the time of the study. An estimate of the total days per patient including the present hospitalization can be arrived

at by taking the known median for previous admissions, 5.8, and adding to it the average number of days stay per patient including both acute and chronically ill, 12 days. This gives a total of about 18 days per patient, a figure which would be even higher if the average days of previous admissions had been calculated for only those patients who had had previous admissions and had not included the 28 patients with no previous admissions. (on this basis the median patient days of previous admissions would be 20.2 days plus 12 days).

COST OF CARE

To learn the cost of 18 days care per patient, total hospital patient days for the year 1945 may be divided into total hospital expenditures for ward patients for the same year, and the per diem cost thus arrived at, multiplied by 18. The hospital in 1945 spent a total of \$894,227.11 in actual money received from city and county funds. No estimate was made of the contributions from University of Louisville Medical School in services and salaries paid the medical staff. The Medical School paid part of the salaries of the interns and residents, and the entire salary of those of its faculty who are on the staff in the General Hospital. Of the total money received from the city and county, it is estimated that about one fourth is used by the out-patient department, which leaves a balance of three fourths or \$670,670.34 for ward patients. There were a total of 101,720 clinic visits and 26,047 emergency room visits or 127,767 total out-patient department visits in 1945, and 143,256 hospital days for ward patients. 143,256 divided into \$670,670.34 gives the per diem cost, \$4.68. The average cost to the city of caring for each chronically ill patient in this study, not including the

psychiatric (per diem cost multiplied by 18 days per patient) was \$84.24. This a minimum cost, however, as it does not take into account the Medical school contribution, interest on investment, depreciation of property, buildings, and equipment. The actual cost is therefore much higher. The total 55 patients cost the city an average of \$4633.20. The cost for one patient alone, a diabetic who in five admissions spent 204 days in the hospital, was \$954.72 exclusive of clinic cost. By actual number of hospital days, 1,152, the total cost was \$5391.36. In the following chapter we shall consider what the estimated cost would be if these patients were accommodated in a chronic disease hospital.

PATIENTS CONTRIBUTION TOWARDS THE COST OF CARE

The above figures are based on the assumption that none of these patients were paying anything towards the cost of their care. The greatest number, 51, excluding the psychiatric, were receiving free care, one was paying part, and two were paying almost full cost. The pay status of one patient was unknown. The Kentucky Crippled Childrens Commission paid for the two full pay patients. The one part pay patient had an income of \$148 from his wife's earnings. None of the patients had hospitalization insurance.

All hospital patients, out-patient, and in-patient, are given a hospital classification by the admissions department, based on their ability to pay. The classifications are "A", \$4 a day plus costs, "B", \$4 a day with no extra charge for X-rays, test, operating room and other expenses, and "C", free. A similar scale exists for clinic patients and some patients are given one classification for clinic, another for ward. In the main, a patient with an income of \$1500 and no de-

pendents is given an "A" classification. Insurance cases, those under the Emergency Maternal and Infant care program, and those aided by agencies such as American Red Cross and Kentucky Crippled Childrens Commission are classified as "A" patients.

TABLE 16

MONTHLY INCOME OF CHRONICALLY ILL PATIENTS
 ADMITTED TO LOUISVILLE GENERAL HOSPITAL
 FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
 BY WARD AND HOSPITAL CLASSIFICATION, A,B,or C^a

Monthly Income		Ward				
	Total	Medical	Surgical	Baby	Psychiatric	
	Total	76	36	17	2	21
Unknown		33	15	7	1	10
0- 19.99		12	8	4	0	0
20- 39.99		3	2	1	0	0
40- 59.99		4	1	2	0	1
60- 79.99		5	3	1	0	1
80- 99.99		6	3	2	0	1
100-119.99		4	1	0	1	2
120-139.99		4	2	0	0	2
140-159.99		2	1	0	0	1
160 and over		3	0	0	0	3

^aA = full pay patient; \$4 per day plus costs

B = part pay patient; \$4 per day

C = free patient

TABLE 16--Continued

Hospital Classification			
Unknown	A	B	C
4	9	2	61
4	2	0	27
0	1	0	11
0	0	0	3
0	1	0	3
0	1	0	4
0	0	0	6
0	0	0	4
0	1	1	2
0	1	1	0
0	2	0	1

Table 16 shows the hospital classification of all 76 patients, including the psychiatric, by amount of income and by ward to show the classification of patients in the psychiatric wards. There is no correlation between the ward and hospital classification except in the case of the psychiatric patients. It is interesting that seven of the psychiatric patients, or one third, were "A" or full pay patients, while only two of the 55 patients had "A" classifications. One psychiatric patient had a "B" classification, ten were "C", and

classifications of three patients were unknown.

TABLE 17

SOURCE OF INCOME OF CHRONICALLY ILL PATIENTS
 ADMITTED TO LOUISVILLE GENERAL HOSPITAL
 FEBRUARY 5 th THROUGH FEBRUARY 14th, 1946
 BY AMOUNT (MONTHLY)

Source of Income	Total	Amount of Income		
		Unknown	Under 10	10 under 29.99
Total	76	33	4	9
Earnings	28	9	0	0
Savings	3	2	0	0
Insurance	2	2	0	0
Army-Navy ^a	4	0	0	0
Social agency ^b	14	5	0	9
Pension	2	0	0	0
Relative	12	9	0	0
Institution	4	0	4	0
Other, unknown	7	6	0	0

^aPay, allotment, pension

TABLE 17--Continued

Amt. of Inc., Cont.		
30 under 59.99	60 under 119.99	120 and over
6	15	9
1	10	8
1	0	0
0	0	0
3	1	0
0	0	0
1	1	0
0	2	1
0	0	0
0	1	0

^bOld age assistance, Municipal Bureau of Social Service, County Welfare Department. Other agencies were active, but not as a source of income.

INCOME

The income of the psychiatric patients was considerably higher than the average income for all patients. The average income of the psychiatric patients (of eleven known incomes) was \$125. For all patients it was \$64.50. The earnings of one psychiatric patient, a chemist, were reported to be \$500 a month. The distribution is shown in table 17. There appears to be one point in the array at which a good many of the cases are concentrated; the income from

\$60 to \$120. All of the \$10 to \$30 incomes were derived from a social agency, seven from Old Age Assistance and two from Municipal Bureau of Social Service. Half of the eight Old Age Assistance recipients had an additional source of income, but the other half lived entirely on the grant. There were five Municipal Bureau of Social Service clients in all and the amount received were unknown in three cases. Four of the five Municipal Bureau of Social Service clients lived entirely on the agency's assistance, and one was being helped by a relative in addition. The County Welfare department was active with one patient, amount of assistance unknown.

The average income of \$64.50 considers only the primary source of the patients income, but 19 patients (including the psychiatric) had an additional source to supplement the primary source. No attempt was made to tabulate these, since the amounts were so varied in each case. Earnings, when the patient or a member of his family was employed, were always considered as a primary source, and in five cases earnings were supplemented by insurance, a pension, or relatives. All of the incomes exceeding \$129 were derived from earnings. Savings constituted the major portion of the income in only three cases, but insurance supplemented savings in only one case, and the other two patients were living entirely upon their savings. Insurance as a major part of the income occurred in only two cases, as the amount of the claim was usually too small to meet all expenses and the number of benefit weeks was limited. Insurance did, however, form a supplementary part of the income in six cases. The amount of insurance may in some cases exceed the public assistance grant, but it is given for a limited period while the latter may go on indefi-

nitely. Pay, allotments, and pensions, are included in the category "army-navy" and were a major portion of income in four cases and an addition to other income in one case. There were no patients receiving work or unemployment compensation. Social agencies supplied the major portion of the income in 14 cases, or half as many as lived on earnings. Distribution by agencies is stated above. Pensions were a secondary source of income for three persons. Relatives helped almost as many patients as did social agencies. They were a primary source of income in 12 cases and the secondary source of income for six patients. Four patients lived in institutions, three at the Kings Daughters Home for Incurables, and one at the Home for the Aged and Infirm. There were seven patients receiving incomes from sources not mentioned above. Two patients were receiving supplemental income from friends and from rent. This distribution is shown in table 18. Table 17 shows the primary sources of income by amounts of income. Table 18 also shows the primary sources, whether they form the total income or are supplemented, what the supplementary sources of income are, and which primary source they are an addition to.

OCCUPATION

The last known occupation of the 55 patients(excluding the psychiatric), as shown in table 19, was compiled by chief occupation groups and included own housework, school or institution, craftsmen and foremen, operatives and kindred, service workers, domestic workers, unskilled laborers and farmers. There were no patients employed in the professional or semi-professional, proprietors, manufacturers, and officials, or clerical and sales groups. The occupation of one patient was unknown, and five patients had no occupation. Unskilled laborers formed one fifth of the total occupations, with operatives

TABLE 18

PRIMARY SOURCE OF INCOME OF CHRONICALLY ILL
 PATIENTS ADMITTED TO LOUISVILLE GENERAL
 HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946,
 BY ADDITIONAL SOURCE OF INCOME

Primary Source of Income	Total	Additional Source of Income		
		None	Earnings	Insurance
Total	76	57	1	6
Earnings	28	23	0	1
Savings	3	2	0	1
Insurance	2	1	0	0
Army-Navy ^a	4	3	0	0
Social agency ^b	14	9	0	1
Pension	2	0	0	0
Relative	12	9	1	2
Institution	4	4	0	0
Other, Unknown	7	6	0	1

^aPay, allotment, pension

TABLE 18--Continued

Add. Source of Inc., Cont.			
Army-Navy	Pension	Relative	Other, Unknown
1	3	6	2
0	1	3	0
0	0	0	0
0	1	0	0
0	0	0	1
0	0	3	1
1	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0

^bOld Age assistance, Municipal Bureau of Social Service, County Welfare Department

^cFriends, rent collected

TABLE 19

LAST KNOWN OCCUPATION OF CHRONICALLY ILL
PATIENTS^a ADMITTED TO LOUISVILLE GENERAL HOSPITAL
FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
BY TIME OF LAST EMPLOYMENT

Occupation		Last Employment			
		Unknown	Under one month	1 month under 1 year	1 year under 5 years
Total					
Total	55	9	12	10	10
Unknown	1	1	0	0	0
Own housework	4	2	1	0	1
School or Institution	2	1	1	0	0
Craftsmen and foremen	6	0	0	1	3
Operatives and kindred	9	2	3	2	1
Service workers	6	0	2	2	1
Domestic	9	0	2	3	2
Unskilled labor	11	2	3	1	2
Farming	2	1	0	1	0
None	5	0	0	0	0

^aExcluding patients on psychiatric wards.

TABLE 19--Continued

Last Employment, Cont. 5 years under 10 years	Over 10 years	Never
5	4	5
0	0	0
0	0	0
0	0	0
2	0	0
1	0	0
0	1	0
1	1	0
1	2	0
0	0	0
0	0	5

and kindred and domestic workers following close behind. There were more than twice as many domestic workers as there were women doing housework in only their own homes. There were the same number of craftsmen and foremen as there were service workers. The smallest groups were composed of farmers and those employed in schools and institutions (students and teachers).

Over one fifth were at their jobs almost until they were admitted to the hospital (one month or less). One ninth were last employed one and two years prior to this admission, and one sixth had not worked for five years or longer before the present admission. In most cases this was directly attributable to the illness.

In stating their discharge plans, of 30 patients in the wards at the time of study, nine patients or almost one third said that they wanted to return to work. The last time of employment for one of these patients was unknown, five had been employed just before admission, but the remaining three had not been employed for a long time before. The prognosis for two of these three patients was poor, and for the third, good. The long time away from the job, coupled with the poor prognosis, makes it appear very doubtful that two patients in this group would return to work. In the group of five patients employed before admission, two had unfavorable prognoses. Therefore, out of nine patients who planned to return to work upon discharge, about half would probably not do so. This estimate of 50% should be regarded as being very liberal if the patients who had gone home and had a chance to work out their plans were any indication of what the patients still in the wards would be doing after their discharge..for only three of the total 25 discharged patients were known to have returned to employment, or

about one eighth.

HOUSING

About four fifths of the patients, not including the psychiatric, were living with relatives. Patients having no homes formed a considerably smaller proportion than in the 1937 one day survey of General Hospital patients. In that survey slightly over 50% of chronic and incurable patients had no homes. A home, it will be recalled, was defined as "that residence either maintained by an individual, wife, or husband, or own child". Using the same criterion, only one seventh of patients in the present study were homeless. Of more concern is the patient living alone, for although he has a home of his own in some cases he may be receiving much poorer care than the institutional patient or the patient living with friends or boarding who has someone to look after him. As shown in table 8., a small number of patients were living alone, five of the total number.

The median number of people per household was 2.8 and the median number of rooms, 2.4. Since in tabulating the number of rooms, the kitchen is usually included as a room, this meant that 2.8 people were sleeping in one room. There were only .66 children living in each household. As shown in table 8, about half of the patients had a room to themselves and two thirds sleep alone.

Of the total 76 patients including the psychiatric, 14 or one fifth were known to own or be buying their home, 38 or exactly half were renting, four lived in institutions, and the housing of one fourth was unknown. The median rent paid per month was \$11.45 or over one sixth of the median income, \$64.50. Table 20 shows rent

TABLE 20

MONTHLY INCOME OF CHRONICALLY ILL PATIENTS ADMITTED TO
LOUISVILLE GENERAL HOSPITAL FEBRUARY 5th THROUGH
FEBRUARY 14th, 1946, BY MONTHLY RENT,
OWN HOME^a, OR LIVING IN INSTITUTION

Amount of Income		Unknown	Own	Institution
Total				
Total	76	20	14	4
Unknown	33	18	2	0
Under 19.99	12	0	1	4
20- 39.99	3	0	0	0
40 - 59.99	4	1	2	0
60- 79.99	5	0	1	0
80- 99.99	6	0	2	0
100- 119.99	4	1	1	0
120- 139.99	4	0	1	0
140- 159.99	2	0	1	0
160-and over	3	0	3	0

^aOwn or buying home

TABLE 20--Continued

Unknown	Free ^b	Monthly Rent				
		Under 5	5 under 9.99	10 under 14.99	15 under 19.99	20 and over
4	5	1	7	11	6	4
1	2	0	0	4	4	2
2	1	0	1	3	0	0
0	1	0	1	0	1	0
1	0	0	0	0	0	0
0	1	0	2	1	0	0
0	0	1	1	2	0	0
0	0	0	1	0	1	0
0	0	0	1	1	0	1
0	0	0	0	0	0	1
0	0	0	0	0	0	0

^b 2 living with relatives free

1 living on farm free

1 living in company house

1 caring for property

distribution by amount of income. Rentals ranged from \$4 to \$39.

Five patients were living rent free, two with relatives, one on a farm, one in a company house, and one caring for property in exchange for free rent. Some of the low income patients were paying rentals very much out of proportion to their income. Three patients with incomes of between \$10 to \$20 were spending between \$10 to \$15 for rent, or almost their entire incomes, while one patient

earning \$80 paid \$4 for rent.

Some indication of the physical condition of the home may be had from the amount of rent paid. Two and .4 rooms renting for \$11.45, the average, would in all probability contain few if any modern conveniences and would be a poor environment for the care of a chronically ill person. Housing has a great deal to do with maintenance of morale, health, and the hastening or retardation of an individual's recovery.

Mary C. Jarrett used three criteria in judging whether the home was suitable for the patient's care: the physical condition of the home, family attitudes (towards the patient and he towards the family), and the make up of the family (ability of the members to attend to the needs of the sick person). By applying these standards to the known data for each patient, not including the psychiatric, and making careful evaluation of each, eleven homes or one fifth were found to be unsuitable; 44 or four fifths, suitable. A home was not judged unsuitable unless at least two of the three factors were unfavorable, except in a few outstanding instances, e.g. in one case the family attitudes and the make up of the family were satisfactory but there were eight people living in one room, and the patient neither had a room to himself nor slept alone. Physical condition of the home was judged by the number in the household, the number of rooms, rent, neighborhood, whether patient had a room to himself and slept alone. Family attitudes is self explanatory, but this factor was more frequently unknown than any of the others. Make up of the family was judged to be favorable if there was someone to help out at home.

The percentage of unsuitable homes, one fifth, compares favorably with that of the New York City findings in which one fourth of the patients had homes unsuited to their care. It is felt that the possibility of satisfactory home care decreases in each succeeding age group.

MEDICAL CARE IN THE HOSPITAL

All of the patients in the hospital were receiving ~~A~~ care; in other wards intensive medical study and treatment. There is no way to estimate with any degree of accuracy the extent or intensity of treatment, but certain objective phases of, or tools used in treatment are of interest and will be mentioned here.

TABLE 21

TREATMENT RECEIVED BY CHRONICALLY ILL
PATIENTS^a ADMITTED TO LOUISVILLE GENERAL
HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946

Treatment	Patients receiving
Special x-rays ^b	30
Tests	33
Medicine	44
Diet	30
Soft	9
High caloric	2
Special	4
High protein	3
Diabetic	5
Cardiac	5
Liquid	1
Sippy	1
Physical therapy	0
Occupational therapy	0

^aExcluding patients on psychiatric wards

^bExclusive of routine chest x-ray

Table 21 shows the number of patients for whom special x-rays were taken (exclusive of routine chest plate for all patients in the hospital), for whom various kinds of tests were made, who were getting medicaments and special diets, physical therapy and occupational therapy. Thirty patients out of 55 were x-rayed, and 33 were given special tests including fluoroscope, electrocardiogram, electro-encephalogram, sedimentation tests, glucose tolerance, renal function, sternal puncture, and bone substance tests. A wide variety of medicaments were administered to 44 patients, including digitalis for cardiac conditions, insulin for diabetes, radium for cancer, penicillin for a variety of conditions, and adrenalin for asthma. Treatment was as varied as transfusions for anemia, therapeutic malaria for tabes dorsalis, to Elliott treatment for chronic salpingitis. Thirty patients were on special diets for part or all of their hospitalization, and these included soft, high caloric, high protein, diabetic, cardiac, and other kinds of diets.

A large number of operations were performed, among them: setting of a fracture, hysterectomy, cystoscopy, pyelography, cervicectomy, sequestrectomy, incision and drainage (for osteomyelitis), perineal resection, bronchoscopy, dilation and curettage, removal of carbuncle, air encephalogram, excision of tumor, biopsy, and amputation of toe. This brief picture of the variety of work done with a chronic patient should dispel any previously held misconceptions that chronic disease is a non-changing, non-improving condition, upon which any active treatment is wasted.

There was no record of either physical therapy or occupational therapy being used for any of the patients. There may have been

failure to record such treatment in the medical chart, if it was given, but on the other hand, it appears that the possibilities for using physical and occupational therapy with many different kinds of ailments, are being overlooked.

CLINICS

General Hospital also cared for a good many of the city's chronically ill in the various clinics. These patients are also receiving A or intensive medical care. Twenty-two of the 55 patients, not including the psychiatric, had attended one clinic, six patients had attended two clinics each, six had attended three clinics each, and two patients were in attendance at four and five clinics. Table 22 shows this distribution.

TABLE 22

LOUISVILLE GENERAL HOSPITAL CLINICS
 ATTENDED, REGULAR OR OCCASIONALLY,^a
 CHRONICALLY ILL PATIENTS^b ADMITTED TO LOUISVILLE
 GENERAL HOSPITAL, FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
 (PRIOR TO HOSPITALIZATION)

Clinics Attended	Patients	Regular	Occasional
Total	55	15	23
Unknown	2	0	0
0	15	0	0
1	22	8	14
2	6	2	4
3	6	3	3
4	2	2	0
5	2	0	2

^aLast clinic or treatment clinic, attended regularly or occasionally

^bExcluding patients on psychiatric wards.

Fifteen of total patients had never attended any clinic, and had been admitted to the ward from the emergency room. Six patients were admitted from bench clinic, which is the diagnostic clinic. All new patients attend bench clinic from where they are assigned to the various treatment or special clinics. In five cases, bench clinic was the only clinic the patient had ever attended. Fifteen patients had been in regular attendance at the clinic or clinics, and 23 patients had attended occasionally. A patient was said to be attending occasionally if the frequency of attendance was unknown, if the last attendance took place a long time before the present hospitalization, or if the patient had only attended bench clinic one time before being admitted to the ward.

It is interesting to note the correlation between ward admission and future clinic attendance. Among the 25 patients discharged to their homes, one of the seven patients who had never attended clinic before started to attend regularly after discharge. Among the 17 patients who had attended clinic before, all but three returned, and these three had attended occasionally so there is the possibility that they would return in the future. Of the patients who returned, nine are in regular attendance, and five occasional. Three patients who attended only occasionally before, began to attend clinic regularly after discharge from the hospital. All of the patients who attended regularly before continued to do so with the exception of one patient who died.

In evaluating what happened to ward patients with regard to their future clinic attendance, it appears that a hospital admission had not discouraged patients from continuing their medical treatment

in the clinics. For the three patients who discontinued clinic visits, there were three patients who began to attend regularly. The hospital experience had had the effect of awakening one individual to the possibility of clinic treatment, but in the main, the clinics were attended by the same patients who had visited them before.

MEDICAL CARE RECOMMENDED

The doctor of each chronically ill patient in the hospital at the time of the study, not including the psychiatric, was asked to state his opinion about the type of future care that the patient would be needing, and where this care should be secured. He was also asked whether he would recommend a chronic hospital for the patient if there was one in Louisville. Exactly one half of the 30 patients were thought to need class A care or intensive medical care, only one patient needed class B care or skilled nursing care, and 14 patients were in need of custodial or attendant care. Six of the 15 class A patients should continue at General or another hospital offering facilities for intensive medical care, and the remaining nine could return to their homes and attend Louisville General Hospital clinics. Care in a custodial institution was not recommended for any of the class A patients. It was thought that the one class B patient should have intensive nursing care in his own home. Eleven of the class C patients should be in a custodial institution, and the other three could receive clinic care while residing in their own homes.

Chronic hospital care was recommended in 17 cases or over half. It was not recommended for nine or less than one third of patients, and the doctors would not state an opinion in four cases. The fact that chronic hospital care was recommended in over 50% or

cases would appear to be a good argument in favor of a hospital in Louisville specializing in the treatment of chronic diseases.

Seven class A patients, one class B patient, and nine class C patients were said to need chronic hospital care, as shown in table 23. Such a hospital should therefore be planned in proportion to the types of care needed, having half of its beds reserved for class C or custodial patients, almost half for class A, and a small number of beds for class B. Recommendations for psychiatric patients by type of care needed and place where this care should be secured are shown in table 24.

PATIENTS PLANS FOR MEDICAL CARE

The patients in the wards were asked what their probable discharge plans were, excluding the psychiatric, and what plans they would prefer if conditions were such that they could have a choice of plans. In 25 out of 30 cases, probable plans and desired plans were the same. In nine cases the patients plans included return to work soon after discharge, but as pointed out in the preceeding discussion on employment, not more than, and in all probability less than 50% of these patients would be returning to work. This estimate is based on the patients last period of employment, prognosis for recovery, and the very low proportion of patients already discharged who were known to have returned to work. It appears therefore that at least half of the patients who included employment under "probable plans" were really stating their "desired plans" and were not giving enough thought to the reality factors in the situation. Four patients stated that they preferred other plans to the ones they had been able to work out. All four desired in-

TABLE 23

TYPE OF CARE RECOMMENDED FOR CHRONICALLY
ILL PATIENTS^a ADMITTED TO LOUISVILLE GENERAL
HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
BY WHETHER CHRONIC HOSPITAL IS INDICATED FOR THEIR CARE
(PATIENTS ON WARD AT TIME OF STUDY)

Type of Care ^b Total		Chronic Hospital		
		Unknown	Yes	No
Total	30	4	17	9
Class A	15	2	7	6
Class B	1	0	1	0
Class C	14	2	9	3

^aExcluding patients on psychiatric wards

^bClass A care is intensive medical study and treatment which may be secured in a hospital, or at home by a private physician, city physician, nursing service, or in a clinic.

Class B care is skilled nursing care which may be secured in a hospital or at home by a nursing service.

Class C care is custodial or attendant care which may be secured in a custodial institution or at home if home conditions are suitable.

TABLE 24

TYPE OF CARE RECOMMENDED FOR PATIENTS ON THE
PSYCHIATRIC WARD. ADMITTED FEBRUARY 5th
THROUGH FEBRUARY 14th, 1946, TO
LOUISVILLE GENERAL HOSPITAL BY
PLACE WHERE THIS CARE SHOULD BE SECURED

Type of Care ^a		Continue at LGH for in- tensive medi- cal care	Home		Clinic	Custod- ial Insti- tution
			Little Nursing	Inten- sive Nursing		
Total	21	2	0	0	6	13
Class A	8	2	0	0	6	0
Class B	2	0	0	0	0	2
Class C	11	0	0	0	0	11

^aClass A care is intensive medical study and treatment which may be secured in althospital, or at home by a private physician, city physician, nursing service, or in a clinic.

Class B care is skilled nursing care which may be secured in a hospital or at home by a nursing service.

Class C care is custodial or attendant care which may be secured in a custodial institution or at home if home conditions are suitable.

TABLE 25

CHRONICALLY ILL PATIENTS^a ADMITTED TO LOUISVILLE
GENERAL HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946
ON WARD AT TIME OF STUDY (PROBABLE DISCHARGE PLANS,
DESIRED DISCHARGE PLANS, WHETHER SOMEONE
IS AT HOME TO HELP OUT)

Probable discharge plans	Total	30
Unknown		1
Convalesce		3
Return home-not work ^b		15
Return home, work		9
Other ^c		2
What patient would desire		
Unknown		1
Same as probable discharge plan		25
Different from pro- bable discharge plan		4
Someone to help out at home		
Yes		26
No		4

^aExcluding patients on psychiatric wards

^bIncludes two institutional cases

^cVeterans hospital, Institution in Paducah

stitutional care in preference to returning to their own homes; a nursing home for one, Home for the Aged and Infirm for another, and two, church homes (one specified a catholic home). Two of the ward patients who came from institutions would return there, and two others planned to enter institutions; one a Veteran's Hospital, the other an institution in Paducah (This patient had poliomyelitis). These are included under "probable plans" in table 25; the institutional cases under "return home- not work", and the two planning to enter institutions under "other".

Three patients stated that they would convalesce for a while, one in his own home, two at the home of relatives. It is significant that the patient who planned the fullest convalescence, two or three months, was the one whose income was considerably above the median; \$148.

Almost all of the patients, 26 out of 30 stated that they had someone at home to help out.

Twentyfive discharged patients, not including the psychiatric, were visited in their homes in an effort to learn what kind of adjustment they were making and whether they were still under supervision in the treatment of their chronic condition. Only one eighth of patients had returned to work. At least 15 patients were attending clinic, among them one who had never attended clinic before. Three patients who had attended clinic prior to hospitalization did not return. Only two patients were seeing a private physician. Only one patient was utilizing the services of a public health nurse from Visiting Nurse Association. Two other patients received nursing care at the institutions of which they were inmates. One institutional case at Home for the Aged and Infirm for twelve years was transferred to Waverly Hills Sanatorium, and plans were being made to transfer the Kings Daughters patient, an inmate of this institution for sixteen years, bedridden and suffering from anemia for twenty five years and spinal degeneration for seventeen years, to Central State Hospital. (She was noisy and offensive to the other inmates and had delusions that she was Mrs. Roosevelt.)

Nineteen of the 25 patients had someone at home to help out, and eleven were taking medicaments. Institutional care had been con-

sidered in only one case among the patients at home, but application had not been made. (As stated above, two patients still in the wards planned to enter institutions). The above data is shown in table 26.

TABLE 26

PLANS TO CONTINUE MEDICAL CARE OF CHRONICALLY ILL
PATIENTS^a ADMITTED TO LOUISVILLE GENERAL
HOSPITAL FEBRUARY 5th THROUGH FEBRUARY 14th, 1946,
DISCHARGED FROM HOSPITAL AT TIME OF STUDY

Total 25	
Attending clinic	15
Frequency of clinic attendance	
Once a week	1
Twice a week	1
Once in two weeks	4
Once in three weeks	1
Once a month	2
Visiting nurse Association	1
Other nursing	2 ^b
Someone to help out at home	19
Services of private physician	2
Taking medicine	11
Applied at nursing home	0
Considered nursing home	0
Applied at Home for Aged and Infirm	0
Considered Home for Aged and Infirm	1 ^c
Applied at benevolent institution	0
Considered benevolent institution	0
Is inmate of institution	2 ^d

^aExcluding patients on psychiatric wards

^bNursing at Home For Aged and Infirm and Home For Incurables

^cMade other plans

^dOne of these patients returned to Home For Aged and Infirm and from there was transferred to Waverly Hills

Table 9 shows the disposition of the psychiatric patients. Thirteen or less than one half had returned to their homes, four had been discharged to Central State Hospital, two had entered nursing homes, one a private sanatorium, and one a Veteran's Hospital.

Table 27 is a summary of what the patients would desire in the way of facilities for chronic care, based on the assumption that these resources were available. More patients who indicated a preference said that they would prefer better nursing in their own home to any other change in their present plan. Only three patients gave a chronic hospital as their first choice. (According to the doctor's recommendations, chronic hospital care would be beneficial to over 50% of patients).

TABLE 27

FACILITIES FOR MEDICAL CARE PREFERRED TO PRESENT
ARRANGEMENT (IF AVAILABLE)^a BY CHRONICALLY
ILL PATIENTS^b ADMITTED TO LOUISVILLE
GENERAL HOSPITAL FEBRUARY 5th
THROUGH FEBRUARY 14th, 1946

Total	55
Unknown	7
Home For the Aged and Infirm	2
Private nursing home	1
Church-benevolent home	2
Better nursing at own home	5
Chronic hospital	3
None	35

^aFirst preference only

^bExcluding patients on psychiatric wards

The picture, then, is of the vast majority of medical and surgical chronic patients returning to their own homes or planning to do so, most of them expressing satisfaction with these plans. Institutional care was considered in very few cases either because the patient was unaware that such resources existed, but more often because he desired to return to his own family group. Thirty eight percent were married. One diabetic patient who had had eight previous admissions illustrates this thinking very well. She stated, "I wouldn't break up housekeeping. I haven't got much, but what I have is mine and is paid for". A few patients associated institutional care with going "over the hill to the poor house". The patients who had considered institutional care had not seen these plans through because they had made other plans, or because they were not eligible for care at these institutions. The patients' own home was suitable for his care in 44 or four fifths of total cases. Two thirds of patients continued to receive some form of supervised medical care after leaving the hospital.

PATIENTS KNOWN TO SOCIAL SERVICE

In the New York City study about half of all the chronic patients in hospitals were reported as known to a social worker but no attempt was made to classify the extent of service. Such a classification is attempted here, but it must be emphasized that an entirely objective criterion to measure this intangible does not exist. The method used comes as close to being as exact measure of the nature and intensity of the service rendered the patient, as could be found, but another investigator might have classified the extent of service

differently. In most social agencies a method of recording is used that gives some information on all people coming to the attention of the agency and records are classified by major service and minor service or by some other title to distinguish between cases that are intensive in nature and those which are short contact and involve little planning and treatment. The hospital social service department has a somewhat different set up than the other agencies, as it is geared to function as part of the hospital organization and is not an autonomous unit in itself. Intake or application work is not handled from a central place as in other agencies, but instead applications and referrals are made to the individual social workers assigned to the various services. The worker comes into contact with many patients, and renders many services, but not all of these are carried and recorded as cases. The medical social worker performs a variety of services ranging from a report to another interested agency on the patient's condition to intensive case work over a long period of time involving help to the individual in adjusting to his illness and in accepting the limitations which his illness imposes. The medical social worker practices case work in a medical setting. Acting as the liaison between the hospital and the community with the patient and his problems always as the focus, she helps the patient to discover and utilize existing community resources.

As a general rule, cases involving intensive case work are carried as "recorded". The worker uses her own judgement in determining which cases shall be recorded and which shall go unrecorded. Sometimes there is but a degree of difference between the

two. Unrecorded cases in which there has been correspondence, e.g. a letter of referral to another agency, are filed as "correspondence". There are also those cases which are active with the worker and for which recording is planned but has not yet been started. These three categories, recorded or active, unrecorded (similar to the minor service of other agencies), and correspondence were chosen as indices of the degree of intensity or extent of service rendered for the purpose of this study. By reading all of the recorded cases, all of the correspondence, and consulting with the workers in the various services about the unrecorded and active cases, it was learned that 32 or about three fifths of the total 55 patients, excluding the psychiatric, were known to a social worker. As shown in table 28 almost one third of these were recorded or active, more than one third were unrecorded, and correspondence composed the remainder.

TABLE 28

EXTENT OF MEDICAL SOCIAL SERVICE TO CHRONICALLY
ILL PATIENTS^a ADMITTED TO LOUISVILLE
GENERAL HOSPITAL FEBRUARY 5th
THROUGH FEBRUARY 14th, 1946,
AS INDICATED BY FORM OF RECORDING

Form of recording	Number
Total	55
Not known	23
Correspondence	9
Unrecorded	13
Recorded or active	10

^aExcluding patients on psychiatric wards

Four cases¹ are selected from among those which were known to social service to translate some of the statistics given in the body of this chapter into the problems of the individual patient, to point up the social components of the illness, to show how the patient is affected by chronic illness, and how he utilizes the services of the social worker.

CASE NUMBER ONE

Miss M is 73 years old, never married, with diagnosis of tracheobronchitis and possible tuberculosis. She complains of asthma of 21 years duration. This is her first admission to the hospital although her sister Mary, age seventy-six with whom she lives has been known to the hospital since 1928 and through the years has been treated for upper respiratory infections, anxiety neurosis, chronic myocarditis, and cancer of the breast. The diagnosis of cancer was made in 1938 and an advised operation was refused by the patient.

Miss M and Mary came from a family of ten children and were brought up on a farm. Only one of these children is still living, in another part of the state, besides Miss M and Mary. When the parents died, Mary, who was always the more aggressive of the two, sold the farm and found employment in Louisville as a seamstress. This was back in 1898 when Miss M was twenty-five years old. Mary has always supported Miss M in exchange for which Miss M did all the housekeeping.

A number of years ago Mary bought a four room cottage from her savings and derived a little additional income by renting rooms but stopped when she found that she was losing money from nonpayment of rent. The sisters are still living in this house which by now is badly neglected and run down. The house has few modern conveniences and toilet facilities are located in an out-house. Through the years there has been a constant struggle to keep from losing the house. Going under the HOLC plan, they made \$11.65 monthly payments until the flood of 1937 when they became indebted. Also getting behind in city and state taxes, they were threatened with mortgage foreclosure.

Financial assistance was secured from Family Service Organization, Municipal Bureau of Social Service, and St. Vincent de Paul Society, at various times, and when Mary reached the age of sixty-five, she made application for Old Age Assistance and received a grant of \$10 a month which was supplemented by sewing and doing alterations on clothing. The size of the grant was changed several times, until at the present time both sisters

¹ All the names used in these cases are disguised so as not to reveal the identity of the individual.

are receiving \$10 each. A nephew is helping by paying the expenses on the house.

When a young girl, Miss M became mentally ill and was sent to a hospital in Louisville for treatment. She relates indignantly that this occurred again 20 years ago when Mary had her committed to Central State Hospital for observation, but that there was nothing wrong with her. She shows some ambivalent feelings towards her sister, on the one hand seeming to be devoted to her, but yet making many complaints about the way Mary treats her. She projects her sister's accusations right back to her by saying, for example, that it is Mary who is mentally unbalanced, not she. She was full of bitterness and hostility as she told of Mary having her in court to prove that Miss M had tried to kill her with an ice pick. She is definitely neurotic and seems to have some paranoid trends, but is clear thinking and oriented.

The social worker in the medical service attempted to work out discharge plans with Miss M, and in conjunction with Miss M's Old Age Assistance worker. In this case we have a very good illustration of a cooperative relationship between agencies. Because the patient had made so many complaints in the past about the poor physical condition of the home, and her sister's maltreatment of her, the Old Age Assistance worker had at three different times attempted to work out other plans with Miss M, but Miss M had not followed through on them. Arrangements had been made for Miss M to live in a nursing home, but when she went there she left before the end of the first day, expressing a good deal of dissatisfaction with the room they had given her which she described as a "pig sty". She was then content to return to her home with Mary and her three canaries which she called her "babies". Another time Miss M was almost admitted to the Little Sisters of the Poor, but this was held up because the pastor of her church would not recommend her, feeling that she would make trouble for the other inmates.

This time she pleaded with the worker to find her a place away from Mary, for she was certain that if she returned home, Mary would kill her. She preferred institutional care, but as a second choice thought that she would like a room where she could "take care of children".

This patient presented a difficult planning problem. In view of her unnatural behavior patterns, neurotic trends, and general unwholesome attitudes, it is doubtful whether any institution would accept her, or if accepting her, would keep her for very long. She appears to be a borderline mental case, and therefore a mental institution would probably be unsuited to her needs. The doctor thought that a chronic hospital for treatment of the tracheobronchitis condition would be advisable, but after a period of hospitalization there, the same problem of planning for the future would exist. Psychiatric treatment to give the patient better insight into her situation would in all probability have little chance for success, the patient's age being what it is.

The social worker attempted to explore the possibilities for institutionalization more fully but had not as yet arrived at any plan that pleased the patient, when Miss M suddenly left the hospital, L.O.A. (left own accord). Case work service was continued by the old age assistance worker.

CASE NUMBER TWO

Miss A is an 18 year old, colored, unmarried female. She was admitted to the hospital after an acute attack of chronic pelvic inflammatory disease after suffering pain of two weeks duration. Miss A has had two previous admissions, 38 days in 1939 for gonorrheal vaginitis, and eight days in 1945 for abdominal pain-undiagnosed. In the interim she had attended pediatric, ear, nose and throat, bench, syphilis, and gynecology clinics. She was first examined in the pediatric clinic in 1937 at the age of nine years when the diagnosis of G.C. vaginitis and chronic tonsillitis was made. The patient continued to be followed in clinic and was hospitalized for the vaginitis condition two years later, when she was treated with sulfanilamide and improvement was noted. Treatment was continued in weekly clinic visits. During the entire two years Miss A was not attending school.

Miss A is one of seven children and was one of three living at home in 1939 when the case came to the attention of the social worker. Her parents had separated four years previously when she was seven years old, and a year later the mother brought her seven children to Louisville. The mother had attempted to support the family through her earnings on a WPA sewing project but every 18 months when routinely laid off for two months, she applied for assistance from Family Service Organization. Several Family Service Applications were rejected because it was felt that much of the information supplied by Mrs A was false. When Mrs A was transferred from the sewing project to the Housekeeping Aid Division of WPA she was afraid that she would be unable to find the homes to which she was sent, as she could neither read nor write.

The family in 1939 consisted of a married daughter, Emma, age twenty-four, who was separated from her husband and had been pregnant by another man in 1937. (The mother stated that she did not know how she was making her living), Richard, age twenty-one, who was not at home and had no permanent address but wandered about from place to place, Irma, age twenty, married and out of the home, Henry, age seventeen, who lived part of the time with his paternal grandmother in another section of the state, Eleanor, age sixteen, who at the time of this contact was in the surgical ward after having an incomplete abortion, Doris, age fourteen, who attended Junior High School, and the patient, Miss A, who was the youngest. The three youngest children, Eleanor, Doris, and Miss A, were living in the home with their mother. Living conditions were extremely poor and the income, while adequate to meet minimum needs, did not seem to be used to the best advantage. They lived in one furnished room, sharing two beds. When Henry came home from his grandmother's, he used one bed, the mother and three daughters the other.

The mother admitted the patient's sexual irregularities at the age of nine years. The clinic doctor thought that the patient might have become infected through the mother, but Mrs A stated that the patient had had intercourse with a man when they first moved to Louisville. She did not appear to be especially concerned about this. She had been working most of the time and had to leave the children alone most of the day.

The family became known to medical social service when the mother asked for assistance with fresh milk for the patient who was underweight. When the facts of the situation were revealed, the family was referred to Family Service Organization for supervision in the home because of the poor moral standards of the family. Family Service Organization was active with the family from November, 1939 through April, 1941 at which time the case was transferred to Municipal Bureau of Social Service for financial assistance. Another application for assistance was made in 1944, at which time the mother was in the hospital having had a stroke, Eleanor had joined the WAC, and the patient was doing domestic work.

This case is a good illustration of how a broken home, poor housing, inadequate income, and inadequate parental supervision lead to promiscuity, marital unhappiness, economic dependency, with permanent physical and moral damage to its members. The germ for Miss A's chronic condition started to incubate in 1935 with the separation of her parents. The pattern is consistent with that described for many of the gynecological conditions in the early part of this chapter; early sexual promiscuity leading to gonorrheal infection especially in young Negro women in the low income groups. The disease process also seems to follow a regular pattern; an early acute attack going untreated, followed by another attack with fever that causes the victim to seek medical advice and treatment with the sulfa drugs. At this time the pelvic examination fails to show up any abnormalities (note that the 1945 admission was for abdominal pain-undiagnosed). From six months to three years later there are definite structural changes followed by frequent attacks. This stage occurred six months after the 1945 admission for Miss A.

We can predict, for Miss A, if the development of her disease continues to be in conformity with the pattern, additional attacks increasing in severity until she is forced to give up her job and at which time surgery may be recommended. The adhesions will always remain and may be revived by such precipitating factors as childbirth and reinfection. At the present time, patient is in the period of lull before the storm breaks again, is employed, and has no complaints.

CASE NUMBER THREE

Mr K is sixty-five years of age, never married, with diagnosis of lumatic heart disease, aortic insufficiency, and congestive failure. The patient has had this condition for 17 years and has had six previous admissions to Louisville General Hospital totalling 87 days. Including the present hospitalization, he has spent 97 days in this hospital. In the period between hospitalizations since 1940, he has attended medical clinic regularly.

During the patients second hospitalization in 1942 Mr K's sister, Mrs. Young, consulted the social worker, appearing very upset as she stated that she could not give the patient a home, and she did not know how he could manage. She operated a rooming house but did not have room for her brother. Mr Young was employed in a factory.

Mr K had been living alone in two rooms in the bank of a shoe repair shop since the death of his mother a year before. She had received an Old Age Assistance grant and the patient had never married, staying at home to take care of her. He did occasionally share these rooms with a young man who was away at work all day, but he was alone most of the time. The patient had been employed as a craftsman- a maker of bells, until the heart condition became incapacitating. A brother in Detroit sent money for food.

Two years later, in 1944 the patient applied for Municipal Bureau of Social Service aid, and in 1946 he became eligible for Old Age Assistance. Mr K had four living siblings, Mrs Young, another sister in Louisville, and a brother and sister in Detroit.

In 1942 plans were discussed with the patient but he thought that he could manage well at home, and although he had two interested sisters he stated that he did not wish to live with them.

Contact was maintained with Mr K during his frequent admissions, one in January, 1943 and three in 1944. In 1943 Mr K stated that he would like to make application for the Home for the Aged and Infirm but shortly afterwards his sister, Mrs Young, and her husband came to live with Mr K in two rooms which had been opened into Mr K's two rooms, making a four room apartment..and although the sister was crippled from varicose veins, she was able to do enough work to enable Mr K to remain in bed or sit in a chair most of the day. Mr K therefore decided not to enter the Home for the Aged and Infirm at this time.

The following year the patient's condition became more serious. He had three admissions for decompensation. During the first of these admissions Mr K had two heart attacks in the ward, and there was difficulty in getting his swelling down. When he left the ward he was advised to have very limited activity and to try to get someone to live with him. Mr and Mrs Young had left his home and he was staying by himself and doing his own cooking. It was at this time that referral to Municipal Bureau of Social Service was made, as the patient had attempted to do a few odd jobs to supplement the help he was getting from Mrs Young and the brother in Detroit.

The patient continues to live alone, doing the housekeeping and preparing his own meals, following his cardiac diet strictly. The two rooms are kept spotlessly clean although the furniture is old and faded. His hands shake, he is becoming more and more feeble with time, and there will undoubtedly come a time when the patient will have to plan for institutional care. During the present hospitalization it was noted that his stay was uneventful, his condition upon discharge somewhat improved. It is felt that with proper medication and sufficient rest this man can get along fairly well. He will no doubt be readmitted to the hospital at various times due to recurrent decompensation, and would be an excellent candidate for a chronic disease hospital, needing A (intensive medical) care and C (custodial) care at different times.

CASE NUMBER FOUR

Miss R is a twenty-five year old colored female, with diagnosis of sickle cell anemia of nine years duration. She has had eight

previous admissions, 88 hospital days, and two additional admissions while this study was in progress, or a total of 112 Hospital days.

Miss R married very young and has been separated from her husband for ten years. Her father died when she was twelve years old, her mother when she was six years old. She was one of seven children.

The patient's condition is such that she must come to the hospital for frequent transfusions and she is also being treated with liver injections and yeast capsules.

This case was presented at a medical student conference in 1943 as an example of a situation in which a patient with a recurrent disease has learned to live with her disease, managing very well both from an economic and social standpoint. At that time she did not appear to be concerned about her condition and was taking fairly good care of herself. She lived with a sister and worked when she was able as an elevator operator, occasionally doing domestic work. Because her sister provided her with a home, Miss R was able to go to bed whenever she was not feeling well. The family had never been known to any social agency. As she appeared to be making a good adjustment of her illness, no services from social service were required.

The situation has changed since the patient was known in 1943. Miss R is now living alone in a room renting for \$4 a month. She is employed as a scrubwoman in a hotel when she is able to work, but more frequently she is confined to her bed due to extreme weakness and severe cramping in her legs. When admitted to the hospital this time she was delirious and complained of pains in her head and back. In the ward she cried most of the time and disturbed the other patients. So great has been the change that it almost appears as though this were another patient and not the same one who in 1943 had no complaints and had learned to live with her disease. It is surprising that she has not had to seek public assistance all this time. Chronic hospital care would be an excellent plan for this patient.

CHAPTER III

COMMUNITY RESOURCES FOR MEETING THE NEEDS OF THE CHRONICALLY ILL

CHAPTER III

COMMUNITY RESOURCES FOR MEETING THE NEEDS OF THE CHRONICALLY ILL

"the outstanding factor in the situation of the chronic sick is that wherever they are, they are almost always in the wrong place!"
¹Are Louisville's chronic sick "almost always in the wrong place" because the community has failed to provide the "right place" for them? In the foregoing chapter we saw what the problems of the chronically ill are, and their needs in the way of medical care. We shall now consider how the community is prepared to meet these needs, what the facilities are, whether they are sufficient, and what the areas of unmet needs are.

For social, even more than for medical expediency, the patient's own home is considered the best environment for satisfying the needs of the individual patient, unless unsatisfactory home surroundings or a serious medical condition calling for hospital care dictate otherwise. The New York City survey of 1928 found that one fourth of those living at home should have been in institutions. The patient at home must either be able to visit the clinics at the hospital or else have his medical care brought to him by a city visiting physician, since we are considering the medically indigent group who are unable to pay for a private physician.

CLINICS

Louisville has an excellent out-patient department set up with special clinics for many of the chronic diseases, but unfortunately the physician's indifference to the chronic diseases is often carried over into the clinics. From observation it would appear that this is more true of the general diagnostic, medical, surgical, and orthopedic clinics than it is of the other special chronic disease clinics

which are often staffed by doctors especially skilled in the treatment of these diseases. It was found in New York City that as many patients were attending clinics who needed C care, as were those in need of A care. If the same thing is happening here, and it appears that it is, this might be one factor accounting for the doctor's lack of interest in the chronically ill clinic patient. Clinics are intended to give intensive medical treatment as is the in-patient department, with the exception that the patient does not need to go to bed. Because of the tremendous volume of work, only patients who are ill and who can be treated are accepted, theoretically. Class C patients are those who have reached a stationary point in their illness and to whom medical treatment can be of no benefit. It is therefore an abuse of clinic facilities when class C patients continue to be treated at the various clinics. Each clinic has a quota, and for every person who is seen in clinic with out benefit, another person may be turned away who could benefit.

Louisville General Hospital does not have a separate cancer clinic, but there is one located at St. Joseph's Infirmary where x-ray treatments are given.

CITY PHYSICIANS

City physicians are provided for those patients who are unable to attend clinics but for whom hospital care is not indicated, on a prolonged basis as long as needed for indigent patients, and only in case of emergencies when a private doctor cannot be found

¹Rosenfield, I. op.Cit., p.50

for those patients who can afford to pay for the service. The city physician set up follows one of two general outlines; they are either drawn from a panel and paid by the visit, or are engaged on a full time or part time salaried basis. The chief defect of the panel system is the lack of supervision. The other system seems to be best, especially when the city is divided into districts with one or more physicians responsible for each district. A plan of district physicians is in force in Louisville and suburban areas. The city and county is divided into five districts, three White and two Colored, with a physician on a part time salaried basis assigned to each district. There is also a list of available physicians located in each district who may be called when the regularly assigned physician is unable to make the call. The director of the Bureau of Medical Care with offices in the city and county health department building also makes many visits himself. Monthly reports on the calls made are sent to the director. There were 3,825 home calls in 1943, 3,253 in 1944, and 2,041 in 1945. The declining number of home visits each year may be partially explained by increased ability of people to pay for private physician care. Requests for the service are relayed from the hospital (General Hospital itself does not have a staff of visiting physicians), or come from the patients themselves. Many illnesses are treated by the visiting physicians, and it is estimated that over ten percent of total home visits are made to chronically ill patients.

NURSING

Another important phase of home care for the chronically ill is a nursing service. In almost all communities the nursing service

consists of that operated under municipal auspices and service bought from or contributed by the voluntary organizations already in the field. In some cities where there are a number of voluntary organizations there is a good deal of duplication resulting in the failure on the part of the public to understand and utilize the service. A rather clear cut distinction exists in Louisville between the Public Health Nursing Association (Health Department) and the Visiting Nurse Association, with the functions of each service clearly defined and duplication pretty well ruled out. Misunderstanding arises occasionally between the public health nurse and the social worker over the division of responsibility but on the whole there is good cooperation. There also appears to be some friction between the hospital nurse and the public health nurse but it is not of such serious nature as to affect the health of the patient.

There are three types of nursing service; the visiting nurse, the health department nurse, and the practical nurse who is untrained and gives only bedside care. The visiting nurse, or public health nurse as she is properly called, is a graduate, registered nurse with additional public health training who gives complete nursing service including bedside nursing and a certain amount of educational work with the patients and their families. Visiting Nurse Association in Louisville is a community chest supported agency, but also derives a portion of its income from patients' fees and from several insurance companies who pay for the nursing care of their industrial and group policy holders. One dollar and fifty cents is charged for a visit of an hour or less, and \$2.50 for an

appointment visit when the patient can afford to pay, but there is a fee scale depending upon the patient's ability to pay and many patients are served free of charge. In 1943 it was estimated that chronic cases comprised two percent of total cases, and nine percent of total visits for that year. Distribution by major disease groups, cases, and visits, was as follows:

TABLE 29

CHRONIC PATIENTS CARED FOR BY VISITING NURSE
ASSOCIATION BY CASES AND VISITS, LOUISVILLE
KENTUCKY, 1943

Patients	Cases	Visits
Total	252	5,120
Cancer	72	3,600
Rheumatism and Arthritis	50	300
Anemia	10	50
Heart	90	480
Nephritis	8	80
Senility	20	88
Orthopedic-congenital malformations	2	522

In addition, 750 visits were made to fracture cases. In January, 1945, Visiting Nurse Association stated that while records are not kept to give a breakdown of information into chronic and acute cases, two percent of total patient load is a conservative figure for chronic cases. A year later, in March, 1946, it was estimated that about twelve percent of total visits are to chronic patients. There is no limit to the number of visits that may be made to one patient. The nurse continues her work until she is no longer needed, or until she has taught the patient or a member of his family how to carry on.

It is not necessary that the patient be under a doctor's care in all cases, but for such things as bladder irrigation, dressings, hyperdermic series, the nurse gets her orders directly from the doctor in charge of the patient. The visiting physician service and sometimes the clinic service is more effective if nursing service is available at the same time. Unfortunately, there seems to be too little contact between the physician and nurse working with the same patient. They rarely see the patient at the same time and do not get the benefit of each other's observations.

New York City's Visiting Nurse Association in 1938 made the same percentage of home visits to chronic patients, about ten percent. It was felt that the number did not represent all of the chronically ill who needed nursing care, but rather that it represented the total number that Visiting Nurse Association could accommodate. The pressure of acute work and health teaching kept the services of the Visiting Nurse Association down to a minimum. Visiting Nurse Association in Louisville is fully staffed again after the war period and feels that it can serve as many patients as are referred to it. The Association is disturbed by the fact that so many chronic cases are referred so late, when the condition has become really serious. It would like to have the opportunity to do some of the preventive aspects of the work. Their feeling, backed by experience, is that if they do not get the chronic cases early, they will surely get them later on. Although it is felt that the educational work of the Nursing Agency reduces the amount of time that can be given to the bedside care of the chronically ill patient, it has a direct relation to the prevention and reduction of chronic illness and has

more beneficial effects in terms of the future.

Apparently then, the need in Louisville is not for an expansion of the Visiting Nurse service, but for better utilization of the existing one. Public education is probably the best way that this could be accomplished, and the Association feels that early reporting of cases known to the various social agencies, as well as more referrals from General Hospital would be an effective way to introduce the chronically ill person to a nursing resource.

The health department nurse has little to do directly with the care of the chronically ill person. She is primarily concerned with the promotion and protection of health, and makes routine home visits only in cases of communicable disease. A graduate, registered nurse, some of her functions under the city-county health program are:

- a. Home visitation of cases of acute communicable diseases for educational purposes.
- b. Assisting physicians at tuberculosis, venereal diseases, and pre-natal clinics, and home visitation for finding cases and for instruction of patients in the home.
- c. Assisting physician with organization of and teaching in infant and pre-school conferences.
- d. Assisting with examination and supervision of school children and securing needed treatment and corrections for such children.
- e. Promotion of group education through classes in home care of sick child care, nutrition, first aid, etc; through informal talks with mothers, talks to groups, and through assisting

with all projects for arousing public interest.¹

HOUSEKEEPING AIDES

Clinics, city physicians, nursing services, meet the medical needs of the chronically ill patients living at home, but other things are needed to render the home a suitable place for the care of the chronic patient. For the women who is afflicted with chronic disease there is a real need for a form of housekeeping service to relieve her of the burden of cleaning her house, cooking, doing the laundry, and numerous other tasks so necessary to the maintenance of a household. The problem is especially severe if she has no one at home to help out, and in the case of persons living alone.

In 1935 a housekeeping aid experiment was tried in New York City to explore the possibilities of home care for chronic patients, to gain experience in the use of housekeeping service for this purpose, and to determine its desirability as a permanent part of a public assistance program. The Committee of Chronic Illness of the Welfare Council, in cooperation with the Henry Street Nursing Service under the auspices of the Department of Hospitals sponsored a WPA project for a demonstration study of home care of chronic patients. Three years later, a similar WPA housekeeping project for home care of recipients of Old Age Assistance was merged with it. Patients were referred by 60 medical and social agencies including the Henry Street Nursing Service. To be eligible an individual had to be chronically ill, active with a social agency,

¹State Department of Health, Information of Public Health Nursing. Louisville, 1944

receiving medical care from a physician or clinic, and in the low income brackets. Preference was given to patients who were being kept in city hospitals because there was no way of caring for them at home, in an effort to learn whether suitable arrangements could be made for them with housekeeping service. It was demonstrated that many patients could be cared for at home in this way who otherwise would have to remain in an institution. Not only did the patient benefit from this service, but so did the entire household. There were 807 patients served in a two year period. Among the benefits observed were improved home conditions, preservation of normal relationships in family life, increased comfort and contentment for the patient, and improvement in health. Seventy five percent of the patients were living with their families, ten percent lived with relatives or friends, and 15% lived alone. The average length of time the patients received housekeeping service was 7.4 months.

The housekeeping aides were women referred by the Home Relief Division of the WPA, who were given a preliminary instruction course before going into the homes of the patients. They were regarded as an "aide" and not a "maid" and their function was to help the family to maintain normal home conditions but not to relieve the well members of the patient's family of their responsibilities. Duties of the housekeeping aide included cleaning, cooking, washing clothes and ironing, and personal service. The service was given in half day units of three hours, and the average unit of service given per patient was 4.8 half days or about two and one half days a week. Housekeeping aides were paid

prevailing WPA rate of about \$.46 an hour.¹ Including supervision and administration, the service cost approximately \$3 a day per housekeeper. The cost of service per patient, without overhead expenses was an average of \$.92 a day. To learn whether home care for chronic patients under a housekeeping aide program was less expensive to the city than institutional care, the average daily expenditure per patient for medical care, \$.157, nursing care .016, drugs and appliances .07, and housekeeping service .92 were added together, arriving at a total of \$1.16 a day, exclusive of overhead and administrative charges. Institutional care would probably cost the city considerably more.¹

This study is cited as an example of what can be accomplished in the way of housekeeping service to help the chronic patient to live comfortably in his own home. The greatest impediment to the establishment of such a service in Louisville at the present time is the current shortage of womanpower. Few women are willing to accept positions as housekeeping aides so soon after the lucrative positions they held during the war years. The purpose of the program, which is to help the chronically ill to maintain their own homes, the close supervision, and strict eligibility for service, are some of the features that distinguish it from a domestic employment service.

SOCIAL AGENCIES

Financial assistance by a relief agency is in a great many cases essential to the plan of home care for chronically ill people.

¹Jarrett, Mary C., Housekeeping Service for Home Care of Chronic Patients, Report of a WPA Project in New York City. New York, December, 1938.

Poverty may be a precipitating factor causing or promoting the development of chronic illness, but the corollary is more often true; economic dependency arising from the chronic illness. In the New York City study almost half of the chronic cases were reported by non-institutional agencies, and about half of the families served by family agencies had a problem of chronic illness. The average period of care by one agency was two years and nine months. The cost of caring for those who became permanently disabled was enormous. Clients of an agency come to its attention usually because of financial need, but the responsibility of the family agency goes beyond in uncovering the causes that led to the need and in offering guidance and assistance to the individual. Chronic patients often require social service more frequently than do others, and for longer periods of time, since they need to adjust themselves and their circumstances to their disability.

In this study over half of the patients receiving public assistance were clients of Old Age Assistance, the program of federal and state aid which came into existence with the social security act. We have seen that the size of the grant is in no way related to the needs of the sick individual; nevertheless in half of these cases it was the individual's entire source of income. Municipal Bureau of Social Service, the public relief agency for residents of Louisville, was helping five eighths of individuals receiving public assistance. The County Welfare department was active with one family who, by residence, did not qualify for Municipal Bureau of Social Service aid.

In the fiscal year 1939-1940 Municipal Bureau of Social Service reported that 31% of the entire "single" case load (which constituted 40% of the entire load) were chronically ill and in need of care not available to them in their own homes. An additional four percent of individuals in the single case load were bedfast. Many cases required medical care, special diets, and bed rest, and arrangements were made to care for the bed patients, the very feeble, and those requiring institutional care, at the Home for the Aged and Infirm.

In its report for the fiscal year 1943-1944, Municipal Bureau of Social Service states that the chronically ill or incapacitated formed 88% of its relief load. In the two previous years this figure was 87%. The agency reported a smaller number of the aged and of families with dependent children who would qualify for the federal-state Aid to Dependent Children program in 1943-1944 than ever before. "The large majority of the chronically ill remain year after year".¹

Social agencies also serve the chronically ill by investigating cases that apply for care at some of the institutions. The County Welfare department investigates all applications for the Jefferson County Home for the Aged. The Municipal Bureau of Social Service has had the function of investigating all applicants to the Home for the Aged and Infirm since 1931. Family Service Organization

¹City of Louisville, Annual Report of Department of Welfare, for fiscal year ended June 30, 1944. Louisville, June, 1944, P.19.

since February, 1946 has taken over the function of investigation, temporarily or until a medical social worker can be secured, for the Kings Daughters Home for Incurables, investigating all new applicants and giving casework service to an occasional patient already in the home when there is need for a change of plan.¹

INSURANCE

There are several different kinds of insurance that help the insured chronically ill person by easing the financial burden imposed by prolonged illness. All forms of insurance work on the principle of spreading the risk. None of the patients in this study had hospitalization insurance to meet part of the cost of the hospitalization. Eight individuals had a form of sickness and accident insurance, but in only two cases was this a major part of their income. Most policies include a maximum weeks of payment clause, and chronically ill people are usually ill or incapacitated for longer than this period. Another very common regulation is that the individual be a bed patient to qualify for benefits. Chronically ill clinic patients, although they may be bedfast or partially ambulatory most of the time, are ineligible for payments. This form of insurance is therefore a resource for few people.

On a larger scale, and for people aged sixty-five and over who have been in "covered employment", or their survivors, benefits are available under the Old Age and Survivors Insurance program of the Social Security Act. Illness is not a requisite for

¹Taylor, Esther. Kings Daughters Home for Incurables, Memo to executives of Social Agencies. February, 1946.

this benefit; but of course, many of the people sixty-five years and over who qualify have some form of chronic disability. The plan was set up and differs from Old Age Assistance in that it makes possible a continuation of income after retirement. Insurance is paid from a fund contributed by workers and employers and every individual sixty-five years and over who has been in covered employment and who is "fully insured" or "currently insured" according to the definition of the act is entitled to such benefits, the amount varying with total wages and number of dependents. Assistance grants, on the other hand, are financed entirely out of tax revenues and are paid on an individual budget basis. The insurance program has benefited a smaller number of people than the assistance program because many people under the former have not as yet accumulated the necessary quarters of coverage to make them "fully insured" or "currently insured". There are many potential beneficiaries who will draw when the insurance program becomes more fully matured.

It is not the purpose here to describe fully the various features of the Old Age and Survivors Insurance program except as it related to the chronically ill aged sixty five and over. Some provisions of the law are being studied by legislators and administrators in an effort to seek liberalization of provisions which currently exclude large groups of the population. Several proposals arising out of such study would have a direct effect upon the chronically ill, and include extended coverage, more adequate benefits, and disability benefits payable to wage earners under sixty five. It is this last proposal that is of special

interest to us here. Many workers are forced to leave the labor market due to chronic illness before they reach the age of sixty-five, and when they become sixty five have not accumulated enough quarters of coverage to make them eligible for benefits. "Permanent disablement is more like old age retirement. The permanently disabled worker leaves the labor market in the same sense as does the aged person; both of these classes of persons permanently cease to have earnings. The disabled worker is generally younger than the retired worker and therefore more often has a dependent spouse and dependent children. Hence, assurance of some income is at least as urgent, socially, for the disabled as for the aged."¹ One possible solution to the problem would be the reduction of the age of eligibility for those workers who become disabled before the age of sixty five.

Another way to meet this need is by expansion of the present social security program to include new forms of social insurance; insurance against wage loss through temporary or permanent disability. More than one hundred bills were introduced in the present congress offering various schemes for the liberalization of benefits and the inclusion of new forms of insurance in the present social security set up. A compulsory health insurance program formed the major portion of these. Health insurance plans will be further discussed under the section "federal participation".

Unemployment compensation is another provision of the social security act which seeks to offset the effects of temporary unemployment. Entirely state administered, with amount of benefits and period of coverage varying from state to state, a common pro-

¹Boas, E.P., The Unseen Plogue Chronic Disease, p.81.

vision in all states is that the individual to qualify must be willing and able to work, but unable to find suitable work. A person unemployed for reason of illness is automatically disqualified. As the bill stands, people unemployed because of chronic illness are ineligible for benefits under this program. However, there is a bill before congress proposing addition of payments for temporary disability to the unemployment compensation system. Rhode Island is the only state who has such a provision now in effect. If passed the "temporary disability" feature would exclude a large number of chronically ill, but there would be some who might qualify.

VOCATIONAL REHABILITATION

The federal-state social security program of vocational rehabilitation helps an individual with a physical or mental impairment constituting a vocational handicap through its rehabilitation services to be restored to productive capacity. Now under the Federal Security Agency and the state departments of vocational rehabilitation of the departments of education, the program got its start in 1920 with the passage of the rehabilitation act, "An act to provide for the promotion of vocational rehabilitation of persons disabled in industry or otherwise and their return to civil employment."¹

The scope of the program was expanded with the vocational rehabilitation amendments of 1943. By 1944, fifty states and territories had made plans for vocational rehabilitation programs.

¹Social Security Board, Compilation of the Social Security Laws. Washington, D.C., 1941. p.35.

Kentucky was one of the first states to accept the federal provisions, and in July 1922, exactly two years after the beginning of the federal program, received its first federal appropriation.

To be eligible, a person must be of employable age, must have an employment handicap by reason of disability, the disability must be considered to be remediable (if it can be substantially reduced or eliminated within a reasonable period of time), the individual must be unable to pay for the services in whole or in part, and the individual must be rendered employable or more advantageously employable through rehabilitation services. A complete program of rehabilitation includes: finding the disabled, medical and vocational diagnoses, advise and counseling in helping the individual to evaluate his assets and liabilities, causes of his present problems, and in taking steps necessary to correct these difficulties, physical restoration including all forms of prosthetic appliances, vocational training, maintenance and transportation for some individuals, placement in employment, and follow up.¹

In 1934 in Louisville it was recommended that the Kings Daughters Home for Incurables be converted into a vocational guidance institution for handicapped young people.

SHELTERED WORK

Some of the chronically ill are able, without rehabilitation services, to be employed but cannot face the open competition in the labor market. Sheltered workshops offer a solution to this

¹ Federal Security Agency, Annual Report of the office of Vocational Rehabilitation 1944. Government Printing Office, Washington, D.C., 1940. pp.1-11.

problem by providing work on a non-competitive basis for the handicapped person. This is one of the functions of the sheltered workshop but not the most important when considered from the standpoint of the limited salaries offered. It also serves to rehabilitate persons not eligible under the federal-state program. The sheltered workshop in Louisville, Goodwill Industries, one of a number located in the various states, pays its trainees about \$14 a week and its workers starting at \$16 a week, depending upon need. Married workers with dependents receive higher pay. Sheltered workshops therefore do not free the patient entirely from the economic hardship brought on by the chronic disease. The other functions of the sheltered workshop, besides providing a work opportunity for those who cannot compete in industry, include training for a job suited to the individual's handicap, and providing industrial convalescence where the individual may learn to adjust at his own pace. More important than actual financial remuneration is the maintenance of morale and the feeling of confidence it gives to the patient.

Sheltered workshops are not the entire answer to the problem. They are, as a rule, limited in the amount of work they offer and the number of people they employ. They rarely pay for themselves but must be heavily subsidized. It is difficult to remove the competitive element entirely and there is a certain amount of pressure felt by the patient as he attempts to gear his output to that of the fellow working on the next bench. An effort is made to place the individual in the type of work that he will enjoy but this is not always successful. Job monotony is a frequent com-

plaint as so many of the jobs require piling and sorting and other routine tasks. It is necessary that the individual be made to feel that he is doing an important, worth while job, and that the job have status. This is especially true if the individual's pattern has always been one of independence and assumption of responsibility. Eleanor Cockerill points out that in terms of psychosomatic meaning, some jobs offer few satisfactions to the individual and retard rather than promote his return to normal status.¹

Two groups of people are eligible for training and employment with Louisville Goodwill Industries; the disabled who after a period of training will be capable of seeking employment in competitive industry, and those whose disabilities make it impossible for them to meet the demands of competitive employment and who will remain in the sheltered workshop. Facilities are limited and preference is given the first group. The agency uses the following guide in accepting clients: (in order to preference).

For Group 1:

1. Orthopedic disabilities - age: 18 to 29 years
2. Visual or hearing disabilities - age: 18 to 29 years
3. Orthopedic disabilities - age: 30 to 39 years
4. Visual and hearing disabilities - age: 30 to 39 years
5. Cardiac and related circulatory disorders - age: 18 to 39 years
6. Arrested tuberculosis and related respiratory disorders - age: 18 to 39 years
7. Epileptic and related nervous conditions - age: 18 to 39 years
8. Any of the above specified disabilities - age: 40 to 64 years

For Group 2:

1. Orthopedic disabilities

¹Cockerill, Eleanor, Institute on Psychosomatic Medicine. Louisville, Ky., March 30, 1946

2. Epilepsy
3. Cardiac and related circulatory disorders
4. Visual and hearing disabilities
5. Neurotic and related nervous disorders
6. Arrested tuberculosis and related respiratory disorders

In the month of February, 1946, according to the service report of the executive secretary, 88 persons were employed. They were classified according to disabilities:

TABLE 30

DISABILITIES OF PERSONS EMPLOYED
AT GOODWILL INDUSTRIES, FEBRUARY, 1946

Disabilities		Number
	Total	88
Orthopedic		29
Osteomyelitis		2
Poliomyelitis		12
Amputations		8
Orthritis		2
Club feet		1
Injury		2
Partial Paralysis		1
General Health		12
Arrested Tuberculosis		2
Back Injury		2
Cardiac		3
Other		5
Aged		9
Blind-Defective Vision		5
Blind in one eye		4
Defective Vision		1
Mental-Nervous-Neurological		4
Mentally deficient		3
Neurotic		1
Deaf-Mutes		2
Epileptic		2
Curvature of Spine		2
Non-Handicapped		21
Staff ^a		2

^aTwo other staff members are included in Handicapped persons.

The work classification of these 88 persons were as follows:

TABLE 31

WORK CLASSIFICATION OF PERSONS EMPLOYED
AT GOODWILL INDUSTRIES, FEBRUARY, 1946.

Work Classification	Number
Total	88
Trainee	15
Sheltered Work	48
Non-Handicapped	21
Staff	4

The list of trainable trades and skills at Goodwill industries is impressive:

- Maintenance
- Ironing, sewing, and tailoring
- Millinery
- Doll rehabilitation
- Cooking and kitchen management
- Brush refinishing (painting, staining, varnishing, shellacking, bleaching)
- Spray painting
- Wood shop - general
- Clerical -- general office work
- Stove repair and refinishing
- Laundry
- Dry cleaning
- Steam press
- Shoe repair
- Upholstering
- Store management
- General mechanical repair (sewing machine, vacuum sweeper, lock-smithing, etc)
- Clock and watch repair
- Radio repair
- Cabinet shop - antique reproductions and repair
- Traffic control
- Statistical
- Inventory control
- Switchboard
- Graphotype
- Addressograph
- Multilith
- Mimeograph
- Postage meter machine
- Ediphone operation

Telephone solicitation
Elevator operation
Low pressure fireman
Appraisal and pricing
Toy repairing

Many referrals come from the Office of Vocational Rehabilitation which uses Goodwill Industries a good deal for the vocational training phase of their work.

The materials used in the various trades are, in the main, salvaged goods, and the finished product is distributed to the nine Goodwill stores throughout the city to be sold at reduced price.

Louisville Goodwill Industries does not arrange transportation for its employees, nor does it have a program for home bounds (people confined to their homes), although it would like to develop this phase of their program as has been done in Dayton, Ohio with 47 home bounds. All work is done at the central plant located at South Eighth Street.

CHRONICALLY ILL CHILDREN IN THEIR OWN HOMES

For chronically handicapped children of school age the Board of Education has a division of special classes equipped to meet the varying needs of the handicapped who cannot attend or would derive no benefit from regular classes. There are seven sight saving classes for 112 children with impaired vision offering first grade through junior high work. The four classes for the hard of hearing are graded by age, and accomodate 32 children. One teacher is available for speech correction work with about 250 students. There is also one coach teacher who instructs groups of children who are normal mentally but retarded in certain subjects. Three classes are held for orthopedic and cardiac cripples (in-

cluding spastics). There are 65 students in these classes. One class is held for children who are behavior problems, classified by age and range. There are 33 students in the 14 classes for the mentally retarded.

These children all live in their own homes, and carfare to the school is provided when the family cannot afford it. Orthopedic and cardiac cripples are taken to schools by taxi. There are also the children with disabilities including rheumatic fever, nephritis, congenital deformities, poliomyelitis who cannot leave their homes without danger to their health, and for whom home teachers are provided. The Board of Education has three full time and one part time teacher who give home instruction to 60 students, visiting each child about once a week.

Two teachers are assigned to Childrens Free Hospital, Jewish Convalescent Home, and Kosair Crippled Childrens Hospital, to work with the children, who, during the long period of hospitalization, have fallen behind in their school work.

The Board of Education's division of special classes gives at least 800 handicapped children the opportunity to have as good an education as the healthy child, and in some cases makes it possible for children to remain in their own homes who might otherwise have to be in institutions. Institutional care for children is more common for social than for medical reasons. It is pretty generally accepted that home care, even of inferior quality, is preferable to institutional care for the child who has living relatives. There are exceptions to this rule, of course, and it is these exceptions who fill the childrens institutions, aside from the orphaned.

Chronic illness among children besides bringing unhappiness and suffering to the child, is of great concern to the community because their illness will be of longer duration than that of the adult population, and they are of potentially greater expense to society.

FOSTER HOMES

Foster home care for physically handicapped children as well as for the aged, when their own homes are unfit, is a plan that has been too little developed in Louisville. Substituting for the patient's own home, it offers the advantage of family life, and is a means of circumventing institutional care. "Foster home care for physically handicapped children is more expensive than foster home care for healthy children, but less expensive than institutional care for sick children."¹ The use of foster homes for the care of these two groups has been successfully demonstrated in several cities, including Boston and Cleveland.

NURSING HOMES

Nursing or boarding homes do not properly belong under the title "institution"; actually they represent the intermediary plan, half way between the home and the institution. A boarding or nursing home is a private home operated on a profit basis, which has been adapted to the care of aged, ill, convalescent, or homeless people. Rule 1, section 4 of the rules and regulations governing nursing homes in Louisville, defines a nursing home, "includes homes, convalescent homes, homes for the aged, and

¹Jarrett, Mary C., "The Care of the Chronically Ill", Hospital Survey of New York. Vol.II, Chap. XI, 1937. p. 679.

similar institutions and establishments in which two or more persons are cared for with or without hire, gain or reward, such patients receiving care beyond that which is usually given in hotels, lodging and boarding houses, wherein a maid, attendant or nursing service is required for the care of patients beyond and in addition to the usual maid service rendered by a hotel, lodging or normal boarding house, but not including institutions listed by the American Medical Association as hospitals, and not including establishments caring only for patients related by blood or marriage to the operator or person in active charge of such home, home for the aged or similar establishment."¹

The nursing home started out as a place for aged people who were not chronically ill, but who were too old to take care of themselves. The increase in the number of aged in the population, and the fact that these aged people were often without family ties, had a direct bearing upon the development of the nursing home. The Social Security Act in 1935 gave some financial status to the aged, and coming as it did during the depression, when many people were seeking by renting rooms and other means to supplement their meagre incomes, the aged were welcomed with open arms and the nursing homes began to flourish. (In contrast to the present day when Old Age Assistance recipients are turned aside in favor of the wealthier clientele) "Wily rooming housekeepers evicted their unemployed to make room for the "pensioner" who could pay cash".² In exchange for the Old Age

¹Louisville and Jefferson County Board of Health, Rules and Regulations Governing Nursing Homes. Louisville, Ky., July, 1944.

²Wagner, Margaret, "Nursing Homes Care for Rigid Supervision", Hospitals. March, 1945. p.52-56.

Assistance grant, the aged individual was given his meals and a room which he shared with several others. It was not realized until later on that the aged person was very often a chronic disease sufferer, and that he needed medical supervision as well as a roof over his head. Even now, the primary function of many nursing homes is to provide shelter rather than any form of medical care.

The next step in the development of nursing homes, in order to combat the evils of the early period, was the introduction of regulatory laws and licensing procedure. New York in 1909 was the first state to require licensing of nursing homes. By July, 1945, fourteen states had such a regulation. The licensing procedure and the controlling body varies with the state. In onestate it is done by the Board of Control, in another by the Public Welfare Council, and in another by the Board of Public Welfare, but in eleven states it is the responsibility of the state department of public or social welfare, with controls varying from simple supervision and licensing to very elaborate requirements.

New Jersey, one of the early states to establish control of nursing homes by licenses (in 1927) has one of the most progressive laws. A graduate nurse in each home, and the regular attention of a physician are required. After the system had been in operation for a little while, New Jersey candidly surveyed the situation and found that with rising cost of living, and a greater number of individuals with incomes considerably higher than that of the Old Age Assistance recipient, who could pay more for nursing home care, the Old Age Assistance recipient was being excluded from the

nursing home, or else was crowded into one room with several others to make it worthwhile to keep him. Most of the recipients were receiving the maximum amount of \$40 allowable under the Social Security program, (50% federal, 50% state money), but this was not enough to buy decent care for them. It was felt that the federal maximum was tending to pull down nursing home standards. New Jersey, a wealthy state, then decided to supplement the \$40 with money of its own (state and county), although it would not bring an increase of federal money, and the grant, figured on a budget deficit basis, was raised, over a five year period, to \$70 for people living in nursing homes, plus additional amounts for clothing and personal expenses, drugs, unusual amounts of surgical dressings, etc. The accepted going rate for Old Age Assistance patients in nursing homes in New Jersey is \$70. Removal of the ceiling on Old Age Assistance grants has resulted in better nursing home care for Old Age Assistance clients. In 1944 approximately 410 persons or 1.6% of the Old Age caseload received grants with which to pay for care in licensed nursing homes.

At the Baker Memorial in the Massachusetts General Hospital the social worker assumes the responsibility for inspecting the nursing homes used by the hospital. Chicago established a central service for the chronically ill under the auspices of the Institute of Medicine in 1943, with one of its major functions the supervision and development of good nursing homes. The Benjamin Rose Institute in Cleveland has been responsible for the development of good nursing homes through supervision, and it has also established a small nursing home for the aged incapacitated by chronic disease.

The Board of County Commissioners in Cuyahoga County, Ohio, sponsored its own nursing home as a division of the County Relief Bureau for its totally disabled relief clients.

Louisville did not adopt regulations governing the operation of nursing homes, or a system of licensing until July, 1944. Some of the abuses mentioned above, were common occurrence in this city and could not be corrected until the Health Department was given the power of closing homes which did not conform to the standards set up by the law. Note that the responsibility for licensing, setting of standards, inspection, grading, and the imposing of penalties, rests with the Health Department, not with the Welfare Department as in most other states, with the exception of New York City where the Department of Hospitals does the inspecting and the licensing.

Under the present set up, all nursing homes in Louisville and Jefferson County must be licensed, (See appendix 4-application for permit to operate a nursing home) and the license must be renewed every year. A practical nurse is required in the home if there are bed patients or chronic invalids. Inspection of the homes is the full time responsibility of a health department employee. The law contains very specific sanitary requirements pertaining to buildings and premises; heating, lighting, ventilation, water supply, toilet and bath facilities, food, sleeping accommodations, and disposal of waste. A physician's statement testifying to the individuals physical condition is required of all applicants at admission. The insane and drug addicts are prohibited from entering a nursing home, but mild mental cases are acceptable. Each home is graded in the following manner: by kind of nursing (homes with a registered nurse

are Grade 1, homes with a practical nurse are Grade 2, and all others are Grade 3), and the degree of conformity to the rules and regulations pertaining to nursing homes. Homes conforming to all the rules and regulations are given a Grade A rating, those which conform to all rules of sanitation but not to rules governing buildings and premises, heating lighting, and ventilation (one or more of these), are rated Grade B, and those not meeting the B requirements are graded C. If two consecutive inspections find that recommended corrections have not been made, the rating is lowered one grade. The law contains certain penalties including the closing of a Grade C home within 30 days after warning has been given if the nursing home operator has failed to bring her home up to standard. If after the license is revoked, the home is not closed, the operator is fined for each day that she fails to do so. The law states that the revoking of licenses would not begin until one year after passage of the law in July, 1944. In June, 1945, three homes were given warning that their homes would be closed in July if they still had their C rating. One of these homes has been a particular source of trouble and has been threatened with closure many times. It did finally manage to come up to minimum requirements.

The grades of twenty homes in January, 1946 were as follows:

- 1 A - 3 homes
- 2 A - 15 homes
- 2 C - 2 homes

Only one home, therefore, had a registered nurse in attendance, while all the others had a practical nurse. Eighteen homes were complying

with all the rules and regulations and two were not meeting the sanitary, medical, and other standards contained in the rules and regulations. Two of the 2 A homes had improved from 2 C ratings in November, 1945. The number of patients accommodated ranged from three to 32, the median average being seven patients per home. Only two of the homes were taking Old Age Assistance recipients, and these were the two most crowded homes, having 23 and 32 patients. Seventeen homes were for White patients, three for Negro. Eight homes took both sexes, seven women only, and only one home was for men only (a Negro home). No information is on hand on the remaining four homes. Letitia Fairfield in describing nursing homes for the chronically ill in London, England points out that an equally inequitable distribution exists there, with too few nursing homes in general, and hardly any for men.¹ Five or one fourth of homes specify that they can accommodate mild mental patients. One will take cancer patients. Twelve homes take bed patients; the remainder do not take bed patients.

In June, 1945, a list of the nursing homes in Louisville and Jefferson County was compiled, giving sex, race, diagnosis, duration of stay, source of income (whether own or receiving public assistance), and condition of each patient. The data is summarized in tables 32, 33, 34, and 35. There were only 14 homes included in the census, with total population of 152. In November, 1945 revisions were made when five additional nursing homes were added to the list, bringing the total nursing home population up to 235. At this time

¹Fairfield, Letitia, "Care of the Chronic Sick", Lancet:2, October 9, 1943. p.456.

TABLE 32

DIAGNOSIS OF POPULATION OF NURSING
HOMES IN LOUISVILLE AND
JEFFERSON COUNTY, JUNE 1945

Diagnosis	Number of Patients
Total	152
Senile	56
Paralysis	26
Blind	14
Fracture	11
Cardiac	10
Arthritis	6
Mental	4
Rheumatism	2
Other	23

TABLE 33

DURATION OF STAY OF POPULATION OF
NURSING HOMES IN LOUISVILLE
AND JEFFERSON COUNTY JUNE, 1945.

Duration	Number
Total	152
Under 6 months	51
6 months to one year	21
1 to 5 years	66
5 to 10 years	14

TABLE 34

SOURCE OF INCOME, OWN OR PUBLIC ASSISTANCE, OF
POPULATION OF NURSING HOMES IN LOUISVILLE AND
JEFFERSON COUNTY JUNE, 1945.

Source of Income	Number
Total	152
Own	111
Public Assistance	41

TABLE 35

CONDITION OF POPULATION OF NURSING HOMES IN
LOUISVILLE AND JEFFERSON COUNTY JUNE, 1945

Condition	Number
Total	152
Bedfast	60
Ambulant	88
Unknown	4

analysis was made of the types of care received, and whether the individual was a temporary or permanent resident. This data is shown in table 36. Sixteen of the total 235 were convalescents; about seven percent.

TABLE 36

TYPE OF CARE RECEIVED BY POPULATION OF NURSING
HOMES IN LOUISVILLE AND JEFFERSON COUNTY
NOVEMBER 1945, BY WHETHER TEMPORARY
OR PERMANENT RESIDENT

Type of Care Total		Temporary	Permanent
Total	235	21	214
Domiciliary	88	3	85
Nursing	53	1	52
Medical and Nursing	94	17	77

It can be seen that the majority of people are diagnosed as being senile; that most stay a long time, between one and five years. A great many people, admitted when they are old, remain until they die. The cost of nursing home care ranges from the small amount received by Old Age Assistance clients to about \$125 a month. The average Old Age Assistance grant of \$19 a month is turned over the nursing home operator, and a small part of this, depending upon the size of the grant, is returned to the patient to be used for personal expenses such as tobacco. At one home only one dollar was refunded to almost all of the patients; in another the patients got to keep three dollars for themselves, one patient getting as

much as six dollars. For the individual without financial resources of his own, the nursing home might just as well not exist. The cost of nursing home care is prohibitive for most people. The quality of care given usually depends upon the number of people in the home; the smaller homes charging higher rates and giving better care. Louisville might do well to consider a plan of supplementation, with a basic fixed nursing home rate as was done in New Jersey. The only facility left for the patient who cannot be cared for in his own home, and who is not eligible for nursing home care, is the institution which is more expensive for the city. In spite of their many faults, the nursing homes care for many people who would otherwise have to be institutionalized.

MUNICIPAL INSTITUTIONS

According to the 1940 U.S. census there were 450,000 persons in institutions providing chronic hospital, custodial, domiciliary, and special care, not including the chronically ill in general hospitals. Institutions can be classified under two main categories: publically supported and operated, and the voluntary, endowed, benevolent, or church supported and operated. The public institutions caring for the chronically ill are usually called homes for the aged but the assumption is that they are for the well aged. As is the case in Louisville, they are composed almost entirely of the chronically ill, and have some in the younger age groups. Most of these institutions are equipped to give only custodial and not medical care, although the large institutions may have a separate hospital department or infirmary for the care of inmates who become ill. Serious illness cannot be treated here, however, and persons becoming seriously ill

are transferred to a city hospital. This points up the advantage of having a custodial division of a chronic disease hospital in close proximity to the main hospital. Most municipal homes for the aged are survivors of the almshouse and the poor farm and some have never had their names changed. The Louisville city almshouse became the Home for the Aged and Infirm in 1895 but the sign at the entrance was not changed until 1935.¹ The almshouse is the oldest and the most widespread method of providing institutional care at public expense. The history of the almshouse will not be gone into here except to point out that they were an offshoot of the poor law principle of local responsibility and had their beginning as a "catch-all" institution for those for whom no other provision could be made, including dependent children, vagrants, alcoholics, mentally deficient, insane, and paupers; all housed together. "Its historic function as the final refuge for human derelicts who can find no other haven still moulds its policies. Medical care, not to say medical rehabilitation is not thought of."² "Over the hill to the poor house" is a descriptive lay expression in frequent use to express the feeling of the average citizen about almshouse care. The evils of the almshouse system, many of which still exist today, have attached a permanent stigma to the almshouse which makes it very difficult for many people to accept care there.

¹Lipetz, Irving, The Louisville Home for the Aged and Infirm, a Study of an Institution in Transition. Unpublished Masters Thesis, Division of Social Administration, University of Louisville, 1942. p.51

²Boas, E.P., The Unseen Plague Chronic Disease. p.39

The development of the almshouse according to function can be divided into two main periods: the "catch-all" period, and the period towards conversion of almshouses into institutions for the chronically ill.

HOME FOR THE AGED AND INFIRM

The Louisville Home for the Aged and Infirm is a three story brick building erected in 1874 with maximum capacity of 250. Almost all admissions to the Home have two factors in common; the lack of financial resources and the need for constant medical care. Since 1931 the Municipal Bureau of Social Service has had charge of admissions. Old Age Assistance also refers patients. The trend towards increasing use of the Home for the chronically ill was recognized as early as 1930, and in the ensuing years has become more pronounced. In 1941 28% of patients were bedridden as a result of chronic illness.¹ An analysis of the March, 1944 population showed that 192 of the population of 237 needed some kind of medical service. Of these, 99 were chronic hospital patients (needing intensive medical care). Seventy four were bed patients and 25 ambulatory cases needing frequent medical attention. There were 124 custodial patients, with less serious chronic conditions. Seventy nine of these needed occasional medical attention and 45 little or no medical attention. The remaining 14 of the ill population were convalescent cases referred from Louisville General Hospital. All of the 120 admissions to the Home for the Aged and Infirm during the fiscal year 1943-1944 were in need of medical care. Medical care that year amounted to 20.5% of total expenditures.²

¹Lipetz, I., op.cit., p.54.

²Annual Report of Department of Welfare op.cit., pp.41-43.

From May through September, 1945, a survey, including the one described above for nursing homes, was done of the public and endowed institutions in Louisville and Jefferson County. One hundred and four chronic patients were found in the Home for the Aged and Infirm. Of these 61 were male, 43 female; 65 White, 39 Negro. As in the patient study for Louisville General Hospital, the outstanding diagnosis was cardiac disease. Almost one fourth of the chronic population had this diagnosis. Fractures were next in importance in order of prevalence. The median age of the patients was 71.8 years, but there were several patients in the younger age groups, three under the age of thirty five. The oldest patient was ninety four years of age, suffering from arteriosclerosis and senility, and receiving nursing care. One of the youngest, in the age group twenty one through twenty five was a colored male spastic paralytic. The great majority of patients were bedfast and had lived in the home between one and five years. About nine percent of the patients had been there over ten years. The inmate with the longest stay in the Home had entered in 1904. Now aged sixty two, she was mentally deficient (moron), crippled, blind, and had hemorrhoids. Another patient had entered the Home in 1909 with the diagnosis of mental deficiency. Eighty seven patients were permanent residents, 17 were temporary. Only four required domiciliary or custodial care, and 20 nursing, while 80 required medical and nursing care combined. Tables 37, 38, 39 and 40 show the above data. Tables 41 and 42 are based on material derived from the survey in November, 1945 which brought the early study up to date and secured additional information.

TABLE 37

POPULATION OF PUBLIC AND ENDOWED INSTITUTIONS
IN LOUISVILLE AND JEFFERSON COUNTY
MAY-SEPTEMBER 1945, BY SEX AND RACE

Institution		Sex		Race	
		Male	Female	White	Negro
Total	382	138	244	341	41
Home for the Aged and Infirm	104	61	43	65	39
Jefferson County Home for Aged	26	17	9	24	2
Kings Daughters home for Incurables	98	40	58	98	0
Church Home and Infirmary	16	0	16	16	0
Altenheim	36	4	32	36	0
Lutheran Home	20	16	4	20	0
Parr's Rest	82	0	82	82	0

TABLE 38

POPULATION OF PUBLIC AND ENDOWED INSTITUTIONS
IN LOUISVILLE AND JEFFERSON COUNTY
MAY-SEPTEMBER 1945, BY DURATION OF STAY

Institution	Total	Duration of Stay	
		Under 6 months	6 months to one year
Total	382	32	40
Home for the Aged and Infirm	104	16	23
Jefferson County Home for Aged	26	3	0
Kings Daughters Home for Incurables	98	2	3
Church Home and Infirmary	16	0	0
Altenheim	36	4	4
Lutheran Home	20	3	1
Parr's Rest	82	4	9

TABLE 38--Continued

Duration of Stay, Cont.		
one year to five years	five years to ten years	ten years and over
146	81	83
45	11	9
9	7	7
41	20	32
8	1	7
14	7	7
6	4	6
23	31	15

TABLE 39

POPULATION OF PUBLIC AND ENDOWED INSTITUTIONS IN
LOUISVILLE AND JEFFERSON COUNTY MAY-SEPTEMBER 1945,
BY DIAGNOSIS

Institution		Senile	Cardiac	Paralysis	Arthritis
Total					
	Total 382	87	59	40	39
Home for the Aged and Infirm	104	8	23	3	4
Jefferson County Home for the Aged	26	4	6	1	2
Kings Daughters Home for Incurables	98	0	5	30	19
Church Home and Infirmary	16	9	3	1	1
Altenheim	36	16	2	3	7
Lutheran Home	20	6	6	1	3
Parr's Rest	82	44	14	1	3

TABLE 39--Continued

Fract- ure	Can- cer	Luetic	Mental	Cerebral Accident	Osteomyeli- tis	Poliomye- litis
29	9	9	8	8	8	7
21	3	8	2	8	1	0
0	2	0	2	0	0	0
4	0	1	0	0	7	7
0	0	0	0	0	0	0
1	0	0	2	0	0	0
0	0	0	0	0	0	0
3	4	0	2	0	0	0

TABLE 39--Continued

Diagnosis, Cont.					
Amputation	Blind	Anemia	T.B. of bone	Diabetes	Other
6	5	4	2	1	61
5	0	2	0	0	16
0	2	0	2	0	7
1	0	2	0	0	20
0	1	0	0	0	1
0	0	0	0	1	4
0	0	0	0	0	4
0	2	0	0	0	9

TABLE 40

POPULATION OF PUBLIC AND ENDOWED INSTITUTIONS IN
LOUISVILLE AND JEFFERSON COUNTY MAY-SEPTEMBER 1945,
BY CONDITION

Institution	Total	Condition		
		Bed- fast	Ambul- ant	Unknown
Total	382	188	133	61
Home for the Aged and Infirm	104	78	24	2
Jefferson County Home for the Aged	26	4	12	10
Kings Daughters Home for Incurables	98	82	10	6
Church Home and In- firmary	16	6	10	0
Altenheim	36	3	27	6
Lutheran Home	20	6	12	2
Parr's Rest	82	9	38	35

The Home for the Aged and Infirm provides about 105 hospital beds for ill inmates. Medical care is secured through a physician, a supervisory graduate nurse, two interns, and 13 practical nurses. Twenty beds are set aside for the use of patients referred by Louisville General Hospital. This agreement was drawn up in 1931 between the Department of Health, the Dean of the School of Medicine, the Director of Welfare, and the Superintendent of the Home for the Aged and Infirm.¹ These beds are primarily intended for use by convalescing patients, the purpose of the plan being to relieve congestion at General Hospital, but actually there is no separation of convalescent and chronic patients and in the main these beds are

¹Caswell, G.B., op.cit., p.54.

TABLE 41

POPULATION OF PUBLIC AND ENDOWED INSTITUTIONS IN
LOUISVILLE AND JEFFERSON COUNTY NOVEMBER 1945,
BY TYPE OF CARE RECEIVED AND RESIDENT STATUS^a

Institution	Total	Type of Care				
		Domicil- iary Per.	Nursing Temp.	Per.	Medical and Nursing Temp.	Per.
Total	563	213	2	36	15	297
Home for the Aged and In- firm	104	4	2	18	15	65
Jefferson County Home for the Aged	26	5	0	4	0	17
Kings Daughters Home for Incurables	98	0	0	0	0	98
Church Home and Infirmary	16	3	0	0	0	13
Altanheim	36	29	0	7	0	0
Lutheran Home	20	13	0	7	0	0
Parr's Rest	82	68	0	0	0	14
Masonic Home	119	30	0	0	0	89
Moorman Home	62	61	0	0	0	1

^a Per = Permanent
Temp = Temporary

TABLE 42

POPULATION OF PUBLIC AND ENDOWED INSTITUTIONS IN
LOUISVILLE AND JEFFERSON COUNTY NOVEMBER, 1945,
BY SUPPORT

Institution	Total	Support	
		Private ^a	Public Assistance
Total	563	429	134
Home for the Aged and Infirm	104	0	104
Jefferson County Home for the Aged	26	1	25
King Daughters Home for Incurables	98	95	3
Church Home and Infirmary	16	16	0
Althenheim	36	34	2
Lutheran Home	20	20	0
Parr's Rest	82	82	0
Masonic Home	119	119	0
Moorman Home	62	62	0

^aSupported by the institution

used for chronic patients. The plan has not resulted in the immediate removal of many convalescent and chronic patients from Louisville General Hospital because there are few vacancies at the Home and patients remain at General Hospital for long periods of time until they can be admitted to the Home. A great amount of additional expense is incurred by this procedure, because per diem cost at the Home for the Aged and Infirm is approximately \$1.25 as compared with \$4.68 at Louisville General Hospital.

A trend towards conversion of homes for the aged and almshouses into chronic hospitals has been in evidence throughout the country during the past decade. Passage of the Social Security Act providing grants for the aged is believed to have been the

precipitating factor, as many people upon establishing eligibility for Old Age Assistance (also Aid to the Needy Blind) left the institutions. "It is not known whether this move away from institutions reflected:

1. the possibility of the recipients living upon his payment.
2. that the payment was sufficient supplement to other resources to permit maintenance outside an institution.
3. dissatisfaction with institutional life.¹

The matching of assistance grants to inmates of public institutions is prohibited by the Social Security Act. In some cases the departure of the aged resulted in pressure to abolish the almshouse, based on the theory that all of the inmates would be transferred to Old Age Assistance and the almshouse population would be entirely depleted. The ever increasing number of chronically ill was not reckoned with. Instead, when the almshouses were emptied of their able bodied who were eligible for Old Age Assistance, the chronically ill were left behind. The proportion of chronics in almshouses has steadily increased.

There has been considerable thought given to conversion of the Home for the Aged and Infirm in Louisville into a chronic hospital. Mr. Charles J. Rieger, Jr, past Director of Welfare is quoted as saying in his 1939-1940 annual report: "I am confident that in the near future the Home for the Aged and Infirm will become a chronic hospital for the aged. Our planning must continue to be directed toward this development which perhaps will have to be tied in with

¹Need for a State Infirmary, op.cit., p.27

a general chronic hospital. The need of such an institution has already been cited in detail by persons in close touch with the situation".¹ A study of the Home for the Aged and Infirm, one purpose of which was to determine the feasibility of conversion, reached the following conclusion: standards in the Home compared favorably with the standards set up by the Joint Committee of the American Hospital Association and the American Public Welfare Association with a few exceptions, and that such conversion would be feasible if the following improvements were made: an elevator installed, better fire escapes, physiotherapy instituted, additional wheel chairs secured, additional bathing and toilet facilities installed, the hiring of a dietician and at least one more social worker, a number of practical nurses secured, and a program of Occupational Therapy started.²

The installation of an elevator has been requested by the department of Welfare (which operates the Home for the Aged and Infirm) for a number of years, to no avail. It has been estimated that about 30 additional patients could be cared for on the second floor if there were an elevator. The cost of the elevator and of its installation, also the cost of the additional beds is figured at about \$8000.

Capital Outlay Expense for Accommodations for 30 Additional Chronic Hospital Patients Home for the Aged and Infirm. April 11, 1945 ³

1. Installation of key-operated, self-leveling automatic elevator first to third floors. Elevator equipment proper- 5 feet wide by 6 feet 6 inches front to back, by 7 feet high. (in-

¹Lipetz, I., op.cit., p.108.

²Ibid.,

³Information secured from Miss Louise Diecks, Director of Welfare, Louisville, Ky.

cluding control machinery, car, rails, etc)	3,500
CCar gate	250
Outside doors	700
Labor on installation	750
	<u>5,200</u>
Labor on building shafts	500
Motor	250
	<u>\$5,950</u>

2. Hospital equipment and supplies

30 hospital beds @ 25.20 each	756.00
30 mattresses @ 7.60 each	228.00
30 bedside table @ 9.75 each	292.00
15 bed pans @ 2.00 each	30.00
sheets, pillow cases, pillows, spreads	365.00
dishes	60.00
30 trays @ 2.00 each	60.00
1 food carrier	50.00
1 dressing cart	50.00
1 wheel stretcher	160.00
2 laundry hampers @ 17.75 each	35.50
	<u>\$2087.00</u>

Total Capital Outlay \$8037

Not all of the opinion is in favor of conversion of the almshouse into a chronic hospital. The physical plant is often in such poor condition that it does not seem justifiable to expend the large sum that would be necessary to make the change. The buildings are usually old and in need of expensive repairs, and the care given the patient corresponds with the character of the physical plant.¹ Class A and Class B patients should be cared for in a modern chronic disease hospital and not in a converted almshouse. Class C patients could receive suitable care in a

¹Need for a State Infirmary, "Suggestions Concerning State Infirmaries for the Aged, Infirm, and Chronically Ill", op. cit., p.6

home for the aged if facilities are provided in addition to those which now exist. Other reasons why converted almshouses rarely make satisfactory hospitals are:

1. Tradition surrounding the almshouse
2. Its place in the policial scheme of things
3. Its geographical isolation
4. Its reputation as a pauper asylum
5. Its antiquated buildings and small size.¹

There is also an important financial consideration, aside from the actual cost of conversion. Chronic hospitals are, of course, in the institutional category, and patients in these hospitals would lose their eligibility for the social security benefits, Old Age Assistance, Aid to the Needy Blind, and Aid to Dependent Children, because the states would discontinue these programs, having lost the federal governments matching funds. Section 205.020 of the Kentucky Revised Statutes reads: "Old Age Assistance shall be granted to any needy person who is not at the time of receiving Old Age Assistance an inmate of any public or private institution except for temporary medical or surgical care in a hospital." This would mean that the local community would bear the entire cost of chronic hospitalization itself.

A special joint subcommittee of the Welfare Policy Committee and the Medical Care Committee of the American Public Welfare Association undertook to study this problem in 1945 in relation to the granting of public assistance to inmates of public institutions

¹Boas, E.P., "Chronic Diseases", Social Work Year Book, ed. F.S.Hall, Russell Sage Foundation, New York, 1933, p.80.

(excluding patients of correctional or mental institutions and general hospitals). The subcommittee reported that the local governments in most states bear almost the whole cost of hospital care for the chronically ill, a practice that would be increased should almshouses be converted into chronic hospitals. The local units of government (usually the county) bear a share of the cost of institutional care, public assistance, and health and welfare services entirely disproportionate to the size of their incomes.¹

TABLE 43

DISTRIBUTION OF COST OF INSTITUTIONAL CARE,
PUBLIC ASSISTANCE, AND HEALTH AND WELFARE SERVICES
BY LOCAL, STATE, AND FEDERAL GOVERNMENTS

Service	Unit of Government		
	Local	State	Federal
Institutional care (some states)	90%	10%	1%
Public assistance	12.9%	41.7%	45.4%
All health and welfare services (1940 in 34 urban areas)	29%	20.7%	68.6%

The total tax yield of the United States in 1944 was 43.6 billion dollars; the federal government receiving 82%, the states eight percent, and the local units of government ten percent. It is estimated that if the cost of chronic hospital care is to be borne entirely by the countries it would absorb more than one fourth

¹Evans, Louis, "Providing Institutional Care for Recipients of Public Assistance", Public Welfare, vol.3. No.11, November, 1945, p.252.

of their total tax revenues. The Subcommittee concludes that the county is the governmental unit least able to carry the cost, and that the federal provisions should be revised so that public assistance may be granted to inmates of public institutions. Other solutions that have been worked out in some instances have been the states sharing of the entire cost with the local units, (Illinois in 1945 authorized Old Age Assistance and Aid to the Needy Blind grants to inmates of county institutions, financed entirely from state and local funds) and the leasing of almshouses to private operators in order that inmates might become eligible for public assistance grants.

To substantiate the recommendation that the federal government expand its public assistance program to include inmates of public institutions, the Subcommittee repudiates the idea that the public assistance rolls would be swelled by enormous numbers of institutional cases by stating that the total maximum number of persons who would become eligible would be less than two percent of the present number receiving Old Age Assistance and Aid to the Needy Blind. Probably between 30,000 to 40,000 of persons now in institutions would be otherwise eligible and would cost the federal government ten to twelve millions or less than two percent of present expenditure. The same percentage, about two percent present numbers would become eligible for Aid to Dependent Children.¹

JEFFERSON COUNTY HOME FOR THE AGED

The Jefferson County Home is the public institution which serves residents of the county, as does Home for the Aged and In-

¹ Ibid ., pp.250-253.

firm, the city. Admissions to the home are made through the Jefferson County Welfare Department. Theoretically, the institution was set up as a home for the indigent aged and is not supposed to accomodate people needing medical or nursing care, but like the Home for the Aged and Infirm, a large proportion of its population suffers some form of chronic disease. It is estimated that "practically all 26 of the population at some time during the month are needing medical care".¹

The population of the Home is small, averaging 26 at any given time. Seventeen of these in September, 1945 were male, nine were female; 24 were White, two Negro. All of the residents were permanent. Only three patients had been in the home for less than one year,; the others having lived there from one to over ten years. Seventeen inmates required medical and nursing care, four nursing care only, and five domiciliary or custodial care. Almost one fourth of the population had a cardiac condition. Three times as many were ambulatory as were bedridden. Only one of the inmates had a private source of income. The above data is shown in tables 37 through 42.

There is no medical staff in the home and the Welfare Department pays for visits by a private outside physician. The institution is currently under study for the purpose of determining whether it should be placed under the direction of the Board of Health. It is currently under the supervision of the County Commissioners.

¹Report of Committee on Survey of the Operation of the Jefferson County Home For The Aged, November 29, 1945.

BENEVOLENT INSTITUTIONS

The benevolent homes for the aged are endowed by church groups, fraternal orders, and others, and usually limit admission to people belonging to these various affiliations. A pretty wide spread practice is the guarantee of life care within the institution if the individual turns over all or part of his resources to the institution. Other institutions charge a rather high admission fee, and a larger one to people not affiliated with the organization sponsoring the institution, in return for which they too receive life care. A few charge a monthly rate which is lower than actual cost of care. Some institutions specify that the individual be in good health upon admission, but they do take care of him if he becomes ill while in the home. Many have residence requirements.

Five benevolent institutions were surveyed in the above mentioned study by the Health Department, and in November when the data was brought up to date, two more homes were added, as shown in tables 37 through 42. There are several additional institutions not covered by the study, including the Cook Benevolent Institution, the Little Sisters of the Poor, the Sacred Heart Home, Saint James Old Folks Home, and the Christian Church Widows Home. The Church Home and Infirmary is non-sectarian. Cook Benevolent Home, non-sectarian has a five years residence requirement and specifies that the individual must have no relatives upon whom he can depend. If the individual has an insurance policy it is assigned to the institution for burial purposes. The Moorman Home has similar requirements. The minimum age for entrance

into the Little Sisters of the Poor which is also non-sectarian, is sixty. It houses about 247 people, mostly men, and has a 70 bed infirmary. The Louisville Protestant Altenheim has a minimum age of sixty five and a five years county residence requirement. Part of the individuals income must be turned over to the Home. If there is no income a two thirds vote of the Board is required before the admission can be approved. The Masonic Home accepts widows of Masons who are old and indigent. Parrs Rest is for Baptists and other protestants sixty years of age, ambulatory, with no income. St. James Old Folks Home is for Negro men and women, old and indigent. Sacred Heart Home is almost entirely limited to catholic women, although non-catholics are admitted. There is no minimum age but applicants must be elderly, and have no chronic ailment. They must be "respectable and deserving", and may pay board if they are able. The Christain Church Widows Home accepts people who are members of the Christian chruch for ten years and residents of Kentucky for five years. The Lutheran Home in Jeffersontown asks \$500 admission charge and \$1500 of non-lutherans. Fifty eight years is the minimum age and residence of one year in mandatory.

Summarizing some of the above data, we see that senility was the major diagnosis for most of the patients in the nursing homes and benevolent institutions but heart disease was more prevalent in the two city institutions; there were more ambulatory patients in nursing homes than in the public and endowed institutions; in all three the residents were almost all permanent, and had an average duration of stay of from one to five years, although patients remained in public and endowed institutions longer than they did

in the nursing homes; there were more people requiring medical and nursing care in the public institutions than in the endowed and nursing homes. Three eighths of people in all three kinds of institutions required custodial or domiciliary care, about one ninth medical care only, and almost one half medical and nursing care. Almost all of the institutional cases were supported by the institution (the Welfare Department in the two city homes), and almost all of the nursing home patients were paying their own way. There were many more females accommodated than males, and a preponderance of White over Negro. It was estimated that there were 16 convalescents in the nursing homes and 17 in the public institutions. The studies also included 62 chronic patients known to be in their own homes and needing chronic hospital care.

TABLE 44

CHRONICALLY ILL PATIENTS IN ENDOWED AND
PUBLIC INSTITUTIONS, PRIVATE NURSING HOMES, AND
OWN HOMES, LOUISVILLE, KY. NOVEMBER, 1945

Total	
Patients in 7 endowed institutions	860
Patients in 2 public institutions	433
Patients in 19 private nursing homes	130
Patients in own homes	235
	62

TABLE 45

SUPPORT OF CHRONICALLY ILL PATIENTS IN ENDOWED AND
PUBLIC INSTITUTIONS, PRIVATE NURSING HOMES,
AND IN OWN HOMES, LOUISVILLE, KY., NOVEMBER, 1945

Support	Number
Total	860
Public Funds	226
Private Funds	634

TABLE 46

TYPE OF CARE REQUIRED BY CHRONICALLY ILL
PATIENTS IN ENDOWED AND PUBLIC
INSTITUTIONS, PRIVATE NURSING
HOMES, AND IN OWN HOME, LOUISVILLE, KY. NOVEMBER, 1945

Type of Care	Number
Total	860
Domiciliary care	331
Nursing care	91
Medical and Nursing care	438

HOSPITALS

Louisville's hospitals, voluntary as well as the General Hospital are taking care of the chronically ill to greater or lesser degree. Some of these hospitals are:

TABLE 47

HOSPITALS IN LOUISVILLE, KY.
BY BED CAPACITY

Hospital	Capacity
Total	2,150
Nortons	174
Childrens Free	68
Jewish	115
Baptist	152
Deaconess	87
Red Cross	67
St Anthony	155
St Joseph	369
SS. Mary and Elizabeth	190
Kosair Crippled Childrens	100
Kings Daughters Home for Incurables	98
Waverly Hills Sanitorium	575

Planning for the mentally ill is not the responsibility of the municipal government because the state has assumed this function. The report of the Committee for Kentucky states that our mental hospitals are overcrowded, often with patients who do not properly belong there and who constitute a "dead weight load", such as old age patients suffering cerebral arteriosclerosis. About one out of eight patients in our mental hospitals is not mentally ill, but is old, crippled, or unable to care for himself. At least 3,000

mentally deficient people in the state need institutional care which is not available to them, the feeble minded institute having room for only 750.¹

Several private sanatoria are available for the treatment of the alcoholic, charging very high rates, such as the Stokes Sanitorium.

The tuberculous are cared for in the 575 bed Waverly Hills Sanitorium. At a meeting of the Louisville and Jefferson County Board of Health in March, 1946, a resolution was passed providing for some liberalization of the admissions policy. Rules are now flexible enough so that the admittance committee composed of the Director of Health, the Controller and Assistance Controller, and the social investigator of the Tuberculosis clinic, will have some discretion in handling doubtful cases.

KINGS DAUGHTERS HOME FOR INCURABLES

The Kings Daughters Home for Incurables was included in the Health Department study of nursing homes and institutions caring for the chronically ill, but it is by actual definition, a hospital. It is the only ⁱⁿ⁻stitution in Louisville bearing the fear-provoking title "incurable". By estimate, more than one fourth of the population at Kings Daughters can be rehabilitated.²

In 1927 a program of vocational rehabilitation was begun with the cooperation of the State Department of Education, which provided training in shoe repair and auto mechanics to a few patients.

The proposal in 1937 to convert the Home into a vocational guidance institution for handicapped young people has never been acted

¹Courier-Journal (Louisville) November 18, 1945, section 3, pl, column 5.

²Statement by Dr. John D. Trawick, Asst. Director of Health, Louisville and Jefferson County, Personal interview, February 12, 1946.

upon.

The use of the term "incurable" is indicative of the fatalistic, defeatist thinking of so many about the chronic diseases. Starting with a bed capacity of about 40, the capacity of the Home has more than doubled in the ensuing years. Patients are accepted from all over the state but an effort is made to keep the population in proportion to the Louisville population. The Home is state and Community Chest supported and also derives part of its income from pay and part pay patients. Mentally ill, cancer, and tuberculous patients are not admitted. Only White patients are admitted whose incapacity is of a permanent nature.

Family Service Organization has recently taken over the function of investigating new applicants; this being a temporary plan until a medical social worker can be secured. The Board of the Kings Daughters has the responsibility for final decisions on admissions, and for all policies of the home. An attempt is made to fill vacancies in the order in which applications are made, but this is not always feasible as the next vacancy may, for example, call for an ambulatory patient who may be far from the top of the waiting list. There are usually not more than 15 vacancies throughout the entire year. Family Service Organization is attempting to clear the waiting list of those people for whom other plans had in the meantime been made.¹

¹ Taylor, E. op.cit.

CRIPPLED CHILDREN

The primary source of help for Kentucky's crippled children comes from the Kentucky Crippled Childrens Commission, a public agency receiving part of its money from the federal government under Section 512, Title V, of the amended Social Security Act. State funds, in addition to the federal contribution, are supplemented by the Kentucky Society for Crippled Children, a private state-wide organization, the Kentucky chapter of the National Foundation for Infantile Paralysis, and from payments and donations. During the fiscal year July 1943 through July 1945, 3,590 Kentucky children were treated under the auspices of the Commission. The average amount spent per patient was \$185.59 but this did not include the services contributed by many other community agencies including railroads, bus lines, and cab companies who gave passes and reduction in ticket rates, the County Health Department staffs, Travelers Aid Society, American Red Cross, and the local chapters of the Kentucky Society for Crippled Children. Saving is also effected through uniform payment rates for hospitalization which does not approximate the actual cost of such hospitalization.

The Commission provides free treatment for White and Negro orthopedic cripples under the age of twenty one (this was an amendment to the original act which did not go past the age of eighteen), of sound mentality, whose parents are financially unable to pay for the child's treatment. Persons over twenty one years of age are referred to the Office of Vocational Rehabilitation. Many types of crippling conditions are represented in the Com-

mission's patient load including: poliomyelitis, congenital defects, osteomyelitis, tuberculosis of the bone, injuries, spastic paralysis, etc. Functions include diagnosis, remedial care by hospitalization or appliance, preventive care, follow up, and referral to other agencies.

The Commission does not operate its own hospital but buys care for its patients at the existing hospitals. All applications for Kosair Crippled Childrens Hospital are cleared through the Commission. Kosair, in existence since 1926, is owned by the Kosair Charities Committee but is not one of the National Shrine Hospitals. It is operated by its own Board of Governors. The Commission pays two thirds of the cost for each patient and the hospital raises the balance through its endowment fund and special fund raising activities. The hospitals original bed capacity has been increased from 50 to 100 beds. During the poliomyelitis epidemic in 1944 the entire bed capacity was devoted to the treatment of poliomyelitis cases.

Louisville General Hospital and St. Joseph's are also used by the Commission, the latter primarily for neurological cases. A physical therapy out-patient clinic is also located at Louisville General, opened in January 1945 to provide follow up treatment for poliomyelitis patients of the 1944 epidemic. Occasionally a child is sent to Childrens Free Hospital but this is mostly for medical care, and the Commission does not pay for their treatment.¹

¹Kentucky Crippled Children Commission, Biennial Report, 1945. pp.4-24. Courier-Journal(Louisville), November 11, 1945. Section 3, p.3, Column 1-4.

It is estimated that there are some 2,500 to 3,000 cases of cerebral palsy (spastic paralysis) in the state of Kentucky (803 are known to the Commission) and surveys to determine the exact number are being carried on by the Louisville Lions Club and the American Legion. Two bills are before congress providing for federal aid for spastics. The Pepper Bill would distribute 75 million dollars to the states on a proportional matching basis. The other bill would increase the amount now provided under the Social Security Act for spastics by 50 million dollars. In April, 1946 the Kentucky Crippled Childrens Commission and the Kentucky Society for Crippled Children sent a committee to Baltimore and New York where a study of the facilities for treating spastic cases was being made, in an effort to learn how a special program involving medical treatment and educational training should be set up in the state.

CHILDREN WITH RHEUMATIC FEVER

Rheumatic fever is another serious chronic disease affecting, according to a study of Louisville Children attending public and parochial schools from 1936 to 1939, 52% of school children. This figure includes both rheumatic heart injuries and heart injuries dating from birth. Rheumatic heart disease occurred in 33% of the White and 35% of the Negro pupils, and heart disease dating from birth in 18% of the White and five percent of the Negroes. Louisville could secure money from the Federal Childrens Bureau (under Social Security provisions) for a program of care and treatment for rheumatic fever patients if it could establish eligibility through meeting the following requirements: by showing a demonstrated need, by having an approved state agency to

administer the program, and by having adequate facilities where such care could be given. Louisville qualifies under the first two provisions, but does not have adequate hospitalization facilities. A program was prepared calling for an annual budget of \$18,300 with which three centers could be established, one in Louisville, for clinics and consultations under the joint direction of a heart specialist and a pediatrician. The plan is being held in readiness until such time when Louisville will become eligible for federal money to put it into effect. Oklahoma had a rheumatic fever program approved in 1940 and there are now 18 states and the District of Columbia with approved programs.¹ Convalescent facilities for children with rheumatic fever are especially important. There are no such facilities in Louisville for Negro children except through the medium of foster homes.

LOUISVILLE GENERAL HOSPITAL

The Louisville General Hospital has a bed capacity of 577 beds and 60 bassinets. The primary responsibility of the hospital is for the acutely ill patient but with much of its effort directed towards the chronically ill whose duration of stay is long and who have frequent admissions, the hospital is under great pressure in discharging the duty it owes to the acutely ill. The hospital has a public responsibility to care for the sick, but actually it is a moral obligation not enforceable by a court of law and General Hospital could therefore prohibit the admission of patients who were not in need of acute or emergency treatment if it chose to

¹ Ibid., Column 5-6

do so. Patients frequently "shop" for hospital care, and rejected by the private hospitals in the city, apply for admission to the public hospital. Louisville General Hospital has a liberal admissions policy and does not distinguish between the acute and the chronic if the individual appears to be in distress, although the purpose of the General Hospital is usually conceived of as the care of the acutely ill in need of immediate medical diagnosis or treatment. Louisville General Hospital could take one of several courses of action: it could admit by the "first come, first serve" principle, thereby depriving many acutely ill patients of needed hospitalization; it could take more than its quota of patients, thereby crowding the hospital and giving less service to the patients it accommodates; or it could refuse chronic patients not in need of emergency treatment. It has chosen to compromise with emphasis upon the second plan, resulting in crowding and less service per patient. Some of the crowding is of course due to the nature of the hospital organization itself. Medical beds may be in great demand one week; surgical beds the next. One ward may be tremendously overcrowded, overflowing into the halls; another half empty, but this cannot be altered as the hospital is divided into services.

Dr. Bachmeyer found that on an average day 15% of patients in the hospital are the chronically ill who need prolonged institutional care. The three weeks survey in 1927 found about eight percent of patients who could be cared for in a chronic institution, and the one day survey in that year, 13.1% of total hospital popu-

lation. The cost to the city of the care of the chronic patients in Louisville General Hospital for the year September 1925 through September 1926 at per diem cost of \$3.16 was \$354,331.75.¹

Number of patient days 112,153

Expenditures \$35433.75

Paid by the Board of Safety \$314,331.75

Contributed by medical school \$40,000.00
in services and money

The patients in the present study cost the city an average of \$84.24. The situation is not peculiar to Louisville General Hospital. In New York City in 1928 one fifth of beds in general hospitals were occupied by patients with chronic disease. Nineteen percent of total facilities of Bellevue Hospital, the city's foremost general hospital, were given up to the care of chronic patients. It is estimated that probably four percent of the ward beds of general hospitals may be occupied by chronic patients at any one time for a legitimate reason.² A survey in 1940 found that 27% of dismissed patients from Louisville General Hospital were readmitted within one month; 39% from within two months to one year. Fifty two percent of all such patients were readmitted with the same diagnosis.

In 1944 the average length of stay per patient in a voluntary hospital in the United States was ten days. The comparable figure

¹ Health and Family and Child Welfare Council of the Community Chest, Study of the Provision for Chronic and Incurable Patients, Louisville, Ky., 1927.

²Jarrett, M.C., Chronic Illness in New York City. vol.1.p.51

in New York City in 1940 was 12.3 days for voluntary hospitals and 15.8 days in municipal hospitals. Compared with total hospital days per patient in a chronic hospital (133.2 days in a voluntary hospital and 172.9 in a municipal) it was estimated that one chronic patient occupying a general hospital bed deprives 12 acutely ill patients of the use of that bed.¹

The average length of stay per patient, in Louisville General Hospital is twelve days, but we do not know what the average would be if chronic patients were not included in this figure. In the present study the average length of stay of previous admissions was 5.8 days. This figure is low because it includes patients for whom there were no previous admissions. Being a median average, it also fails to take into account patients who spent as many as 204 previous days in the hospital.

Chronic patients remain in the hospital for long periods of time not only because of the nature of their condition and treatment given, but because it is particularly difficult to make discharge plans for them and they remain in the wards until satisfactory (under the circumstances) plans can be worked out, sometimes waiting for an expected vacancy in a nursing home, benevolent institution or the hospital division of an Home for the Aged and Infirm. During the month of January, 1945, about 41 patients (in-patients and out-patients) who required chronic care came to the attention of the

1 Rosenfield, I., op.cit., p.51-52

In 1944 the average length of stay per patient in a voluntary hospital in the United States was ten days. The comparable figure in New York City in 1940 was 12.3 days for voluntary hospitals, and 15.8 days in municipal hospitals. Compared with total hospital days per patient in a chronic hospital (133.2 days in a voluntary hospital and 172.9 in a municipal) it was estimated that one chronic patient occupying a general hospital bed deprives 12 acutely ill patients of the use of that bed.¹

The average length of stay per patient, in Louisville General Hospital is twelve days, but we do not know what the average would be if chronic patients were not included in this figure. In the present study the average length of stay of previous admissions was 5.8 days. This figure is low because it includes patients for whom there was no previous admission. Being a median average, it also fails to take into account patients who spent as many as 204 previous days in the hospital.

Chronic patients remain in the hospital for long periods of time not only because of the nature of their condition and treatment given, but because it is particularly difficult to make discharge plans for them and they remain in the wards until satisfactory (under the circumstances) plans can be worked out, sometimes, waiting for an expected vacancy in a nursing home, benevolent institution or the hospital division of an Home for the Aged and Infirm. During the month of January, 1945, about 41 patients (in-patients and out-patients) who required chronic care came to the attention of the

¹Rosenfield, I., op.cit., p.51-52

social service department. Dr. Bachmeyer notes that the voluntary non-profit hospitals in Louisville frequently are compelled to retain patients because more suitable facilities are not available.¹

CHRONIC HOSPITALS

A chronic hospital would seem to offer the best solution to the problem, not only as a means of saving money for the city, but more important because it would offer the chronic patient the most integrated plan of medical care. Patients suited to chronic hospital care are those whose homes are unsuitable, those who would not be receiving the proper medical care at a nursing home, public or endowed institution, those who are not eligible for care at a nursing home, public or endowed institution by reason of inadequate finances (or too adequate finances for the public institution) age, sex, color, residence, type of illness, etc., those who would otherwise be eligible but for whom no vacancy exists, and those for whom no proper resource exists. In the 1927 chronic disease study it was pointed out that the city and county homes for the aged as well as the benevolent institution were not providing adequate medical and nursing service, that there was no provision for the care of cancer patients except in the hospitals for acute cases, that there was no provision for crippled children from 16-18 years of age nor for adult cripples, that there was no provision for colored chronic patients, and that rehabilitation service was inadequate; 50% of the chronic patients at Louisville General Hospital at the time of

¹Bachmezer, A.C., op.cit.

that study were under 40 years of age, and over 75% were males, many of them fit candidates for a program or rehabilitation.

Some of these defects have been remedied, but today, nearly twenty years later, many still exist. The institutions are still offering inadequate medical care, are careless about the diagnosis attached to the patients condition, are more crowded, the physical plants have become more rundown and neglected; but they have come to recognize the overwhelming problem of chronic illness that they are faced with which may lead them to attempt to do something about it.

There is still no provision for cancer patients who usually require skilled nursing care, and would be proper candidates for a chronic disease hospital. Only one nursing home accepts them willingly, a few cancer patients are located in the two city and in one endowed institution.

The age for help to crippled children has been extended to age twenty one, following a Federal Childrens Bureau recommendation, and the program is adequate except for a few groups such as the spastics. Facilities are also lacking for rheumatic fever patients and no federal money can be gotten until such facilities are available.

There is a crying need for planning resources for adult cripples, the polio myelitis victim, the arthritic, and the orthopedic cripple, among others, over the age of twenty one who are not eligible for the services under the Crippled Childrens Commission and who do not fit into the Vocational Rehabilitation program by virtue of their unemployability. When their incapacity becomes

great the only resource open to these patients is to seek admission to Louisville General Hospital, often occupying a bed for months at a time. If they are discharged after a brief period, they often have to be readmitted within a short time. A chronic hospital would be ideal for these patients, offering as long a period of hospitalization as is necessary for treatment and transfer to the custodial section of the hospital if the condition has become stationery and cannot be benefitted by medical and nursing care.

Negro chronic disease sufferers have little choice of facility. They can be admitted to the city institutions, or to the one benevolent institution for Negroes, or to three nursing homes, all of which had a 3C rating until November 1945. Negroes comprised 50% of chronic patients in this study but considerably less than 50% of resources are available to them. Convalescent care for Negro children is limited to whatever foster homes are available.

Rehabilitation services were expanded with the vocational rehabilitation amendments in 1943 and are probably adequate to meet the need of those who qualify.

There has been considerable thought given to building a chronic disease hospital in Louisville, as recommended in the 1927 and 1937 community chest studies. The 1927 study recommended that such a hospital be an extension of Louisville General Hospital as expert medical and nursing supervision is needed; that it provide pay, part pay, and free care; also that the existing institutions develop more adequate facilities; and that care in the patient's own home be continued whenever possible.¹

¹Study of the Provision for Chronic and Incurable Patients,
op.cit.

The 1937 survey stated that such a hospital would: provide adequate medical care for many patients now suffering in their own homes; permit admission of more acute cases to Louisville General Hospital following the release of chronic disease patients; and reduce the per diem cost of care of chronic disease patients needing medical care in an institution. It was estimated that a 555 bed hospital would be needed; 176 beds for the "mentally abnormal"; 379 beds for medical, orthopedic, and tuberculosis cases. The inclusion of the mentally ill and the tuberculous in a chronic hospital is a provision open to much question. More adequate planning has been done for these two groups than for the medical, orthopedic, and surgical patients, and the latter groups would require a large hospital by themselves.

Dr. Emerson in December, 1944 indicated that 20 chronic beds and 60 convalescent beds per 10,000 population is a fair estimate of need. According to this schedule, Louisville would need 760 chronic beds and 2160 convalescent beds.

The standard advanced by the Interdepartmental Committee to coordinate Health and Welfare activities is 4.5 hospital beds per 1000 population but this is for general hospitals, including chronic beds. In a Cleveland survey a conservative estimate was 3.3 beds per thousand population.

A preliminary report of a committee on chronic and convalescent hospital care noted that there were 548 persons known to be needing medical or hospital care because of chronic illness in Louisville in January, 1945.¹ In the report on the preliminary Louisville

¹Bachmezer, A.C., op.cit.

area hospital survey made in 1945 the author states; "certainly 400 chronic beds for the Louisville area would be a reasonable estimate of the needs of the community."¹ Public health administrators in Louisville are of the opinion, however, that a much larger hospital would be needed if the city is to begin to meet the needs of its chronically ill. One estimate is as high as 800-1000 beds.

Dr. Bachmeyer stated in his report that at least 100 beds could be used for Class A care, but if patients whose disabilities are of permanent nature but who require medical and nursing care are included, several hundred additional beds would be needed.²

Estimates of the size of the hospital therefore range anywhere from 400 to 1000 beds. Obviously, further study is indicated before any further planning can be done. No estimate is available from the above sources, of the number and proportion in each of the three categories; A, intensive medical care, B, skilled nursing care only, and C, custodial or attendant care, but in general it is believed that there should be three custodial beds for every hospital bed. In New York City in 1928 this division was as follows: over four fifths, C care, a very small number, B care, and one seventh, A care. At Montefiore Hospital in 1927 the distribution was: 38% group A, 18% group B, and 44% group C. In the present study of Louisville General Hospital chronic patients, chronic hospital care was recommended for over one half; 50% of these were recommended for A care, only one patient for B care, and almost half for C care.

¹Bradkey, F.R. and Raper R.E., op.cit.

²Bachmeyer, A.C., op.cit.

The most talked of plan for a chronic hospital is the one that would involve converting Louisville General Hospital into a chronic hospital and building a new one for acutely ill patients, the scheme advanced by Dr. A.C. Bachmeyer who, at the request of the Louisville Area Development Association's Hospital Committee, made a survey in February 1945 of the General Hospital, to develop future plans. Recommendations include the erection of a 600 bed hospital for the acutely ill and the conversion of at least two wings and the present nurses home for the chronic patients. Convalescent patients would have the use of at least one wing of the hospital and the present Psychopathic unit. Estimated cost of additional land, construction of new buildings, and conversion or remodeling of present buildings is five million dollars. Another plan is to build another wing adjoining the clinic building, to be used in addition to the clinic building for chronic patients.

No plan has as yet been advanced, to our knowledge, to construct an entirely new building for a chronic hospital. Although it may not be applicable here, Boas' advice "The idea that buildings unsuited to the acute will provide satisfactory accommodations for the chronic sick, is wrong",¹ should be heeded. It almost seems as though the chronically ill are being treated as step-children receiving hand-me-downs from their older siblings. The new building, like the new dress, is being given the oldest and favorite child, although the younger child, chronically ill, will wear the dress for a longer time and actually should have the better one.

¹Boas, E.P., "A Community Program for the care of the Chronic Sick", reprinted from Hospitals, February, 1936.

If a chronic hospital is build, existing facilities for caring for the chronically ill will not be discarded. The nursing homes and the city and benevolent institutions would still continue to satisfy the needs of some patients more than a chronic hospital would. Bachmeyer states that the Home for the Aged and Infirm will continue to serve some of the chronically ill, as will nursing homes of proper standard. The important thing is that the various levels of care be well coordinated, for "however excellent the separate services if their efforts are not coordinated, the individual falls into the gap and suffers."¹

STANDARDS OF CHRONIC HOSPITAL CARE

"The happy conception of a hospital with every modern appliance for the treatment of the chronic sick in a homelike atmosphere began to crystalize at the opening of this century".² Two principles of good chronic care are embodied here; first, that the hospital should have all of the facilities of the modern hospital for the treatment of disease, and second, that the chronic hospital should be planned to promote the comfort and happiness of the patient, especially because he will spend so much time here. Boas outlines in some detail how a chronic hospital should be planned, from selecting a site to the amount of space allotted to wheelchair storage. These specifications are intended, of course, for new construction, but certain of the principles may be adapted to a building already in existence. The highlights of Boas' plans are:³

¹Jarrett, M.C., Chronic Diseases in New York City, vol.1, p.49

²Boas, E.P., The Unseen Plague Chronic Disease. p.92

³Ibid., pp.92-120

1. Location in an outlying section of a city, beyond the turmoil of the city proper yet easily accessible by convenient transportation routes.
2. Ample grounds, landscaped.
3. Five essential sections must be provided in the buildings: administration, service, employees, medical, and custodial. In addition, a research unit and a nurses training school are highly desirable. Services are separated into neurological, general medicine, surgical including orthopedic, and cancer; with corresponding wards.
4. Administrative unit should contain, among other things, a library, auditorium for religious services, general recreation room for moving pictures and concerts.
5. Pavilion type of construction to relieve elevators of wheelchair congestion. All doors, corridors, elevators, lavatories, recreation rooms, telephone booths, and porches large enough to permit free passage of wheelchairs.
6. Small wards or rooms with two to six beds in each. Ample room for personal possessions.
7. At least one sun porch on each floor.
8. Central dining room for custodial section(not practical for other patients) is economical and creates spirit of congeniality. Round tables 52 inches in diameter to accommodate four wheelchairs or six ambulatory.
9. Custodial unit close to the main hospital and connected with it by a covered passageway.
10. Separate unit for children.
11. Tailor and barber shops and patients cooperative store.
12. Reception ward and examining rooms near ambulance entrance.
13. Dental service, physical therapy department, and workshops of Occupational therapy department, within easy reach of patients.
14. Follow up clinic for discharged patients.

The nature of Louisville General Hospital's physical plant is such that it could meet many of the above standards, if converted into a chronic hospital. It would not meet the first standard,

choice of site, of course, as it is located in the heart of the city. Although not offering the advantages of ample grounds at minimum cost, this location does provide greater convenience of transportation and saves the expense of constructing and maintaining employees quarters. The nurses building could easily be converted into the custodial section, and fits the above standards exactly as it is separated from, but within easy access of the main building. This leaves the problem of providing new quarters for the nurses, unless they could be housed with the nurses of the main hospital. The present emergency section could be used for reception and examining rooms(as they are now) and is located near the ambulance entrance. Only four essential sections would be needed, as few employees would have to live in the hospital. The administrative section could remain where it is now, on the first and fifth floors. A more ample library than now exists, would have to be provided for patients. The medical library for the staff could remain where it is, but the patients' own library should have more than just a few shelves for books; it should include an attractive reading room. A general recreation room is also lacking under the present set up and an auditorium which might be located where the ampitheatre now stands. Since the clinic building would no longer be in use for that purpose, except for a small follow up clinic, it could be used for tailor and barber shops and patients cooperative store, as well as for a recreation center. Louisville General Hospital does not have a pavilion type of construction, being one large continuous unit; but its corridors are ample to accomodate wheelchair traffic. The

elevators in the main building are large enough to accomodate several wheelchairs at one time. Almost all the wards have a closed sun porch, which due to crowding, is used as an extension of the ward; but in a chronic hospital may be used as originally intended. Ideally, there should be several open porches where the patients may have the advantage of fresh air and sunshine. General Hospital offers little opportunity for getting the patients out of doors. This is a serious lack. The wards as they are now constructed, are much too large and should be partitioned off into six bed wards. Division into services would, of course, be left to the medical staff.

To make the hospital as homelike as possible, and to relieve the monotony, it is important that a variety of color be used. This would help to reduce the present drab appearance of the hospital. An example of this type of planning which has been put to good practicable use is the new hospital for chronic diseases on Welfare Island in New York. Every effort was made to make the interior of the buildings durable but also cheerful and colorful. The wards are finished in peach tint, with the metal partitions and radiators of a darker shade. Ward floors are gray and maroon, and the corridor floors blue and gray. Exteriors of the buildings are greyish buff brick.

Chronic hospitals in general, have two goals: to give the best possible care to those who need chronic care, and to return as many as possible to their homes. There should be proper sorting of patients, as the time to arrange for home care is before the patient becomes institutionalized. Patients accepted for chronic

hospital care should be given a preliminary period of study before assignment is made to the appropriate section of the chronic disease hospital. As has been mentioned, transfer from one section to another may be anticipated as the patients condition changes. The average length of stay at Montefiore Hospital in 1940 was six months. Hospitalization for chronics is a particularly difficult problem because each patient occupies a bed for a long period of time, and because he can seldom pay for hospital care. In 1940 Montefiore patients paid only 4.7% of the cost of care. (not including indirect costs such as interest on investments and depreciation of property and equipment). One partial solution to the former problem is a rehabilitation program. By training the patient to do useful work, he will in the future be less of a charge on the community. Such training also improves the patients morale and helps him to get better faster. Margolis suggests that patients be hospitalized for a preliminary period during which time the foundation for an entire course of treatment be laid. After he has made a start toward recovery, feels confidence in the program of treatment, and is given simple instructions, the patient is returned home where he continues care and treatment with the aid of relatives who have also been instructed, or a nurse.¹ This would often work successfully, when the treatment is a form of physiotherapy, when home conditions are suitable, when relatives can help, etc.

Patients pay little or nothing towards their care, but they

¹Margolis, H.M., op.cit., p.8

do not pay much more in an acute hospital either. (except in the voluntary hospitals). One argument almost always advanced in favor of a chronic hospital is that cost of caring for a chronic patient in a chronic hospital is much less expensive than the cost of maintaining this patient in a hospital for the acutely ill. The equipment in a chronic hospital is much the same, if not superior to that in an acute general hospital as it includes more elaborate physical and occupational therapy facilities; the dietary budget is higher as many patients require special diets; but the smaller turnover in a chronic hospital is one factor that reduces the cost. Personnel cost is also lower in a chronic hospital. If a custodial section is included in a chronic hospital, the per capita cost is much lower than in a general hospital. The average per capita cost in Montefiore is \$4.14. Fifty seven percent of this goes for wages and salaries; 22% for food supplies; seven percent for medical expenses; seven percent for plant maintenance and operation expenses. Montefiore estimates that the cost per day of maintaining a chronic patient in a hospital is about two thirds of the cost of maintaining an acutely ill person, but the period of stay is considerably longer for the chronic. "The acute patient is more expensive to maintain in a hospital within a shorter period of time, while the chronic patient is more of a drain on the community, in the long run, because of the prolonged character of his illness and the correspondingly reduced chances of any kind of return on his part for his care".¹

¹Montefiore Digest 1935-1939. op.cit., p.8.

Since Montefiore Hospital's standards are so excellent they should serve as a guide to what is desirable for public care. The \$4.14 average per capita cost is probably higher than average cost elsewhere because so much research is done. Operating costs for other New York City municipal hospitals in 1940 were:¹

general hospitals	\$5.19
Goldwater Memorial Hospital (class A chronic disease hospital on Welfare Island)	\$2.93
Custodial chronic hospitals	\$1.50

In 1943 custodial care in Montefiore Home in Cleveland, Ohio was \$2.33 per day. Distribution of cost was as follows:

Administration	10%
Labor	27%
Food	27%
Medical fees	2%
Medical supplies	10%
Nurses salary	5%
Buildings and main- tainance	8%
Office, farm and other general expenses	20%

The per capita cost in Louisville's custodial institutions is considerable lower but this probably reflects inadequate care given. The cost of chronic care therefore varies from \$1.50 in a custodial institution to \$4.00 in a chronic hospital offering custodial as well as medical and nursing care. The Wagner-

¹Rosenfield, I., op.cit., pp.51-53.

Murray-Dingall Bill provides that payment for each day of hospitalization in a chronic institution shall be not less than \$1.50 and not more than \$3.50. The very much lower cost in a custodial institution as compared with a chronic hospital offering this care in combination with the two other types, A and B, might be construed as a possible argument in favor of maintaining chronic patients in a custodial institution, but we know that these institutions are not equipped to give adequate medical care and that the burden would continue to be borne by the general acute hospitals.

Construction costs of chronic hospitals are estimated at anywhere between \$1000 and \$7000 per bed, with operating costs depending upon whether the hospital is to house A and B or custodial patients. The chronic disease unit of the Fairmont Hospital in San Leandro, California was ~~erected~~ at a cost of \$1250 per bed.¹ A 300 bed ward built at Western State Hospital, Washington for the aged mentally ill cost \$300,000 or only \$1000 a bed.² Dr. Heiser's estimate of the cost of constructing a state infirmary for Connecticut was \$1000 to \$1200 per bed.³ A new hospital wing added to the Home for the Aged and Infirm Hebrews in New York City cost \$360,000 or about \$7000 per bed; however this included an out patient department and extensive physical and occupational therapy facilities.⁴ The Goldwater Memorial Hospi-

¹Jensen, Andrew C., "Chronic Disease Patients, Housing them Small Scale," Modern Hospital, vol.54, No. 1, January 1940 pp.74-75

²Cove, George, "A constructive contribution to the comfort of the Aged", reprinted from Modern Hospital, September, 1945

³Need for a State Infirmary. op.cit., p.17.

⁴Butler, Charles, and Golub, J.J., Home for Aged and Infirm Hebrews. New Hospital Wing Hospitals, December, 1942. pp.49-54

tal, a class A chronic hospital cost \$4,630 per bed to construct. The comparable cost of a grade B or grade C chronic diseases hospital is estimated to cost about \$2,600 per bed. The average construction cost per bed of an acute general hospital including power plant, garage, nurses residence and training school, and out patient department is \$8000.¹

NURSING

The nursing staff in a hospital for the chronically ill may be, and usually is of two types; the graduate, registered nurse, and the practical nurse or attendant. Although the chronic hospital does not require as many nurses as the general acute hospital, the quality of nursing care given must be the equal of that in the general hospital. Chronic patients may be very trying, as they make a good many demands, and are generally unpleasant to work with. There is little variety; the nurse sees the same patients week after week and month after month. In general, nurses dislike the chronic service for the same reasons the doctors dislike it. The nurse in a chronic hospital must have a good deal of patience, tact, and firmness. They must be "intelligent observers- able to distinguish between real and fancied ills, trained in the psychology of the sick, appreciate the value of and cooperate with the medical social worker, occupational therapist, librarian, chaplain, in helping to maintain the patients morale, have an unlimited capacity for friendliness and kindness".²

¹Rosenfield, I., op.cit., p52

²Jensen. A.C., "Sufficient Nursing of chronic illness", Modern Hospital, vol.63, No. 1, July, 1944. pp.57-59

The practical nurse is not equipped to give this type of service, and in the long run it is more expensive to have a majority of practical nurses; few graduate nurses. The chronic service should not be overlooked for the training of specialized, skilled nurses. It is estimated that two hours per patient per 24 hours of nursing care (including student nurses, attendants, and orderlies) is necessary for the satisfactory care of a patient in a chronic disease hospital, in comparison to three to three and one half hours in a general hospital.¹ One nurse to every two or three patients in a general hospital; one nurse to three and one half patients in the hospital section of a chronic hospital; and one nurse to six and one half patients (including graduate and student nurses, attendants, and orderlies) in the custodial section of a chronic disease hospital is a desirable standard.²

OCCUPATIONAL THERAPY

Two of the "therapies" that are so necessary in chronic treatment are occupational therapy and physical therapy. Others include radio therapy (x-ray and radium) and psychotherapy. Occupational therapy is an important phase of treatment in a chronic disease hospital. "It may consist of any activity, mental or physical, that relieves a patient temporary, or contributes to

¹Clay, Charles L., "Keeping Them Contented. Chronic Disease Patients," Modern Hospital, vol.54, No. 1, January, 1940. pp.77-79.

²Jensen, A.C., "Efficient Nursing of Chronic Illness". pp.57-59

recovery. The objectives sought are to arouse interest, courage, and confidence, to exercise mind and body in healthy activity, to overcome disability, and to re-establish, capacity for industrial and social usefulness. Like other forms of remedial treatment it should be prescribed and administered under medical advice and correlated with other treatment of the Patient".¹ There is nothing quite so depressing to the patient as having to sit around idly, waiting for the next meal. Occupational therapy in the form of simple crafts such as sewing, knitting, crocheting, weaving, woodwork, jewelry making, games and other group activities, give a tremendous boost to the patient's morale. None of the patients in this study were reported to be utilizing the service of the occupational therapist, and several of the patients, especially in the younger age groups, expressed a desire to occupy themselves in some way other than by looking at the ceiling, or conversing with the other patients.

PHYSICAL THERAPY

Physical therapy, the treatment of disease by physical and mechanical means, has special application in the treatment of the chronic patient. It includes such forms as electro-therapy, hydro-therapy, thermo-therapy, helio-therapy, and mechanotherapy. Physical therapy is applied with the two fold purpose of preserving and strengthening bodily functions as well as counteracting the processes of disease. Three conditions which in many cases can be especially benefitted by physical therapy are arthritis, cardio-vascular disease, and hemiplegia. In arthritis general

¹Jarrett, M.C., "Care of the Chronically Ill". p.687.

measures are used to increase circulation and metabolism. During the acute stages of the disease, rest and applications of heat; dry, wet (contrast baths) or with diathermy, massage, and the exercise of involved joints to prevent the formation of adhesions or atrophy of surrounding muscles is helpful.

The decompensated cardiac patient is helped by rest and massage to improve the blood circulation. Closely supervised postural exercise is helpful for the patient confined to bed. When nervous tension exists baths and local heat may be given to advantage.

The contribution of physical therapy to the hemiplegia patient, previously mentioned, consists of improving muscular coordination, strengthening of weak muscles and stretching of the stronger spastic ones, through mild heat, light sensitive massage, and exercise, first mild then more active as muscular power returns.¹

MEDICAL SOCIAL SERVICE

The medical social worker has an important role in the chronic disease hospital. No plan of medical treatment is effective without consideration of the social problems that are inherent in each individual's situation. Every patient coming to the hospital is both a medical problem and a social being and planning for the individual must take this into account. A medical plan without consideration for the social factors; the frustration produced by enforced idleness, conflict between feelings of dependence and independence, rearrangement of the whole life pattern, home conditions and family attitudes promoting or hindering the getting well process, has

¹Erickson, D.J. and Krusen, F.J., op.cit., pp.88-92.

little chance for being carried to a successful conclusion. The social plan must be a practicable application of the doctors recommendations to the patients social situation. The social worker may have to help the patient to accept the limitations imposed by the illness by finding the strengths within the individual and by making known certain community resources. The patient may reject the illness, refuse medical care or accept only those recommendations to his liking. At this point, the social worker, knowing what the medical implications are, helps the patient to see the need for medical treatment by showing acceptance of the patients feelings and by encouraging him to express his conflicts. The skilled worker is able to distinguish reality factors from psychological; the former consisting of such things as lack of knowledge of existing medical facilities, home responsibilities, inadequate finances, etc; the latter being deep rooted fears based upon feelings of insecurity, fear of losing whatever satisfaction the illness holds, etc. The social worker's function then, is to evaluate the situation in the light of what a particular experience means to a particular individual. "Each patient is unique in the problems he brings and the help he desires".¹

To establish a helpful relationship with the patient, the social worker has to know what her own feelings are. If she views cancer with dread, she may never be able to face the reality of this diagnosis with the patient; may never learn what meaning

¹Cockerill, Eleanor, "The Social Worker Looks at Cancer", Family, vol.xvii, no. 10. February, 1937. p.327

it has for the patient, with the result that the patient becomes more and more fearful and less able to take the steps necessary to getting well. With the arthritis patient this pent up feeling is expressed through painful immobilization of the joints; the joints getting the excess of feeling that should have been released through the medium of the social worker. "It is important that they have an opportunity to drain off this feeling for otherwise it can be as much a deterrent in their improvement as undrained wound."¹

More and more, social workers and doctors alike are coming to recognize the effect of the emotions upon the patients physical condition, a phenomenon which has been given the name "psychosomatic medicine". This relationship is especially apparent if we observe the patients adjustment to a prolonged disease. There are few people who can experience such a change in their life without some discomfort, some unhappiness, and some adjustment in their living pattern. Some people become tense and worried and withdrawn; they may be irritable and resentful. Bodily expression is given to these emotions in the form of an exacerbation of their illness. It has also been shown that the etiology as well as the recurrence of the illness is conditioned by the individuals psychic make up. Every disease has its psychic as well as its somatic aspects. The social worker uses this concept by evaluating in each situation the degree of physical and the degree of emotional involvement, never putting so much stress on one as to exclude

¹ Biddle, Cornelia Trowlridge, "The Individual in Relation to a Medical Care Program", Family, vol. XXV, No. 4, June, 1941 p. 110.

the other.

The patients problems are presented to the social worker in one of three ways: as a need for securing medical care, as problems of the environment, or as deep emotional problems. Often the first and second are stressed by the patient, but it is in the area of emotions that the patient is really needing help. Sometimes the three are integrated as in the case of a patient who does not know the hospital and clinic set up and is assisted in getting to the doctor in the appropriate clinic and in stating her complaints to him. The worker may share her observations with the doctor based on the patient's behavior, and helps the doctor to achieve a satisfactory plan by discussing conditions in the home which will directly affect the health of the patient. Carrying this example through further, the patient may then be admitted to the ward and while there tells the worker that she is worried about the children at home, about the family's inadequate income, about her need to have continued nursing care for a long period. The worker may then in the early stage of the disease, help the patient to achieve a mode of life that will contribute to her eventual recovery by arranging for the patient to be admitted to a nursing home, by arranging temporary foster home care for the children, and by helping the patient to file an application for Aid to Dependent Children to become effective when the patient returns to her own home. All of this planning is done "with" and not "for" the patient, in response to her wishes and needs. Soon afterwards the patient may begin to show signs of conflict over being in this dependent position in the hospital. Everyone has a

wish to be cared for, which is related to complete dependence upon parents in early childhood. This patient is experiencing the same thing in the hospital environment, with the doctor projected in the role of a rewarding or a punitive father (rewarding when he shows her special attention; punitive when he withholds her medicine or puts her on a liquid diet). As soon as the patient begins to improve she wants to leave the hospital; her more mature and natural feelings having returned to her. The doctor says she is not ready discharge, and she develops a sense of frustration over the enforced idleness, a sense of guilt, believing herself responsible for her illness and conflict between wishes for dependence and independence.¹ The social worker at this point by identifying with the patient, and giving her acceptance, encourages the patient to release her feelings without increasing her feelings of guilt. She helps the patient to view the situation more objectively, pointing out the medical reasons why the patient must remain in the ward, and helping her to look forward hopefully to the day when she will be reestablished in her own home.

Medical-social work in a chronic hospital differs from that in a general hospital in that cases may be more intensive and of much longer duration. It is estimated that a ratio of one social to 500 admissions in a chronic disease hospital is necessary for adequate service.²

¹ Gordon, Eckka, "Treatment of Problems of Dependency Related to Illness", Family, vo. XXIII, No. 6, June, 1943. p.211

² Jarrett, M.C. "Care of the Chronically Ill". p.686.

PREVENTION

The problem of prevention of chronic disease is more a medical problem than a social or economic but it includes such things as housing, sanitation, and recreation, which are the concern of the public health officers, social workers, public administrators, as well as doctors and everyone interested in maintaining and preserving the health of the community. There is no longer a clear cut distinction between prevention and cure; except for the saving in money and human suffering which is effected when a disease is prevented and does not develop into a full blown condition requiring treatment. All the health services offered by the community are direct and indirect means of preventing chronic disease. Health education in the schools and follow up of children with health defects until correction is made, child health conferences, the Tuberculosis clinic., Mental Hygiene clinic, Venereal Disease clinic, the six health centers, dental work with school children, compulsory health examinations for children of school age applying for work permits, the educational work of the Health Department and public health nurses, the pasteurization of milk, the food handlers classes, the publicity put out by the Central Dairy Council, the immunization program, and the classes at Louisville General Hospital for expectant mothers, are just a few of the many services offered the community as a means of preventing chronic diseases. In 1944 the Health Department reported 11,560 complete physical examinations done on school children, in 44.5% with parents present. Poor posture was the most common defect

found, with poor teeth next. Seven thousand and fifteen school children had some form of dental work done at the schools and in two of the health centers. The preventive clinic gave small pox vaccinations and other immunizations to 2,071 children as well as 1,746 complete examinations for milk handlers, civil service employees, etc. It was felt, however, that a great deal more could have been accomplished in these three areas, if it had not been for the shortage of personnel.¹ In all of the preventive divisions of the Health Department (including Administrative, Communicable disease, Preventive medicine, Health centers and home care, Red Cross Hospital, Laboratory and Food and Sanitation) a total of \$265,915.89 was spent in 1944.² One hundred thousand dollars, about 40% of this came from the federal government. The Health Department is in danger of losing the federal contribution if Louisville gives up its civil service law, which is proposed. It is required that the funds be administered by the local units operating under the merit system.

Community education is probably the most productive method in the field of preventive medicine. The voluntary national health agencies are spending huge sums of money for research and education but a good deal of the effort and money is being used on the diseases which are relatively well under control, and are not so prevalent or disabling as others, which receive little attention. If control of some of these chronic diseases such as diabetes and heart disease were attacked with as much vigor as has characterized the fight against infantile paralysis and

¹Louisville and Jefferson County Health Department, Annual Report 1944 pp.52-53.

²Ibid., pp.110-111

tuberculosis, "it should be possible to reduce the diabetic death rate by 20% within the next five years",¹ and to do at least as well for cardiac conditions. "There are 100,000 free beds provided for tuberculosis patients in the United States and \$100,000,000, is spent annually to care for patients with this disease. Yet arthritis has only \$200,000 to cover research and treatment. Although not communicable, it produces more invalids than does tuberculosis."² The voluntary health agencies spend \$94 per case annually for poliomyelitis, \$22 for tuberculosis, \$8 per case of cancer, and only .05 per case for diabetes, and .03 per heart disease. Yet there are 660,000 cases of diabetes, 3,700,000 cases of heart disease, and only 550,000 cases of cancer, 680,000 cases of tuberculosis, and 175,000 cases of crippled persons. A national health fund is suggested as a means for overcoming these inequalities.³

Research to discover the causes of the chronic diseases, many of which are unknown, is another important aspect of prevention. A good deal of this research would be done right in the chronic hospital... Far from being an undesirable residue discarded by the mill of the general hospital the long term patient is precious clinical material for the man of science. He is under control over comparatively long periods of time and deductions made

¹Jarrett, M.C., Chronic Illness in New York City. p.11

²McClurkin, Eleanor, "Chronic Disease From a Patient's Point of view", Modern Hospital, vol. 65, No. 5, November, 1945. P. 79.

³Buell, Bradley, "From Yesterday to tomorrow", Survey Monthly, vol. lxxxi, No. 10, October, 1945, p.252.

from the treatment of his condition are therefore more likely to be reliable."¹

A three point program is advanced to encourage research in the chronic field:

1. Create adequately paid positions for physicians in this branch of medicine.
2. Establish research funds and grants to enable physicians and medical scientists to pursue such work.
3. Create greater emphasis in the medical schools upon the chronic aspects of disease.²

FEDERAL PARTICIPATION

Federal participation in programs of rehabilitation, services to crippled children, and public assistance as they effect the chronically ill, have already been mentioned.

Federal programs of aid which would directly affect the health and welfare of the chronically ill and are in their planning stages include:

1. Extension to Social Security benefits to include those living in institutions who would otherwise qualify for the public assistance programs.
2. Revision of the Old Age and Survivors features of the Social Security program to increase coverage and to include insurance against wage loss through temporary or permanent disability.
3. A program of federal grants in aid to the states to expand

¹Bluestone, E.M., "Administrative Axioms", Modern Hospital, vol. 65, No. 5, November, 1945. p.77.

²Need for a state Infirmary, op.cit., p.42.

their existing hospitals or to provide new construction.

4. A national health program which would in reality be an extension of the Social Security program.

The first and second plans have been discussed in the body of this paper. The program of aid for hospital expansion was recommended as early as 1938 when the Interdepartmental Committee to Coordinate Health and Welfare Activities met in Washington. It was pointed out in a report by the Technical Committee on Medical Care "The long duration of the average case of chronic disease and the specialized requirements for diagnosis and treatment combine to make illness of this type expensive to persons in low and dependant income groups. The assumption of such costs presents a serious burden without such aid from public funds as has been provided for the treatment of the tuberculous and the mentally diseased".¹ It was recommended that federal grants be computed on a basis of \$300 per bed per annum for general and tuberculosis hospitals and \$150 for mental institutions, not to exceed 50% of the actual patient day costs. The grant was to last only during the first years of their operation.²

A bill providing for about three billion dollars of federal money to be spent on a hospital construction program is in congress now. The Hill-Burton Senate Bill 191 reads, "To amend the

¹The Need for a National Health Program, Report of the Technical Committee on Medical care, Interdepartmental Committee to Coordinate Health and Welfare activities. Washington, D.C. July, 1938.

²Proceeding of National Health Conference, Interdepartmental Committee to coordinate Health and Welfare activities, Washington, D.C., July, 1938. p.47.

Public Health Service Act to authorize grants to the states for surveying their hospital and public health centers and for planning construction of additional facilities, and to authorize grants to assist in such construction". The aim of the bill is three fold, then:

1. To inventory existing facilities.
2. To develop programs which will insure "the necessary physical facilities for furnishing adequate hospital, clinic, and similar services to all of the people"
3. To aid, through federal grants, the construction of such physical facilities as may be necessary to develop such a program.

The Surgeon General of the United States Public Health Service would administer the plan, with guidance from a federal advisory council. Payments would be made to the states after submission of an approved plan, but provisions are also made for direct payment to hospitals such as the private hospitals, if under the law the state is not authorized to make payments to these hospitals. The bill has, in general, received wide support from hospitals, health, and medical authorities, and has been endorsed by some of the national health agencies.¹ If the measure goes through, it might well provide the assistance necessary to start a chronic disease Hospital in Louisville. There is some question, however, about whether Louisville would meet the standards set by the bill. The fact that Louisville has no licensing law for hospitals might

1

"The Hill-Burton Bill", American Journal of Public Health, vol. 35, No. 4, April, 1945. p.380.

disqualify it for federal assistance. As though in anticipation of Louisville's not qualifying for federal money, Dr. Bachmeyer "emphasized---that local resources were sufficient in 1913 to build the General Hospital and should be sufficient to provide the modern facilities so urgently needed now".¹

The Wagner-Murray-Dingall Bill has been called "America's greatest health opportunity".¹ There are 235 prepaid medical care plans in operation in thirty eight states, covering an estimated six million persons. The Wagner-Murray-Dingall bill would increase the scope of medical services to include almost every person in the United States. The bill plans "to provide for the national security, health, and public welfare" by expanding medical and research facilities to include ordinary medical care and hospitalization, by broadening public assistance to the aged, blind, dependent children and unemployables, by expanding the coverage of the present Social Security law, and by increasing unemployment payments to cover temporary or permanent disability, retirement pay, and survivors benefits. The Surgeon General of the United States Public Health Service would administer the law. It is expected that the program would be financed through additional Social Security taxes, not to exceed 4% of earnings. Universal medical care through health insurance, provided for in this bill, is probably the most effective method at our command for combatting the chronic diseases.

¹Louisville Area Development Association, Planning for the Louisville area, No. 5, March, 1945.

²Courier-Journal (Louisville), November 18, 1945, section 3, p. 2, column 5-6.

Before federal aid can be used to greatest advantage, indeed, before a community can qualify for federal aid, it must have worked out a good program of its own. In the Louisville area it is suggested that the Council of Social Agencies lay the foundation by sponsoring studies and creating public interest, and in general acting as a coordinating body. The essentials of a good community program as advanced by Mary C Jarrett are:

1. To create public recognition that chronic disease constitute the next great field of public health work to be undertaken.
2. To break up the whole problem of chronic illness into its natural parts, that is, the problems peculiar to different forms of chronic disease requiring special measures for their prevention and treatment; and to differentiate the particular physical, mental, and social problems of childhood and youth, middle age, and old age for each disease.
3. To outline a program for each division in which the type of disease and the age of the patients present special problems.
4. To consider how available funds for research into the causes and prevention of chronic physical disability may be allocated to obtain the greatest benefits to the health and welfare of the community.
5. To provide for the integration of mental health services with medical services in the study and treatment of chronic diseases.
6. To study the extent to which social and economic factors contribute to chronic illness caused by different forms, of disease and the possibilities of preventing disability through social services.
7. To demonstrate the feasibility and economy of various forms of care for different types of chronically ill persons.
8. To promote public responsibility for the care of the chronic sick.
9. To establish a municipal chronic hospital administered and equipped as a modern medical institution with a custodial department for the permanently disabled whom hospital care can no longer benefit and who cannot

be cared for at home.

10. To reconstruct the city homes for the aged and infirm.
11. To determine what policy the city should adopt in regard to home care for the chronically ill. Home care is more economical, and a much happier solution for many.
12. To determine the function of the Department of Health in a program for the control of chronic diseases.
13. To define the policies of the different types of private agency that assume responsibility for the care of the chronically ill and to formulate standards for the discharge of this responsibility.
14. To form a central planning committee equipped to attempt such an organization of the community's resources as has been suggested and to initiate the development of additional facilities.¹

A community with a high proportion of chronically ill has lost some of its vitality and productiveness. The few must carry the burden of the many. A good part of its income must be spent in providing medical facilities and public assistance for chronic disease sufferers, especially for those who become permanently disabled. The cost of chronic illness, direct and indirect, is high and is paid for by the individual, his family, and the community.

¹ Jarrett, M.C., Chronic Illness in New York City.

CONCLUSION AND RECOMMENDATIONS

CONCLUSIONS AND RECOMMENDATIONS

This study was attempted as a statistical demonstration of the extent and nature of chronic illness among patients of Louisville General Hospital admitted during an average ten day period.

1. Analysis of the case records yielded 76 cases of chronic illness, or one sixth of total patients admitted. More than one fourth of these were patients admitted to the psychiatric wards. Previous studies have shown a higher proportion of chronic illness among Louisville General Hospital patients.
2. The average chronic patient studied was male, white, 43.5 years of age, married, with no children at home. He lived with relatives in a household of 2.8 people and paid \$11.45 monthly rent 2.4 rooms. He did not pay anything towards his care in the hospital and had an income of \$64.50 a month, derived from earnings as an unskilled laborer.
3. The average patient had a heart disease of five to ten years duration with poor prognosis. He had spent 5.8 days in the hospital before the present admission. Including the present hospitalization he cost the city \$84.24 at \$4.68 per diem. In a chronic disease hospital his care would have cost anywhere from \$1.50 to \$4.00 per diem, depending upon the kind of care he would be receiving.
4. Patients may receive either intensive medical care including nursing, or chiefly skilled nursing care, or custodial-attendant care. The patients in the study were all receiving intensive medical care and a large number had attended clinics prior to hospitalization and continued to do so after discharge. Two thirds of patients continued to receive some form of supervised medical care after leaving the hospital.

5. One half of patients would need to continue to receive intensive medical care in a hospital or clinic, one patient would require skilled nursing, the remainder needed custodial care in an institution or hospital and a few in their own homes, according to doctor's recommendations.
6. Chronic hospital care was recommended for over one half of patients; less than half in the section of the hospital offering intensive medical care, a very small percentage in the section offering only skilled nursing, and over one half in the custodial section of the chronic disease hospital.
7. Most of the patients expresses satisfaction with their discharge plans but were not facing the reality of their situations. A plan that may have been considered feasible in the hospital often did not work out at home. One third planned to return to work but only a few were able to do so. A very few had thought of utilizing community resources other than the hospital and the relief agencies either because of lack of knowledge about these resources, unwillingness to leave the family setting, or because of the stigma attached to some of these facilities, particularly the public institutions. Patients who had considered institutional care had not followed through because they had either made other plans or because they were not eligible for such care. Twelve percent of patients (not including the psychiatric) made some adjustment in the form of plans to drop all activities and convalesce at home, enter an institution, or transfer from one institution to another.
8. The patient's own home is the most desirable resource if the home, physically and otherwise is suited to meet the needs of the sick individual. The patients own home was considered suitable for his

care in four fifths of cases. The community can help to render the patient's home more suitable by providing clinic, visiting physician, nursing, and housekeeping aide services, and through adequate public assistance. Vocational rehabilitation and sheltered workshops help the person to maintain his independence by offering job training and placement in work suited to the person's physical limitations. Foster homes are a desirable substitute for the patient's own home. Louisville offers adequate medical services: clinics, visiting physicians, and nursing. Three of the above mentioned programs have, however, not been developed or are inadequate to meet the need: Housekeeping aides, public assistance, and foster home placement. Suitable foster homes have been difficult to find for well children, let alone sick children and the aged.

9. There are some 23 privately operated nursing homes in Louisville, all licensed under the law which went into effect in July, 1944. Great strides have been made in improving the standards of the homes but they still are not the best plan for the chronically ill. Overcrowded, they give inadequate medical attention, and are too expensive for the average individual especially the chronic who has had his resources depleted by his illness. Subsidized nursing homes, in increased numbers, to accomodate the public assistance client, will save the community the high cost of institutional care in some cases.
10. The two city-county institutions are being used almost exclusively for the chronically ill, with the Home for the Aged and Infirm offering an entirely different type of medical care than the Jefferson County Home for the Aged. There has been so much reluctance about providing the Home for the Aged and Infprn with a much needed elevator and other improvements that it seems improbable that the Home would

ever meet the standards necessary to becoming a chronic hospital. Converted amshouses are never suited to giving class A and B medical care, and the only possible use recommended for the Home for the Aged and Infirm is as the custodial section of the chronic disease hospital.

11. The benevolent homes serve a useful function, but too, are limited in scope. There are waiting lists of several hundred names at some of these homes. There are several additional hundreds who would like to enter but who are not eligible.
12. Kings Daughters Home for Incurables would render a service to the community by striking out the latter half of its name.
13. The crippled childrens program is providing necessary treatment, appliances, hospitalization, but facilities for two large groups are still lacking; spastics and rheumatic fever patients. Great efforts should be expended to provide the minimum facilities require in order to qualify for federal aid for the operation of such programs.
14. Facilities are badly needed for adult cripples who are by passed by both Vocational Rehabilitation and the Crippled Childrens Commission programs. Long term hospitalization is often of benefit and should not be denied these patients. A proposed chronic hospital would provide the environment, technical equipment, and the skilled specialists to help these patients.
15. The problem of Negroes affected by chronic disease is serious. Fifty percent of cases of chronic illness were among Negroes, yet they form only 15% of the Louisville population, and have even a smaller share of community resources devoted to meeting their needs.

Negro children have no place to convalesce if their own homes are unsuitable, except possible foster homes. A much larger proportion of Negro than White patients had cardiac and gynecological conditions, and were unskilled and domestic laborers.

16. A chronic disease hospital in Louisville would offer the best solution to the problem of overcrowding in Louisville General Hospital and the expensive cost of maintaining a chronic patient in a hospital for the acutely ill, as well as offering the best plan of medical care for the chronically ill. In the chronic hospital all levels of treatment should be integrated for the most efficient operation and for the benefit of the patient by considering his needs at various points in his illness.
17. Chronic hospital care is indicated for those patients who cannot be properly cared for in their own homes, those who do not benefit by clinic visits for one reason or another, those who cannot receive proper medical care at a nursing home, city, or endowed institution, as for example, the cancer patient, those who are not eligible for nursing home or institutional care or who would otherwise be eligible but for whom no vacancy exists, and those for whom no proper resource exists.
18. Louisville has for many years considered adding a chronic hospital to the present hospital set up, with most of the thinking centered about the idea of converting Louisville General Hospital into a chronic hospital and erecting a new hospital to accommodate the acutely sick and injured. Estimates of needed capacity range from 400 to 1000 beds.
19. A good chronic hospital should contain all of the modern facilities

of the general hospital, in addition to various conveniences and comforts in a homelike atmosphere to make the patient's long stay as pleasant as possible. Adequate nursing staff, programs of physical therapy and occupational therapy, and medical social service should be provided. The patients in the present study were apparently not utilizing physical therapy and occupational therapy facilities, but three fifths of the patients were known to a social worker who was helping them to make economic, social, and physical adjustments to their handicaps.

20. A program of prevention for which the community takes primary responsibility, affects a great saving in money and human suffering. Public expenditures for improving public health results in ultimate public savings. Chronic illness is a drain upon an individual's morale, vitality, and productiveness, and upon community resources.
21. The federal government enters the picture through its Social Security programs, and proposed measures of grants for hospital construction, expansion of Social Security benefits to inmates of public institutions and to provide disability insurance, and through a plan of national health insurance.

BIBLIOGRAPHY

BOOKS

- Bachmeyer, Arthur C. and Hartman, Gerhard. (ed.). The Hospital In Modern Society. The Commonwealth Fund, New York; 1944
- Boas, Ernest P. The Unseen Plague Chronic Disease. J.J. Augustine Publisher, New York; 1940.
- Hall, Fred S. and Ellis, Mabel B. (ed.). Social Work Year Book. Russell Sage Foundation, New York; 1929, 1933, 1935, 1941.
- Jarret, Mary C. Chronic Illness in New York City. 2 vols. Columbia University Press, 1933.
- Margolis, H.M. Diagnosis And Treatment Of Arthritis and Allied Disorders. Paul B. Hoeber, Inc., New York; 1941.

PUBLIC DOCUMENTS

- Compilation of the Social Security Laws. Social Security Board. Washington, D.C.; 1941
- Interdepartmental Committee to Coordinate Health and Welfare Activities. The Nation's Health. Washington, D.C.; 1939.
- Interdepartmental Committee To Coordinate Health and Welfare Activities. Proceedings National Health Conference. Washington, D.C.; 1938.
- Louisville And Jefferson County Board Of Health. Rules And Regulations Governing Nursing Homes. Louisville; July, 1944.

REPORTS

- Bradley, F.R. and Raper, R.E. Preliminary Louisville Area Hospital Survey Made For Louisville Area Development Association. St. Louis; November, 1945.
- Britten, R.H., Collins, S.D., and Fitzgerald, J.S. The National Health Survey: some general findings as to Disease, Accidents and Impairments in Urban Areas. Vol.55, No.11. Government Printing Office, Washington, D.C.; 1940.
- City of Louisville. Annual Report Of Department of Welfare; for Fical Year ended June 30, 1944. Louisville; June, 1944.
- Council of Social Agencies of the Louisville Community Chest. Bulletin.

No.14. October 23, 1937.

Federal Security Agency. Annual Report Of The Office Of Vocational Rehabilitation 1944 Government Printing Office, Washington, D.C.; 1944.

Jarret, Mary C. Housekeeping Service For Home Care Of Chronic Patients; Report of a WPA Project in New York City. New York; December, 1938.

Karpinas, Bernard D. The Physically Handicapped. Vol.58, No.43. Government Printing Office, Washington, D.C.; 1943.

Kentucky Crippled Children Commission. Biennial Reports: For 1939, 1941, 1943, 1945. Louisville.

Louisville And Jefferson County Health Department. Annual Report 1944. Louisville; 1944.

Louisville Area Development Association. Planning for the Louisville Area. No.5 Louisville; March 1945.

Montefiore Digest, Annual Report For 1935-1939, 1940, 1941. New York.

State Department Of Health. Information On Public Health Nursing. Louisville; 1944.

State Department Of Health. Vital Statistics Report 1944. Vol.xvii, No.2, Louisville; 1944.

Perrot, G.S., Tibbits, C. and Britten, R.H. The National Health Survey: Scope and Method of the Nationwide Canvass of Sickness in relation to it's Social and Economic Setting, Vol.54, No.37, Government Printing Office, Washington, D.C.; 1939.

Public Welfare Council. Need For A State Infirmary For The Care And Treatment Of Aged, Infirm And Chronically Ill Persons. Hartford; 1944.

ARTICLES

Barker, Lewellyn F. "On the Care Of The Aged", Canadian Hospital, May, 1941, pp.31-38.

Bartlett, Harriet M. "Emotional Elements In Illness: Responsibilities Of The Social Worker," Family, Vol.xxi, No.2, April, 1940, pp.39-47.

Biddle, Cornelius T. "The Individual In Relation To A Medical Care Program," Family, Vol.xxv, No.4, June, 1941, pp.104-111.

Boas, Ernest P. "The Care Of The Chronically Ill," Reprinted From The Proceedings Of National Conference Of Social Workers, Columbia University Press, New York; 1939.

1. "The Chronically Sick," American Journal Of Nursing, Vol.xxxvii, No.2, February, 1937.

2. "A Community Program For The Care Of The Chronic Sick," reprinted from Hospitals, February, 1936.

3. "Convalescence And Chronic Illness," Reprinted From Proceedings Of The Conference Held Under The Auspices Of The Committee On Public Health Reports Of New York Academy Of Medicine New York; November, 1939.

4. et al "Nursing Service In Hospitals For Chronic Disease," Modern Hospitals, Vol.xxi, No.2, August, 1923, p.125.

5. et al "Present Institutional Facilities For Care Of Chronic Disease," Modern Hospitals, Vol.xxi, No.1, July, 1923, p.1.

Bluestone, E.M. "Administrative Axioms," Modern Hospitals, Vol.lxv, No.5, November, 1945, p.77.

6. "The Emergence Of The Chronic Patient," Journal American Medical Association, Vol.cxxiii, No.6, October, 1943, p.374.

7. "Chronic Disease Patients, Planning For Their Care," Modern Hospital, Vol.liv, No. 1, January, 1940, p.66.

Buell, Bradley. "From Yesterday To Tomorrow," Survey Midmonthly, Vol. lxxxii, No. 10, October, 1945, pp.253, 254.

Butler, Charles and Franklin, L.M. "Chronic Disease Patients, Housing Them Large Scale," Modern Hospital, Vol.liv, No.1, January, 1940, pp.67-73.

Butler, Charles and Golub, J.J. "Home For Aged And Infirm Hebrew, New Hospital Wing," Hospitals, December, 1942, pp.49-54.

Clay, Charles L. "Keeping Them Contented," Modern Hospital, Vol.liv, No.1, January, 1940, pp.77-79.

Cockerill, Eleanor. "The Social Worker Looks At Cancer," Family, Vol.xvii, No.10, February, 1937, pp.326-329.

Dexter, Elizabeth H. "New Concepts In Case Work Practise With The Aged," Family, Vol.xx. No.6, 1939, pp.171-176.

Downes, Jean, "Chronic Disease Among Middle And Old Age Persons," Reprinted From The Millbank Fund Quarterly, Vol.xix, No.1, January, 1941.

Erickson, Don J. and Krusen, Frank J. "Physical Therapy Comes To The

- Aid Of The Aged," Modern Hospital, Vol. lxii, No.5, May, 1944, pp.88-92.
- Fairfield, Letitia, "Care Of The Chronic Sick," Lancet, October, 1943, pp.455-457.
- Evans, Louis, "Providing Institutional Care For Recipients Of Public Assistance," Public Welfare, Vol.iii, No. 11, November, 1945, pp.248-253.
- Fitzsimmons, Margaret, "Treatment Of Problems Of Dependency Related To Permanent Physical Handicap," Family, Volxxiii, No.9, September, 1943, pp.329-336.
- Gordon, Eckka. "Treatment Of Problems Of Dependency Related To Illness," Family, Vol.xxiii, No.6, June, 1943, pp.210-218.
- Gave, George. "A Constructive Contribution To the Comfort Of The Aged," Reprinted From Modern Hospital, September, 1945.
- Hamilton, Gordon. "Case Work In Old Aged Assistance," Family, Vol.xviii No.10, February, 1938, pp.327-333.
- Heiser, Karl F. "The Problem Of Chronic Illness In Connecticut," Connecticut State Medical Journal, February, 1944, pp.79-82.
- "How Should Private Nursing Homes For Aged Be Regulated," Hospital Management, July, 1945, pp.69-70.
- "The Hill-Burton Bill," American Journal Of Public Health, Vol.xxxv, No.4, April, 1945, p.380.
- Goldwater, S.D. "The Hospitalization Of The Chronically Ill," Printed By Committee On Chronic Illness Of Welfare Council Of New York City, April, 1935.
- Jarret Mary C. "The Care Of the Chronically Ill," Hospital Survey Of New York, Vol,11, Chap.xi, 1937, pp.642-700.
- Jensen, Andrew C. "Chronic Disease Patients Housing Them Small Scale," Modern Hospital, Vol.liv, No. 1, January, 1940, pp.74-75.
- _____. "Efficient Nursing Of Chronic Illness," Modern Hospital, Vol. lxiii, No. 1, July, 1944, pp.57-59.
- Maisel, albert Q. "Urgently Needed A National Health Fund," McCall's, February, 1946, pp.133-138.
- Marsh, Edith L. "The Care Of The Chronically Ill At The Cuyahoga County Nursing Home," American Journal Of Nursing, Vol.41, No.2, February, 1941, pp.161-166.
- Mason Clifford V. "Let's Keep The Old Gray Mare In Harness," Modern

- Hospital, Vol.1xii, No.2, February, 1944, pp.82-84.
- McClurkin, Eleanor. "Chronic Disease From The Patients Point Of View," Modern Hospital, Vol.1xv, No.5, November, 1945, pp.78-79.
- Potter, Ellen C. "Joint Federal-State Aid For Chronics Held Essential," Medical Economics, December, 1940, pp.87-88.
- _____. "In Future Plans Chronic Disease Must Have A Place; New Jersey Starts," Hospitals, May, 1944, pp.33-36.
- _____. et al. "States Face New Problems In Increased Demands Of Chronic Care," Hospitals, March, 1945, pp.45-48.
- Rosenfield, Isadore. "The Fruit Of Research," Modern Hospital, Vol.48, No.3. March, 1937, pp.58-64.
- _____. "Care Of The Chronic Sick," Hospitals, November, 1944, pp.50-53.
- Seegal, David. "The Problem Of Chronic Disease," Hospitals, March, 1938, pp.32-34.
- Stowell, Kenneth K. "Public Health-Your Opportunity," Architectural Record, Vol.97, No.4, May, 1945, p.69.
- Wagner, Margaret. "Nursing Homes Call For Rigid Supervision," Hospitals, March, 1945, pp.52-56.
- Walker, Eugene and Dixon, Jennie. "Chronic Disease Ward 10 Years After," Modern Hospital, Vol.64, No.6, pp.55-62.
- Warren Marjory W. "Care Of Chronic Sick," British Medical Journal, December, 1943, pp.822-823.
- Weil, Julius. "The Aged Ill Need A Specialized Staff," Hospitals, March, 1945.

UNPUBLISHED MATERIAL

- Bachmeyer, Arthur C. "Confidential Report Preliminary Draft To Dr. John Phair, Commissioner Of Health," January, 1946.
- Caswell, Grace B. "Convalescent Care In Louisville, Kentucky," Unpublished Masters thesis, Division of Social Administration, University of Louisville, October, 1943.
- Chandler, Doris. "Notes On Chronic Disease," Council Of Social Agencies, April, 1944.

Haines, Anna J. "Chronic Enumeration," Louisville Health Council, 1937.

Health and Family and Child Welfare Councils of the Community Chest,
"Study Of The Provision For Chronic And Incurable Patients,"
Louisville, 1927.

Lipetz, Irving. "The Louisville Home For The Aged And Infirm, A Study
Of An Institution In Transition, "Unpublished Master's Thesis,
Division of Social Administration, University of Louisville, 19

Phelps, Evelyn. "Memorandum To Mr. Walton on Need For More Beds For
Chronic And Convalescent Patients," June, 1945.

Report Of Committee on Survey of the Operation Of The Jefferson
County Home For The Aged," November, 1945.

Taylor, Esther. "Memo To Executives of Social Agencies On Kings
Daughters Home For Incurables," February, 1946.

Williamson, Mary T. "A History Of The Council Of Social Agencies Of
Louisville, Kentucky," Unpublished Masters Thesis, Division
of Social Administration, University of Louisville, November,
1943.

NEWSPAPER ARTICLES

Courier Journal:

November 11, 1945
November 18, 1945
January 20, 1946
February 21, 1946
April 5, 1946
April 7, 1946
April 12, 1946
April 14, 1946

Louisville Times:

January 18, 1946
February 5, 1946
April 10, 1946
April 16, 1946

APPENDIX I

NAME: _____ HOSPITAL NO. _____ AGE _____
 ADDRESS: _____ SEX _____ RACE _____ MARITAL STATUS _____

No. in household: _____ Children: _____ Ages _____
 HOUSING: Alone _____ No. of rooms _____
 With relatives _____ Room to self? _____
 With friends _____ Sleep alone? _____
 Boarding _____

OCCUPATION: _____ Last Employed: _____

INCOME: Earnings _____
 Savings _____
 Insurance _____
 Army-Navy (pay allotment) _____
 Compensation _____
 Social Agency _____ Partially _____ Wholly _____ Date _____
 Other _____
 Unknown _____

Date of admission: _____ Date of Discharge: _____
 On Ward at Present? _____
 Previous Admissions _____ Dates of Discharge: _____

Other Hospitals: _____
 Nursing Homes: _____
 Institutions: _____
 Duration of Illness (Date first became ill) _____
 Diagnosis: 1. _____ 2. _____ 3. _____
 Provisional? _____ Confirmed? _____

CONDITION: Ambulatory _____
 Partially Ambulatory (crutches, cane, confined indoors) _____
 Wheelchair _____
 Bedridden _____
 Prognosis (if known) _____
 Treatment: Special X-rays _____ Operations: _____

Tests (not routine blood) _____

Medicine _____
 Special Diet _____
 Physiotherapy _____
 Occupational Therapy _____

CLINICS ATTENDED:

Last clinic attended _____ Regular _____ Occasional _____
 Recommendations (chart & Interviews with Medical Staff)
) 1. Patient requires medical care for diagnosis & treatment.
 (2. Patient requires chiefly skilled nursing care.
) 3. Patient requires only custodial care.

(1. Patient needs to continue at Louisville General Hospital
 for medical & nursing care.
 Approximate period _____

- (2. Patient may be cared for at home
-) Little nursing care
- (Intensive nursing care
-) Clinic
- ((3. Patient needs custodial care (general nursing care and supervision_____

In your opinion if Louisville had a chronic hospital would that be desirable for patient?

KNOWN TO SOCIAL SERVICE:

PATIENTS IN HOSPITAL:

Plans upon Discharge

Probable

What patient would desire

If home - anyone to help out?

PATIENTS AT HOME:

Attending clinic?

Frequency?

V.N.A.

Other nursing?

Someone to help out?

Private physician

Take medicine

Has patient applied____considered____nursing home, Home for Aged and Infirm, Church home?

If applied why didn't go?

If available would patient prefer any of the following to present arrangement?

Home for Aged and Infirm

Private nursing home

Church - benevolent home

Better nursing at home

Chronic Hospital

Any other

COMMENTS:

APPENDIX II

MONTEFIORE HOSPITAL AND THE CHRONIC DISEASE
HOSPITAL WELFARE ISLAND

MONTEFIORE HOSPITAL

Fifteen percent of the patients in Montefiore Hospital are custodial patients housed in the Schiff Pavilion. In addition to the city institution, Montefiore Hospital operates a country sanatorium of 230 beds for tuberculosis at Bedford Hills, New York, thirty miles from the main hospital, and the Mack Memorial, a summer vacation home for cardiac clinic children. The Mack Memorial is Ossining, New York, overlooking the Hudson River, accommodates 110 children during fifteen weeks from June through September. Montefiore also has a clinic for the follow up of discharged patients. The twelve main buildings of the hospital occupy seven square blocks. In spite of a very high occupancy rate of about 99 percent throughout the year, the hospital has a list of waiting patients which averages 200 names.

Montefiore Hospital for Chronic Diseases in New York is the best representative of good chronic planning in the voluntary field. It has a total bed capacity of 944 beds including the separate custodial section and Tuberculosis Sanatorium. To provide a well rounded service for patients, Montefiore Hospital has its own school for 30 children patients, central radio system which provides radio facilities for all of the patients, a 22,000 volume library, flower gardens, and printing shop, sewing and weaving rooms, and carpenters shop as part of the rehabilitation program aimed at training chronic patients to be at least partially self supporting when they leave the hospital. Moving pictures are shown bi-weekly.

Beginning as a custodial institution in 1884, Montefiore Hospital has developed into an outstanding center for research. It has

four large clinical divisions; the surgical division, the medical division, the neurological division, and the division of pulmonary diseases. There is also a laboratory division, and in addition each of the four main divisions has its own laboratory for research. About twelve percent of all beds are used for private patients, and four and one half percent of all beds are occupied by children.¹

THE HOSPITAL FOR CHRONIC DISEASE ON WELFARE ISLAND

Agitation for planning chronic facilities began in April, 1935 when Dr. Goldwater, Commissioner of the Department of Hospitals, sponsored an auxiliary which came to be known as the Research Council of the Department of Hospitals. This Council, functioning through a scientific committee representing five medical schools and the Department of Hospitals, had for its aims the fostering of medical research in the Department of Hospitals and the promotion of a clinical division to be known as the Research Division of Chronic Diseases. In May 1936 a building consisting of a sixty bed hospital and associated research laboratories was dedicated as temporary headquarters for the work of the Research Division. It was planned that permanent quarters would be located in the new welfare hospital to be ready for occupancy in 1939.

The chronic disease hospital actually came about as a result of the work of many individuals and agencies under the leadership of the Committee on Chronic Illness of the Welfare Council of New York city, which was established following the publication of the findings of the 1928 survey. This body has as its objectives:

¹Montefiore Digest. Five year report-1935-1939; annual report for 1940.

- 1-The creation of new attitudes toward chronic illness through public education.
- 2-Fixing of responsibility for the care of the dependent chronically ill upon the city government.
- 3-Seeking of a definition of policies and responsibilities in regard to the chronic sick by the voluntary agencies with a view to more effective use and development of their facilities.
- 4-The bringing about in certain fields of chronic disease that are not already organized, more adequate coordination and development of services for prevention and care of chronic illness.
- 5-Offering of consultation service on problems connected with the prevention and care of chronic illness.

This committee pioneered in directing public welfare opinion to the need for mobilizing its resources against the destructive forces of chronic disease.

Welfare Island (the once notorious Blackwell's Island) was the site of the 1000 bed hospital. Welfare Island, hitherto shared by the Department of Hospitals and the Department of Corrections, became total hospital territory. This hospital is unique in its general plan, which is strictly functional. Built on a section of the island 500 feet in width, the hospital site is nearly 1200 feet long and consists of four ward buildings, each four stories high, an administrative and treatment building also four stories, and a three story laboratory building, all of these connected by a two story corridor running north and south. Corridors are twelve feet wide so that they may be used for additional sun porches, and the roofs at the third floor level are used as terraces. Five foot

balconies are carried across the south front of all wards, and eleven foot balconies extend across the end of the 24 bed wards. On the first floor a terrace 20 feet wide extends across the entire south front of each pavilion with easy ramps down to the ground. There is a 24 bed ward and an 18 bed ward in addition to four isolation rooms on every floor, but these are divided into smaller units by partitions. The 24 bed ward is divided into six units of four beds each, and the 18 bed ward into three units of six beds each.¹

All sorts of minor conveniences for the patients were thought of such as special lighting for reading in bed. The problems of circulation, control, orientation, view, and ample ground space, were given careful consideration. To achieve the maximum sun exposure, best view, and best utilization of narrow space, the hospital departed from the traditional experience that has influenced the design of most hospitals, and constructed ward buildings of chevron shape. It is functional planning at its best. This is one of three chronic hospitals located on Welfare Island. The others are Goldwater Memorial, of 1800 beds offering class A care, and City Home, offering C care. The Chronic Disease Hospital offers type B care. New York city in 1944 offered some 8550 municipal beds for the chronically ill. It was expected that when the entire program of construction for the chronic sick was carried out, voluntary beds as well as municipally provided New York city would offer 10,000

¹Butler, Charles, and Franklin, L.M., "Chronic Disease Patients Housing them, Large Scale", Modern Hospital, vol.54, No.1, January, 1940. pp.67-73

Name	No. of beds	Kind of care
Goldwater Memorial Hospital	1800	A
Kings County Hospital- Chronic Disease Pavilion	750	A and B combined
Chronic Disease Hospital Welfare Island	1000	B
City Home-Welfare Island	2000	C
Farm Colony-Staten Island	3000	C

Total	8550	

to 10,500 beds for chronics, or about 1.4 beds per thousand population. It was estimated that this would be less than one half of actual need. In a Cleveland survey a conservative estimate was 3.3 beds needed per thousand population, and that the number that should be provided for in class A hospitals should be from one third to one fourth of the total beds.¹

¹ Rosenfield, Isadore, Ibid. pp.52-53.

APPENDIX III

Dear _____

I am doing a study of some of the people who were patients at Louisville General Hospital during the month of February 1946, to determine the kind of care that these patients received, and what sort of plans they made after returning to their homes. I understand that you were at the hospital during this time. I would greatly appreciate it if you would answer the following questions for me by putting a check next to the appropriate answer, by filling in the desired information, or by writing a brief explanation when you feel it is necessary.

Number of people living in your house-hold with you _____

Number of living children _____

Their Ages _____

Do you live

Alone _____
 With relatives _____
 With friends _____
 Board _____

How many rooms do you occupy? _____

Do you have a room to yourself? _____

Do you sleep alone? _____

What is your occupation? _____

When were you last employed? _____

What is the source of your income

Earnings _____
 Savings _____
 Insurance _____
 Army-Navy _____
 Compensation _____
 Pension _____
 Welfare agency _____ Which one _____
 Other _____

Were you ever at any other hospital? _____

Were you ever at any Nursing Home? _____

Were you ever at any other Institution? _____

What is your condition--do you walk about without help? _____
 Use crutches or a cane or a wheelchair? _____
 Are you confined to your bed? _____

Do you attend any clinics at Louisville General Hospital? _____

Which one? _____ How often? _____

Does a nurse from Visiting Nurse Association or other nursing agency visit you? _____

Do you have someone at home to help out? _____

Are you being treated by a private physician? _____

Do you take medicine? _____

Have you ever applied or considered going to
 a private nursing home? _____
 Home for the aged and infirm? _____
 Church home? _____

If you did apply why didn't you go? _____

If any of the following were available would you prefer any of the following to your present arrangement, (Please check the one that you would prefer, if any)

Home for the Aged and Infirm _____
 A private nursing home _____
 Church Home _____
 Better nursing at home _____
 Housekeeping help _____
 A chronic hospital _____
 Any other _____

I am enclosing a stamped addressed envelop for your convenience in mailing this questionnaire back to me, and would appreciate if you would return it as soon as possible. I hope that you will feel free to reply as honestly as possible because your answers will be tabulated along with many others, and no names will be used in the finished study.

Thanking you for your cooperation, I am,

Sincerely yours,

APPENDIX IV

LOUISVILLE AND JEFFERSON COUNTY HEALTH DEPARTMENT

LOUISVILLE, KENTUCKY

APPLICATION FOR PERMIT TO OPERATE
A NURSING HOME

The undersigned hereby makes application for a permit to operate a nursing home for patients to be issued to _____ address _____ subject to the rules and regulation governing Nursing Home, adopted July 20th, 1944.

The maxium number of patients to be cared for will not exceed _____. Ages between _____. Sex _____. Color _____. List number of patients now being cared for _____. Have you read the rules and regulations governing Nursing Home? _____

Does your home, in your opinion, meet all the requirments outlined in the rules and regulations? _____. And do you have a person in charge with some hospital training or satisfactory experience as a practical nurse? _____. If not, explain _____

If so, give dates and details _____

List name and address of three refrences on opposite side of form.

A fee of two dollars must accompany this application to partially cover the expense of issuing permit. Checks should be made payable to Louisville and Jefferson County Health Department.

Approved
Disapproved

By _____

Signature of Applicant .

Date _____

Date