A study of selected home care programs : a joint project of the Public Health Service and the Commission on Chronic Illness.

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A Study Of Selected Home Care Programs

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PUBLIC HEALTH SERVICE

LEONARD A. SCHEELE, *Surgeon General*

A Study Of Selected Home Care Programs

A Joint Project of the Public Health Service
And the Commission on Chronic Illness

Part I

The Total Study

Part II

Individual Programs

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Foreword

During the past 10 years, the increasing number of persons requiring long-term care, the high costs of institutional care and of hospital construction, and a growing awareness of the adverse effects of prolonged institutionalization have stimulated a keen interest in the provision of care to patients at home. As a result, the Public Health Service and the Commission on Chronic Illness have received many requests for information concerning the establishment of home care programs.

A review of the literature revealed some information on a number of programs with a variety of administrative patterns. The lack of detailed, comparable data, however, made it impossible for the two organizations to be as helpful as they would wish. Therefore, a joint study of selected home care programs in various sections of the United States was undertaken.

We are pleased to present the results of this study for the consideration of all those concerned with the care of long-term patients. The Public Health Service and the Commission on Chronic Illness are indebted to many individuals and organizations whose unfailing cooperation made this study possible. We wish especially to express our thanks for the contributions of the study board, the consultants to the board, the directors of the programs included in the study, and the study staff.

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May 1955

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Contents

Definitions of Terms

Home care programs. Those organized programs having centralized responsibility for the administration and coordination of services to patients and for providing at least the minimum of medical, nursing, and social services, essential drugs, and supplies.

Administrative agency. The institution or organization which is responsible for financing, directing, and integrating services to patients.

Administrative plan. The pattern by which the administrative agency arranges to provide services to patients. The plan will generally include the utilization of a combination of personnel and facilities from the home care program, the administrative agency, and community agencies.

Study year period. The most recent fiscal or calendar year period for which statistical and cost data were available at the time of study.

Number of patients. An unduplicated count of the patients actually receiving home care services during the study year period in each program. Patients were not counted who were on the active file of a program but did not receive any service. Each patient served was counted only once, no matter how many times he may have been discharged and readmitted to the program during the year.

Number of services. Count of the services to patients which were provided after the patients had been admitted to the program. Visits to patients for evaluation purposes prior to their admission were not included.

Direct services to patients. Those services which were provided directly to or in behalf of patients, as opposed to administration and overhead, which were considered as indirect services.

Cost of services. Costs of direct and indirect services actually shown on the home care budgets. Not included were the costs of services provided for which no charges were made to the home care budgets.

Primary diagnosis. The major condition for which a patient was receiving care, according to program records. No attempt has been made to compile data on the multiple diagnoses of patients.

Chronic illness vs. acute illnesses. The division of diagnostic categories between "chronic" and "acute" was arbitrary and was based upon general usage.

Length of patient stay. Number of days the patient stayed on the program: (1) during the study year or (2) the total time spent on the program from date of first admission up to the time of last discharge or up to the date the program was studied. Interim periods spent in the hospital or in other facilities have not been included. Patient-days stay does not imply that the patient received daily care during the period of stay.

Part I

The Total Study

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Part I

Introduction

Home Care Defined

For the purposes of the study, home care programs were defined as those organized programs having centralized responsibility for the administration and coordination of services to patients and providing at least the minimum of medical and nursing care, social services, and essential drugs and supplies. It was expected that some programs would also include additional services, for example, physical and occupational therapy and housekeeping services.

Purposes of the Study

The purposes of the study were:

1. To obtain basic factual data describing the objectives, organization, development, and operation of selected home care programs.
2. To describe the use of home care programs for professional education.
3. To identify basic factors to be considered in the establishment and operation of home care programs.
4. To make this information available to program operators, consultants, and persons interested in planning new programs.

Method of the Study

The study was conducted as a joint project of the Public Health Service and the Commission on Chronic Illness. The commission is a national voluntary organization founded by the American Hospital Association, American Medical Association, American Public Health Association, and the American Public Welfare Association.

The study staff included the following Public Health Service personnel: a physician, a public health nurse, a medical social worker, and a statistician. A study board, appointed by the Public Health Service and the Commission on Chronic Illness, assisted the staff in selecting the programs to be studied and in defining the scope, content, and techniques for conducting the study. The board also reviewed the report prior to publication. In addition, a consultant group representing physicians, nurses, medical social workers, educators, and program operators was invited to review the study plan and make recommendations on the content to be included.

Schedules [1] were designed to secure factual information regarding (1) the objectives, organization, administration, and operation of the programs, (2) the use of home care in professional education, and (3) statistical data on costs and services provided to patients.

The programs selected for study were chosen from a list of operating programs compiled by the staff and the study board. The basic list was compiled by the Commission on Chronic Illness as the result of three surveys, conducted in 1950, which asked information on home care programs. Inquiries were sent to general hospitals of 50 beds or more, to State health departments, and to visiting nurse associations throughout the country. The programs included in the study were selected to represent various auspices, different administrative patterns, and broad geographic distribution. Attempts were made neither to study all programs currently in operation nor to evaluate the

[1] See Appendix.

quality of care provided to patients. The Commission on Chronic Illness assumed the responsibility for securing the participation of the program directors in the study.

The study staff spent from 5 to 7 days visiting in each program. Information was obtained by individual and group conferences with the program director and members of his staff, and with agencies in the community participating in the home care program; attendance at advisory committee meetings, staff and case conferences; visiting patients' homes with members of the home care team; and from available statistical data compiled by the home care program. In the smaller programs for which statistical data were not readily available, abstracts were made from all or from a 50-percent sample of patient records. For the larger programs, abstracts were made from smaller samples to obtain an indication of certain basic program characteristics. Unless otherwise specified, all data for the program reports were obtained for a selected study year. Whenever possible, a final group conference was held with the program director and his staff to review the data collected.

Scope of the Study

The study was limited to 11 organized home care programs, administered by the following agencies or institutions:

Alameda County Department of Institutions, Alameda County, Calif.
Benjamin Rose Institute, Cleveland, Ohio
Boston Dispensary, Boston, Mass.
Chicago Department of Welfare, Chicago, Ill.
King County Hospital, Seattle, Wash.
Massachusetts Memorial Hospitals, Boston, Mass.
Montefiore Hospital, New York, N. Y.
Philadelphia Visiting Nurse Society, Philadelphia, Pa.
Queens General Hospital, Department of Hospitals, New York, N. Y.
Department of Public Health, Richmond, Va.
College of Medicine, University of Vermont, Burlington, Vt.

Development of Home Care Programs

The term "home care," which has become popular during the past decade, is confusing to many people because it is difficult to distinguish between a home care program per se and already existing patterns of care in the home.

Care in the home is usually limited to physician's services plus nursing care when available. Rarely does it include the full range of services and the special supplies and equipment so often necessary to meet the total needs of patients.

A "home care" program, on the other hand, is one in which selected homebound patients are provided with a full range of services, which are arranged for and coordinated through one administrative agency or institution. Home care is part of a total medical care plan intended to meet the needs of a patient during a specific phase, or phases, of his illness. Patients with long-term illness especially benefit from a program of home care because it allows them to live in a setting more normal than that of an institution. However, home care should not be thought of as a substitute for hospital care for patients whose needs can best be met in a hospital.

The philosophy of home care is not new. It has roots in this country that go back at least as far as 1796. In that year, the Boston Dispensary was established to provide medical care to the sick poor. Its program was founded on the following three principles:

"1. The sick, without being pained by a separation from their families, may be attended and relieved in their own houses.

"2. The sick, can, in this way be assisted at a less expense to the public than in any hospital.

"3. Those who have seen better days may be comforted without being humiliated, and all

the poor receive the benefits of a charity, the more refined as it is the more secret" (*1*).

The Boston Dispensary is still operating on the same principles although its services are keyed to a vastly different world of health, science, and medicine than that which existed in the latter part of the 18th century.

Early in its history, the program of the Boston Dispensary was used to provide an apprentice type of experience for young physicians. With the changes in medical education, this kind of experience has been replaced by a closely supervised practice experience for residents and fourth-year medical students of the Tufts College Medical School.

In 1875, the Boston University School of Medicine and the Massachusetts Homeopathic Hospital instituted a home care program that has continued to be a part of the educational experience for senior medical students. In 1930, a similar program was established in the College of Medicine of the University of Vermont.

Medical institutions have not been the only agencies, however, which have been concerned with providing medical care to patients at home. In some areas, public and private health and welfare agencies have assumed this responsibility. In 1933, for example, the Chicago Department of Welfare recognized the health needs of its clients and instituted a total medical care program that included provisions for care at home as well as in the hospital and in the outpatient department. In Cleveland, the Benjamin Rose Institute, a philanthropic agency concerned with the needs of older people, recognized the need for planned medical services for its clients at home and in 1940 established care at home as part of a total medical care plan.

All of these programs originated because of the concerned interest and vision of persons and agencies. Since 1940 there has been a marked increase in the number and variety of agencies providing care at home. This more widespread interest is due to several factors, foremost among which are the aging of the population, the increase in chronic illness, and the need for field work experience for medical students.

One of the first studies to demonstrate the value of continuous medical care and coordinated services for patients at home was conducted in 1940 at University Hospital in Syracuse, N. Y. (*2*). Perhaps the greatest single stimulus to the current interest in home care programs was the demonstration program established in 1947 at New York City's Montefiore Hospital. That program was set up to show that under given circumstances, required services, especially for patients with long-term illness, could be provided at home at probably less cost than in the hospital. The reports of this program have received wide publicity in lay and professional magazines and continue to be a subject of discussion at many meetings of professional groups who are concerned with the problems of patients with long-term illnesses (*3*). Though the programs established since 1947 do not necessarily duplicate the Montefiore plan, there is little question that much of the impetus to begin such programs has stemmed from the Montefiore demonstration.

Community interest in meeting the needs of patients with chronic illness led the Health and Welfare Council of Philadelphia in 1948 to ask the Visiting Nurse Society of that city to administer a home care program designed to meet the needs of the chronically ill and to be available to the private physicians in the community. With the exception of this program, all of the programs included in the study were providing care only to the indigent and the medically indigent.

Coupled with an interest in meeting patient needs, there is a demonstrated interest in using home care programs as a training resource. Deans of medical schools have been quick to see the potentialities of home care programs for providing medical students and residents in training with an opportunity to observe and treat patients outside of a hospital setting.

Administration

The 11 programs studied indicate that home care programs are administered by various types of agencies and institutions and by personnel with different kinds of professional backgrounds. Eight of these programs were based in medical agencies and were administered by physicians; 2 were in social agencies and were administered by social workers; and 1 was in a

nursing agency and was administered by a public health nurse.

A number of factors appeared to affect the location of the administration of the program. In Philadelphia, for example, the Visiting Nurse Society was requested by the Health and Welfare Council to assume administrative responsibility because it was already providing nursing, physical therapy, and occupational therapy services to patients at home, and it was in a position to develop and extend these services. In Richmond, the health department administered the program because it had the legal responsibility for providing medical care to the city's indigent and medically indigent (*4*). In any given community, the most important of the many factors that determine which agency will assume the responsibility for a home care program are the sources of leadership and the readiness to develop such a program.

The type of personnel responsible for program operation seems to be determined by the kind of agency that administers the program.

Six of the programs had advisory committees which assisted the directors in different phases of administration. Three of these six programs were not administered by physicians. However, they had active medical advisory committees to assist the directors on the medical technical aspects of their programs. The membership of the other advisory committees ranged from broad representation from the community at large and from health and welfare agencies to those including only representation from the field of medicine.

The functions of the committees varied from making specific technical recommendations to making recommendations for broad community planning. In Richmond, for example, prior to the establishment of the home care program, an advisory committee representing physicians, nurses, social service workers, and an interested citizenry was appointed at the request of the director of public health to review the health department's existing home medical service and to make specific recommendations for a more comprehensive home medical care service. Since the establishment of the program, this committee has continued to function in an advisory capacity to the director of public health and the director of the home care program and to participate in program evaluation.

The consensus of directors of home care programs was that advisory committees played a very important part in assuring a well-balanced and coordinated program and in securing community understanding and support. The nonmedical administrators considered medical advisory committees essential in planning for the medical aspects of the program, for interpreting the program to the community, especially to community medical groups, and in safeguarding the quality of medical care.

Financing

Funds for financing the home care programs came from a variety of sources. Four programs, administered by public agencies or institutions, were supported almost entirely by tax funds. One program, administered by a public agency, was supported primarily by tax funds, but the budget was augmented by a grant from a foundation. Another program was supported almost equally by tax and by private funds. Five programs were financed primarily by private funds but received some payments for services from patients or their families and from other sources. In addition, programs used space, services, supplies, and equipment, furnished from community resources, which were not charged to the home care budget.

Source of Direct Services to Patients

Table 1 shows each program's plan for providing direct services to patients. Little variation existed in the kinds of services, but there was considerable variation in plans for providing the services and in the professional qualifications of personnel. Medical, nursing, and social services, drugs and medical supplies, X-rays, hospital equipment and sickroom supplies, laboratory tests, and transportation were available in all programs. In addition, 9 programs provided for physical therapy and prosthetic appliances; 3 programs, occupational therapy; and 8 programs had plans for homemaker or domestic services. In one program, speech therapy was available. All programs had arrangements for patients to be

Table 1. Sources of direct services to patients

Type of services	Administrative agency										
	Alameda County Institutions	Benjamin Rose Institute	Boston Dispensary	Chicago Welfare Department	Massachusetts Memorial Hospitals	Montefiore Hospital	Philadelphia Visiting Nurse Society	Queens General Hospital	Richmond Health Department	Seattle-King County Hospital	University of Vermont College of Medicine
Practicing physicians [1]	C	C	H & A	C	A	H & A	C	A	H & C	H & A	H
Residents [2]	O	O	H	O	H	O	O	A	H	O	H
Medical students [2]	O	O	H	O	H	O	O	O	H	H	H
Nursing	C	C	C	C	C	C	A & C	C	C	C	C
Social service	A	A	H	H & A	H	H	C	A	H	H	C
Physical therapy	O	C	C	C	C	H	A	H	C	A	O
Occupational therapy	O	C	O	O	O	H	A	O	O	O	O
Speech therapy	O	O	O	O	O	O	C	O	O	O	O
Home teaching	O	O	C	C	C	C	C	C	C	C	O
Housekeeping	O	C	C	A	C	C	C	C	C	O	O
Laboratory	A & C	C	A & C	C	A & C	A	C	A	A & C	A	H & C
X-rays	A & C	C	A & C	C	A & C	A	C	A	A & C	A	C
Hospital equipment and supplies	A	C	H & C	C	C	H & C	A & C	H	C	H & A	C
Medications and medical supplies	A & C	C	A & C	C	A & C	A	C	A	H & C	A	H
Prosthetic appliances	O	C	H & C	C	C	C	C	A & C	C	C	O
Transportation	A & C	C	C	C	C	A	C	H	H & C	A	C
Hospitalization	A	C	C	C	A & C	A	C	A	C	A	C

Code for source of services:
H—Facilities and staff of the home care program.
A—Facilities and staff of administrative agency or institution.
C—Community resources.
O—Services not provided in the program.

[1] Data for practicing physicians includes specialists' consultations.

[2] Residents and medical students are usually considered part of the home care staff during the period they are assigned to the program. Residents at Queens General Hospital are not assigned to the home care program. All residents make home visits as part of their regular duties.

hospitalized without delay when diagnostic or therapeutic procedures were needed.

Wide variation was found in the extent to which the central administrative agency itself provided services or assumed responsibility for purchasing services through other community agencies. In some programs, such as that at Montefiore Hospital, the major portion of the services was supplied by a home care staff. In other programs, such as that of the Chicago Welfare Department, services were provided through community agencies, with the home care staff functioning primarily as the coordinating and purchasing agent. When the administrative agency depended upon other agencies to provide services, prior arrangements were made defining the administrative agency's participation in the program. Arrangements between agencies ranged from formally signed agreements to an informal understanding. In some programs, the participating agency was paid on a fee-for-service basis; in others, the services were provided by the agency without charge to the home care program.

The training and experience of personnel providing services to patients ranged from fully qualified personnel in the various professional categories to students in the fields of medicine, nursing, and social service, functioning under the supervision of qualified personnel.

Operational Policies and Procedures

Only indigent or medically indigent patients were eligible for services except in the Philadelphia home care plan, which offered service to patients of private physicians regardless of financial status. Patients able to pay

for service were charged according to their ability to pay.

Six programs [2] served patients with both acute and chronic illnesses; four provided care only to patients with long-term illnesses,[3] and one (Alameda County, Calif.) served only patients with tuberculosis.

In the four programs providing services to long-term patients only, criteria had been established for determining the suitability of home care before the patient was accepted. In general, the criteria included consideration of such factors as the medical condition of the patient and the kinds and amounts of services required; the nursing requirements and the family's ability to care for the patient; the patient's attitude toward care at home; and the family's attitude toward having the patient at home.

In the programs which provided care to patients with both acute and chronic illnesses, all requests for service were screened for financial eligibility, and at least one call was made by a physician or a medical student to determine the patient's condition and to make plans for his care. In none of the programs serving patients with both acute and chronic illness was there a formal evaluation process before patients received care in the home. An informal evaluation of the individual patient's needs took place during the course of treatment, and plans were made either to continue care in the home after a review of the total situation or to make other more appropriate plans for patient care.

Methods Used in Coordinating Information

Methods used to coordinate services to patients included records, formal and informal conferences, written reports, and telephone calls.

Records

The types of patient records maintained by the home care programs ranged from very complete to those so meager that they contained little more than identifying data and the names of individuals or agencies providing services.

The majority of the record systems, however, fell between these two extremes and included a summary or abstract of medical findings, medical progress notes, and summary reports on services provided by other personnel. Summary reports received from agencies providing patient care were filed in the individual patient's record. In several instances, in addition to summary notes on the patient's cumulative record, separate detailed records were kept by the personnel in each category providing care.

Conferences

The formal conferences were centered around plans for patient care and discussions of policy matters. Conferences on patient care were attended by the personnel of the home care program and, generally, by representatives from other agencies providing care to the patients under discussion. The content of the case conferences varied from a clinical discussion of the patient's condition and medical therapeutic regime to a thorough discussion of his condition and family situation, with each member of the team contributing to the discussion and to the formulation of a plan for meeting the patient's need.

The frequency of formal conferences varied from one a day in some programs to impromptu conferences when indicated, in others. In

[2] Richmond Home Medical Care Program, Massachusetts Memorial Hospitals Home Medical Service, Boston Dispensary Domiciliary Medical Service, Chicago Department of Welfare, Benjamin Rose Institute, and University of Vermont.

[3] Montefiore Hospital Home Care Program, Queens General Hospital Home Care Program, Seattle-King County Hospital Extension Service, and the Philadelphia Intensive Home Care Program.

general, case conferences were more frequent in the teaching programs than in other programs. In addition to formal case conferences, there were individual conferences and telephone conversations between members of the home care staff and between the home care staff and personnel of other agencies participating in patient care. Such conferences ranged in frequency from very rare in some programs to almost daily in others.

Statistical and Cost Data

The statistical and cost data collected for this study were limited by the availability of data in each program. It was not possible within the time limits of the study to obtain the same kinds of data for all 11 programs. Only by initiating special studies in most of the programs would this have been possible. Detailed data on patients, services, and costs can best be reviewed in the individual program reports, where they are shown in context.

The statistical data collected by each program varied widely. The Richmond Department of Public Health obtained, by machine tabulations, detailed data on characteristics of patients and types of services provided. The programs of Montefiore Hospital, Seattle-King County Hospital, Queens General Hospital, and the Philadelphia Visiting Nurse Society used hand tally methods to compile specific summary data on patients and services. The programs of the Boston Dispensary, Massachusetts Memorial Hospitals, and the University of Vermont College of Medicine made tallies only on the home medical visits. No routine statistics were compiled in the tuberculosis program operated by the Alameda County Department of Institutions. In the programs operated by the Benjamin Rose Institute and the Chicago Department of Welfare, home care was completely integrated with total medical care, and statistics on home care services were not kept separately.

The types and amounts of statistical data compiled were determined by such factors as:

1. The basic needs for specific statistical data as recognized by the program administrators or others.
2. The personnel and/or equipment available to compile the data.
3. The basic procedures set up for procurement of data.
4. The size and type of program.

Programs and Patients

Programs ranged in size from an annual patient load of less than 100 up to several thousand. Patients of all ages with virtually all types and severity of illness were served. The numbers and types of patients served were obviously influenced by the policy regarding the selection of patients, the philosophy of the program, and the funds available. They were also affected by the amount of personnel and other services available from the administrative agency and from the community, the medical care needs of the particular community in which the program was located, and the degree of legal responsibility of the administrative agency for provision of medical care in the community.

Services to Patients

In contrast to the similarity in the kinds of services available under the administrative plans, the amounts of services actually provided showed wide differences among the five programs for which data were available. This variance was due to such factors as the types and severity of illness of the individual patients served, the program policies and practices, the home situations, the types of personnel providing the services, and the amount of money available. These factors not only caused variations from program to program but also from year to year in the same program.

In programs serving patients with severe illnesses, it was obviously necessary to provide

more services per patient than in programs dealing chiefly with less severe illnesses. In certain programs the amounts of services were affected by policies requiring that all patients receive at least one nursing and one medical social visit. The home situations of some patients necessitated more nursing, medical social, and housekeeping services than others. In programs used for education, many visits were made for teaching purposes.

Cost of Services

It was impossible to obtain a true comparison of costs from one program to another since the items included varied greatly. Table 2 shows the services provided in 8 of the 11 study programs, indicating which were paid for entirely or partially out of the home care budget and which were provided without cost to the program. Budgets for home care were not kept separately from other medical care in the remaining 3 programs.

According to general usage, the term "costs of operation" of home care programs refers only to those costs listed in their budgets. Actual costs, however, fall into two major categories—costs paid by the home care budget and costs paid by the community. The first category contains funds spent directly by the program

Table 2. Services in 8 programs,[1] showing costs paid out of home care budget

Type of services	Administrative agency							
	Alameda County Institutions	Boston Dispensary	Massachusetts Memorial Hospitals	Montefiore Hospital	Philadelphia Visiting Nurse Society	Queens General Hospital	Richmond Health Department	Seattle-King County Hospital [2]
	Direct services to patients							
Practicing physicians	I	I	N	I	P	I	P	I
Residents	O	I	I	O	O	I	I	O
Medical students	O	N	N	O	O	O	N	N
Nursing	N	N	N	I	I	I	I	I
Social service	N	I	I	I	N	I	I	I
Physical therapy	O	N	N	I	I	I	N	N
Occupational therapy	O	O	O	I	I	O	O	O
Speech therapy	O	O	O	O	I	O	O	O
Home teaching	O	N	N	N	N	N	N	N
Housekeeping	O	N	N	I	I	I	P	O
Laboratory	N	P	N	I	N	I	I	N
X-rays	I	P	N	I	N	I	N	N
Hospital equipment and supplies	N	P	N	P	N	I	P	I
Medications and medical supplies	N	P	P	I	P	I	I	I
Prosthetic appliances	O	N	N	I	P	I	N	I
Transportation of patients	N	P	N	I	N	I	N	I
	Administration and overhead							
Staff	N	I	I	P	I	I	I	I
Space and utilities	N	I	I	N	I	I	I	N
Other expenses [3]	P	P	P	P	I	I	I	I

CODE:
I— Cost of services included in home care budget.
N—Cost of services not included in budget.
P—Cost of services partially included in budget.
O—Service not provided by the program.

[1] Data are not included for the programs at the Chicago Welfare Department, the Benjamin Rose Institute, and the University of Vermont College of Medicine since these programs did not keep separate budgets for home care.
[2] Data include services provided during the first 10 months of operation of this program.
[3] Items included are office supplies and equipment, transportation of staff, telephone and telegraph, conference expenses, depreciation of equipment, maintenance of automobiles, auditing, social security, insurance, printing and postage, and so on.

plus the estimated cost of services provided by the administrative organization and charged to the home care expense account. The second category, costs to the community, includes services and facilities furnished without charge to the program budget by the administrative agency and by community organizations, as well as costs borne by the family.

Home Care and Professional Education

Six of the 11 home care programs were used to provide educational field work experience for residents and fourth-year medical students. Two programs were used for field work experience for students in nursing and two for graduate students in social work.

Field work experience in home care programs offers students an opportunity to care for patients in their home settings, to observe family interrelationships and their effect on patient care and treatment, and to become familiar with community resources for meeting patients' needs. Field work has been used for many years in nursing and social work education. The opportunity for medical students, however, has been limited, and student work experience has been primarily in the wards and outpatient departments of hospitals. In recent years, increasing emphasis has been placed on the "whole patient" and on the effects of environmental, social, and emotional factors in illness. Medical educators have been exploring ways to provide students with an opportunity for observing and treating patients outside of the institutional setting, so the students may become familiar with the diversity of factors which affect patient care through firsthand knowledge.

Home care programs, affiliated with teaching hospitals, provide one of the ways in which medical students may have this kind of an experience. To make the experience meaningful to the student and to safeguard patient care, there must be conscientious supervision of the medical care, frequent individual and group discussions with the various disciplines participating in patient care, and a planned method for helping the students to integrate and to understand the significance of their observations.

Resident Training

Five of the programs affiliated with hospitals or clinics assigned residents in various stages of their training to the home care program. The period of time spent by residents in the program ranged from 1 year, part time, to 6 weeks, full time.

Residents worked under the supervision of the medical directors of the program. In the programs of the Boston Dispensary, the University of Vermont, and Queens General Hospital, residents provided most of the direct services to patients. In the Boston Dispensary and the University of Vermont programs, residents also supervised the limited services provided by medical students.

In two programs (Richmond and Massachusetts Memorial Hospitals), the residents supervised medical students, who provided most of the direct service. The residents gave direct services to a limited number of patients whose needs were beyond the scope of the medical students' capabilities.

Medical Student Education

In the five programs in which medical students were assigned for field work experience, the length of assignments varied from 3 weeks full time to 1 year on a part-time basis. Students were assigned varying levels of responsibility for patient care. In three programs (Richmond, Massachusetts Memorial Hospitals, and Seattle-King County), students had major responsibility for the medical care of patients, although resident preceptors or the medical director of the program were available for consultation. In the other two programs (Boston Dispensary and the University of Ver-

mont), students observed the care given by the residents and carried graduated responsibility for patient care in selected cases.

In addition to direct services provided to patients, all students were responsible for maintaining patient records and attending scheduled individual and group conferences. In some of the programs, regular case conferences were a part of the teaching program and were attended by physicians, nurses, medical social workers, and representatives of participating community agencies. Students had major responsibility for presenting the case material. The conferences were designed to assist the students in understanding patients' problems and in learning what resources were available to meet patients' needs. The program of the Massachusetts Memorial Hospitals has the unique feature of the team concept at the student level. Medical students, nursing students, and social work students receive training simultaneously (*5*).

Nursing Education

Nursing students were assigned for field work experience in the Massachusetts Memorial Hospitals and Montefiore Hospital home care programs. Both of these educational programs had been in operation for less than 2 years at the time of the study; and both were set up on an experimental basis.

The Massachusetts Memorial Hospitals School of Nursing assigned all senior nursing students to the Massachusetts Memorial Hospitals program for a period of 3 weeks. Students were responsible for providing nursing services to a limited number of selected patients under the supervision of a public health nursing instructor. In addition, students were responsible for maintaining patient records and attending and participating in staff and case conferences scheduled for all students of medicine, social service, and nursing.

The Montefiore School of Practical Nursing set up its field work program as a 2-year study to determine the functions and services the practical nurse is best prepared to carry out in the home. All practical nursing students were assigned to the Montefiore home care program for a period of 3 weeks during the last quarter of their 1-year period of training. Under the supervision of a public health nursing instructor, they provided limited nursing services to selected patients and performed some housekeeping duties. In addition, students were responsible for maintaining patient records, preparing a patient care study, and participating with the physician, social workers, physical and occupational therapists, and others in case discussions on home care patients.

Social Work Education

Two of the programs, Richmond and Massachusetts Memorial Hospitals, had social work students in their second year of graduate study assigned for field work experience. The students, who spent part time in the program throughout the academic year, provided direct casework services to a limited number of selected patients, maintained social records and attended scheduled case conferences. Their field work experience was supervised by the medical social worker in the home care program.

Conclusions

The study demonstrates that organized home care programs vary in size, from a few patients to thousands of patients; that they include patients of all ages, with virtually all types of illnesses of all degrees of severity; that the kinds and amounts of services provided vary widely; and that the cost per patient or per patient-day of care also varies from program to program.

Hospitals, health departments, and private and public welfare agencies administer programs, using diverse patterns of organization and administration. Services are provided di-

rectly, are purchased from other agencies, or are provided without cost by other agencies.

Characteristics of Programs

The organized home care programs studied have three essential characteristics:

1. Centralized responsibility for the administration and coordination of services.
2. A plan for the provision of services and the coordination of such services.
3. A team approach in the planning and provision of services.

Comprehensive services to patients at home include:

Physician's services
Medical specialist consultation
Nursing
Social service
Physical therapy
Occupational therapy
Nutrition consultation
Housekeeping
Laboratory
X-ray
Drugs and medical supplies
Prosthetic appliances
Hospital and sickroom equipment
Transportation

Provision is made for hospitalization when necessary, for diagnosis, and for treatment.

The programs studied and those currently in operation have demonstrated the effectiveness of home care for selected patients in various stages of illness. However, these programs provide care primarily for the indigent and medically indigent, and the services are not generally available to patients of private practitioners. Patients of all economic groups, especially those with long-term illness, need coordinated services at home during some phase of illness, yet comparatively few communities have recognized the potential of organized home care as a component part of total medical care. Approximately 50 programs are in operation. This study of 11 of them has revealed sufficient values to indicate the desirability of further exploration of methods and techniques. Such study should be focused particularly on ways in which integrated services can be made readily available, through private physicians, to all patients at home who can benefit by them.

Budgets of the programs in the study do not reflect the total expenditures for home care. More factual information is required to determine the true costs of home care programs. It is assumed that the costs of home care are ordinarily less than institutionalization because of the use of the patient's own home and of the services of the family. However, the kinds and amounts of service required by some patients may be so great that institutionalization is preferred for economic reasons.

Statistical information that administrators need for planning and evaluation was adequate in only a few of the programs. Data similar to that collected in the study would help administrators in day-to-day administration as well as in long-range adaptations designed to meet the needs of patients and of communities more adequately.

The use of home care programs for professional education has increased during the past few years. Teaching methods are highly variable because educators are still experimenting with the best ways of using this type of experience.

Guidelines for Establishing Home Care Programs

Observations and information obtained during the course of the study indicate that certain approaches have proved helpful in establishing and operating home care programs. The points given below—not listed in any order of priority—seem to be important.

Regardless of the organizational pattern that may develop in a given community, all of the points listed merit serious consideration. Each facet of planning is necessary to develop a program that is related to community needs and that will receive the understanding and support of individuals, groups, and agencies. Moreover, each step is necessary for program operators to have sufficient information to enable them to evaluate the services their programs provide.

1. Assess the community need for a home care program.

Determine the number of patients in hospitals and other institutions, on waiting lists, attending clinics, and at home, who could benefit by such a program.

2. Explore the community's resources and evaluate them in relation to their potential in meeting the needs of patients at home.

3. Plan the program.

(*a*) Establish general and technical advisory committees to consult with the program director on program planning, formulation of policies and procedures, and on evaluating the effectiveness of the services. Committees should include representatives from such fields as medicine, nursing, social service, hospital administration, health and welfare agencies, and other interested community groups.

(*b*) Define objectives for the program.

(*c*) Define types of patients to be served.

(*d*) Determine services to be furnished.

(*e*) Establish a plan for providing services to patients; designate the administrative institution or agency to be responsible for procuring and coordinating services to patients; and secure formal agreements from cooperating agencies.

(*f*) Establish methods and techniques for facilitating interchange of information to assure coordination of services.

(*g*) Establish policies and procedures for the maximum and appropriate use of service.

(*h*) Establish a plan for financing.

4. Establish criteria for acceptance of patients on the program. The suitability for home care must be measured in terms of a number of closely related criteria: the medical and nursing needs of the patient; the social situation in the family; and the ability of the family to meet patient needs.

5. Establish a record system that will facilitate the provision and coordination of services and at the same time yield statistical and cost data to meet the administrative, operational, and evaluative needs in the program. From the inception of the program, such data should include:

(*a*) Unduplicated counts of the numbers and kinds of patients served in a given period; the number of new admissions and readmissions.

(*b*) The amounts and types of services provided.

(*c*) The costs of operating a home care program, including the actual cash spent out of the home care budget; and, where possible, the costs of services provided without charge to the home care budget.

In programs used for professional education, particular attention should be paid to the dual responsibilities of patient care and student activities. Adequate and safe patient care is the primary consideration. Both the plan for care and the educational plan should be firmly established before one is superimposed on the other.

In metropolitan areas where several home care programs are either already operating or are proposed, consideration should be given to techniques for coordinating programs to avoid duplication of effort and to assure that a full range of services is available.

References

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Part II

Individual Programs

Part II

Richmond Home Medical Care Program

Richmond, Va.

Origin of the Program

Since 1909, the Richmond [Va.] Department of Public Health has been charged with the responsibility of providing medical care to the indigent population of the city. Until 1947, Richmond, like many other communities, provided physician's services to the indigent in their homes through the use of "city poor physicians."

In 1947, however, a review of the service by the health department staff revealed many inherent weaknesses, among them lack of continuity of care, lack of laboratory service, and inadequate records. As a result of that review, the health department requested the Richmond Area Community Council to appoint a committee to study the problem and to make recommendations for an adequate home care service. After an intensive period of study, the committee made the following recommendations:[1]

"1. That the city abandon the services of its six part-time physicians.

"2. That there be established within the Medical College of Virginia three residencies in general practice, and, that these residents should work under the supervision of part-time faculty preceptors.

"3. That a general practice clinic, to serve as a family doctor's office, be established within the admitting clinic of the Medical College of Virginia and be staffed by the residents and the faculty preceptors.

"4. That the hospitalization and outpatient clinic program for the indigent be coordinated with the home care service under the supervision of a qualified director in order that continuity of service could be assured."

To aid in the establishment of the program, the health department appointed a committee which has continued to meet twice a year in an advisory capacity and which has been primarily concerned with program evaluation. Its membership is composed of physicians (general practitioners and specialists), a public health nurse, and a social worker.

The program began operation on a citywide basis in July 1949, with the following specific program objectives:

"1. To demonstrate that medical care of high quality, giving continuity of service between home, clinic, and hospital could be provided by a public health agency to the indigent and medically indigent under a coordinated plan in cooperation with a medical college.

"2. That the residents, interns, and students of the Medical College could be made aware of the problems of a home medical care service and the social aspects of the practice of medicine among low-income groups.

"3. That in time, data might be collected which would be of value from the research point of view by providing complete medical histories from home to hospital and back to home for follow-up care."

The Richmond Home Medical Care Program is an integral part of an organized medical care program for the indigent and medically indigent in the city of Richmond. The program is administered by the department of public health and provides the following services to patients with both acute and chronic illness: medical, nursing, social, and homemaker services; medications and medical supplies; X-rays; laboratory

[1] Richmond Department of Public Health: Richmond [Va.] home medical care program. Unpublished material.

and other diagnostic tests; sickroom equipment; prosthetic appliances; and transportation. Physical therapy, home teaching, and nutrition services are available in limited amounts.

The program has been used to provide field work experience for students of the Medical College of Virginia and of the School of Social Work of the Richmond Professional Institute.

Program 1951–52

This section of the report is primarily concerned with a description of the home care program during the third year of operation, July 1, 1951–June 30, 1952.

Statistical data, showing general patterns for types of patients served and services provided, were estimated for the fiscal year from International Business Machine (IBM) cards available for the calendar year 1951. Detailed IBM data for the latter half of the fiscal year July 1, 1951–June 30, 1952 were not yet available at the time of the study. Only certain summary figures were available for the entire fiscal period. Cost data were taken directly from accounting records kept within the program.

Administration

The responsibility for the administration of the home care program was delegated by the director of public health to the medical aid bureau of the department of public health. In addition to home care, the medical aid bureau had the responsibility for making provisions for outpatient clinic services, hospitalization and institutional care, and dental, ambulance, and coroner services to the indigent and medically indigent in the city of Richmond. Medical indigence was defined as including members of the community receiving financial assistance through public and voluntary agencies and individuals not covered in these categories who, at the discretion of the director of the department of public health, were found to be unable to provide for medical care through their own resources.

The staff of the home care program consisted of a part-time clinical director, a part-time administrative assistant, two part-time supervising physicians, a social work supervisor and two staff social workers, a statistical clerk, clerical staff, switchboard operators, and a part-time clinical nurse.

Administrative responsibility for the program was divided between the clinical director and the administrative assistant. The clinical director, who was also professor of clinical medicine at the Medical College of Virginia, devoted approximately one-half of his time to the program and was responsible for the quality of medical care to patients and for the teaching of medical students during their assignment to the program. The administrative assistant devoted approximately one-half of his time to the program and was responsible for the interpretation of established policies, administrative details of budgeting and billing, and the supervision of the statistical and clerical staffs.

The two supervising physicians (preceptors) were assistant professors of clinical medicine, and devoted approximately one-half of their time to the program. They also acted as assistants to the clinical director.

The chief social worker held faculty rank at the Medical College of Virginia, with the title of associate in public health. She had responsibility for the social aspects of program planning, development of relationships with community agencies, consultation and teaching in home care, and for supervision of social service staff and social work students. The two staff social workers were responsible for providing casework services to patients in their homes and for following cases referred to hospitals that had no social service department.

A half-time clinical nurse was responsible for maintaining stock medications and medical supplies, cleaning and packing physicians' and medical students' bags, and for a variety of similar nonnursing activities.

The statistical clerk was directly responsible for seeing that the central patient records were complete and for handling related clerical activities.

The directors of the nursing division, department of public health, and the Instructive Visiting Nurse Association were available to the home care staff for consultation on the nursing aspects of the home care program.

Cars equipped with radio-telephones were provided by the Medical College of Virginia

and the Richmond Department of Public Health for staff transportation.

Both routine and emergency ambulance transportation of patients were provided by the medical aid bureau, department of public health.

Services not available within the department of public health were arranged for through working agreements with the following community agencies:

1. The hospital division, Medical College of Virginia, provided hospitalization as required for home care patients, laboratory and other diagnostic tests, and medications and medical supplies. Selected stock medications purchased by the department of public health were provided in quantity to the home care program to be dispensed by physicians and medical students. Prescriptions for other drugs were filled at the hospital pharmacy.

2. The combined nursing services (department of public health and Instructive Visiting Nurse Association) provided nursing care to patients in South Richmond, and the Instructive Visiting Nurse Association provided care to patients in the remainder of the city. All nursing service was paid for by the city at the rate of $2.50 per visit.

3. Family Service Society provided housekeeper service at the rate of 33⅓ cents per hour.

4. Sickroom Loan Chest provided sickroom equipment on a rental schedule basis.

5. Sheltering Arms Hospital, Community Hospital, and City Home provided chronic and convalescent medical care at scheduled rates.

Source of Funds and Costs of Services. All costs for providing services were not recorded by the program. The available cost figures totaled $78,909.71 for operating the Richmond home care program during the fiscal year July 1951–June 1952. About 83 percent of that total was paid out of actual funds received from the Richmond City health department and the Commonwealth Fund. The remainder was the estimated value of services provided to the program by the Medical College of Virginia. These figures are summarized below. Using the total caseload of 2,910 patients, the average recorded cost per patient for the fiscal year amounted to $27.12, of which $22.38 was actual cash outlay and $4.74 was the estimated cost of services provided without charge to the program. Services provided to patients for which no separate cost figures or estimates were available included medical consultations, physical therapy, X-rays, and transportation, all of which were provided without charge to the program by the Medical College of Virginia.

Funds received and estimated value of services used	$78, 909. 71
Funds received	65, 109. 71
Richmond City health department	46, 774. 71
Commonwealth Fund	18, 335. 00
Estimated value of services used, total	13, 800. 00
Medical College of Virginia (payroll)	7, 040. 00
Medical College of Virginia (rent, light, fuel, phone, supplies, and so on)	6, 760. 00

Table 1 shows a detailed breakdown of the cost of services for the fiscal year.

Operational Policies and Procedures

The policy of the home care program was to accept referrals from any individual or agency in the community. With the exception of mental illness, all disease categories could be cared for in the home. Patients with active tuberculosis could be cared for in the home on a selected basis. Prenatal and postpartum care were provided in the home, but no patients were delivered at home.

Calls from individuals and agencies were received from 8 a. m. to 8 p. m., 7 days a week. All requests for service were screened by the switchboard operator to determine financial eligibility and source of most recent medical care.

Patients eligible for service were seen by a physician or medical student within 12 hours after the receipt of a request for service. The decision to continue care in the home or to make other arrangements for care was made by the physician.

When, in the opinion of the physician (preceptor, resident), alone or in consultation with the director or the social worker, the services of other personnel—such as nurse, social worker, or homemaker—were required, the case was referred to the appropriate agency by telephone

Table 1. Recorded costs of services provided by the Richmond Home Medical Care Program, July 1951–June 1952

Type of service	Total	Cost of service	
		Expenditures from home care funds	Estimated value of services provided without charge [1]
Total	$78,909.71	$65,109.71	$13,800.00
Direct service	44,587.71	33,947.71	10,640.00
Personnel	32,674.71	26,834.71	5,840.00
Practicing physicians	12,458.00	8,858.00	3,600.00
Resident physicians	2,240.00		2,240.00
Consultant physicians	800.00	800.00	
Nurses	7,576.71	7,576.71	
Social workers	6,000.00	6,000.00	
Physical therapists	N. A.		N. A.
Homemakers [2]	3,600.00	3,600.00	
Other services and supplies	11,913.00	7,113.00	4,800.00
Laboratory	3,600.00		3,600.00
X-rays	N. A.		N. A.
Hospital equipment and appliances	113.00	113.00	
Medications and medical supplies	8,200.00	7,000.00	1,200.00
Transportation	N. A.		N. A.
Administration and other expenses	34,322.00	31,162.00	3,160.00
Administration	14,432.00	14,432.00	
Medical director (½ time)	7,228.00	7,228.00	
Administrative assistant (½ time)	2,300.00	2,300.00	
Chief social worker	4,904.00	4,904.00	
Other expenses	19,890.00	16,730.00	3,160.00
Senior statistical clerk	2,850.00	2,850.00	
Other clerical staff and telephone operators	9,260.00	9,260.00	
Clinic nurse (½ time) [3]	1,200.00		1,200.00
Telephone	160.00		160.00
Overhead (space, light, heat, etc.)	1,800.00		1,800.00
Travel to meetings	585.00	585.00	
General expense [4]	4,035.00	4,035.00	

N. A.—Not available.

[1] Cost estimates were not made by the program for all services provided without charge. Among the services not included in the program estimates were medical consultations, physical therapy, X-rays, and transportation, all of which were provided by the Medical College of Virginia.

[2] A rate of 33⅓ cents per hour was paid by the program; the remaining 31⅔ cents of the total cost of 65 cents per hour was paid by the Family Service Society.

[3] The clinic nurse procured supplies for the visiting physicians.

[4] Items included were office supplies, automobile operation and maintenance, postage, and so on.

NOTE: The total average annual cost per patient served was $27.12. Expenditures from home care funds averaged $22.38 per patient, and the estimated value of services provided without charge averaged $4.74.

and later confirmed in writing on appropriate forms.

Physician services were available from 8 a. m. to 8 p. m. 7 days a week; nursing services, from 8 a. m. to 5 p. m., 7 days a week; and other services, from 8 a. m. to 5 p. m., 5 days a week. Emergencies arising between 8 p. m. and 8 a. m. were answered by the ambulance service of the department of public health and cared for by the staff of the emergency room, Medical College of Virginia Hospital.

Records. An individual cumulative case record was on file in the home care office. This record included identifying data, medical

history, medical and social progress notes, and complete social information on each patient known to social service.

There was no formal plan for routine summary reports from participating agencies to the home care program, but those received were incorporated in the patient's record. There were frequent telephone reports from some agencies, but only occasionally did these reports become a part of patient records.

Conferences. Case conferences were held twice weekly under the leadership of the clinical director or one of his assistants. These conferences were intended to serve two purposes: (*a*) sharing of information and the planning for the care of patients, and (*b*) as an aid in student education. The conferences were attended by the professional members of the home care staff, by students assigned to the home care program, and by workers from other community agencies, such as public health nurses and representatives from public and private organizations which were providing services to patients and their families.

Services to Patients

The types and estimated amounts of services provided to patients on the home care program during the fiscal year 1951–52 are indicated in table 2.

Medical Services. Direct medical services to patients in the home were provided by the physicians of the home care staff, and by residents and senior medical students under staff supervision. Medical consultation was available from the hospital staff of the Medical College of Virginia. An estimated total of 9,634 visits were made to patients during the year. The range of medical services included

Table 2. Estimated numbers of services [1] given to patients by the Richmond Home Medical Care Program, July 1951–June 1952

Service	Patients receiving services		Total visits	Average number of visits	
	Number	Percent		Per patient receiving each service	Per total caseload
Professional services:					
Physician—preceptor, resident, and student	2, 910	100	9, 634	3. 3	3. 3
Physician—specialists	40	1	40	1. 0	(2)
Nursing (Instructive Visiting Nurse Association and health department)	317	11	3, 448	10. 9	1. 2
Social service	637	22	N. A.	N. A.	N. A.
Physical therapy	26	1	N. A.	N. A.	N. A.
Home teaching	N. A.	N. A.	N. A.	N. A.	N. A.
			Number of times service requested	Average number of times	
				Per patient receiving each service	Per total caseload
Other services and supplies:					
Laboratory	306	10	490	1. 6	0. 2
X-rays	N. A.	N. A.	N. A.	N. A.	N. A.
Hospital equipment and appliances	35	1	N. A.	N. A.	N. A.
Medications and medical supplies	2, 203	76	5, 728	2. 6	2. 0
Homemaker	52	2	94	1. 8	(2)
Transportation	291	10	378	1. 3	. 1

N. A.—Not available.

[1] All figures shown are estimates, based upon recorded data for the calendar year 1951 and adjusted upward to coincide with the estimated increase in the patient load.

[2] Less than 0.05.

histories, physical examinations and diagnoses, uncomplicated diagnostic and therapeutic procedures (similar to those ordinarily provided by private physicians), instructions to patients, dispensation of routine oral drugs by the physician and through prescription, administration of parenteral drugs, and revisits based on patient needs. Such specimens as sputum, blood, and urine were collected at home for simple diagnostic tests which were performed in the laboratories of the city health department or the Medical College of Virginia. Patients requiring additional diagnostic and therapeutic procedures, such as electrocardiograms, X-rays, spinal taps, transfusions, and paracenteses, were sent to the hospital for these services. Consultation services in the specialty fields were provided to about 1 percent of the patients upon request of home care physicians.

Nursing Services. Direct nursing care was provided to approximately 11 percent of the patients on the program by the combined nursing services in South Richmond and by the Instructive Visiting Nurse Association in the rest of the city. An estimated total of 3,448 nursing visits resulted in an average of almost 11 visits per patient for those receiving nursing care. The range of services ordered by the physicians included such care as dressings, injections, irrigations, bed baths, health instruction, and teaching members of the family how to care for the patient.

Social Services. Social casework services were available to patients and their families through the home care staff medical social workers. Direct casework service was provided (through personal interview) to those patients and families who needed help in understanding and accepting the patient's illnesses and in meeting the social problems created by the illnesses. Social problems not directly related to the illness situation, but recognized by the home care staff and in need of casework service, were referred by the medical social workers to appropriate community agencies, such as Department of Public Assistance, Family Service Society, and Catholic Charities. Referrals for homemaker service were channeled through the social service staff. Social services were provided to an estimated 637 patients, or about 22 percent of the total patients on the program.

Homemaker Services. Homemaker service, which included cleaning, cooking, and general supervision of children, was available through

Table 3. Estimated numbers[1] of various services provided, by type of illness of patient, Richmond Home Medical Care Program, July 1951–June 1952

Type of service	Total services		Services to patients with—					
			Diagnoses usually chronic[2]			Diagnoses usually acute[2]		
	Number	Average services per patient[3]	Number	Percent	Average services per patient[3]	Number	Percent	Average services per patient[3]
Total patients served	2,910		666	23		2,244	77	
Medical visits	9,634	3.3	3,836	40	5.8	5,798	60	2.6
Medical specialist visits	40		24	60		16	40	
Nursing visits	3,448	1.2	2,468	72	3.7	980	28	.4
Social services (number of patients)	637		287	45		350	55	
Times drugs supplied	5,728	2.0	2,222	39	3.3	3,506	61	1.6
Times laboratory services used	490	.2	266	54	.4	224	46	.1
Times homemaker services used	94		63	67		31	33	
Times patients supplied with transportation	378	.1	228	60	.3	150	40	.07

[1] Figures shown are estimates based on recorded data for the calendar year 1951 and adjusted upward to coincide with the estimated increase in the patient load.

[2] More detailed diagnostic categories are shown in table 6 for both chronic illness and acute illness.

[3] The average number of medical specialist visits and the average number of times homemaker service were used are not shown since both figures would be less than 0.05. The number of social services provided is not available.

Table 4. Estimates of new admissions to the Richmond Home Medical Care Program, by source of referral, July 1951–June 1952 [1]

Source of referral	New admissions [2]	
	Number	Percent
Total	2, 030	100
Hospitals, inpatients	51	2
Outpatient departments and clinics	278	14
Nursing agencies	199	10
Social agencies	144	7
Patients or relatives	1, 299	64
Other sources (private physicians, police, nursing homes, etc.)	59	3

[1] Figures are estimates based on recorded data for the calendar year 1951 and adjusted upward to coincide with the estimated increase in the patient load.
[2] These data do not include readmissions.

the Family Service Society in accordance with their established policy. The reported number of patients who received this service was small—52 patients, or 2 percent of the total patients.

Other Direct Services. Upon specific request, limited physical therapy and nutrition services were available from students in training at the Medical College of Virginia. Home teaching for children was available through the public school system. About 1 percent of the total patients were known to have received physical therapy. Data were not available on home teaching or nutrition services.

Other Services. Hospitalization, prescribed drugs and medical supplies, and laboratory and other diagnostic procedures were available through the facilities of the hospital division, Medical College of Virginia. About three-fourths of the patients received medications and medical supplies, and 1 in 10 received laboratory services. Sickroom supplies and equipment were made available to about 1 percent of the patients through a loan service sponsored by the Council of Jewish Women. Supplies provided included hospital beds, wheelchairs, rubber sheets, hot water bottles, and a variety of other items.

In table 3, a division has been made for the Richmond program between diagnoses of diseases that are usually chronic and those that are usually acute, with the amount and types of services provided to each diagnostic category. An estimated 666 patients (23 percent) on the program were considered to be ill with chronic diseases and 2,244 (77 percent) patients were considered to be ill with acute diseases. Patients treated for chronic diseases received relatively much more of the various services than those treated for acute diseases. For example, 40 percent of the home medical visits and 72 percent of the nursing visits were made to chronically ill patients, and 45 percent of the social service cases were from this group. The same trend of larger amounts of service provided to chronically ill patients was apparent for all other services.

This pattern is verified by the data showing the average number of services provided per patient. More than twice as many home medical visits and about nine times as many nursing visits were made to patients with chronic diagnoses as were made to acutely ill patients. A 6-month sample of medical visits during the period showed that 55 percent of the chronically ill patients received 3 or more medical visits during the 6 months, whereas only 33 percent of the acutely ill patients received 3 visits.

Table 5. Estimates of total patients receiving home care and new admissions to the Richmond Home Medical Care Program, by age and sex, July 1951–June 1952 [1]

Age group (years)	Number			Percent		
	Total	Male	Female	Total	Male	Female
	All patients receiving home care					
Total	2, 910	1, 240	1, 670	100	100	100
Under 15	1, 509	757	752	52	61	45
15–44	627	149	478	21	12	29
45–64	342	149	193	12	12	11
65 and over	432	185	247	15	15	15
	New admissions to the program [2]					
Total	2, 030	883	1, 147	100	100	100
Under 15	1, 068	535	533	53	61	46
15–44	447	115	332	22	13	29
45–64	235	112	123	11	12	11
65 and over	280	121	159	14	14	14

[1] Figures are estimates based on recorded data for the calendar year 1951 and adjusted upward to coincide with the estimated increase in the patient load.
[2] These data do not include readmissions.

Table 6. Estimates of patients receiving home care, Richmond Home Medical Care Program, by primary diagnostic category, July 1951–June 1952 [1]

Primary diagnostic category [2]	Patients receiving service	
	Number	Percent
Total	2,910	100
Diagnoses usually chronic [3]	666	23
Tuberculosis, all forms (001–019)	35	1
Malignant neoplasms (140–205)	52	2
Allergic disorders (240–245)	52	2
Diabetes mellitus (260)	29	1
Psychoneuroses and psychoses (300–318)	47	1
Vascular lesions affecting central nervous system (330–334)	76	3
Other diseases of central nervous system (340–357)	26	1
Diseases of heart (410–443)	140	5
Other diseases of circulatory system (400–402, 444–468)	81	3
Diseases of genitourinary system (590–637)	87	3
Arthritis and rheumatism (720–727)	35	1
Other diseases of bones and organs of movement (730–749)	6	(4)
Diagnoses usually acute, total [3]	2,244	77
Certain infective and parasitic diseases common among children [5] (050, 055, 056, 085, 089)	404	14
Other infective and parasitic diseases (020–049, 051–054, 057–084, 086–088, 090–138)	148	5
Diagnoses usually acute—Continued		
Alcoholism, acute (322.0)	35	1
Diseases of eye (370–389)	17	1
Diseases of ear and mastoid process (390–398)	38	1
Acute upper respiratory infections and hypertrophy of tonsils and adenoids (470–475, 510)	634	22
Influenza and pneumonia (480–493)	105	4
Other diseases of respiratory system (500–502, 511–527)	79	3
Diseases of digestive system (530–587)	131	4
Complications of pregnancy, childbirth, and the puerperium (640–652, 670–689)	35	1
Diseases of skin and cellular tissue (690–716)	67	2
Congenital malformations and diseases peculiar to early infancy (750–776)	38	1
Accidents, poisonings, and violence (N800–N999)	67	2
Other specified diseases (residual)	44	2
Symptoms, senility, and ill-defined diseases (780–795)	114	4
Special conditions and unspecified diagnoses (Y00–Y09) [6]	288	10

[1] Figures are estimates based on recorded data for the calendar year 1951 and adjusted upward to coincide with the estimated increase in the patient load.

[2] When patients receive care for more than one diagnosis, the primary diagnosis is used. Figures in parentheses are Sixth Revision, International List numbers.

[3] The division of the diagnostic categories between chronic and acute is arbitrary and based upon general usage, but some were selected because of the particular cases served on this program.

[4] Less than 0.5 percent.

[5] Diseases included are scarlet fever, diphtheria, whooping cough, measles, and mumps.

[6] Prenatal care and postpartum observation without abnormal symptoms are included, as well as medical examinations when no diagnosis was specified.

For this study an arbitrary division was made between the chronic and acute illness categories, and it is possible that some patients would actually belong in the opposite category if individual analyses of the cases were made. Most of the division of the general diagnostic categories between chronic and acute was based upon general usage, but some decisions were based upon specific characteristics of the types of patients served in this program.

More detailed data on amounts and types of services provided to patients by diagnostic category will be found in tables 11–14. Since many of the individual diagnostic categories shown in these tables are relatively small, great caution should be exercised in using the figures. It is certain that no conclusion that similar amounts of the services would be utilized for other groups of patients falling within the same diagnostic categories can be reached.

Characteristics of Patients

Approximately 2,900 individuals received services during the fiscal year 1951–52, of whom about 2,000 were admitted to the program for the first time. The data in table 4 show that the patients themselves or their relatives account for about 64 percent of the initial requests

for services. Nursing and social agencies referred 17 percent. About 14 percent of the admissions were referred by outpatient departments or clinics and 5 percent were referred from other sources.

Age, Sex, and Diagnosis. Of the estimated total patients receiving care in the home, about 52 percent were under 15 years of age, 21 percent were in the 15–44 age group, and 27 percent were 45 years of age and older (table 5).

About 400 more females than males received care. Most of this difference may be accounted for by women patients in the reproductive years (15–44). At these ages about three times more females than males received services.

It is evident from the data in table 6 that virtually all types of acute and chronic illnesses were treated on the home care program. More than three-fourths of the patients (77 percent) received care for acute illnesses. The remaining 23 percent had illnesses that were usually chronic in nature.

Of the many types of illnesses cared for, two diagnostic groups together accounted for about 36 percent of the total caseload during the year: (*a*) "certain infective and parasitic diseases common among children," including scarlet fever, whooping cough, measles, mumps, and diphtheria; and (*b*) "acute upper respiratory infections and hypertrophy of tonsils and adenoids" (table 6). Since this table shows only an unduplicated count of patients and their primary diagnoses during the year, it does not indicate the total number of times patients may have been readmitted to the program for treatment for the same or different diseases. (All tables showing diagnostic data in this report include only the primary diagnoses of patients.)

The largest chronic disease category was the total cardiovascular disease group (heart disease, other circulatory disease, and vascular lesions affecting the central nervous system), which comprised about 11 percent of the total caseload. Almost half of the patients in the cardiovascular group were treated for heart disease.

In table 7, the total numbers of patients treated for acute and chronic diseases are shown by age groups. The largest number of patients (77 percent) were treated for acute diseases. Of those patients, 65 percent were under 15 years of age and about 85 percent were under 45 years of age. Conversely, only 7 percent of the chronically ill patients were children under 15 years of age and only 35 percent were patients under 45 years of age.

Discharges. Table 8 shows the number of discharges, by reason, from the home care program during the fiscal year. Because some patients were readmitted to and discharged from the program more than once during the year, the total number of patients discharged is a duplicated count.

About half of the discharges were made with no further medical care indicated. Probably many of these were patients with acute upper respiratory infections, acute infective diseases, or other acute illnesses with no apparent complications. However, about 47 percent of the discharges were made to hospitals and other institutions, to outpatient departments, or to private physicians for further care.

Home Care and Professional Education

The Medical College of Virginia has used the facilities of the home care program for training residents since July 1949 and for teaching medical students since December 1949. The School of Social Work of the Richmond Professional Institute of the College of William and Mary assigned students for field work experience during the academic year 1951–52.

During that year all of the junior assistant residents in medicine and all of the 101 senior medical students were assigned to the home care program for field training. Two social work students were assigned to the program in the same academic year.

Medical Education

Graduate and undergraduate medical education in the home care program was the direct responsibility of the part-time clinical director, with the assistance of the two part-time preceptors. The director of public health, who had overall responsibility for the home care program, was also professor of community medicine at the Medical College of Virginia. Other staff members of the Richmond Department of Public Health had faculty appointments at the college. These dual responsibilities have brought about a close relationship

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Table 7. Estimates[1] of patients with acute and with chronic illness,[2] Richmond Home Medical Care Program, by age group, July 1951–June 1952

Age group (years)	Number			Percent		
	Total patients	Chronic diagnoses	Acute diagnoses	Total patients	Chronic diagnoses	Acute diagnoses
Total, all ages	2, 910	666	2, 244	100	100	100
Under 15	1, 509	47	1, 462	52	7	65
15–44	627	188	439	21	28	20
45–64	342	201	141	12	30	6
65 and over	432	230	202	15	35	9

[1] All figures shown are estimates, based upon recorded data for the calendar year 1951 and adjusted upward to coincide with an estimated increase in the patient load.
[2] The division of the diagnostic categories between chronic and acute is arbitrary and based upon general usage, but some were selected because of the particular cases served on this program.

between the department of public health and the medical college. Close working and teaching relationships were further fostered through the operation of the medical aid bureau by the department of public health.

Graduate Education. When the Richmond Area Community Council committee studied the problems of care of the indigent in 1947, one of the recommendations was "that there be established within the Medical College of Virginia three residents in general practice, and that these residents should work under the supervision of the part-time faculty preceptors."

Each junior assistant resident in internal medicine at the Medical College of Virginia Hospital spent approximately 6 weeks full time with the home care program. Two residents were assigned at a time.

Their duties and responsibilities included:

1. Care of patients in their homes.

2. Supervision of student activities (a responsibility shared with the clinical director and the two preceptors).

(*a*) Visiting patients with students on a selective basis.

(*b*) Review and approval of students' proposed therapeutic plans for patient care.

(*c*) Review and signing of prescriptions.

(*d*) Approval of students' requests for ambulance service and referral of patients to other facilities.

(*e*) Review and countersigning of students' records.

3. Attendance at case conferences.

4. Attendance at ward rounds on hospitalized home care patients with the clinical director or the preceptors.

Undergraduate Education. As outlined by the Medical College of Virginia, the objectives of using the home care program for the training of medical students were:

1. To introduce students by practice and experience to the community resources available to patients.

2. To provide students with the practical experience of serving as private physicians.

3. To give students an opportunity to see how continuity of care for patients may be provided in a community setting.

4. To give students an awareness concerning public health problems, disease prevention, and social and medical relationships involved in community medicine.

As a part of the fourth-year curriculum, each student spent 3 weeks full time on the home

Table 8. Estimates[1] of patients discharged from home care, Richmond Home Medical Care Program, by reason for discharge, July 1951–June 1952

Reason for discharge	Patients discharged[2]	
	Number	Percent
Total	3, 862	100
No further medical care indicated	1, 924	50
To outpatient departments	643	17
To hospitals and other institutions[3]	1, 085	28
Death	43	1
Against medical advice	4	(4)
Referred to private physicians	70	2
Moved out of town	93	2

[1] All figures shown are estimates, based upon recorded data for the calendar year 1951 and adjusted upward to coincide with an estimated increase in the patient load.
[2] Figures shown for patients discharged are not an unduplicated count. If a patient was readmitted and discharged more than once during the year, each time is counted as a patient discharge.
[3] Includes nursing homes, convalescent homes, custodial institutions, and so on.
[4] Less than 0.5 percent.

care program. Students were assigned in groups of eight. During their assignment, pairs of students covered each of the four geographic districts of the city, weekdays, 8 a. m. to 5 p. m. Evenings, from 5 p. m. to 8 p. m., and weekends, from 8 a. m. to 8 p. m., two students answered all calls on a rotational basis. The students were under the supervision of the junior assistant residents, the two preceptors, and the clinical director.

The specific duties and responsibilities of the medical students were:

1. To visit and examine assigned patients referred to the home care program and to plan with the preceptor or the resident for treatment.
2. To maintain the patient's medical charts.
3. To recognize the patient's needs for additional services, such as specialty consultation, nursing, and social and homemaking services, and to request such services after receiving approval from the clinical director or one of his assistants.
4. To participate in the regularly scheduled case conferences.
5. To attend weekly ward rounds with the clinical director or preceptor on hospitalized home care patients.
6. To attend weekly seminars on public health and community medicine.

Approximately 3 hours of the first day of the student's assignment to the program were spent in orientation, which included instruction on the aims of the program, methods of providing care in the home, the role of the social worker in the program, the availability of community resources, and the details of operation of the home care program. The clinical director or his assistants, the chief social worker, and the administrative assistant and members of his staff participated in the orientation of students. Printed materials prepared by the clinical director, explaining the various phases of the program, were given to each student.

Visits to patients were made by the students in pairs, or a supervisor accompanied them. Following a visit to a patient, the students requested a followup visit by a junior assistant resident if the patient's medical condition presented difficulties.

During the 6-month period July–December 1951, about one-fifth of the 1,432 home care patients were visited by the medical students only and were not seen at any time by the resident physicians or by the preceptors on the program (table 9). Of the 310 patients visited only by medical students, 42 had diagnoses classified as chronic. Most of the remainder were treated for upper respiratory infections, children's infectious diseases, and minor trauma due to accidents.

Table 9. Medical visits to patients on Richmond Home Medical Care Program, July–December 1951

Visits made by—	Number of patients	Diagnosis		Number of visits
		Chronic	Acute	
Total	1,432	381	1,051	4,731
Physicians and students together	1,122	339	783	2,655
Students alone	310	42	268	2,076
1 visit only	193	28	165	------
2 visits	79	11	68	------
3 or more visits	38	3	35	------

Although about four-fifths of the patients received home visits at some time during this period from physicians as well as from medical students, almost 44 percent of the total medical visits were made by students unaccompanied by physicians (table 9). Without the services of the medical students, it would have been necessary to increase the number of physicians in order to take care of the patient load.

For detailed data on visits by physicians and students to patients, by diagnostic category, see table 14.

Informal conferences were held daily by the students and their supervisors. In these conferences, the students' cases were discussed, plans were made for patient care, records were reviewed and countersigned, prescriptions were approved and signed, and referrals to other community agencies were approved. A member of the social service staff was available for these conferences to point up the social and emotional needs of patients and their families, and to accept referrals to social service from the medical supervisors and students.

Teaching and supervision were further enhanced through periodic review of records by the residents and preceptors, by visits to the

Table 10. Number of patients receiving services from the Richmond Home Medical Care Program, November 1949–June 1952, by fiscal year

Date	Patients	Medical visits	Nursing visits
November 1949–December 1950 [1]	3, 441	9, 385	1, 301
July 1950–June 1951	2, 486	9, 147	2, 897
July 1951–June 1952	[2] 2, 910	9, 674	3, 448

[1] 14 months. [2] Estimate.

homes of selected patients by the clinical director or preceptors with the students, and by regularly scheduled case conferences, planned to help the students correlate medical and social information related to patient care. The clinical director, or one of his assistants, and the chief social worker selected cases for discussion from the list of active cases on the home care program. Six or eight cases were selected for each conference, and students were encouraged to initiate discussion on any or all of them.

Social Work Education

During the academic year 1951–52, two second-year students from the School of Social Work of the Richmond Professional Institute were assigned to the home care program for field work experience under the supervision of the chief social worker.

Students were selected on the basis of their expressed interest in social work in a medical setting. They spent 2½ days each week in home care from October to June, with the exception of the school vacation periods. The school required 1½ hours a week of individual conferences with the field supervisor. Liaison between the field supervisor in the home care program and the School of Social Work was maintained by the faculty adviser from the school, who visited the home care program twice a semester to read student records and to discuss the students' field work experience with the field supervisor.

During the first week of their assignment to the program, the students were given a brief orientation, during which they met the staff and learned policies and procedures. An average of 10 cases a month were assigned to each student by the chief social worker. The supervisor selected cases that would give the students the broadest possible experience within the limits of the setting.

The students worked with patients and families in situations in which the social problems were directly related to the illness and in which the family and the patient needed help in understanding and adjusting to the problems created by the illness. The students were also given an opportunity, through case situations, to work cooperatively with community social agencies. In these situations, the students were responsible both for interpreting medical recommendations to the social agencies and for bringing significant social data to the medical staff of the home care program.

The social work students were responsible for providing casework services to patients, for maintaining social service records, for preparing summary reports to be included in medical records, and for attending staff conferences.

Developments Within the Program

Changes occurring since the inception of the program have been relatively minor. Because of staffing difficulties, the area served during the latter part of 1949 was limited, but on July 1, 1950, it was expanded to include the entire city. On July 1, 1951, dental extractions and, upon request, nutritional and physical therapy services were provided by students from the Medical College of Virginia Hospital. The medical social service staff was increased from 1 in 1949 to 3 in 1951.

The staff of the Richmond Home Medical Care Program would like the following services added to the program:

1. The services of a psychiatric consultant to work with staff members in planning patient care.

2. Rehabilitation services to include a physiatrist who could evaluate in the home a patient's potential for physical restoration.

3. Occupational therapy and nutrition services directly available in the program.

4. Messenger services as needed for delivery of supplies to patients.

5. The orientation program for medical students to be amplified to include more informa-

Table 11. Number of patients and numbers of services [1] provided by the Richmond Home Medical Care Program, by primary diagnostic category of patients, July 1951–June 1952

Primary diagnostic category [2]	Total patients in program	Number of visits				Number of times services were used			
		Medical	Medical specialist	Nursing	Patients receiving social services	Drugs	Laboratory	Homemaker	Transportation
Total	2,910	9,634	40	3,448	637	5,728	490	94	378
Diagnoses usually chronic, total [3]	666	3,836	24	2,468	287	2,222	266	63	228
Tuberculosis, all forms	35	135	-------	317	18	92	18	-------	10
Malignant neoplasms	52	472	2	403	34	286	39	14	43
Allergic disorders	52	222	2	3	14	160	9	-------	3
Diabetes mellitus	29	241	-------	179	14	166	33	7	20
Psychoneuroses and psychoses	47	125	2	7	24	63	3	7	6
Vascular lesions affecting central nervous system	76	434	2	183	43	200	19	1	35
Other diseases of central nervous system	26	116	2	48	10	74	3	2	17
Diseases of heart	140	1,165	10	838	61	660	47	12	46
Other diseases of circulatory system	81	511	1	390	41	292	42	14	15
Diseases of genitourinary system	87	241	1	34	16	120	37	2	19
Arthritis and rheumatism	35	135	2	66	10	92	13	4	11
Other diseases of bones and organs of movement	6	39	-------	-------	2	17	3	-------	3
Diagnoses usually acute, total [3]	2,244	5,798	16	980	350	3,506	224	31	150
Certain infective and parasitic diseases common among children [4]	404	1,146	4	83	38	751	15	2	5
Other infective and parasitic diseases	148	356	-------	207	12	206	18	2	8
Alcoholism, acute	35	87	1	7	10	40	2	1	3
Diseases of eye	17	39	-------	10	4	17	2	2	2
Diseases of ear and mastoid process	38	96	-------	-------	2	74	1	-------	-------
Acute upper respiratory infections and hypertrophy of tonsils and adenoids	634	1,511	2	103	73	1,066	41	12	6
Influenza and pneumonia	105	395	-------	41	20	292	34	2	14
Other diseases of respiratory system	79	318	-------	39	15	229	19	2	8
Diseases of digestive system	131	328	1	21	20	183	15	1	15
Complications of pregnancy, childbirth, and the puerperium	35	67	-------	31	5	29	3	-------	10
Diseases of skin and cellular tissue	67	222	-------	72	16	126	3	-------	11
Congenital malformations and diseases peculiar to early infancy	38	67	1	7	4	11	2	2	3
Accidents, poisonings, and violence	67	212	4	100	22	69	8	2	20
Other specified diseases	44	125	1	121	13	52	14	-------	9
Symptoms, senility, and ill-defined diseases	114	405	1	62	41	206	33	2	25
Special conditions and unspecified diagnoses	288	424	1	76	55	155	14	1	11

[1] All figures shown are estimates, based upon recorded data for the calendar year and adjusted upward to coincide with the estimated increase in the patient load.

[2] The primary diagnosis is shown for which patients were given services at some time during the year (or at time of admission for newly admitted patients). Sixth Revision, International List numbers for each diagnostic category are shown in table 6.

[3] The division of the diagnostic categories between chronic and acute is arbitrary. Most of the selection was based upon general usage, but some were selected because of the particular cases served on this program.

[4] Diseases included are scarlet fever, diptheria, measles, mumps, and whooping cough.

tion relating to nursing and to how the nurse functions in the community.

Data on the number of patients served by this program were not available before November 1949. During the 32-month period November 1949–June 1952, more than 6,600 different patients received services through the home care program.

Table 12. Percentage[1] of total patients and of various services provided by the Richmond Home Medical Care Program, by diagnostic category of patients, July 1951–June 1952

Primary diagnostic category[2]	Total patients in program	Medical visits	Medical specialist visits	Nursing visits	Patients receiving social services	Drugs	Laboratory	Homemaker	Transportation
Diagnoses usually chronic[3]	23	40	60	72	45	39	54	67	60
Tuberculosis, all forms	1	2	-------	9	3	2	4	-------	3
Malignant neoplasms	2	5	5	12	5	5	8	15	11
Allergic disorders	2	2	5	(4)	2	3	2	-------	1
Diabetes mellitus	1	3	-------	5	2	3	7	8	5
Psychoneuroses and psychoses	1	1	5	(4)	4	1	1	8	2
Vascular lesions affecting central nervous system	3	5	5	6	7	3	4	1	9
Other diseases of central nervous system	1	1	5	2	2	1	1	2	4
Diseases of heart	5	12	25	24	10	12	9	13	12
Other diseases of circulatory system	3	5	3	11	6	5	8	15	4
Diseases of genitourinary system	3	3	2	1	2	2	7	2	5
Arthritis and rheumatism	1	1	5	2	2	2	2	4	3
Other diseases of bones and organs of movement	(4)	(4)	-------	-------	(4)	(4)	1	-------	1
Diagnoses usually acute, total[3]	77	60	40	28	55	61	46	33	40
Certain infective and parasitic diseases common among children[5]	14	12	10	2	6	13	3	2	1
Other infective and parasitic diseases	5	4	-------	6	2	4	4	2	2
Alcoholism, acute	1	1	3	(4)	2	1	(4)	1	1
Diseases of eye	1	(4)	-------	(4)	1	(4)	(4)	2	1
Diseases of ear and mastoid process	1	1	-------	-------	(4)	1	(4)	-------	-------
Acute upper respiratory infections and hypertrophy of tonsils and adenoids	22	16	5	3	11	19	8	13	1
Influenza and pneumonia	4	4	-------	1	3	5	7	2	4
Other diseases of respiratory system	3	3	-------	1	2	4	4	2	2
Diseases of digestive system	4	4	3	1	3	3	3	1	4
Complications of pregnancy, childbirth, and the puerperium	1	1	-------	1	1	(4)	1	-------	3
Diseases of skin and cellular tissue	2	2	-------	2	3	2	1	-------	3
Congenital malformations and diseases peculiar to early infancy	1	1	3	(4)	1	(4)	(4)	2	1
Accidents, poisonings, and violence	2	2	10	3	3	1	2	2	5
Other specified diseases	2	1	2	4	2	1	3	-------	2
Symptoms, senility, and ill-defined diseases	4	4	2	2	6	4	7	2	7
Special conditions and unspecified diagnoses	10	4	2	2	9	3	3	1	3

[1] All figures shown are estimates, based upon recorded data for the calendar year and adjusted upward to coincide with the estimated increase in the patient load.

[2] The primary diagnosis is shown for which patients were given services at some time during the year (or at time of admission for newly admitted patients). Sixth Revision, International List numbers for each diagnostic category are shown in table 6.

[3] The division of the diagnostic categories between chronic and acute is arbitrary. Most of the selection was based upon general usage, but some were selected because of the particular cases served on this program.

[4] Less than 0.5 percent.

[5] Diseases included are scarlet fever, diphtheria, measles, mumps, and whooping cough.

Since November 1949, the Richmond program has been providing home care services to about 2,500 to 3,000 different patients per year. The number of home medical visits to patients has totaled more than 9,000 each year, and the number of nursing visits has shown a steady increase each year, from about 1,000 to more than 3,400 for the 1951–52 fiscal year (table 10).

Collection of Data

The Richmond program utilized IBM equipment to obtain statistical information on patients and services provided. Monthly summary sheets made from the central patient records showed all patients who received services during the past month. IBM cards were then punched for each patient from the codde

Table 13. Average number[1] of various services given by the Richmond Home Medical Care Program, by diagnostic category of patients, July 1951–June 1952

Primary diagnostic category[2]	Total patients in program	Medical visits per patient	Nursing visits per patient	Times drugs supplied, per patient	Times laboratory services used, per patient	Times transportation supplied, per patient
Total	2,910	3.3	1.2	2.0	0.2	0.1
Diagnoses usually chronic, total[3]	666	5.8	3.7	3.3	.4	.3
Tuberculosis, all forms	35	3.9	9.1	2.6	.5	.3
Malignant neoplasms	52	9.1	7.7	5.5	.7	.8
Allergic disorders	52	4.3	.1	3.1	.2	.1
Diabetes mellitus	29	8.3	6.2	5.7	1.1	.7
Psychoneuroses and psychoses	47	2.7	.1	1.3	.1	.1
Vascular lesions affecting central nervous system	76	5.7	2.4	2.6	.2	.5
Other diseases of central nervous system	26	4.5	1.8	2.8	.1	.7
Diseases of heart	140	8.3	6.0	4.7	.3	.3
Other diseases of circulatory system	81	6.3	4.8	3.6	.5	.2
Diseases of genitourinary system	87	2.8	.4	1.4	.4	.2
Arthritis and rheumatism	35	3.9	1.9	2.6	.4	.3
Other diseases of bones and organs of movement	6	6.5	-------	2.8	.5	.5
Diagnoses usually acute, total[3]	2,244	2.6	.4	1.6	.1	.1
Certain infective and parasitic diseases common among children[4]	404	2.8	.2	1.9	(5)	(5)
Other infective and parasitic diseases	148	2.4	1.4	1.4	.1	.1
Alcoholism, acute	35	2.5	.2	1.1	.1	.1
Diseases of eye	17	2.3	.6	1.0	.1	.1
Diseases of ear and mastoid process	38	2.5	-------	1.9	(5)	----------
Acute upper respiratory infections and hypertrophy of tonsils and adenoids	634	2.4	.2	1.7	.1	(5)
Influenza and pneumonia	105	3.8	.4	2.8	.3	.1
Other diseases of respiratory system	79	4.0	.5	2.9	.2	.1
Diseases of digestive system	131	2.5	.2	1.4	.1	.1
Complications of pregnancy, childbirth and the puerperium	35	1.9	.9	.8	.1	.3
Diseases of skin and cellular tissue	67	3.3	1.1	1.9	(5)	.2
Congenital malformations and diseases peculiar to early infancy	38	1.8	.2	.3	.1	.1
Accidents, poisonings, and violence	67	3.2	1.5	1.0	.1	.3
Other specified diseases	44	2.8	2.7	1.2	.3	.2
Symptoms, senility, and ill-defined diseases	114	3.6	.5	1.8	.3	.2
Special conditions and unspecified diagnoses	288	1.5	.3	.5	(5)	(5)

[1] All figures shown are estimates, based upon recorded data for the calendar year and adjusted upward to coincide with the estimated increase in the patient load.

[2] The primary diagnosis is shown for which patients were given services at some time during the year (or at time of admission for newly admitted patients). Sixth Revision, International List numbers for each diagnostic category are shown in table 6.

[3] The division of the diagnostic categories between chronic and acute is arbitrary and based upon general usage but some were selected because of the particular cases served on this program.

[4] Diseases included are scarlet fever, diphtheria, measles, mumps, and whooping cough.

[5] Less than 0.05.

summary sheets, and machine tabulations, primarily of annual data, were made. Monthly hand tallies were kept of the total numbers of patients served, medical visits, and nursing visits. The statistical data collected have been used for program planning and administration, teaching of medical students in the home care program, community planning, and research.

For this program, the study team decided to use the fiscal year July 1951–June 1952 as the

Table 14. Number and percentage [1] of various types of medical visits, Richmond Home Medical Care Program, by diagnostic category of patients, July–December 1951

Primary diagnostic category [2]	Number				Percent			
	Total medical visits	Visits made by—			Total medical visits	Visits made by—		
		Students alone	Residents	Preceptors		Students alone	Residents	Preceptors
Total	4,727	2,075	2,300	352	100	100	100	100
Diagnoses usually chronic, total [3]	1,960	765	969	226	41	37	42	64
Tuberculosis, all forms	67	22	32	13	1	1	1	4
Malignant neoplasms	248	88	121	39	5	4	5	11
Allergic disorders	124	59	59	6	3	3	2	1
Diabetes mellitus	124	42	68	14	3	2	3	4
Psychoneuroses and psychoses	57	20	33	4	1	1	1	1
Vascular lesions affecting central nervous system	234	94	114	26	5	5	5	7
Other diseases of central nervous system	43	20	18	5	1	1	1	1
Diseases of heart	585	217	298	70	12	11	13	20
Other diseases of circulatory system	212	87	107	18	4	4	5	5
Diseases of genitourinary system	138	63	65	10	3	3	3	3
Arthritis and rheumatism	96	44	39	13	2	2	2	4
Other diseases of bones and organs of movement	32	9	15	8	1	(4)	1	3
Diagnoses usually acute, total [3]	2,767	1,310	1,331	126	59	63	58	36
Certain infective and parasitic diseases common among children [5]	611	337	266	8	13	16	12	2
Other infective and parasitic diseases	108	43	55	10	2	2	2	3
Alchoholism, acute	49	10	36	3	1	(4)	1	1
Diseases of eye	9	2	7	-------	(4)	(4)	(4)	-------
Diseases of ear and mastoid process	35	19	16	-------	1	1	1	-------
Acute upper respiratory infections and hypertrophy of tonsils and adenoids	730	380	335	15	15	18	15	4
Influenza and pneumonia	141	68	57	16	3	3	2	5
Other diseases of respiratory system	99	40	52	7	2	2	2	2
Diseases of digestive system	227	87	125	15	5	4	5	4
Complications of pregnancy, childbirth, and the puerperium	26	8	16	2	1	(4)	1	1
Diseases of skin and cellular tissue	129	61	59	9	3	3	3	3
Congenital malformations and diseases peculiar to early infancy	27	13	12	2	1	1	1	1
Accidents, poisonings, and violence	114	49	53	12	2	3	2	3
Other specified diseases	86	39	40	7	2	2	2	2
Symptoms, senility, and ill-defined diseases	181	61	108	12	4	3	5	3
Special conditions and unspecified diagnoses	195	93	94	8	4	5	4	2

[1] All figures shown are estimates, based upon recorded data for the calendar year and adjusted upward to coincide with the estimated increase in the patient load.

[2] The primary diagnosis is shown for which patients were given services at some time during the year (or at time of admission for newly admitted patients). Sixth Revision, International List numbers for each diagnostic category are shown in table 6.

[3] The division of the diagnostic categories between chronic and acute is arbitrary and based upon general usage, but some were selected because of the particular cases served on this program.

[4] Less than 0.5 percent.

[5] Diseases included are scarlet fever, diphtheria, measles, mumps, and whooping cough.

period to be studied since it was the most recent fiscal period ended before the time of the study. At that time, the summary sheet coding of individual patient records and the machine processing of data had not been completed for the 6-month period January–June 1952. Consequently, statistical data from the IBM punchcards were obtained and tabulated for the calendar year 1951. The program staff was in agreement that the general types of patients and services given had not changed from 1951 to 1952, but actual numbers of patients and services were known to be larger. By use of ratios, all figures were adjusted upward to concur with the estimated increase in total patients and services provided during the fiscal year 1951–52. It was believed that the resulting estimates of quantitative data for 1951–52 would give reliable indications of certain general characteristics of the Richmond home care program.

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Montefiore Hospital Home Care Program

New York, N. Y.

Origin of the Program

Montefiore Hospital, a voluntary hospital for chronic disease, located in the Bronx (1 of the 5 boroughs of New York City) established a department of home care in January 1947 to demonstrate the feasibility of caring for indigent and medically indigent patients with long-term illness in their homes through an extension of hospital services.

The program was initially financed by the New York City Cancer Committee and the Greater New York Fund and served selected patients living in the Bronx and upper Manhattan, an area easily accessible to the hospital.

The plan for home care was projected by the director of Montefiore Hospital in 1946 to alleviate overcrowding in the hospital by providing extramural hospital care at home. It was believed that it would provide a laboratory for the observation, evaluation, and better understanding of the social, emotional, and environmental factors which are known to be of great importance in illness. It was also expected that the program would effect savings in the cost of hospital care and reduce the need for costly hospital construction.

The program provided the following services to patients: medical, nursing, social service, physical and occupational therapies, housekeeping service, hospitalization, medication and medical supplies, laboratory and other diagnostic tests, X-ray, sickroom equipment, and transportation.

Program 1951–52

This section of the report is primarily concerned with a description of the home care program during the fourth year of operation, July 1, 1951–June 30, 1952. Statistical data were abstracted from individual patient records and from figures already compiled within the program. Cost data were obtained directly from records kept by the program.

Administration

The home care program was one of three subdivisions in the division of social medicine of Montefiore Hospital. Administrative responsibility for its operation was delegated to the home care executive (a physician) by the chief of the division of social medicine. In addition to the home care executive, the staff consisted of 4 half-time physicians, a half-time social work supervisor and 2 full-time and 1 half-time medical social workers, a public health nursing consultant 1 day per week, a physical therapist, 2 occupational therapists, an administrative secretary, 2 clerks, and 1 messenger.

The home care executive devoted approximately one-half of his time to administrative duties and to the supervision of the home care staff physicians and one-half, to the care of patients. The physicians serving on the home care staff were practicing physicians in the city and had appointments on the attending staff of the hospital.

The chief of the social service department of Montefiore Hospital was also assistant chief of the division of social medicine and was responsible for the social aspects of program planning for home care. The supervision of the home care staff social workers was delegated to a supervisor from the hospital social service staff, who was assigned half-time to the home care program.

A public health nursing consultant from the Visiting Nurse Service of New York spent 1 day a week in the home care program, participating in program planning, providing consultation on the nursing aspects of the program, and serving as coordinator of nursing services to patients.

The chief occupational therapist was re-

sponsible for the planning and supervision of the occupational therapy program.

The physical therapist was responsible for providing a variety of physical therapy treatments to patients under the technical supervision of the home care physiatrist, one of the staff physicians.

The administrative secretary was responsible for all clerical functions in the office.

The messenger was responsible for cleaning and maintaining equipment, packing physicians' bags, maintaining a stock of medical and sickroom supplies, and delivering these supplies to patients when families were unable to call for them.

Funds were available in the home care budget to pay for limited housekeeping services in selected situations, up to a maximum of 10 hours per week.

Arrangements were made with other departments within the hospital to provide the following services:

1. Medical consultation in the home or in the outpatient clinic by physicians from the specialty departments of the hospital.
2. X-rays in the X-ray department.
3. Processing of laboratory and other diagnostic tests in the hospital laboratory.
4. Medications from the hospital pharmacy.
5. Medical and sickroom supplies from the hospital supply department.
6. Hospitalization for home care patients as needed, without delay.

Services not available within the hospital were arranged for through working agreements with the following community agencies:

1. The Visiting Nurse Service of New York was to provide nursing consultation to the program 1 day per week at the rate of $4 per hour, and nursing care to patients at the rate of $2.85 for the first 45 minutes and 50 cents for each additional 15 minutes Progress reports were to be made on patients after the first visit and each month thereafter
2. An ambulance company was to provide ambulance service at the rate of $8 per trip and oxygen and hospital equipment at scheduled rates.

Source of Funds and Costs of Services. The operating budget of the Montefiore Home Care Program was $95,521.07 for the fiscal year 1951–52. A total of 181 different patients were on the program for 29,330 patient days during the year, at an average cost of $3.26 per patient day. The sources of funds were:

Source of funds	*Amount*
Federation of Jewish Philanthropies	$55, 909. 02
Other sources	
New York Cancer Committee	12, 000. 00
Commonwealth Fund	16, 667. 00
Patient fees (including welfare department payments)	2, 355. 75
Estate of Claire H. Weill	4, 405. 95
Estate of Florina Lasker	4, 289. 00
Gross income, total	95, 626. 72
Less payment of New York Heart Association (adjustment from previous year)	105. 65
Net income	$95, 521. 07

The Federation of Jewish Philanthropies, the prime source of support for the Montefiore Hospital, furnished about 59 percent of the program budget Most of the remainder came from various private organizations and estates. Patient fees provided about 2 percent of the total funds.

Detailed data on costs are shown in table 1. Certain known administrative and overhead costs were absorbed by Montefiore Hospital and were not separated out for the home care program. These costs included the part-time services of a social work supervisor, services of the hospital accounting and purchasing departments, and rent, heat, light, and so on.

Operational Policies and Procedures

The policy of the home care program was to provide care to selected indigent and medically indigent patients with chronic illnesses living in the Bronx and Upper Manhattan. Patients having active pulmonary tuberculosis and mental illnesses were not accepted for care. Patients whose incomes were not adequate to meet their medical needs were considered to be medically indigent. Patients who were financially able to pay a maximum of $25.00 per month for physician's services were not eligible unless their total medical needs exceeded that amount.

Referrals were accepted from Montefiore Hospital, other health and welfare agencies, and private physicians. Medical abstracts were obtained from patient records for persons referred

Table 1. Recorded costs of services provided by the Montefiore Hospital Home Care Program, July 1951–June 1952

Type of service	Cost
Total	$95, 521. 07
Direct services to patients	75, 483. 61
Personnel, total	56, 853. 85
Home care executive (half-time)	4. 501. 32
Visiting physicians (4 half-time)	17, 137. 94
Consulting physician's fees	1, 830. 00
Visiting nurse service [1]	4, 318. 75
Social workers [2]	10, 736. 96
Physical therapist	3, 137. 74
Occupational therapists (2)	5, 814. 26
Clinical psychologist (part-time)	1, 368. 50
Dentist	99. 08
Housekeepers	7, 909. 30
Other services and supplies	18. 629. 76
Laboratory	1, 203. 50
X-ray	867. 00
Hospital equipment [3]	2, 506. 70
Medications and medical supplies	9, 377. 59
Orthopedic appliances	581. 34
Eye glasses	33. 91
Oxygen	1, 507. 16
Occupational therapy supplies	996. 44
Blood	525. 00
Linen	37. 91
Ambulance expense	993. 21
Administration and other expenses	20, 037. 46
Personnel, total	13, 277. 48
Home care executive (half-time)	4, 501. 33
Administrative secretary and clerks (2)	7, 162. 73
Messenger	1, 613. 42
Other expenses, total [4]	6, 759. 98
Conference expense	746. 30
Printing and postage	145. 73
Office supplies and equipment	411. 21
Telephone and telegraph	480. 00
Room and board—employees	806. 75
Transportation of staff	2. 469. 83
Automobile maintenance	414. 98
Social security	443. 12
Compensation insurance	718. 64
Miscellaneous	123. 42

[1] Includes services of part-time nurse consultant at $4 per hour.

[2] 2 full time, 1 half time. Does not include services of part-time social work supervisor.

[3] Includes rent of large equipment only. Does not include small items such as bedpans, hot water bottles, and so on.

[4] Does not include such overhead expenses as the time spent on home care by the Montefiore Hospital accounting and purchasing department staff, or cost of heat, light, and space.

NOTE: Average cost per patient day, $3.26.

from Montefiore Hospital; and requests were made for medical abstracts on patients referred by private physicians and by other hospitals. All patients referred for care were examined by a home care physician, who consulted with the patient's attending physician.

All patients considered medically eligible were referred to the medical social service staff workers of the home care program for a social evaluation.

Criteria for Service. Patients were considered suitable for home care if they met certain criteria. The medical criteria were:

1. Patient had had a complete medical workup and the plan for treatment was such that services could be provided in the home.

2. Patient required a physician's visit at least every 2 weeks.

The social criteria were:

1. A physically suitable place existed in which the necessary care could be given.

2. There were family members or others to assume necessary responsibilities in the home.

3. The patient was emotionally ready and able to leave the hospital.

4. The status of family relationships and the home conditions were conducive to the welfare of the patient.

5. The patient's presence in the home was not or would not be incompatible with the welfare of the family.

After patients were accepted for home care and were at home, they were referred to the Visiting Nurse Service of New York for at least one visit. During this visit, the patient's need for nursing care was evaluated and plans were made for providing necessary nursing care, teaching members of the family how to give care, and giving general health instruction to the patient and his family.

Patients accepted for home care were also visited in their homes by the occupational therapist, who determined their need for and general interest in occupational and diversional therapy. Following these visits, patients were discussed with the physician and plans were made to institute some type of therapy for those who were interested and who were not too sick to carry on some type of activity.

When, in the opinion of the attending physician, alone or in consultation with the physi-

atrist, patients required physical therapy, they were referred to the therapist with specific orders.

When services of community agencies were required, the patient was referred by telephone and the referral was later confirmed in writing on appropriate forms.

An individual cumulative case record was maintained for each patient and was on file in the home care office. This record included identifying data, medical abstract of previous medical care, medical history and progress notes, complete social information, and routine summary reports from the nursing agency. Correspondence and summary reports, when received from other agencies, were incorporated in this record.

Staff conferences were held weekly under the leadership of the home care executive. These conferences were devoted to discussions of patient care and administrative policies and procedures. When conferences were centered around planning for patient care and involved participation with other community agencies, representatives from the respective agencies were invited to attend.

Once a month, each staff physician reviewed his case records with a staff social worker.

Monthly conferences were held by a medical consultant from the hospital with individual staff physicians to review case records and to visit selected patients with the physician.

Services to Patients

A total of 181 different patients received services during the fiscal year 1951–52. The amounts and types of services provided to these patients are indicated in table 2. (For data by diagnostic category, see tables 10 and 11.)

Medical Services. Direct medical services to patients in the home were provided by the home care executive, staff physicians, and consultants from the hospital staff. The range of medical services included histories, physical examinations, administration of medications, drawing blood for laboratory analysis, diagnostic and therapeutic procedures such as electrocardiograms, chest and abdominal taps, transfusions, and surgical procedures. Consultant services in most of the special fields of medicine were provided to patients either in their homes or in the outpatient department of the hospital. An average of 22 visits were made to each patient on the program during the year. Using as a base the average length of patient stay, which was almost 23 weeks, this would give an average of slightly less than 1 visit per week per patient. Consultations by medical specialists were provided to 72 patients, or 40 percent of the total patients on home care during the fiscal year 1951–52. An average of 2.3 visits were made to each patient receiving medical consultant services.

Nursing Services. Direct nursing care to patients was provided under the direction of the Visiting Nurse Service of New York. The range of services, as prescribed by the physicians, included such care as dressings, injections, health instruction and teaching members of the family how to care for the patient, and assisting the physician with such therapeutic procedures as transfusions and surgical procedures. An average of 15.1 visits were made to 133 patients, or about 74 percent of all patients on the program during the year 1951–52.

Social Services. Direct medical social casework services in the home were provided by the staff medical social workers. The range of services included helping patients and families adjust to the social and emotional problems involved in having a sick person in the home; giving support and encouragement to patients and to families in their ability to care for patients in the home; helping patients and families utilize community resources to meet economic needs and social problems not related to the illness situation; helping patients and families plan for patient care when home care was no longer a suitable plan. All of the patients were visited in the home by a medical social worker at least once in 6 weeks, during their stay on the program. Some of the patients were visited much more frequently, and in some instances their families were interviewed in the office. During the study year, according to summary figures provided by the social service department, the home care medical social workers had 1,235 interviews with patients and families in the hospital or in the home care office and 866 interviews in the home.

Physical Therapy. Physical therapy was

provided by the staff therapist. The range of service as prescribed by the physiatrist included such therapeutic procedures as corrective exercise, massage, short wave and ultraviolet treatments, and wax therapy. The physical therapist also served as a chiropodist, especially to diabetic patients. Thirty-two patients, or 18 percent of the total, received some physical therapy during the fiscal year. These patients each received an average of 28.8 home visits.

Occupational Therapy. Occupational therapy was provided by staff therapists. The range

Table 2. Services to patients, Montefiore Hospital Home Care Program, July 1951–June 1952

Type of service	Patients receiving services		Number services	Average visits per patient receiving each service
	Number	Percent		
Total patients receiving service	181	100.0		
Staff physicians (visits)	[1] 178	98.0	3,911	22.0
Medical consultations (visits)	72	40.0	169	2.3
Nursing visits	133	74.0	2,014	15.1
Social service	[2]			
Physical therapy	32	18.0	922	28.8
Occupational therapy	92	51.0	646	7.0
Housekeeping (hours)	44	24.0	8,513	
Laboratory services [3]	118	65.0	1,008	
X-rays	68	38.0	128	
Hospital equipment [3]	68	38.0	[4] 80	
Medications (prescriptions) [3]	181	100.0	5,867	
Electrocardiograms [3]	27	15.0	37	
Blood transfusions [3]	10	6.0	24	
Paracenteses and thoracenteses [3]	N. A.		17	
Ambulance transportation [3]	74	41.0	121	
Oxygen tanks [3]	21	12.0	124	

N. A.—Not available.

[1] This table is based upon the total number of different patients receiving any kind of service during the fiscal year 1951–52. Some of these patients may have been on the program for the entire year, and some only a few days. The three patients not recorded as receiving home visits were probably discharged from home care within a few days after the year period began,

[2] It was not possible to abstract social records to obtain data comparable to home visits by other professional personnel. See text (page 37) for quantitative data.

[3] Data collected by Montefiore program staff after completion of the study.

[4] 40 beds, 32 wheelchairs and 8 other pieces of miscellaneous equipment.

Table 3. Referrals to the Montefiore Hospital Home Care Program, July 1951–June 1952

Source of referral	Total referrals [1]		New admissions		Readmissions	
	Number	Percent	Number	Percent	Number	Percent
Total	299	100	83	100	83	100
Montefiore Hospital wards	200	67	69	83	76	91
Montefiore Hospital outpatient department	20	7	3	4	4	5
Montefiore Hospital waiting list	4	1	3	4		
Other hospitals	38	13	1	1		
Other institutions and agencies	3	1	2	2	3	4
Private physicians	34	11	5	6		

[1] Total referrals include 133 rejections by home care and 166 acceptances, of which 83 are new admissions and 83 are readmissions.

of services covered both occupational and diversional therapy and included such activities as knitting and leather work. About 51 percent of all patients on the program were provided with some type of therapy during the year. Each patient provided with therapy received an average of 7 visits.

Housekeeping Services. Housekeeping services, which included cleaning, cooking, and shopping, were provided, when necessary, to patients and families. Forty-four patients, or 24 percent of all patients, received some housekeeping service during the year.

Other Services. Virtually all of the patients on home care received some additional services. Table 2 shows the types and amounts of these services provided during the study year.

Characteristics of Patients

Two hundred and ninety-nine prospective patients were referred by formal written application to the home care program during the fiscal year 1951–52. Of these, 83 were accepted as new admissions, 83 were readmitted to the program, and 133 were rejected. About 67 percent of the total referrals were Montefiore Hospital ward patients. About 83 percent of the new admissions and 91 percent of the readmissions had been referred from the Montefiore Hospital wards (table 3).

Other hospitals accounted for 13 percent and private physicians, for 11 percent, of the total referrals, including both those rejected and those accepted. Eight percent of referrals were originated by the Montefiore Hospital Outpatient Department or were from the Montefiore Hospital waiting list. The remaining 1 percent came from other institutions or agencies.

Rejected patients amounted to about 45 percent of the total written referrals. The reasons for rejection are shown in table 4. The terminology used in this table to indicate reasons for rejection is that used by the Montefiore program. Two of the categories could be classified as medical reasons for rejection. The first, "medically unsuitable," comprised 70 patients, or more than half of the total rejections. A survey of the types of patients classified in this group showed that at least 28 were rejected because they did not require medical visits at biweekly intervals but were considered as primarily nursing, physiotherapy, and/or custodial cases. Most of the remainder were too ill or needed too extensive care to be discharged from the hospital.

The second medical reason for rejection was that the patient was able to attend the outpatient department. This group made up 16 percent of the total rejections. Added together, the two medical reasons accounted for 91, about 69 percent, of the rejections for services under the home care program.

Table 4. Rejection of patients referred to Montefiore Hospital Home Care Program, July 1951–June 1952

Reasons for rejection [1]	Patients rejected	
	Number	Percent
Total	133	100
Medically unsuitable	70	53
Able to attend outpatient department	21	16
Inadequate home situation	12	9
No home	3	2
Patient does not want home care	4	3
Can afford private medical care	7	5
Geographically ineligible	4	3
Patient deceased before evaluation made	11	8
Admitted to another home care program	1	1

[1] According to classifications used by the program.

A total of 26 referred patients, or about 19 percent, were rejected for socioeconomic reasons—inadequate home situation, no home, patient did not want home care, patient could afford private medical care. A group consisting of 11 patients, or 8 percent, were deceased before an evaluation could be made; and 3 percent were refused for geographic ineligibility.

Age, Sex, and Diagnosis. A total of 181 different patients received services under the home care program during the fiscal year 1951–52. (In this total, each patient is counted only once, no matter how many times he may have been readmitted to the program during the year.) The average daily census during the year was 80 patients.

A major proportion of the patients were in the middle and older age groups, as shown in table

5. Persons 45 years and over accounted for 71 percent of the total patient population during the year, and 29 percent were 65 years and older. About 5 percent were under 15 years of age and 17 percent were between the ages of 15 and 44 years (table 5). The median age was 58.6 years.

There were about two females for every male patient served on the program. The same ratio between males and females held for new

Table 5. All patients receiving home care and patients newly admitted during the year to the Montefiore Hospital Home Care Program, by age and sex, July 1951–June 1952

Age (years)	All patients						Newly admitted patients					
	Both sexes		Male		Female		Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	181	100	59	100	122	100	83	100	27	100	56	100
Under 15	8	5	5	8	3	2	4	5	2	7	2	4
15–44	31	17	8	14	23	19	10	12	3	11	7	12
45–64	76	42	26	44	50	41	36	43	13	49	23	41
65 and over	53	29	18	31	35	29	26	31	7	26	19	34
Unknown	13	7	2	3	11	9	7	9	2	7	5	9

NOTE: Median age for both sexes, 58.6 years; for females, 59.0; for males, 57.7.

Table 6. All patients receiving home care and new admissions to the Montefiore Hospital Home Care Program during the year, by diagnostic category, July 1951–June 1952

Diagnostic category [1]	All patients		New admissions	
	Number	Percent	Number	Percent
Total, all diagnoses	181	100	83	100
Heart disease (410–443)	55	30	27	32
Arteriosclerotic heart disease and coronary disease (420)	22	12	15	18
Rheumatic heart disease (410–416)	21	11	7	8
Other heart disease (421–443)	12	7	5	6
Other cardiovascular disease	16	9	6	7
Rheumatic fever (400–402)	3	2	----	----
Vascular lesions affecting central nervous system (330–334)	2	1	1	1
Other diseases of circulatory system (444–468, 754)	11	6	5	6
Malignant neoplasms (140–205)	57	31	25	30
Diabetes mellitus (260)	10	6	6	7
Arthritis (720–727)	8	4	3	4
Diseases of digestive system (530–587, 756)	10	6	3	4
All other diseases (chronic)	25	14	13	16
Tuberculosis [2] (001–019)	2	1	1	1
Allergic, endocrine system, and metabolic disease (240–254, 270–289)	6	3	4	5
Diseases of central nervous system, except vascular lesions (340–357, 751)	3	2	1	1
Diseases of respiratory system (470–527)	5	3	1	1
Diseases of genitourinary system (590–637, 757)	2	1	2	3
Accidents (N800–N999)	1	1	1	1
All other specified diseases, residual	6	3	3	4

[1] Primary diagnoses only. Figures in parentheses are Sixth Revision, International List numbers.
[2] Nonrespiratory cases.

Table 7. Patients receiving home care services by the Montefiore Hospital Home Care Program, by total length of stay on the program, July 1951–June 1952

Length of stay (days)	Patients	
	Number	Percent
Total	181	100
Less than 180	59	33
180–359	42	23
360–719	46	25
720–1079	16	9
1,080 and over	18	10

NOTE: This table shows the length of stay of the patients as of February 15, 1953, at which time 43 of the 181 patients were still active. The total length of stay was thus not complete for this group. In addition, there was probably a small group of patients in the hospital at that time who were subsequently readmitted to the home care program for a further stay. The total patient-days for this group of 181 patients was 77,338, as of February 15, 1953. The mean length of stay was 427 days; the median length of stay was 310 days.

admissions during the year. There were no significant differences between the proportions of males and females served in each age group.

Malignant neoplasms, heart disease, and other cardiovascular disease ranked as first, second, and third, respectively, out of the various primary diagnoses of patients cared for on the program (table 6). Patients in these three categories together accounted for about 70 percent of all 181 patients treated. There were 57 patients with malignant neoplasms, 55 with heart disease, and 16 with other cardiovascular disease. There were 10 or fewer patients in each of the other diagnostic categories.

Although this home care program served both indigent and medically indigent patients, few were strictly indigent. Of the 83 patients newly admitted to the program during the fiscal year, only 7 were receiving public financial support at the time of admission.

Length of Patient Stay. During the fiscal year 1951–52, the average length of stay on home care for 181 patients was 162 days, or about 23 weeks. (There was a total of 29,330 patient-days during the year.) Many of these patients spent interim periods in the hospital and then were readmitted to home care within the year.

Many patients have received services under the home care program for several years. The total length of stay of the 181 patients from first admission date through February 15, 1953 (the date of the field study) is shown in table 7. About 67 percent of the patients were on the home care program for 180 days or more. The length of stay for 44 percent was approximately 1 year or longer. Ten percent of the patients served during 1951–52 had been on the home care program for at least 1,080 days, or about 3 years. (Interim periods in the hospital were not included.) Average length of stay for the 181 patients was 427 days, or about 1 year and 2 months.

Discharges. Of the 181 patients on the home care program, 138, or 76 percent, were discharged at least once during the year, and 34, or 19 percent of the total patient load, had 2 or more discharges (table 8). In the case of 72 percent of these discharges, the patient was admitted to a hospital—there were 127 admissions to Montefiore Hospital and 6 admissions to other hospitals from home care. The three major reasons for admission to the hospital from home care were: (*a*) the patient became too ill to be cared for at home; (*b*) the patient required special care which could best be given in the hospital; or (*c*) the family could no longer take care of patient at home. Many of the patients who entered Montefiore Hospital were

Table 8. Discharges of patients from home care, Montefiore Hospital Home Care Program, by reason for discharge, July 1951–June 1952

Reason for discharge	Discharges	
	Number	Percent
Total	183	100
No further medical care indicated	1	1
To outpatient department or clinic	26	14
To Montefiore Hospital	127	69
To other hospitals	6	3
To other institutions	7	4
Died at home	12	7
Moved out of town	2	1
Other and unknown	2	1

Note: 138 patients were discharged at least once during the year; 34 patients were discharged 2 or more times; 9 patients were discharged 3 or more times; 2 patients were discharged 4 times during the year.

readmitted to the home care program later on during the year. Of 83 readmissions to the program during the fiscal year, 77 were from Montefiore Hospital.

Twenty-six patients were referred for clinic care, 7 patients entered nursing homes or similar facilities, and 12 patients died while on the program. Only 1 patient was discharged with no further medical care indicated.

Home Care and Professional Education

The only formal educational program connected with the Montefiore Hospital Home Care Program was one for practical nurse students. However, graduate students from several schools observed the program for varying lengths of time. Students from the School of Public Health of Yale University spent 1 day observing and in conference with the home care staff. Third-year medical students from the College of Physicians and Surgeons, Columbia University, and the Cornell University Medical College, and nursing students from Teachers College, Columbia University, spent one-half day observing and in conference with the program staff.

Students of medical social work assigned for field experience to the social service department at Montefiore Hospital were assigned a patient on the home care program so that they might have the opportunity of becoming familiar with this method of care.

In addition, members of the home care staff participated in seminars at several of the universities.

Because the use of practical nurses to care for the sick at home is expected to expand, the school for practical nurse training, Montefiore Hospital, initiated a 2-year study in October 1952 to determine the functions and services the practical nurse is best prepared to carry out in the home.[1]

Subsidiary and corollary to this main objective, the following points were considered:

1. What is the role of the practical nurse in the home?
   (*a*) Without immediate supervision.
   (*b*) As a member of an organized home care team.
   (*c*) As a member of a visiting nurse service.
2. How much of the training year should be devoted to training in the home?
3. What is the nature of the training in the home?
   (*a*) Techniques.
   (*b*) Conferences and seminars.
   (*c*) Homemaking duties, and so on.
4. In addition to training in the home, what changes are desirable in the basic curriculum of the practical nurse's training which will enable her to do the best job in the care of the sick at home?
5. What is the cost of such a program?

All practical nurse students were assigned to the home care program for a period of 3 weeks during the last quarter of their 1-year training period. A public health nursing supervisor, assigned to the home care program from the training school office, was responsible for planning their field work and supervising them. The student's orientation to the program included two 4-hour conference periods with the public health nursing supervisor, who explained the home care program, duties of the home care staff members, and the adaptations of nursing techniques to the home setting; 2 days in visiting the homes with various team members to observe their activities; and 2 days in visiting and observing in the homes with another practical nurse student or a public health nurse from the Visiting Nurse Service of New York.

Patients to be visited by practical nurse students were selected by the public health nursing supervisor. Students were introduced to the patients they were to serve by the supervisor, another practical nurse student, or a public health nurse from the Visiting Nurse Service of New York.

Practical nurse students were allowed to carry out the following procedures:

1. Complete general care.
2. Temperature, pulse, and respiration.
3. Dressing of pressure sores which are not extensive.
4. Simple dressings.
5. Prepare and give unsterile vaginal douche.
6. Prepare and give cleansing enema, colonic irrigation, and colostomy irrigation.

[1] Practical nursing training program, Montefiore Hospital—Unpublished material.

7. Measure and give all oral medication.

8. Prepare and give subcutaneous injections by hypodermic when no fractional dose is involved.

9. Continue help in crutch walking, light massage, or exercise.

In addition, they were responsible for:

1. Providing nursing care and treatment to patients assigned by program supervisor.

2. Continuing simple teaching which has been started by the visiting nurse or the program supervisor.

3. Calling to the attention of the supervisor any change in the patient's condition whether it be medical or in the social condition of the home.

4. Referring to other members of the team questions asked by the patient that cannot be answered by a practical nurse.

5. Taking over the routine homemaking duties as instructed by the program supervisor.

6. Recording all visits and treatments given to the patient in the form of nursing notes, and leaving these reports in the home care office at the end of each day.

7. Attending home care staff conferences.

Teaching and supervisory methods included demonstrations, visiting with students in the patient's home, individual and group conferences to discuss patient care, and review of patient records.

Developments Within the Program

A number of changes have occurred in the administrative aspects of the program since it began operation. There has been a shift in philosophy from emphasis on "home care" as a means of relieving a shortage of hospital beds to a conviction that "home care" is a sound plan for providing better care for many patients.

During the second year of operation, the policy for admission to the program was broadened to include patients from private physicians, hospitals other than Montefiore, and health and welfare agencies.

Several changes were made relating to the utilization of professional personnel. In 1951, the plan for allocation of patients to physicians was changed. Originally, all patients were visited by any staff physician; but in 1951 patients were assigned to individual physicians on a geographical basis.

Table 9. Services provided by the Montefiore Hospital Home Care Program, calendar year 1947 and fiscal year 1951–52

Services provided	Calendar year 1947	Fiscal year 1951–52
Number of patients [1]	121	181
Patient-days of care	11, 146	29, 330
Average annual number of days care per patient	92. 1	162. 0
Average daily patient census	49. 6	80. 1
Number of medical visits [2]	2, 007	[3] 4, 070
Medical visits per patient	16. 6	22. 5
Number of nursing visits	1, 150	2, 014
Nursing visits per patient	9. 5	11. 1

[1] Unduplicated count; does not include readmissions.
[2] Including consultations.
[3] Includes 175 visits by medical specialists.

The range of physical and occupational therapy services was expanded and occupational therapy became more closely integrated with total patient care.

In 1950, arrangements were made with the Visiting Nurse Service of New York to assign a public health nursing coordinator to work in the program 1 day a week.

Gradually, the Federation of Jewish Philanthropies, the prime source of support for Montefiore Hospital, has assumed more financial responsibility for the program.

The number of patients served and the amounts of services provided have steadily increased (table 9). During the first year of operation, 121 different patients received an average of 92 days of home care per patient, and an average of 16.6 medical visits and 9.5 nursing visits were made to each patient. During the fiscal year 1951–52, 181 patients each received an average of 162 days of home care; medical visits per patient averaged 22.5, and nursing visits, 11.1.

At the time of the study, plans were being discussed to extend the educational program to include third-year medical students from the Harvard University Medical School. The course would be elective, with a 1-month assignment.

Plans also called for greater emphasis on rehabilitation for home care patients as soon as a

department of rehabilitation is established at Montefiore Hospital.

Collection of Data

A central patient record, located in the home care office and kept separately for active and inactive patients, contained identifying data and all medical and social information on each patient. Also located in the home care office were the following files related to patients or services: referral file; bill file for services provided patients by outside agencies; file containing welfare department payments for patients; and index card file of active and inactive patients. In addition, daily logs were kept of the active patients on the program.

From these sources of information, the administrative secretary made, by hand tally, a monthly activity analysis report, which consisted of summary data on the following: number of patients and number of days of care; source of referrals to home care service; number accepted and reasons for rejection; amount of various services rendered in the home; numbers of clinic visits and of X-rays taken at Montefiore Hospital. The data in this monthly report were the only routine statistics compiled in the program.

For this study, more detailed data on patients and services were necessary than were routinely compiled. Consequently, specified data were abstracted for each patient receiving home care services during the fiscal year July 1951–June 1952. These data were obtained from the central patient records and from the other files on patient services. All subsequent tabulations of the statistics were made after the study team's return from the field. When indicated, the data in table 2 (page 38) were collected by the Montefiore program staff after the completion of the study.

Table 10. Number of patients receiving specific types of services, Montefiore Hospital Home Care Program, by diagnostic category, July 1951–June 1952

Primary diagnostic category [1]	Patients receiving services							
	Total receiving any services	Visiting physician	Medical consulting specialist	Nursing	Physical therapy	Occupational therapy	Housekeeper	X-rays
	Number							
Total, all diagnoses	181	178	72	133	32	92	44	68
Heart disease	55	54	19	42	4	32	15	23
Other cardiovascular disease	16	16	8	9	6	11	4	7
Malignant neoplasms	57	55	29	41	4	22	8	21
Diabetes mellitus	10	10	2	8	3	4	5	2
Arthritis	8	8	1	7	6	6	2	1
Diseases of digestive system	10	10	5	8	2	5	4	4
All other diseases (chronic)	25	25	8	18	7	12	6	10
	Percent							
Heart disease	30	30	27	32	12	35	34	34
Other cardiovascular disease	9	9	11	7	19	12	9	10
Malignant neoplasms	31	31	40	31	12	24	18	31
Diabetes mellitus	6	6	3	6	10	4	11	3
Arthritis	4	4	1	5	19	7	5	1
Diseases of digestive system	6	6	7	6	6	5	9	6
All other diseases (chronic)	14	14	11	13	22	13	14	15

NOTE: Not shown in this table are certain other services provided under the program, such as medical social services, orthopedic appliances, blood transfusions, and home teaching.

[1] When patients receive care for more than one diagnosis, the primary diagnosis is used. For Sixth Revision, International List numbers of diagnoses, see table 6.

Table 11. Numbers and types of specific services provided to patients, Montefiore Hospital Home Care Program, by diagnostic category, July 1951–June 1952

Primary diagnostic category [1]	Total patients receiving any service	Amount of services provided							
		Physician visits	Consulting visits	Nursing		Physical therapy visits	Occupational therapy visits	Housekeeper hours	X-rays
				Visits	Hours				
	Number								
Total, all diagnoses	181	3, 911	169	2, 014	1, 346	922	646	8, 513	128
Heart disease	55	1, 488	29	526	303	158	212	3, 120	39
Other cardiovascular disease	16	270	13	87	63	97	75	552	11
Malignant neoplasms	57	939	78	700	547	97	179	1, 310	30
Diabetes mellitus	10	252	10	32	19	52	7	531	3
Arthritis	8	169	1	224	131	270	48	515	1
Diseases of digestive system	10	221	13	51	45	40	51	780	15
All other diseases (chronic)	25	572	25	394	238	208	74	1, 705	29
	Percent								
Heart disease	30	38	17	26	22	17	33	37	30
Other cardiovascular disease	9	7	8	4	5	11	12	7	9
Malignant neoplasms	31	24	46	35	41	11	28	15	23
Diabetes mellitus	6	6	6	2	1	6	1	6	2
Arthritis	4	4	1	11	10	29	7	6	1
Diseases of digestive system	6	6	8	3	3	4	8	9	12
All other diseases (chronic)	14	15	14	19	18	22	11	20	23
	Average number of visits per patient								
Total, all diagnoses	----	21. 6	0. 9	11. 1	7. 4	5. 1	3. 6	47. 0	0. 7
Heart disease	----	27. 1	. 5	9. 6	5. 5	2. 9	3. 9	56. 7	. 7
Other cardiovascular disease	----	16. 9	. 8	5. 4	3. 9	6. 1	4. 7	34. 5	. 7
Malignant neoplasms	----	16. 5	1. 4	12. 3	9. 6	1. 7	3. 1	23. 0	. 5
Diabetes mellitus	----	25. 2	1. 0	3. 2	1. 9	5. 2	. 7	53. 1	. 3
Arthritis	----	21. 1	. 1	28. 0	16. 4	33. 8	6. 0	64. 4	. 1
Diseases of digestive system	----	22. 1	1. 3	5. 1	4. 5	4. 0	5. 1	78. 0	1. 5
All other disease (chronic)	----	22. 9	1. 0	15. 8	9. 5	8. 3	3. 0	68. 2	1. 2

[1] When patients receive care for more than 1 diagnosis, the primary diagnosis is used. For Sixth Revision, International List numbers of diagnoses. see table 6.

Queens General Hospital Home Care Program

New York, N. Y.

Origin of the Program

The New York City Department of Hospitals is responsible for providing hospital care to the indigent and the medically indigent. In 1948, faced with a critical shortage of hospital beds, the department conducted a limited home care pilot study at Bellevue Hospital (*1*). The study was financed by a research grant from the Milbank Memorial Fund. This study demonstrated that home care was a practical means of extending continuous medical care to certain patients for whom no such care otherwise existed. It also showed that home care alleviated the shortage of hospital beds since certain patients could be discharged at an earlier date and, through continuous followup, unnecessary readmissions could be avoided.

As a result of this study, a division of home care was established in the department of hospitals, and broad administrative policies for home care were formulated. Responsibility for developing individual programs within this framework was delegated to the hospital superintendents. During 1948, programs were established in 5 municipal hospitals; and by 1951, home care programs were in operation in 13 general hospitals, in 2 tuberculosis hospitals, and in the 1 chronic disease hospital in New York City. To facilitate development of the home care programs, meetings were held every 2 months in the office of the general medical superintendent in charge of home care to discuss common problems and to evolve working policies. These meetings were attended by the deputy superintendents, the coordinators of nursing, and the directors of social service from programs of individual hospitals, and by the assistant director of nursing and the director of social service of the department of hospitals.

The Queens General Hospital Home Care Program began operation in December 1948 and provided the following services: medical care, nursing service, social service, physical therapy, housekeeping service, hospitalization, medications and medical supplies, prosthetic appliances, laboratory and other diagnostic tests, X-ray, sickroom equipment, and transportation.

Queens General Hospital, one of 33 municipal hospitals administered by the New York City Department of Hospitals, is located in Queens, one of the five boroughs of New York City. The borough is one of the less congested areas of New York City. It covers 127 square miles, or about 35 percent of the total land area, and, according to 1950 Census figures, it contains about 20 percent of the population of New York City. The median annual income of families and single persons living in Queens was $3,817, as compared to $3,073 for the city as a whole.

Program 1952

The information contained in this section of the report is primarily concerned with the fourth year of operation, January 1–December 31, 1952. Statistical data were abstracted from individual patient records for a 50-percent sample of patients receiving home care services during the calendar year 1952. Data were also obtained from certain compilations made by the program. Cost data were obtained directly from program accounting records.

Administration

Responsibility for administration of the home care program was delegated by the superintendent of Queens General Hospital to a deputy medical superintendent (who was also responsible for the administration of the outpatient department).

In addition to the deputy superintendent, the immediate staff of the home care program

consisted of a coordinator of nursing, a physical therapist, two clerks, and two stenographers.

The deputy medical superintendent devoted approximately three-fourths of his time to the home care program and was administratively responsible for all staff assigned and for overall supervision of the program. His responsibility included review of the clinical progress of home care patients, authorization of transfer of patients to and discharge from home care, and general supervision of medical services in the home.

The public health nursing coordinator participated in program planning and was responsible for planning, directing, and coordinating the nursing aspects of the home care program.

The physical therapist was responsible for providing a variety of physical therapy treatments to patients.

The chief clerk supervised all the clerical functions in the home care office.

The director of social service at Queens General Hospital participated in program planning and was responsible for planning and administering the social service aspects of the home care program.

Provisions were made in the home care budget to pay for housekeeping services, when necessary, at prevailing rates up to a maximum of 30 hours a week.

Provisions were made with other departments within the hospital to provide certain services to patients.

Medical services in the home were provided by hospital residents from the medical, surgical, pediatric, gynecological, and genitourinary services, under the general supervision of the deputy superintendent in charge of home care. The increased workload was met by the appointment of five additional residents to the staff of the hospital.

Medical consultant services were provided to home care patients by appropriate visiting staff members in the outpatient department.

Social services were provided by the ward medical social workers on the staff of the Queens General Hospital. To meet the increased workload created by the home care program, 1 social worker was added to the staff for each 50 patients admitted to home care.

Medications listed in the formulary of the department of hospitals were provided through the hospital pharmacy. Dressings and other medical supplies were furnished through the hospital surgical supply unit.

All X-rays were taken in the hospital X-ray department.

Laboratory tests were processed in the hospital laboratory. A technician was available 2 days a week to visit patients at home to draw blood and collect necessary specimens. Blood transfusions, paracenteses, and other complicated therapeutic procedures were performed in the hospital or the outpatient department.

Hospital equipment and sickroom supplies were furnished through the home care program.

Patients on home care could be transferred to the wards of the Queens General Hospital whenever they required hospitalization.

Cars with drivers were furnished through the home care department for transportation of patients, staff, medications, and supplies.

Services not available within the hospital were arranged for through working agreements with the following community agencies:

1. The division of public health nursing of the department of health provided nursing care to patients in the major portion of Queens County. These services were paid for by allotting to the health department a sum equivalent to the salaries of 7 staff nurses and 1 assistant supervisor of nurses.

2. The Visiting Nurse Service of New York provided nursing care to patients at scheduled rates, in the remainder of the county.

Source of Funds and Costs of Services. The program was financed by the New York City Department of Hospitals through Queens General Hospital. According to figures available, the total budget for operating the home care service was estimated to be $188,838.49 for the calendar year 1952. Actual costs were itemized for about 83 percent of this total. The remaining budget of the program was for the estimated value of services provided without charge to the home care program by the hospital itself or by the department of hospitals and the estimated depreciation of equipment and facilities.

The largest item in the recorded costs of the home care program was for personnel services,

which accounted for almost 80 percent of the total. Further detail on personnel and other costs of the program will be found in table 1.

Operational Policies and Procedures

The policy of the home care program was to provide services to indigent and medically indigent patients living in Queens County who had been hospitalized at Queens General Hospital, although patients living in the area were occasionally admitted to the home care service from other city hospitals. Patients were considered to be medically indigent if their incomes were not adequate to meet their medical needs. Patients who were unable to pay $2 a day for care were eligible for service. With the exception of those with active pulmonary tuberculosis and mental illness, patients with all types of diseases were eligible. Patients who were considered by ward personnel as likely candidates for home care service were referred to the home care department for evaluation. The deputy superintendent and the chief medical resident then visited the patients to determine whether

Table 1. Recorded costs of services provided by the Queens General Hospital Home Care Program, calendar year 1952

Type of service	Cost	Percent of total cost
Total cost recorded	$188, 838. 49	100
Services for which actual cost was known	157, 256. 46	83
Personnel services	150, 197. 73	79
Payroll, total	61, 762. 28	------
Deputy medical superintendent (8½ months)	3, 822. 46	------
Resident physicians (salary equivalent of 5 positions plus maintenance)	6, 909. 40	------
Assistant superintendent of nurses	3, 717. 39	------
Staff nurse (2½ months)	570. 00	------
Practical nurses (salary equivalent of 3 positions)	6, 755. 31	------
Medical social workers (salary equivalent of 4 positions)	11, 142. 68	------
Physical therapy technician	2, 880. 72	------
Hospital helper, physical therapy (11 months)	1, 833. 32	------
Clerks (2 positions)	7, 262. 50	------
Clerk-typists (2 positions)	4, 998. 50	------
Auto enginemen (chauffeurs) (4 positions)	11, 870. 00	------
Housekeepers [1]	43, 990. 76	------
Visiting nurse service [2]	7, 110. 60	------
Department of health nurses [3]	30, 000. 00	------
Additional costs [4]	7, 334. 09	------
Other services	7, 058. 73	4
Drugs	4, 866. 51	------
Surgical supplies and appliances	1, 251. 13	------
Gasoline and oil for station wagons	908. 91	------
Miscellaneous	32. 18	------
Services for which cost was estimated	$31, 582. 03	17
Services by Queens General Hospital	17, 700. 00	9
Ambulance trips	1, 000. 00	------
Ambulance attendant	2, 500. 00	------
Clinic visits	350. 00	------
Laboratory assistants' visits	500. 00	------
Laboratory and X-ray examinations	1, 000. 00	------
Telephone rental	250. 00	------
Stationery and forms	100. 00	------
Proportion of overhead [5]	2, 000. 00	------
Services by New York City Department of Hospitals	11, 000. 00	6
Repair of vehicles	1, 000. 00	------
Proportion of overhead [6]	10, 000. 00	------
Depreciation	2, 882. 03	2
Hospital and surgical equipment	876. 80	------
Office equipment	176. 23	------
Garage equipment	1, 549. 00	------
Garage addition	180. 00	------
Office and storage space	100. 00	------

[1] Housekeepers were paid 85 cents per hour through June 30, 1952, 95 cents per hour for remainder of year.
[2] Visiting nurses were paid $2.65 per visit through June 30, 1952, $2.85 per visit for remainder of year.
[3] Includes salaries for the equivalent of 7 nurses plus 1 assistant supervisor of nurses.
[4] Includes employees' pensions, compensation, health insurance, and social security.
[5] Includes home care share of cost of supervision and general expense.
[6] Includes auditing and accounting, dietetics, medical records, and statistics, construction and repairs, laundry, and pharmacy.

NOTE: Average cost per patient-day, $2.44. Average annual cost per patient served, $374.68.

or not their medical needs could be met at home.

The nursing coordinator visited each patient on the ward to evaluate his nursing care needs and also made referrals to the appropriate nursing agency for evaluations of the homes. The medical social worker on the ward interviewed the patient and his family and visited the patient's home to evaluate social suitability. Following the individual evaluations, the evaluation committee, composed of the chief medical resident, medical social worker, and nurse coordinator, with the deputy superintendent acting as chairman, met to consider the patient's total suitability for home care. Patients were considered suitable for home care services if they met the broadly stated criteria as outlined by the staff of Queens General Hospital Home Care Program.

Criteria for Service. The medical criteria for suitability for home care services were:

1. The patient had been diagnosed and a plan for treatment had been made.

2. The patient no longer required specialized hospital services.

3. The patient did not regularly require more than two medical visits a week.

The nursing criteria were:

1. The physical environment of the home was such that the patient could receive adequate care.

2. The patient wished to go home, and there were family members or others who could be taught to provide the necessary care and who were willing to assume this responsibility.

3. Necessary sickroom supplies and equipment were available or procurable.

The social criteria were:

1. The patient was medically indigent (decision based on information supplied by the financial investigations section of the hospital).

2. The patient had a home in which to receive care.

3. The patient wished to be cared for at home and, if he had a family, the family relationships were conducive to his welfare.

4. There was a person capable of assuming responsibility for the patient, if necessary.

When the evaluation committee made a decision to accept or reject the patient for care in the home, the patient and the appropriate hospital personnel were notified of the decision. When services of community agencies were required, the case was referred by telephone and later confirmed in writing on the appropriate forms.

Continuity of services to patients was augmented by the sharing of information between the personnel of the home care staff and the personnel of other agencies. The methods used included written reports, individual conferences, telephone calls, and the use of case records.

Records. The individual cumulative case record for each patient contained both hospital ward and home care service progress notes and was transferable from one service to another. This folder included identifying data, a complete record of physician's findings and progress notes, laboratory reports, nursing progress notes, correspondence, and summary reports received from other agencies. Social service summary records were maintained in a separate file in the social service department. A notation was made in the patient's medical record that the case was known to the social service department.

Conferences. The only scheduled conferences attended by representatives of the home care staff were the administrative conferences held bimonthly in the office of the general medical superintendent of the department of hospitals and conferences held every 3 months with the nursing supervisors from the department of health and from the Visiting Nurse Service of New York to discuss patient care and to clarify policies.

Staff members discussed patient care informally, and residents were free to select a home care patient for discussion at the scheduled hospital medical clinical conferences.

Services to Patients

The estimated amounts and types of services provided to patients by the home care program during the calendar year 1952 are indicated in table 2. The statistical data shown in table 2 were obtained from a review of a 50-percent sample of the patient master card file on which were recorded the types and amounts of service provided to individual

Table 2. Estimates[1] of services to patients on the Queens General Hospital Home Care Program, calendar year 1952

Type of service	Patients receiving services		Number of visits [2]	Average number of visits		Number of visits per 100 patient-days' stay
	Number	Percent		Per patient receiving each service	Per total caseload	
Total patients	504	100				
Physician	[3] 484	96	3,290	6.8	6.5	4.3
Nursing	460	91	12,844	27.9	25.5	16.6
Medical social work	268	53	([4])			
Physical therapy	94	19	1,724	18.3	3.4	2.2
Clinic	86	17	168	2.0	0.3	
Housekeeping (hours)	72	14	41,236	572.7	81.8	
Laboratory	N. A.					
X-rays	N. A.					
Hospital equipment	212	42	([4])			
Medications and medical supplies	N. A.					
Ambulance or car transportation	N. A.					

N. A. Complete data not available.

[1] Estimates based upon 50-percent sample of patient summary card file.

[2] Or other unit of service.

[3] This table is based upon patients receiving any kind of service during the calendar year 1952. Some of these patients may have been on the program for the entire year, and some for only a few days. Although physician services are provided to all patients while on the program, this table indicates there were 20 patients who did not receive this service during the study year. These were probably patients discharged from home care within a few days after the year period began, or admitted at the end of the period.

[4] The amounts of these services were not obtained since the variation in the units of service is too great for comparability.

NOTE: The amounts of services shown in this table were obtained from the summary cards kept for each patient on the program. It is known that the services to patients were incompletely recorded on these cards. Based upon other total service data available, the amounts of various services shown in this table are in most instances about 6–8 percent lower than the amount of services indicated on monthly statistical reports compiled by this program.

patients. (For detailed data by diagnostic category, see tables 10 and 11.)

Medical Services. Medical services to patients in the home were provided by the resident staff under the supervision of the deputy medical superintendent and the chief resident. The range of services included reexaminations, administration of medications, selected diagnostic and therapeutic procedures (such as electrocardiograms), minor surgical procedures, and the collection of blood for routine laboratory tests. More complicated diagnostic procedures, such as blood transfusions and paracenteses, were performed in the hospital or in the outpatient department. Medical consultation services were provided in the outpatient department or in the hospital. According to the 50-percent sample of patients studied, an average of almost 7 home medical visits were made during the year to each patient. Based upon the average length of patient stay of about 22 weeks, an average of approximately 1 visit every 3 weeks was made to each patient.

Nursing Services. In the major portion of the borough, direct nursing care to patients was provided under the direction of the nursing division, New York City Department of Health The Visiting Nurse Service of New York served the remainder of the borough.

The range of services included nursing evaluation of the patient and the patient's home, dressings, injections, irrigations, personal care, health instructions, and teaching members of the household to care for the patient. About 91 percent of the home care patients were estimated to have received nursing care during

1952, with an average of almost 28 visits per patient. When based on the average length of stay of 22 weeks, this results in an average of more than 1 visit per week per patient.

Social Services. Medical social services were provided to patients by the hospital staff medical social workers under the supervision of the hospital social service department. Service was instituted by the medical social worker when a need for help was recognized by the social worker making the social evaluation or upon request of the physician or family following the patient's transfer home. Services included helping patients who were without homes to find a suitable place in which to receive care—for example, in the home of a relative or friend or in a boarding home, helping patients and families with problems concerned with the patient's adjustment in the home, and making referrals to community agencies.

During 1952, home visits were made to approximately 53 percent of the patients to assist them and their families in adjusting to home care. In addition, relatives and friends of patients were interviewed in the hospital, and social agency contacts were made in behalf of patients.

The medical social workers were also responsible for approving requests for housekeeping service, helping patients and families to find housekeepers, and supervising the housekeepers while they were on duty in the patients' homes.

Physical Therapy. Physical therapy provided by the staff therapist included massage, corrective exercise, infrared and other heat treatment, and instruction in crutch walking and in the use of prosthetic appliances. Based on the sample, about 19 percent of the patients received some type of physical therapy. This resulted in an average of approximately 18 visits per patient receiving physical therapy during the period studied.

Occupational Therapy. No direct occupational therapy services were available to patients in their homes during the period studied. Patients who had received occupational therapy while they were in the hospital were sometimes provided with supplies when transferred home; and limited consultation was available to the home care staff through the hospital therapist.

Housekeeping Services. When necessary, housekeeping services, which included cleaning, cooking, and shopping, were available from a variety of sources. Based on the 50-percent sample, 14 percent of the patients received an average of 573 hours of service during the year, or 11 hours per week.

Other Services. All other services, including hospitalization, drugs and medical supplies, X-rays, laboratory and other diagnostic tests, hospital equipment, sickroom supplies, and transportation, were supplied through the Queens General Hospital. Complete statistical information was not available, but the staff reported that virtually all patients on home care received some medications or medical supplies. Information was also unavailable on the number of patients who received appliances, laboratory services, X-rays, and transportation.

Characteristics of Patients

A total of 504 different patients received services during the calendar year 1952. (In this total, each patient is counted only once, no matter how many times he may have been transferred or readmitted to the program during the year.) The average daily census during the year was 213 patients. All data in this study on patients and services were estimated from in-

Table 3. Estimates[1] of patients receiving home care, by age and sex, Queens General Hospital Home Care Program, calendar year 1952.

Age (years)	Sex					
	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	504	100	208	100	296	100
Under 15	16	3	8	4	8	3
15–44	60	12	20	10	40	13
45–64	180	36	80	38	100	34
65 and over	248	49	100	48	148	50

[1] Estimates are based on a 50-percent sample of the patient summary card file.

NOTE: Median age: both sexes, 64.0 years; males, 63.5 years; females, 64.5 years.

formation abstracted for a 50-percent sample of the total patients served during the year.

Age, Sex, and Diagnosis. In the Queens General Hospital Home Care Program, an estimated 85 percent of home care patients served during the year were 45 years old and over, and 49 percent were 65 years or older (table 3). Children under 15 years of age accounted for only 3 percent of the total. The median age of all patients in the sample was 64 years. There were about 3 female patients to every 2 male patients served on the program.

Table 4. Estimates[1] of patients receiving home care, by diagnostic category, Queens General Hospital Home Care Program, calendar year 1952

Diagnostic category[2]	Patients receiving services	
	Number	Percent
All diagnoses	504	100
Heart disease (410–443)	114	23
Arteriosclerotic heart disease and coronary disease (420)	56	11
Rheumatic heart disease (410–416)	28	6
Other heart disease (421–443)	30	6
Other cardiovascular disease	88	17
Rheumatic fever (400–402)	6	1
Vascular lesions affecting central nervous system (330–334)	34	7
Other diseases of circulatory system (444–468)	48	9
Malignant neoplasms (140–205)	80	16
Diabetes mellitus (260)	46	9
Arthritis and rheumatism (720–727)	18	3
Accidents (N800–N999)	74	15
All other diseases (chronic)	84	17
Tuberculosis[3] (001–019)	4	1
Allergic, endocrine system, and metabolic disease (240–254, 270–289)	8	2
Diseases of central nervous system (except vascular lesions) (340–357, 751)	12	2
Diseases of respiratory system (470–527)	4	1
Diseases of digestive system (530–587, 756)	16	3
Diseases of genitourinary system (590–637, 757)	14	3
All other specified diseases	26	5

[1] Estimates are based upon a 50-percent sample of the patient summary card file.
[2] Primary diagnoses only. Figures in parentheses are Sixth Revision, International List numbers.
[3] Nonrespiratory cases.

NOTE: The 8 children on the program, as obtained in the 50-percent sample, had diagnoses as follows: 2, nonrespiratory tuberculosis; 3, rheumatic fever; 2, rheumatic heart disease; and 1, an orthopedic condition.

Table 5. Estimates[1] of patients receiving home care, by relief status, Queens General Hospital Home Care Program, calendar year 1952

Status	Patients receiving services	
	Number	Percent
Total	504	100
Nonrelief status	402	80
Unknown status	6	1
Relief status	96	19
General assistance	14	------
Aid to dependent children	6	------
Old-age assistance	66	------
Aid to blind	------	------
Aid to disabled	6	------
State charge	4	------

[1] Estimates are based upon a 50-percent sample of the summary master card file.

In order of their importance, heart disease and other cardiovascular disease, malignant neoplasms, and accidental injuries together were estimated to comprise about 71 percent of the primary diagnoses of patients (table 4). Patients with a primary diagnosis of heart disease alone comprised about 23 percent of the total. The variation in the types of chronic diseases treated under the home care program was great, although certain categories were represented by very small numbers of patients.

According to the sample of patients, only 19 percent of the total were receiving some form of public assistance during 1952 (table 5). More than two-thirds of this group were receiving old-age assistance.

Length of Patient Stay. The patient-days of stay on home care during 1952 totaled 77,254 days for the 504 patients served, or an average of 153 days per patient. This time does not include interim periods spent in the hospital during the year by some of the patients.

Many of the patients had received long periods of home care prior to the study year 1952. The total length of stay of these 504 patients includes all days of home care from

the date they were first transferred to the home care program from the hospital up through the date of the study (March 10, 1953). The data on total length of stay is shown in table 6. According to the sample, about 56 percent of the patients received home care services for a period covering 180 days or more. The length of stay for an estimated 32 percent was approximately 1 year or longer. Four percent of the patients had been on the home care program for at least 1,080 days, or about 3 years or longer. (Interim periods in the hospital were not included.) Average length of stay for the patients was estimated to be 320 days, or about 10½ months.

Referrals and Discharges. Virtually all referrals to the home care program were patients in the Queens General Hospital wards. Occasionally, patients who had moved to Queens from another borough were referred by other city hospitals or home care programs. These patients, if determined to be acceptable for home care, were admitted "on paper" to Queens General Hospital and then transferred on the same day to the home care service. In addition, a few patients were referred to home care during 1952 from the Queens General Hospital outpatient department. Those patients accepted for home care in this program were considered as "transfers" to the home care service from the wards. If the need arose, they were transferred back to the hospital for a period of time.

Table 6. Estimates [1] of patients receiving services, by total length of stay on the program, Queens General Hospital Home Care Program, during 1952

Length of stay (days)	Patients receiving services	
	Number	Percent
Total patients	504	100
Less than 180	220	44
180–359	122	24
360–719	104	20
720–1,079	38	8
1,080 and over	20	4

[1] Estimates are based upon a 50-percent sample of patient summary card file.

NOTE: This table shows the length of stay of patients as of March 10, 1953, at which time about 35 percent were still active on the program. The total length of stay was thus not complete for this group. In addition, there was probably a small group of patients in the hospital at that time who were subsequently transferred back to the home care service for a further stay. For this group of 504 patients, the total estimated patient-days as of March 10, 1953, was 161,206. The mean length of stay was 319.9 days; the median length of stay, 208.5 days.

Table 7. Rejection of patients referred to home care, Queens General Hospital Home Care Program, for calendar year 1952

Reason for rejection [1]	Patients rejected	
	Number	Percent
Total	250	100
Medically unsuitable [2]	46	18
Home care not necessary [3]	75	30
No home	12	5
Inadequate home situation	25	10
Patient or family rejected home care	26	10
Not medically indigent [4]	4	2
Patient deceased	55	22
Geographically ineligible	7	3

[1] The rejection categories shown are those used by the program.
[2] Includes patients medically unsuitable at the time of evaluation.
[3] Includes patients who were later found able to attend an outpatient department and those who after evaluation were found able to finance their own medical care.
[4] Includes patients found financially ineligible before evaluation.

There were 664 applications for home care acted upon during 1952. About 62 percent of these were accepted for home care, and 38 percent were rejected. Of the 414 patients accepted, 81 percent were new to the program; the remainder had received previous home care services.

	Number
Total applications acted upon during 1952	664
Acceptances of patients new to the program	334
Acceptances of patients who had received previous home care	80
Rejections	250

The reasons for rejections of patients shown in table 7 are those used by the program. Almost half of the 250 patients rejected for home care during the year were either medically

Table 8. Estimates [1] of transfers or discharges from home care, Queens General Hospital Home Care Program, calendar year 1952

Reason for discharge or transfer	Discharges or transfers	
	Number	Percent
Total	410	100
Transfers:		
To Queens General Hospital	238	58
Discharges:		
To outpatient department	92	22
To private physician	26	6
Moved from area	14	3
Died at home	20	5
To nursing or convalescent home	8	2
To other agency	6	2
Other reasons [2]	6	2

[1] Based upon a 50-percent sample of patient summary cards.

[2] Includes patients discharged "at own risk" or with no further medical care necessary.

NOTE: Approximately 348 patients were transferred to the hospital wards or were discharged at least once during the year.

unsuitable or were found financially able to make their own arrangements for care. About 18 percent of the patients were "medically unsuitable" at the time of evaluation; and 30 percent were rejected because "home care was not necessary." The latter group included those patients who were later found to be able to attend an outpatient department and those who, after evaluation, were found able to finance their own medical care.

About 27 percent of the rejections during the year were made for socioeconomic reasons: the patient had no home; the patient's home situation was inadequate; the patient or his family rejected home care; or the patient was not medically indigent.

A small number of patients were rejected because they did not live in the geographic area served by the program. The remaining patients rejected had died before evaluation or acceptance could be made.

The movement of patients between home care and the hospital wards was a frequent occurrence. There were an estimated 238 transfers of patients from home care to the hospital wards during the year. This group accounted for about 58 percent of the total 410 times that patients were removed from home care during the year (table 8). These patients either became too ill for home care, needed special procedures done in the hospital, or their home situation warranted transfer to the wards. In many instances, they were transferred to home care again after a short interim in the hospital. About 50 percent of the times that home care patients were transferred to the hospital wards during 1952, they were returned to home care during the same year. The average length of stay in the hospital for these interim periods was 20 days. The shortest stay in the hospital was 1 day and the longest was 156 days. (These figures do not include patients returned to home care after the end of the year being studied.)

The next most frequent reason for discontinuation of patients on home care was that patients had recovered sufficiently to attend the outpatient clinic. An estimated 22 percent of the total removals of patients were those discharged to the outpatient department for further care. With the exception of patients who moved outside the area served by this home care program, or who died at home, only about 2 percent of the discontinuations of

Table 9. Trend of services given by the Queens General Hospital Home Care Program, 1950–52

	1950	1951	1952
Number of patients served during year [1]	[2] 505	[2] 588	504
Average daily census of patients	201	226	213
Total patient-days stay	73, 384	82, 521	77, 254
Average number of patient-days stay	145	140	153
Physician visits	3, 175	3, 872	3, 506
Physician visits per patient	6	7	7
Nursing visits [3]	15, 557	17, 144	14, 970
Nursing visits per patient	31	29	30

[1] An unduplicated count of patients served on the home care program during each year. Patients discharged and readmitted during 1 year are counted only once for that year.

[2] Estimated.

[3] During 1950–52, an average of about 84 percent of the total nursing visits were made by health department nurses; the remainder were made by the visiting nurse service.

NOTE: Data for this table were obtained from monthly statistics compiled by the program and not from the individual patient records, which were used to obtain other data in this study.

Table 10. Estimated number and percentage[1] of patients receiving various services by diagnostic category, Queens General Hospital Home Care Program, calendar year 1952

Primary diagnostic category[2]	Total patients	Number of patients receiving—						
		Physician visits	Nursing visits	Medical social worker visits	Physical therapy visits	Clinic visits	Housekeeping service	Hospital equipment
Total, all diagnoses	504	486	460	268	94	86	72	212
Heart disease	114	110	108	68	4	24	12	30
Vascular lesions affecting central nervous system	34	32	28	18	16	4	12	18
Other cardiovascular disease	54	54	50	30	8	2	10	24
Malignant neoplasms	80	80	74	38	2	8	16	30
Diabetes mellitus	46	42	44	22	12	8	----	24
Arthritis and rheumatism	18	18	18	10	8	4	4	12
Accidents	74	72	68	38	34	24	10	42
All other diseases	84	78	70	44	10	12	8	32
	Percent							
Heart disease	22	22	24	26	4	28	17	14
Vascular lesions affecting central nervous system	7	7	6	7	17	5	17	9
Other cardiovascular disease	11	11	11	11	8	2	14	11
Malignant neoplasms	16	16	16	14	2	9	22	14
Diabetes mellitus	9	9	9	8	13	9	----	11
Arthritis and rheumatism	3	4	4	4	9	5	5	6
Accidents	15	15	15	14	36	28	14	20
All other diseases	17	16	15	16	11	14	11	15

[1] Estimates are based upon a 50-percent sample of the patient master card file.
[2] Only the primary diagnosis is used. For Sixth Revision, International List numbers of diagnoses, see table 4.

patients on home care were made without provision for further care.

Developments Within the Program

The area of greatest change since the beginning of the program was in the size and composition of the staff. The program began in 1948 with a home care director, five residents, and a chief clerk. Medical social services were provided by the hospital social service staff. Since that time, the resident staff has increased to 14, and a nursing coordinator and assistant, 2 physical therapists, 1 clerk, and 2 stenographers have been added. Four social workers were added to the hospital social service staff during 1950–51 to meet the extra demands for services. The position of the occupational therapist was vacant at the time of the study.

In January 1953, the program began accepting referrals from the outpatient department. These referrals, however, were limited to patients who had recently been hospitalized at Queens General Hospital.

The trend of services for the 3 calendar years 1950 through 1952 is shown in table 9. These data were obtained from monthly statistics compiled by the program and not from individual patient summary records. Although 1949 was the first complete year of operation for the home care program, comparable data for this period were not available. The number of patients served was about 17 percent higher in 1951 than in the years 1950 and 1952. The amount of medical and nursing services provided per patient remained about the same during the 3 years. The annual average number of patient-days of stay was slightly higher in 1952 than in the previous 2 years.

Collection of Data

In addition to the hospital chart, which was transferred to the home care service with the

patient and which contained complete medical information, a summary card file was kept for active and for inactive patients and showed data such as the amount of each service provided and the financial status of the patient. Other files or registers containing patient information were the referral register book, files on housekeeping hours, physical therapy visits, X-ray and clinic visits, and monthly reports of nursing visits.

A daily census of patients and monthly "activity analysis" were submitted by the home care office to the department of hospitals. The activity analysis included data on the number of patients receiving home care, patient-days, referrals, and rejections from home care; amount of services provided in the home; principal diagnoses; and age groups. This information was obtained from data in the home care files and from specific counts made routinely by the clerical staff.

For this study, more detailed data on patients and services were necessary than were routinely compiled in this program. Specified data were abstracted from individual patient records of a 50-percent sample of patients receiving home

Table 11. Estimated number and percentage[1] of various services provided to patients by diagnostic category, Queens General Hospital Home Care Program, calendar year 1952

Primary diagnostic category[2]	Total patients	Number of services				
		Physician visits	Nursing visits	Physical therapy visits	Clinic visits	Housekeeping hours
Total, all diagnoses	504	3, 290	12, 844	1, 724	168	41, 236
Heart disease	114	856	3, 798	86	34	7, 736
Vascular lesions affecting central nervous system	34	300	1, 092	362	4	11, 638
Other cardiovascular disease	54	320	1, 560	48	2	2, 940
Malignant neoplasms	80	390	1, 226	2	18	4, 906
Diabetes mellitus	46	306	938	132	14	--------
Arthritis and rheumatism	18	144	354	244	6	1, 986
Accidents	74	378	1, 558	502	34	6, 574
All other diseases	84	596	2, 318	348	56	5, 456
	Percent					
Heart disease	22	26	30	5	20	19
Vascular lesions affecting central nervous system	7	9	8	21	2	28
Other cardiovascular disease	11	10	12	3	1	7
Malignant neoplasms	16	12	10	[3]	11	12
Diabetes mellitus	9	9	7	8	9	--------
Arthritis and rheumatism	3	4	3	14	4	5
Accidents	15	12	12	29	20	16
All other diseases	17	18	18	20	33	13
Average number visits per patient						
Total, all diagnoses	--------	6. 5	25. 5	3. 4	0. 3	81. 8
Heart disease	--------	7. 5	33. 3	. 8	. 3	67. 9
Vascular lesions affecting central nervous system	--------	8. 8	32. 1	10. 6	. 1	342. 3
Other cardiovascular disease	--------	5. 9	28. 9	. 9	[4]	54. 4
Malignant neoplasms	--------	4. 9	15. 4	[4]	. 2	61. 3
Diabetes mellitus	--------	6. 7	20. 4	2. 9	. 3	--------
Arthritis and rheumatism	--------	8. 0	19. 7	13. 6	. 3	110. 3
Accidents	--------	5. 1	21. 1	6. 8	. 5	88. 8
All other diseases	--------	7. 1	27. 6	4. 1	. 7	65. 0

[1] Estimates are based upon a 50-percent sample of the patient master card file.
[2] Only the primary diagnosis is used. For Sixth Revision, International List numbers of diagnoses, see table 4.
[3] Less than 0.5 percent.
[4] Less than 0.05 visits.

care services during the calendar year 1952. Every other patient was selected in alphabetic sequence. These data were obtained from the summary card file on patients and certain additional information was obtained from other patient service files kept by the program. All subsequent tabulations of the statistics were made after the study team's return from the field. It was believed that the resultant data for the 50-percent sample of patients receiving services during 1952 would give reliable indication of certain general characteristics of this home care program.

Reference

(*1*) Unterman, D., DeGraff, A. C., and Meleny, H. E.: Study of home care in a municipal hospital. J. A. M. A. 140: 152–155, May 14, 1949.

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Boston Dispensary Domiciliary Medical Service

Boston, Mass.

Origin of the Program

The Boston Dispensary has assumed the responsibility of providing home medical care to the indigent and medically indigent in the city of Boston for the past 157 years. Unlike many other cities, Boston has never employed city physicians for this purpose.

In 1796, a small group of public-spirited men established the Boston Dispensary. The principles upon which the institution was founded (*1*) were:

1. "The sick, without being pained by separation from their families, may be attended and relieved in their own houses.

2. "The sick can, in this way, be assisted at a less expense to the public than in any hospital.

3. "Those who have seen better days may be comforted without being humiliated; and all the poor receive the benefits of charity, the more refined as it is the more secret."

A century and a half later the dispensary still adheres to these principles.

In 1856, when a central outpatient clinic was added, the Boston Dispensary provided both home care (domiciliary service) and outpatient clinic services. Gradually, the number and variety of services increased. In 1910, a full-time director was appointed, and the responsibility for the direction of the domiciliary service was delegated to a supervising physician.

In 1929, the dispensary joined with the Floating Hospital and Tufts College Medical School to form the nucleus of the New England Medical Center, which provides clinical experience to Tufts College medical students. Since the formation of the New England Medical Center, the stated objectives of the domiciliary medical service have been:

1. To meet patients' needs by providing high-level physician services, and by making provisions for other services through effective utilization of community agencies.

2. To provide a training experience in a community setting for residents and fourth-year medical students from Tufts College Medical School.

Today, services available to both acutely and chronically ill patients in their homes include physician's services, medical social services, medications and medical supplies, laboratory and X-ray services, nursing, physical therapy, hospitalization, housekeeping, transportation, home teaching, hospital equipment and supplies, and prosthetic appliances.

Program 1951–52

This section of the report is primarily concerned with a description of the Boston Dispensary program as it operated during the fiscal year October 1, 1951–September 30, 1952. Statistical data were obtained from material compiled by the Boston program and from a special hand tally made for a 9-percent sample of medical visits. Cost data were obtained directly from program records.

Administration

The responsibility for the planning and direction of the domiciliary medical service, and related teaching responsibilities, were delegated to a physician director by the director of the dispensary. An advisory committee, composed of the director of the dispensary and the dean of Tufts College Medical School, met with the director of the domiciliary medical service approximately once a year to discuss policy changes.

The domiciliary medical service staff was composed of a part-time physician director, 4 resident physicians, 1 medical social worker, 1 chief clerk, and 2 part-time clerical assistants.

The director of domiciliary medical service devoted approximately one-half of his time to administrative duties, teaching, and supervision of the medical staff.

The four residents spent about 75 percent of their time in caring for patients and in assisting with the supervision and teaching of medical students. Approximately 25 percent of their time was spent in the dispensary clinics.

The medical social worker, in addition to providing direct services to patients, participated in program planning and in the teaching of medical students.

The chief clerk was responsible for all clerical activities.

Arrangements were made with other departments of the dispensary to provide medications, X-rays, and some laboratory services.

Services not available through either the domiciliary medical service or the dispensary were arranged for by informal working agreements with many community agencies. Some of these agencies and the services they furnished were as follows:

1. The Visiting Nurse Association provided nursing services, physical therapy, some nutrition consultation, and some medical supplies without charge to the program.

2. The Boston Provident Society Homemaker Service provided homemaker service without charge to the program.

Table 1. Source of funds and value of services used by the home care program, Boston Dispensary Domiciliary Medical Service, October 1951–September 1952

Funds received and estimated value of services used	Amount	Percent
Total	$41,177	100
Funds received	33,970	82
United Community Services	23,867	58
Patients and families	2,517	6
Welfare department (for services to patients on relief)	7,586	18
Estimated value of services provided	7,207	18
Boston Dispensary (estimated)	2,407	6
Tufts College Medical School (actual)	4,500	11
Miscellaneous (estimated, appliances and equipment)	300	1

3. The Boston City Health Department provided chest X-rays and laboratory services, in accordance with its usual policy.

4. Community hospitals provided hospitalization for diagnostic and therapeutic care.

Source of Funds and Costs of Services. An estimated budget of $41,177 was set up by the domiciliary medical service to provide home care to patients during the fiscal year October 1951 through September 1952. About 82 percent of this amount was actual cash outlay by the program. The remaining budget items were the estimated values of specific services provided by the Boston Dispensary and Tufts College Medical School without charge to the home care program (table 1). No cost estimates were available for many other services provided to patients without charge to the program. Among these were the services and supplies provided by the Visiting Nurse Association, the Boston Provident Society, the State and city health departments, and various other agencies. The value of services of medical students was also not included in the cost data.

Detailed data on the available costs is shown in table 2. Personnel services, including direct services to patients and administration, accounted for about 69 percent of the costs listed. Other direct services to patients, such as laboratory, X-rays, medications, and supplies, amounted to 9 percent of the costs, and other overhead expenses accounted for about 22 percent of the costs.

Since the number of patients served was not known and therefore could not be used as a base figure, the unit cost figure used by this program was based on the number of visits made by physicians and medical students. The program staff estimated that the average unit cost per medical visit was $2.85 for the fiscal year 1951–52. This figure included the cost of social service; laboratory, X-ray, and medical supplies; and other direct services. It was derived by dividing the total cost of operating the program by the total number of medical visits ($41,177 divided by 14,434 visits).

Operational Policies and Procedures

The policy of the domiciliary medical service was to provide care to indigent and medically indigent patients with both acute and chronic

Table 2. Recorded costs of services provided by the Boston Dispensary Domiciliary Medical Service, October 1951–September 1952

Type of service	Cost of service		
	Total	Expenditures from home care funds	Estimated value of services provided without charge
Total	$41, 177	$33, 970	$7, 207
Direct service	22, 719	17, 984	4, 735
Personnel	19, 088	14, 713	4, 375
Physicians:			
Director of service	500	500	----
Residents	14, 288	11, 288	3, 000
Consultants	200	----	200
Students	----	----	----
Nurses (Visiting Nurse Association)[1]	----	----	----
Social workers[2]	4, 100	2, 925	1, 175
Other personnel[3]	----	----	----
Other services and supplies[4]	3, 631	3, 271	360
Laboratory	331	331	----
X-rays	50	----	50
Hospital equipment	100	----	100
Medications and medical supplies	1, 706	1, 706	----
Orthopedic appliances	200	----	200
Transportation of patients	10	----	10
Transportation of staff	1, 234	1, 234	----
Administrative and other expenses	18, 458	15, 986	2, 472
Personnel	9, 495	8, 495	1, 000
Program director	5, 500	4, 500	1, 000
Chief clerk	2, 100	2, 100	----
Other clerks (2 part time)	1, 895	1, 895	----
Other expenses	8, 963	7, 491	1, 472
Overhead (space, light, heat)	6, 833	5, 361	1, 472
Office supplies and equipment	537	537	----
Telephone	1, 593	1, 593	----

[1] No estimate was available for value of services provided by visiting nurses.
[2] Includes part-time chief of social service of Boston Dispensary and 1 full-time social worker.
[3] No estimate was available for value of direct services provided by personnel such as physical therapists, nutritionists, home teachers, and housekeepers.
[4] The figures shown under "other services and supplies" are only those provided through the Boston Dispensary. Laboratory, X-ray equipment, and supplies were also provided by the State and city health departments and other agencies.

NOTE: Average unit cost recorded by the program was $2.85 (total available cost of $41,177 divided by 14,434 total medical visits during year). Not included are costs for many services provided by other agencies.

illnesses living in specified areas in the city of Boston. The "Boston Uniform Admitting Policy" (*2*) used by hospitals and outpatient departments was the base from which judgments were made. Some of the factors taken into consideration were:

1. Nature of medical problem.
2. Family income, resources, and indebtedness.
3. Availability of health and hospital insurance.
4. Special resources available and the public health responsibility of the institution.

Referrals for persons living within the area covered by the service were accepted from any individual or agency in the community. Patients with all diseases were eligible. However, patients with active pulmonary tuberculosis

were accepted only under unusual circumstances and obstetrical cases were not eligible. Calls were accepted from 8:00 a. m. to 12 noon 7 days a week, and visits were made the same day. Calls received after 12 noon were accepted for visiting the following day. Patients or families requesting emergency service were referred to the nearest hospital.

All patients who were referred and who were eligible for service were visited at least once by a staff physician. The decision to continue medical care in the home, to make other arrangements for care, or to terminate services was made by the resident, alone or in consultation with the director. When, in the opinion of the resident, alone or in consultation with the director or the medical social worker, the services of other personnel—such as nursing, physical therapy, or homemaker—were required, the case was referred to the appropriate agency. Personnel of the service staff and personnel of other agencies gave continuity of services to patients by sharing information with each other. The methods used included individual conferences, telephone calls, case conferences, case records, and some written reports.

Records. The individual case record included identifying data, medical history and examination, physician's progress notes, and abstracts from other medical facilities when received. When the patient was known to the social service staff of the program, summary social service notes were incorporated in the case record. Although there was no formal plan for routine summary reports from participating agencies, there were frequent telephone conferences that centered around patient care. These were, however, rarely recorded in the patient records.

Conferences. Several scheduled conferences were held under the leadership of the director of the domiciliary service. Staff conferences for resident physicians were held monthly in order to discuss medical policy. Case conferences designed to plan for patient care were held weekly. These were attended by the resident physicians, medical students, medical social workers, and representatives from community agencies that were providing services to patients. Frequent informal staff conferences were held to discuss plans for individual patients and operational policies.

Although the director of the service was employed on a part-time basis, he had an office in the dispensary building and was usually available to discuss patient care or problems with staff members.

Services to Patients

There were no available data on the amounts of services provided except the number of resident physician and medical student visits and the number of patients known to social service.

Medical Services. Direct services were provided by resident physicians, fourth-year medical students under medical supervision, and medical consultants. The range of services included histories, physical examinations, administration of medications, collection of specimens for laboratory examinations, diagnostic and therapeutic procedures (such as electrocardiograms and chest and abdominal taps), and minor surgical procedures. Consultation services in pyschiatry, gynecology, and ophthalmology were provided in the home. Other medical consultation services, such as physical medicine, dermatology, surgery, dentistry, and special fields of internal medicine, were provided in the dispensary outpatient clinics. As shown in table 3, a total of 14,434 visits were made by staff physicians and medical students during the fiscal year 1951–52. Approximately 22 percent of these visits were to patients newly admitted to the service; about 41 percent were

Table 3. Medical visits to patients, by admission status, Boston Dispensary Domiciliary Medical Service, October 1951–September 1952

Admission status	Medical visits	
	Number	Percent
Total	14,434	100
Initial visits to new admissions	3,115	22
Initial visits to reinstated [1] patients	5,993	41
Revisits to patients for any 1 illness	5,326	37

[1] In this program, the term "reinstated" is used instead of "readmission." This term implies patients previously served by the program and inactive for an indefinite period of time who are visited by the physicians for a new episode of illness. Any patient can be reinstated once or several times during a year period.

to patients reinstated to the service; and 37 percent were revisits to patients for any one episode of illness.

Social Services. Medical social services were provided to patients by the medical social worker assigned to the service. During fiscal year 1951, 332 limited services and 16 comprehensive services were provided.

Limited services included uncomplicated referrals to other agencies for financial assistance and homemaker service, referrals to family and children's agencies, assistance with transportation, help in securing special equipment and appliances, and reports to other agencies involved in patient care.

Comprehensive services included continued casework service to patients and families to help them understand and cope with problems related to the illness. Complicated referrals to other agencies were also counted as a comprehensive service.

Nursing Services. Direct nursing services to patients were provided under the direction and supervision of the Boston Visiting Nurse Association. The range of services included dressings, injections, irrigations, demonstrations, teaching members of the household how to care for the patient, and health instruction to patients and families.

Physical Therapy. Prescribed physical therapy treatments were provided in the home by registered physical therapists on the staff of the Boston Visiting Nurse Association.

Nutrition Services. Nutritional instructions were provided through consultations to staff and direct services to patients in their homes. Direct services were provided by the nutritionist from the dispensary food clinic and by a staff nutritionist from the Visiting Nurse Association.

Homemaker Services. When the need was indicated, homemaker services, including cleaning, cooking, and general supervision of children, were provided by the Boston Provident Society.

Medications. Necessary medications were provided through the dispensary pharmacy.

Laboratory and Diagnostic Tests. Laboratory examinations of blood, sputum, and urine were provided through the dispensary laboratory. Throat cultures were sent to the city health department for processing.

Hospitalization. Although hospital service for diagnosis and treatment was usually provided by the Boston City Hospital, other hospitals in the area frequently provided care.

Other Services. Patients were provided with prostheses, hospital equipment, sickroom and medical supplies, and transportation from a variety of community sources.

Characteristics of Patients

Although the number of different patients served annually was not known, some indication of the size of the program can be obtained from the number of visits made to patients by physicians and medical students. Of the 14,434 medical visits made to patients in their homes during fiscal year 1951, 3,115 were visits made to new patients for the first time. In addition, 5,993 initial visits were made to patients reinstated with a new episode of illness. (Patients who were previously served by the program and who were then inactive for an indefinite period of time were "reinstated" when the physicians and medical students visited them for any new episode of illness. Any patient could have been reinstated once or perhaps several times during any year period.) From the above figures, it may be assumed that

Table 4. Medical visits to new and reinstated patients, by general age group, Boston Dispensary Domiciliary Medical Service, October 1951–September 1952

Age and admission status	Medical visits	
	Number	Percent
New patients on program	3, 115	100
Children [1]	2, 348	75
Adults [2]	767	25
Reinstated patients [3]	5, 993	100
Children	4, 946	83
Adults	1, 047	17

[1] Under 16 years.
[2] 16 years and over.
[3] In this program, the term "reinstated" is used instead of "readmitted." This term as used implies patients previously served by the program and inactive for an indefinite period of time who are visited by the physicians for a new episode of illness. Any patient can be reinstated once or several times during a year period.

Table 5. Medical visits to patients, by diagnostic category and admission status, Roxbury and South Boston Districts, Boston Dispensary Domiciliary Medical Service, October 1952 and January 1953

Diagnostic category	Medical visits			
	Total	Patients		Revisits for any one illness
		Newly admitted	Reinstated	
	Number			
Total visits	1,237	281	520	436
Acute diseases	1,032	250	461	321
Upper respiratory infections [1]	494	134	235	125
Infectious diseases common among children [2]	69	19	38	12
Other acute diseases	469	97	188	184
Chronic diseases [3]	169	19	39	111
Unclassified [4]	36	12	20	4
	Percent			
Acute diseases, total	83	89	88	74
Upper respiratory infections	40	48	45	29
Infectious diseases common among children	5	7	7	3
Other acute diseases	38	34	36	42
Chronic diseases	14	7	8	25
Unclassified	3	4	4	1

[1] Includes common colds, tonsillitis, pharyngitis, laryngitis, and sinusitis.
[2] Includes mumps, chickenpox, whooping cough, and scarlet fever.
[3] Includes diseases for which patients require home care for 3 months or more.
[4] Includes conditions with no evidence of physical disease or with undiagnosed symptoms only.

NOTE: In order to ascertain the general diagnostic categories of patients visited on the program, an attempt was made to obtain a representative sample of visits made, by diagnosis. Since it was known that upper respiratory infections and children's infectious diseases were most prevalent in the winter months and least prevalent in the summer and fall, 1 winter month and 1 early fall month were chosen to help offset this seasonal bias. Time periods close to the date of the study were selected because diagnosis data on the patients visited were more readily available. The districts of Roxbury and South Boston were selected for study because it was believed by program administrators that these two districts would provide a representative cross section of the patient populations served by the program. About 60 percent of all visits during October 1952 and January 1953 were made to patients in the 2 districts selected. This would yield about a 9-percent sample of all visits made during the entire year.

the number of different patients served during the year fell somewhere between the lower range of 3,115 patients (total new admissions) and the upper range of 9,108 patients (total new admissions plus reinstatements).

Age, Sex, and Diagnosis. About 75 percent of the new patients admitted to the program during the fiscal year were children under 16 years of age (table 4). This proportion of children and adults among the new admissions would probably give at least a fair indication of age proportions among the total number of patients.

A sample of medical visits made to patients during 2 months (October 1952 and January 1953) was used to obtain an indication of the diagnoses of patients (see note to table 5). About 83 percent of all medical visits in the sample were made for acute diseases, of which upper respiratory diseases alone accounted for about 40 percent (table 5). This coincided with the large proportion of visits to children. Although almost 48 percent of all visits to new patients were made because of upper respiratory infections, only about 29 percent of revisits were made to patients in this diagnostic category. The reverse relationship was found for visits to chronically ill patients. Although only 14 percent of total visits in the sample were made to chronically ill patients, about 25 percent of the revisits were made to these patients.

Visits to patients, by relief status, are shown

Table 6. Medical visits to patients, by relief status, Boston Dispensary Domiciliary Medical Service, October 1951–September 1952

Relief status	Medical visits	
	Number	Percent
Total	14, 434	100
On relief	3, 643	25
Old age assistance	469	3
Aid to dependent children	1, 890	13
General relief	1, 284	9
Nonrelief patients	10, 791	75

in table 6 for fiscal year 1951–52. About 25 percent of all visits were made to patients receiving public assistance. More than half of these visits were to patients receiving assistance under the Aid to Dependent Children program.

Home Care and Professional Education

Medical Education

The domiciliary medical service has been used as an educational resource for graduate and undergraduate medical training since 1929, when the Boston Dispensary and Tufts College Medical School became parts of the New England Medical Center. The director of the domiciliary medical service, who is in charge of the educational program, is an assistant professor of medicine in the department of medicine of Tufts College Medical School, and participates in the planning of the fourth-year curriculum.

Graduate Education. The program of graduate teaching was established to provide medical school graduates with practical experience in medical care in the home. At least 1 year of internship and a license to practice medicine in Massachusetts are prerequisites for acceptance as a resident. One year of service as a resident can be used toward fulfilling the requirements of the specialty boards in internal medicine or pediatrics. The residency, which is for 1 year, may be renewed. Residents have appointments as assistants in medicine or pediatrics in the medical school.

Under the supervision of the director of the domiciliary medical service, the residents are responsible for home visits to patients and for supervision of fourth-year medical students assigned to the program. Residents in medicine are required to attend morning staff rounds in the New England Medical Center Hospital before going to the Boston Dispensary, where they work in the medical clinic from 10 a. m. to 12 noon. They are expected to attend all lectures and clinical conferences held for the hospital staff. Pediatric residents have the same responsibilities in the Boston Floating Hospital (pediatric) and the pediatric clinic of the Boston Dispensary. All of the residents may attend such educational activities as those of the Bingham Associates Program, which are held at the New England Medical Center.

During the study period, four residents were on the staff. Because of the inability to recruit more residents, the director of the service was planning to assign to the program medical residents from the New England Medical Center Hospital and pediatric residents from the Boston Floating Hospital. These residents would serve as staff physicians on the domiciliary medical service for 3 months.

Undergraduate Education. During their fourth year in medical school, students are assigned to the domiciliary medical service for 1 month full time. The assignment is designed to give the students, under direct supervision, practical experience in medical care in the home. Upon assignment, students are oriented to the service through meetings with the director of the domiciliary medical service, the director of social service of the Boston Dispensary, a representative from the visiting nurse association, and the office executive of the program.

Each student is assigned two or three cases per day by the resident—usually two new visits and one revisit. On all new visits, the student is under the direct supervision of his resident. The student goes into the home alone, takes the history, and makes the physical examination. The resident meets the student in the home and checks his work, and together they plan for treatment and necessary revisits. Revisits are made by the student alone. If necessary, he may telephone the director of the

service for further guidance. Cases visited by the student alone are discussed with the resident on the following day. The director reviews each student's caseload to make sure that he is assigned a variety of cases. The director also holds individual conferences with the students once a week to discuss their cases.

Students are required to attend clinics at the Boston Dispensary 6 days a week from 10 a. m. to 12 noon. They choose to attend either the medical or pediatric clinic, but they may attend one of the specialty clinics if one of their home care patients has been referred for diagnosis or consultation.

Planned clinical conferences are held periodically from 9 to 10 a. m. During these conferences, members of the department of medicine of Tufts College Medical School discuss specific diseases. Two mornings a week, from 9 to 10 a. m., a physician on the staff of the Boston Dispensary holds conferences with the home care students to discuss selected cases from the dispensary.

During the month's full-time assignment, each student prepares a report on one of his home care cases, selected for its interesting medical and social content. These reports are reviewed by the staff medical social worker, who selects the best reports for presentation at a regularly scheduled weekly social service conference. The conferences are attended by the director of the program, all home care students, the staff medical social worker, the director of social service of the Boston Dispensary, and representatives from those other community agencies which are providing services to the patient under discussion.

Table 7 shows the proportion of visits to home care patients made by medical students, as compared with those made by residents. Sixteen percent of all home medical visits were made by students alone, whereas they accompanied the physicians on their home visiting rounds 27 percent of the time. The remainder (57 percent of all medical visits during the fiscal year 1951–52) were made by the physicians alone.

Table 7. Medical visits made by physicians and medical students, Boston Dispensary Domiciliary Medical Service, October 1951–September 1952

Visit made by—	Medical visits	
	Number	Percent
Total	14, 434	100
Physicians alone	8, 288	57
Physicians accompanied by students	3, 876	27
Students alone	2, 270	16

Developments Within the Program

Although there have, of course been many changes during the 157 years that the Domiciliary Medical Service has been in operation, the primary objectives, as outlined in 1796, have remained the same.

Major changes have occurred primarily in administrative patterns and in the range of services, which has been increased to keep pace with advances in medical science. Starting with physician service in 1796, the program has been expanded to include nursing care (1814), social service (1908), nutritional guidance (1918). and gradually, over the years, many of the various specialized fields of medicine, including rehabilitation, have been made available to patients in their homes.

Depending upon funds available, the size of the professional staff of the Domiciliary Medical Service has varied from 1 physician, paid on a fee-for-service basis during the first year of operation, to an all-time high of about 20 full-time physicians and 30 to 40 part-time physicians.

The areas covered by the program have been reduced from the entire city to those sections of the city where the greatest needs exist.

Until the establishment of the Community Fund in the early 1930's, contributions from civic-minded individuals were the major sources of operating funds. In September 1951, the department of public welfare began reimbursing the program for medical services provided to all recipients of public assistance.

Records have been changed from a ledger-type record to more inclusive individual cumulative records.

During the first year of operation (1796), records show that about 80 patients received medical care in their homes. The program

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grew until it was giving home care to thousands of patients each year. It is not known just how many different patients received home medical services each year prior to 1928, when individual records were first kept. For the years 1928–52, there were approximately 150,000 different patient records, which would yield an average of 6,000 new names added to the records during each year of the 25-year period. This figure, of course, would be less than the annual average number of different patients served, since many patients would be carried over from year to year.

Table 8. Number and average cost of medical visits made by physicians of the Boston Dispensary Domiciliary Medical Service, selected calendar years 1856–1949 and fiscal years 1950–51 and 1951–52

Year	Number of visits	Average unit cost [1]
1856	18, 400	----------
1894	27, 125	----------
1927	4, 724	$0. 83
1929	7, 661	----------
1939	54, 503	1. 00
1949	16, 286	1. 67
1950–51	13, 503	----------
1951–52	14, 434	2. 35

[1] Does not include value of services provided without charge.

Using available medical visit data as an indication, the number of patients served annually has varied greatly throughout the history of this program. If we assume that the number of visits per patient during recent years has stayed about the same, it would appear that the number of patients served annually varied according to prevailing economic conditions. At the end of the depression in 1939, 54,503 home medical visits were made. Similarly high numbers of visits were made during all the depression years. In recent years, the total number of medical visits has decreased, ranging between 13,000 and 16,000 visits per year. The past 25 years have witnessed an increase in the average unit cost (cash expenditures of the program divided by total medical visits) from about $0.83 in the calendar year 1927 to $2.35 per medical visit in the fiscal year 1951–52 (table 8). (These cost figures do not include the value of services provided to the program without charge, which, for 1951–52, brought the unit cost up to $2.85.)

Collection of Data

In the home care program at the Boston Dispensary, a numerical record file is kept in chronological order for all patients given service since 1928. It was estimated that this file contained more than 150,000 different names, as of the date of the field study. Identifying data, referral data, and physician's reports on each patient are kept in this file. In addition, an alphabetical index card file is maintained for each patient. A daily logbook is kept for each district in the program, which contains data on medical visits and the diagnoses of new and reinstated patients visited. Routine monthly statistics compiled by the program personnel contain certain summary data on medical visits. No compilations are made of the total number of different patients served during the year (an unduplicated count of patients), nor of patient characteristics, such as age group and diagnosis. No records are kept on the amount of services other than medical visits. (The agencies providing these other services do not keep separate records for the Boston Dispensary home care patients.)

An indication of certain general characteristics of patients was obtained from the medical visit data compiled in the program for the fiscal year October 1951–September 1952: the number of visits to adults and to children, to new patients, and to patients on relief, and the number of visits made by physicians and by medical students.

In order to obtain information on the diagnoses of patients visited on the program, a hand tally from the medical visit logbook was done for a sample of visits made. The diagnosis for which visits were made was shown in the logbook for new and reinstated patients. The diagnosis of patients revisited for any one episode of illness was not indicated. By tallying visits made during recent months, the diagnosis of patients revisited could more readily be filled in by program personnel. Since it was known that upper respiratory infections and children's infectious diseases were most prevalent during the winter months and least prevalent during the summer and fall, 1 winter month (January) and 1 fall month (October) were chosen to help offset the seasonal

bias. Two districts served by the program (South Boston and Roxbury) were selected for study because it was believed by the program administrator that they would provide a representative cross section of the patient populations. About 60 percent of all medical visits during the 2 months selected for study were made to patients in the two districts selected. This would equal about a 9-percent sample of all visits made during the entire year.

To have obtained complete data on the number of patients and the amounts of various services provided would have necessitated abstracting a large number of individual records in the program and in other agencies. In the limited time allotted for field study, this procedure was not possible.

References

(*1*) 150 years a good Samaritan. Boston, Boston Dispensary. Undated.

(*2*) Hospital Council of Metropolitan Boston: Statement of hospital admitting policy. Boston, Hospital Division of United Community Services. May 1950.

Massachusetts Memorial Hospitals Home Medical Service

Boston, Mass.

Origin of the Program

The Home Medical Service of the Massachusetts Memorial Hospitals was begun in 1875 as a joint activity of the hospitals and the Boston University School of Medicine. The program was designed to care for both the acute and chronic illnesses of the needy and medically needy living in the South End section of Boston, and to provide an educational experience for fourth-year medical students. The program was administered by the department of medicine, School of Medicine, until 1948, when a reorganization transferred administration to the department of preventive medicine of the School of Medicine. Since that time, educational programs centered around patient care in the home have been developed for third- and fourth-year medical students, medical social work students, and senior student nurses.

The objectives of the program are:

1. To provide, through an organized approach, more comprehensive services to patients in their homes and to place emphasis on the preventive aspects of medical care.
2. To develop the "team concept approach" to patient care at both the staff and the student level.
3. To utilize already established community services to help meet patient needs.

The services available to patients include physician services and consultation in the various specialties of medicine, medical social service, nursing, physical therapy, homemaker service, hospitalization, laboratory tests and other diagnostic procedures, drugs and medical supplies, hospital equipment and sickroom supplies, prostheses, and transportation.

Program 1952

The information contained in this section of the report is primarily concerned with a description of the program as it operated during the calendar year 1952. The area served by the program included the South End section of Boston and small adjacent sections in Roxbury. According to the 1950 United States Census, the population of the South End was 54,563, or about 7 percent of the total population of Boston. More than 41 percent of the population in the area were 45 years old or older, as compared to 32 percent for the city as a whole. The median family income was $1,500, as compared to the median income of $2,643 for the total city. Almost 52 percent of the dwelling units were dilapidated or had no private bath as compared to 15 percent for the city as a whole.

Statistical data for this report were obtained from compilations made within the program and from hand tallies of about 9 percent of the medical visits during the year. Cost data were obtained directly from program records.

Administration

Responsibility for the administration of the program was vested in the professor of preventive medicine, Boston University School of Medicine, who also served as the director of the outpatient department, Massachusetts Memorial Hospitals.

In addition to the director, the service and teaching staff of the program consisted of 2 resident physicians, 1 medical social worker, a half-time public health nurse, 1 administrative assistant (clinical nurse), and secretaries. The assistant professor of mental health, the associate professor of psychiatry, and the instructor of preventive medicine, Boston University School of Medicine, provided consultation to staff and students and participated in teaching conferences.

The director devoted approximately one-half time to the program and was responsible for administration, overall supervision, and teach-

ing. The two residents taught and supervised the fourth-year medical students, who provided patient care.

The medical social worker participated in program planning and in the teaching of medical, nursing, and social work students assigned to the program. She was responsible for liaison with community agencies, supervision of social work students, and provision of direct services to patients. Approximately 75 percent of her time was spent in the teaching program and in the supervision of social work students. The remainder was spent in working with community agencies and in providing direct services to patients.

The public health nurse devoted approximately half-time to the home care program. She participated in program planning and teaching conferences for medical, nursing, and social work students. She was responsible for determining nursing needs, referral of patients to the nursing agency, the selection of patients to be seen by student nurses, and the supervision of patient care provided by student nurses. In addition, she taught principles of public health nursing in the basic curriculum and was responsible for interpreting the domiciliary medical care program and the public health aspects of nursing care to the nursing staff of the hospital.

The administrative assistant, a graduate clinical nurse, was responsible for screening all calls, maintaining supplies and equipment, instructing medical students in nursing techniques, and for a variety of clerical and housekeeping duties.

The secretarial staff was responsible for clerical functions.

Arrangements were made with other departments in the Massachusetts Memorial Hospitals to provide the following services:

1. Medical consultation in the home or in the outpatient department by the staff of the hospital.
2. X-rays in the hospital X-ray department.
3. Processing of some laboratory and other diagnostic tests in the hospital laboratory.
4. Medications from the hospital pharmacy.

Services not available through the program or the hospital were arranged for by informal working agreements with the following community agencies:

1. The Visiting Nurse Association, without charge to the program, provided nursing care, physical therapy, some nutrition consultation, and medical supplies.
2. The Boston Provident Homemaker Service furnished homemaker service without charge to the program.
3. Boston City Health Department took chest X-rays and performed some laboratory tests.

Source of Funds and Costs of Services. Funds and services amounting to $37,816 were shown on the program budget for 1952. Most of the funds came from private sources (table 1). The major exception was reimbursements to Massachusetts Memorial Hospitals from the Department of Welfare for care given to recipients of public assistance. The department was billed for $10,041 for services provided during 1952, but not all of this amount was actually received by the hospital during the study year.

Details on the recorded costs of services are shown in table 2. Salaries of personnel accounted for $24,911, or about 66 percent of the total. This included salaries for teachers, administrators, and persons providing direct services to patients. (Visits by medical students were made without charge.) The remaining 34 percent of the cost was spent for drugs and supplies, depreciation, maintenance, and utilities.

Many figures on the costs for providing

Table 1. Source of funds, Massachusetts Memorial Hospitals Home Medical Service, calendar year 1952

Source	Amount
Total	$37,816
Boston University School of Medicine [1]	7,082
Commonwealth Fund [1]	14,519
Public Health Service [1]	1,750
Massachusetts Memorial Hospitals (estimated value of services provided) [2]	14,465

[1] Salaries.

[2] The welfare department was billed for $10,041 in behalf of patients served during 1952. This sum was to be paid to Massachusetts Memorial Hospitals to defray costs of home care. This amount was not deducted here because it cannot be applied to any 1 year. At least part of this money would be used during the following year.

Table 2. Recorded operating costs of Massachusetts Memorial Hospitals Home Medical Service, calendar year 1952

Type of service	Amount
Total	$37,816
Salaries	24,911
Physician director [1]	4,810
Assistant professor of mental health [2]	1,750
Instructor in medical social work [2]	2,769
Associate professor of psychiatry [2]	250
Public health nursing instructor [2]	2,000
Instructor, department of preventive medicine [2]	1,250
Medical residents (2)	6,000
Administrative assistant	3,500
Secretary [3]	1,920
Secretary [2]	662
Other services	12,905
Pharmacy and supplies	1,100
Depreciation of equipment [4]	226
Overhead expense [5]	11,579

[1] The physician director of this program was also director of the outpatient department and professor of preventive medicine in Boston University Medical School. It was estimated that about half of his time was spent on the home medical care program, of which time about one-third was for teaching and two-thirds was for administration.

[2] Part time.

[3] Full time.

[4] Depreciation at 6 percent per annum on equipment used exclusively by the home medical care program.

[5] Overhead allocation is based on the percentage of space utilized by home medical care in the outpatient department building. This estimated cost includes maintenance, utilities, and depreciation of buildings and furnishings.

NOTE: Average unit cost was $3.05 (total program budget of $37,816 divided by 12,391 total medical visits during year). This figure does not include costs of many services provided to patients without charge to the program, such as nursing visits, clinic visits, laboratory, and X-rays.

services were not available. These included costs of nursing and housekeeping services, clinic visits, laboratory work, and X-rays.

Operational Policies and Procedures

The policy of the home medical service was to provide care to the indigent and medically indigent in the South End section of Boston. Medical indigency was determined on an individual basis. The "Boston Uniform Admitting Policy," (*1*), used by hospitals and outpatient departments, was the base from which judgments were made. Some of the factors taken into consideration were:

1. Nature of medical problem.
2. Family income, resources, and indebtedness.
3. Availability of health and hospital insurance.
4. Special resources available and the public health responsibility of the institution.

Referrals were accepted from any individual or agency in the community for persons living in the area served by the program. Patients in all age groups and with all diseases were eligible for home care. Calls were accepted daily from 8 a. m. to 3 p. m. for visiting the same day. Patients or families requesting emergency service were referred to the Boston City Hospital. All patients eligible for service were visited at least once by a fourth-year medical student. The decision to continue care in the home, to make other arrangements for care, or to terminate medical services was made by the student, alone or in consultation with the preceptors.

When, in the opinion of the medical student, alone or in consultation with the preceptors and other staff members, other services, such as nursing, physical therapy, social service, or housekeeping service were required, the case was referred to the appropriate staff member or to a community agency.

The methods used for interchange of information between personnel of the program and personnel from other agencies included individual conferences, case conferences, telephone calls, case records, and some written reports.

Records. For teaching purposes, individual patient records were maintained by type of service and were filed separately. The medical record included identifying data, medical history and examination, progress notes, and, when received, abstracts from other medical facilities. Notations indicating services provided by other professional personnel were entered in the medical record.

Comprehensive social services were recorded in detail on separate social service records and were filed in the hospital social service department. Limited social services were recorded on consultation sheets and filed in the patient's medical records.

The nursing records included identifying data, patient's diagnosis and physician's orders for treatment, progress notes, and pertinent social data.

There was no formal plan for routine summary reports from participating agencies on care provided to patients. However, there were frequent telephone conferences centered around patient care, and notations were made in the appropriate record.

Conferences. There was a variety of teaching conferences centered around patient care, some of which were attended by personnel from all categories and by representatives from participating agencies. When indicated, staff conferences for planning and administrative purposes were called by the director.

Services to Patients

The only available data on the amounts of services provided to patients were the number of visits made by physicians and medical students and the number of patients known to the social service staff.

Medical Services. Direct services to patients in the home were provided by fourth-year medical students under the supervision of the two residents. The range of services included medical histories, physical examinations, administration of selected drugs, and collection of specimens for laboratory examination. Staff members in all the medical specialties at the Massachusetts Memorial Hospitals provided consultation services to patients, either in their homes or at the outpatient clinic. A total of 12,391 home visits were made by medical students and residents during the year, of which approximately 48 percent were initial visits to patients for any one illness and 52 percent were revisits to patients during any one illness episode.

Social Services. Medical social services were provided to patients by the medical social worker and by the two students assigned to the program. During the calendar year, 70 limited services and 57 comprehensive services were given. Limited services included uncomplicated referrals to other agencies for financial assistance and homemaker service, referrals to family and children's agencies, assistance with transportation, help in securing special equipment and appliances, and reports to other

Table 3. Medical visits to patients, by diagnostic category and general age group, Massachusetts Memorial Hospitals Home Medical Service, 48-percent sample of visits made during January and October 1952

Diagnostic category	Medical visits					
	Total		Children under 15 years		Adults	
	Number	Percent	Number	Percent	Number	Percent
Total	1,146	100	857	100	289	100
Acute diseases	953	83	812	95	141	49
Upper respiratory infections [1]	389	34	347	40	42	15
Infectious diseases common among children [2]	249	22	245	29	4	1
Other acute diseases	315	27	220	26	95	33
Chronic diseases	148	13	17	2	131	45
Unclassified [3]	45	4	28	3	17	6

[1] Includes common colds, tonsillitis, pharyngitis, laryngitis, and sinusitis.
[2] Includes measles, mumps, chickenpox, whooping cough, and scarlet fever.
[3] Includes patients with no evidence of physical disease, or with undiagnosed symptoms only.

NOTE: Effort was made to obtain a representative sample of medical visits to patients, in order to show an indication of the general diagnostic categories and age groups of patients. Since it was known that more respiratory infections and children's infectious diseases were prevalent in the winter months, one winter month and one early fall month were chosen to help eliminate this bias. All visits made by two student doctors in each month were tallied, which amounted to 48 percent of all visits made during the 2 months. The sample equaled about 9 percent of all visits made during the entire year 1952.

agencies involved in patient care. Comprehensive services included continued casework services to patients and families when the major problem centered around the illness situation and involved the patient's and the family's understanding and acceptance of the illness.

Nursing Services. Direct nursing services were provided under the direction of the Boston Visiting Nurse Association. The range of services included dressings, injections, irrigations, personal care, health instruction to patients and families, demonstrations, and teaching a responsible member of the household how to care for the patient.

Physical Therapy. Prescribed physical therapy treatments were provided in the home by registered physical therapists on the staff of the Boston Visiting Nurse Association.

Nutrition Services. Limited nutritional instruction was provided to patients by the nutritionists on the staff of the Boston Visiting Nurse Association.

Homemaker Services. Homemaker services, including cleaning, cooking, and general supervision of children, were provided, when indicated, by the Boston Provident Society.

Medications. Medications were provided through the pharmacy of the Massachusetts Memorial Hospitals.

Laboratory and Diagnostic Tests. Simple laboratory tests, such as routine blood and urine tests, were performed by the medical students under the supervision of a member of the department of preventive medicine. More complicated tests were sent to the laboratory of the Massachusetts Memorial Hospitals for processing. Some throat cultures, sputum, and cultures for diphtheria were sent to the city health department for examination.

Hospitalization. Hospital services for diagnosis and treatment were provided by the Massachusetts Memorial Hospitals and the Boston City Hospital.

Other Services. Patients were provided with prostheses, hospital equipment, sickroom and medical supplies, and transportation from a variety of sources in the community.

Characteristics of Patients

Although the number of different patients served annually was not known, some indication of the size of the program could be obtained from the number of home medical visits made to patients and from the number of new admissions to the program. Of a total of 12,391 home medical visits made during the calendar year 1952, 2,187 were made to new patients. In addition, 3,734 initial visits were made for new illness episodes of patients previously visited. (It is probable that a number of patients on the program were visited for two or more episodes of illness during the same year.) From these figures it may be assumed that the number of different patients served fell somewhere between the lower range of 2,187 patients (total new admissions) and the upper range of 5,921 patients (total new admissions plus initial visits to patients for new episodes of illness).

Table 4. Medical visits to patients, by relief status, Massachusetts Memorial Hospitals Home Medical Service, calendar year 1952

Relief status	Medical visits	
	Number	Percent
Total visits to all patients	12, 391	100
Visits to patients on relief	3, 977	32
Old age assistance	461	4
Aid to dependent children	2, 362	19
General relief	1, 000	8
Aid to disabled, to veterans, and blind	154	1
Visits to nonrelief patients	8, 414	68

Since no data had been compiled on the characteristics of the individual patients served, a sample of the visits made by two medical students during January 1952 and by two others in October 1952 was tallied to show the general diagnostic categories and age groups. Since comparatively more respiratory infections and children's infectious diseases are known to be prevalent during the winter and early spring months than in the summer and fall, one winter month and one fall month were chosen for tally in order to get a more representative sample. The visits in the sample equaled about 9 percent of all visits made during the entire year 1952.

Of a total of 1,146 visits tallied in the sample,

953 visits (83 percent) were made for diagnosis and treatment of acute diseases (table 3). Upper respiratory infections and children's infectious diseases, such as measles, mumps, whooping cough, scarlet fever, and chickenpox, accounted for about two-thirds of the visits to patients with acute illness. About 13 percent of the medical visits in the sample were made to patients suffering with chronic diseases, and the remaining 4 percent were made to patients with unclassified illnesses or special conditions.

Almost three-fourths (857) of the visits in the sample were made to children under 15 years of age. Acute illnesses accounted for about 95 percent of these visits. Of the 289 visits made to adults, about 49 percent were due to acute diseases, 45 percent were due to chronic diseases, and the remainder were made to patients with no definite diagnosis.

The medical visits to patients on relief during 1952 are shown in table 4. Of a total of 12,391 medical visits made during the year, 3,977 visits (almost one-third) were made to patients receiving public assistance. The largest group was composed of recipients of aid to dependent children, to whom 2,362 visits were made. Patients receiving general relief received 1,000 visits during the year. Four hundred sixty-one visits were made to old age assistance recipients, and the remaining visits were made to recipients of disability, veterans, and blind assistance.

Home Care and Professional Education

The home medical care program was used as a resource in the education of hospital residents, medical students, student nurses, and medical social work students. The students from the various professional schools were oriented together, and all attended the joint professional case conferences concerned with patient care. The cases discussed at these conferences were selected by the medical social worker. The medical, nursing, and social work students were responsible for preparing and presenting information on the various aspects of the patient and family situation. The medical social conferences were intended to develop an understanding of the social needs of patients and families and of family interrelationships and to point out the community resources available to meet patient and family needs.

It was the hope of the program director and supervisors that by working and planning together at the student level, the three student groups would develop both a basis for mutual professional understanding and a team approach to patient care.

Graduate Medical Education

Each year since July 1, 1949, two residents from Massachusetts Memorial Hospitals have been assigned full time for 1 year to the department of medicine to work in both the home medical care program and the outpatient department. They are required to have had 1 year of approved internship and 1 year of residency, and they are allowed to count the training on this program as a year's credit toward the requirements of the specialty boards (internal medicine and pediatrics). Under the direction and supervision of the director of the program, these residents devoted approximately two-thirds of their time to outpatient clinic activities. Their responsibilities for the supervision of medical students included daily group conferences with students regarding patients being treated in the home, home visits with students to selected patients, and review of students' records.

The residents participated in teaching conferences in both the home medical care program and the hospital.

Undergraduate Medical Education

Fourth-year medical students from the Boston University School of Medicine were assigned in groups of six to the home medical care program for a period of 1 month, full time. Under the supervision of the residents, students were responsible for providing medical care to patients. The range of services provided included histories, physical examinations, diagnoses, dispensing simple medications, collecting blood and urine for testing, collecting other specimens for laboratory diagnosis, and maintaining patient records. Under the supervision of a member of the department of microbiology of the medical school, students did their own plating for throat cultures and

for cultures from suppurating lesions. Thoracenteses and paracenteses were done by the students in the patient's home with a resident present. Students carried a large part of the caseload. At least four residents would have been required to make home visits if medical students had not been assigned to the program.

In addition to their conferences with residents, the medical students attended a weekly conference conducted by the staff psychiatrist, where the psychosomatic aspects of cases were discussed.

A program designed to give third-year medical students an opportunity to observe chronic illness in the home was also conducted by the Boston University School of Medicine. At the beginning of his third year, each student was assigned a family from the rolls of the home medical care program. Under the supervision of the professor of preventive medicine, the student was responsible for general medical care, health instruction, and disease prevention for the family for a period of 9 months. This program was started in September 1949.

Nursing Education

The Massachusetts Memorial Hospitals School of Nursing inaugurated an educational affiliation with the home medical care program on an experimental basis in December 1952. In order not to duplicate established community nursing services, patients to be seen by students were cleared with the Visiting Nurse Association.

The objectives of the educational experiences were: [1]

1. "To provide concrete educational experience for third-year student nurses through observation, demonstration, and participation in the care of the patient in the home.

2. "To learn basic techniques so that responsibility for actual care can be safely administered.

3. "To develop an appreciation of the functions and experiences of medical students and social work students.

4. "To understand better the patient as an individual correlating such factors as may affect his physical, emotional, economic, and social well-being in the home, community, and hospital.

5. "To acquaint the student with the need of health teaching of the patient and family emphasizing nutrition and mental health.

6. "To increase the knowledge of the nurse in application of past experience through care for a patient and family as a whole.

7. "To develop an appreciation of the nurse's role in the continuity of medical care including prevention of disease and promotion of physical and mental health.

8. "To help to create positive attitudes toward the acquisition and maintenance of health.

9. "To learn about and appreciate community resources and the contribution they offer to individuals."

The plan provided for the assignment of all senior nursing students to the home medical care program full time for a period of 4 weeks. A public health nursing instructor on the faculty of the Massachusetts Memorial Hospitals School of Nursing was assigned part time to the home medical care program to be responsible for planning and supervising the student's educational experience.

During the student's orientation to the program, she was introduced to staff members and other students, learned policies of the home care program, read selected materials, and attended general orientation conferences given to students in all categories as well as conferences devoted specifically to nursing service.

During the 4-week assignments, the students' time was about equally divided between individual and group conferences and patient care. The students were given caseloads that provided opportunities to observe and care for patients with both acute and chronic illnesses and to work with both adults and children. Their responsibilities included providing nursing care to selected patients, giving simple health instruction on normal nutrition and health measures, maintaining patient records, and participating in conferences with students from other professions in planning for patient care. When patients whom they had seen in the home were hospitalized or referred to the outpatient department, the student nurses were encouraged to visit them. These visits gave

[1] Massachusetts Memorial Hospitals: Unpublished materials.

the student an opportunity to review the patient's record and to observe his physical condition and his general attitude toward his illness and environment.

Teaching and supervisory methods included demonstrations, visiting with students in the patients' homes, individual and group conferences to discuss patient care and related problems, and review of patient records. The students' activities were closely supervised.

The home medical care program had been used for student nurse training for only 3 months at the time of the study and no evaluation of the educational experience had yet been made. The community nursing aspects of the program were to be evaluated at the end of 6 months by a committee composed of representatives of the hospital school of nursing, the visiting nurse association, and the director of the home medical care program. This evaluation was to include a review of the selection and clearing of patients visited by the students and a determination of whether or not nursing services were being duplicated, or whether there were gaps in services so that patients needing care did not receive it from either a student or a member of the Visiting Nurse Association staff. Educational values of the program were to have been evaluated at the end of 1 year.

Social Work Education

During 1952, two second-year students from the Boston University School of Social Work were assigned to the home medical care program for field work experience.

They were assigned for 3 full days per week from September through May, with the exception of the school vacation periods. They were supervised by the medical social worker in the home medical care program. It was a requirement of both the program and the school that the supervisor spend 2 hours per week in conference with them. Liaison between the supervisor of the program and the school of social work was maintained through quarterly reports by the students and monthly supervisor's conferences at the school of social work. In addition, the faculty supervisor of medical social work made field visits in order to read case records prepared by the students and to discuss their field work experience with the supervisor.

During the first week of assignment to the program, students were given an orientation, which consisted of meeting staff and learning policies and procedures. With social service students assigned to other departments of the Massachusetts Memorial Hospitals, they participated in monthly meetings throughout the school year as a part of a planned program for orienting students to the hospital setting. At these meetings, members of the hospital staff, such as the hospital administrator, the chief nurse, and the chaplain, talked with the students and explained their various services.

Cases were assigned to the students by the supervisor, who tried to select cases that would give them a broad range of medical and social problems, as well as an opportunity to work with both children and adults. The students worked with patients and families whose social problems were directly related to illness and who needed help in understanding the illness and in adjusting to the problems it created. The students were also given an opportunity, through case situations, to work cooperatively with community social agencies, to learn to interpret medical recommendations to social agencies, and to bring significant social data to the staff of the home care program.

The students were responsible for providing casework services to selected patients and families, for maintaining social service records, for preparing summary social service reports, for preparing quarterly reports to the school, for attending monthly social service staff conferences, and for participating in weekly medical social teaching conferences.

Developments Within the Program

Since the 1948 reorganization, there has been an increase in size and composition of the program staff, and the teaching program has been expanded to include medical social work and nursing students. Two medical residents and a medical social worker were added to the staff in 1949 to supervise student activities and to provide some direct services to patients. A part-time public health nursing instructor was added to the staff in 1952 to supervise the activ-

Table 5. Trend data, Massachusetts Memorial Hospitals Home Medical Service, July 1948–December 1952

	July–December 1948	Calendar year			
		1949	1950	1951	1952
Number of new admissions to the program [1]	1, 170	2, 800	2, 095	1, 947	2, 187
Number of medical visits	N. A.	11, 608	14, 734	14, 148	12, 391
Initial visits for any one illness	N. A.	5, 091	4, 946	5, 578	5, 921
Revisits for same illness	N. A.	6, 517	9, 789	8, 570	6, 470
Average unit cost	N. A.	$2. 12	N. A.	$2. 20	$3. 05

N. A.—Not available.
[1] Average number of new admissions per year was 2,266.

ities of student nurses assigned to the program, and to participate in program planning and teaching programs for other student categories.

Table 5 shows trend data in relation to new admissions, medical visits, and average unit costs for the period July 1948–December 1952. During this period a total of 10,199 different patients were admitted for services, or an average of 2,266 new patients per year.

The average unit cost (program budget divided by total medical visits) increased from $2.12 in 1949 to $3.05 in 1952. This unit cost does not include the value of services provided without charge to the program.

The director of the program would like to provide for greater continuity of patient care by assigning medical students to home medical care, to the outpatient department, and to the hospital ward simultaneously for a 4-month period. In this way, the patient would have greater continuity of medical care and the students would have an opportunity to follow the patient from one service to another.

Collection of Data

In this program, individual medical records were on file for all patients served since the program was organized in its present form in July 1948. (There were about 10,000 different records as of December 31, 1952.) Each patient record folder contained the following information: identifying data, date of referral for each illness, diagnoses, detailed report on medical visits, and reports of other services to patients. A daily call book was kept, showing certain information about requests for service. Daily log sheets containing summary information on patient visits were kept by the medical students.

Routine monthly statistics showing the number of initial medical visits for any one illness, revisits, and visits to patients receiving public assistance were compiled. In addition, a tally was kept of the number of new admissions to the program each year. No data were compiled on the total number of different patients served annually, or on services other than medical visits.

For purposes of this study, the data already compiled in the program were supplemented by a special hand tally of about 48 percent of the medical visits made during January and October 1952. Visits made by two student physicians in each period were tallied from the daily logbooks. Since upper respiratory infections and children's infectious diseases are most prevalent during the winter months and least prevalent during the summer and fall months, one winter month and one fall month were chosen for tally in order to obtain more representative samples. The resultant sample equaled about 9 percent of all medical visits made to patients during the calendar year 1952.

Reference

(1) Hospital Council of Metropolitan Boston: Statement of hospital admitting policy. Boston, Hospital Division of United Community Services, May 1950.

Philadelphia Intensive Home Care Plan

Philadelphia, Pa.

Origin of the Program

A study of chronic illness by the Philadelphia Health and Welfare Council in 1945 laid the foundation for the Philadelphia Intensive Home Care Plan. The study revealed that 50 percent of persons with long-term illness, known to agencies and institutions in metropolitan Philadelphia, could be cared for in their homes if the necessary home services were available. A committee of the council was appointed to study the problem.

In 1948 the committee recommended that home care services be established as a pilot program in the Germantown section of Philadelphia. The plan was designed to:

1. Facilitate and extend home care and rehabilitation to persons with long-term illness by correlation and expansion of medical, nursing, and allied services.

2. Demonstrate that such a program is a practical and economical method of providing satisfactory care for many patients with long-term illness and that it could be extended successfully to cover the entire Philadelphia area.

The Philadelphia Visiting Nurse Society was selected as the most appropriate administrative agency for the program because it furnished home nursing service and physical and occupational therapy and was in a position to develop and extend the program to other sections of the city. The plan was approved by the Philadelphia County Medical Society, with the stipulation that the medical consultant would be a practicing physician.

The bases for selecting the Germantown area were its fairly typical residential character, the availability of many of the necessary community services, and the community's interest in extending services to meet the growing problem of chronic illness.

According to the 1950 census, the population of Germantown was 326,487 persons (about 16 percent of the total population of Philadelphia). Living standards in Germantown were apparently above the city's average, for only about 3 percent of the dwellings had no private bath or were dilapidated, as compared with 12 percent for the city as a whole. The average monthly rent in the Germantown area was $55.97, as compared with $40.19 for the entire city.

The program began operation in April 1949. Services available to patients included medical, medical consultation, nursing, social work, physical therapy, occupational therapy, part-time housekeeping, laboratory and X-ray procedures, transportation, speech therapy, and hospitalization. Drugs and medical supplies, appliances, sickroom equipment, and sickroom supplies were also furnished.

Three distinct features of the Philadelphia Intensive Home Care Plan are:

1. The plan is administered by an allied medical agency.

2. The patients remain under the care of their private physicians.

3. The services of the plan are available to persons who can pay, as well as to the indigent and medically indigent.

Program 1952

This section of the report is primarily concerned with a description of the program as it operated in the Germantown area during the calendar year 1952. The statistical data on services provided were obtained through abstracts of individual patient records, and the cost data were taken directly from records maintained by the program.

Administration

Responsibility for administration of the program was vested in the director of the Visiting Nurse Society. The staff of the home care program consisted of a part-time medical consultant, a full-time coordinator of nursing,

and a part-time secretary. A steering committee, including the part-time medical consultant and representatives from civic and professional groups, assisted the director in policy formulation and fund raising. The administrative details were delegated to the public health coordinator of nursing, and the medical administrative aspects of the program were the responsibility of the part-time medical consultant.

The medical consultant devoted approximately one-fourth of his time to the program. He was responsible for determining the medical suitability of patients referred to the program, for all liaison with private physicians and the medical staffs of hospitals, for monthly review of reports from private physicians, for conducting patient evaluation conferences, and for participation with the director and the steering committee in overall planning and interpretation of the purposes of the plan to interested community groups.

The coordinator of nursing was responsible for screening all referrals and for evaluating the general suitability of patients' homes. She participated in planning conferences for patient care, was responsible for seeing that all services ordered by the attending physicians were provided, facilitated the coordination of services through formal and informal conferences and reports, and initiated requests for consultation on special problems.

The secretary was responsible for the major portion of the secretarial and clerical duties connected with the home care program.

The home care administrative plan provided that the staff and facilities of the Visiting Nurse Society would furnish:

1. Nursing care by the nurse serving the area where the patient lived.
2. Physical therapy by a staff physical therapist.
3. Occupational therapy by a staff occupational therapist.
4. Nutrition and mental hygiene consultation by staff serving the patients through the nutrition and public health nursing mental hygiene consultants.
5. Sickroom supplies and equipment.

Provisions were made in the home care budget to pay for moderate amounts of housekeeping services at prevailing rates and for drugs and medical supplies.

Services not directly available through the Visiting Nurse Society were arranged for through informal working agreements with the following individuals and community agencies in the Germantown area:

1. Private physicians were to provide all medical care to patients. Medical consultations were provided by hospital medical staffs or private medical consultants.
2. Starr Centre Association was to provide nursing service to patients living within a specific section of the Germantown area.
3. Speech therapy was to be provided by a private therapist.
4. Local hospitals were to provide hospitalization, X-rays, and laboratory and other diagnostic procedures.
5. Family Society was to provide social service consultation to the staff and casework services to families.
6. Medical supply companies were to provide hospital equipment.
7. Voluntary groups were to provide transportation for patients and visitors.

Source of Funds and Costs of Services. Funds for general use in the home care program were provided by various private sources, including the Community Chest, private foundations and trust funds, private agencies, and individuals. During 1952, a total of $12,650.33 was given directly to the home care plan for general use. In addition to this amount, refunds from patients for specific services totaled $311.16. A salary equivalent to the salary of one full-time public health nurse and the overhead and administrative costs of operating the home care program were paid by the sponsoring organization, the Visiting Nurse Society of Philadelphia. The value of these services, provided without direct charge to the IHCP (intensive home care plan), was estimated to be $15,956.16 for the calendar year 1952.

Funds given directly to IHCP account	$12,650.33
Refunds from patients for specific services	311.16
Total funds	12,961.49
Estimated value of services provided by Philadelphia visiting nurse society	15,956.16
Total funds and services provided	28,917.65

Costs of operating the program during 1952 charged directly to the IHCP amounted to $12,443.90. This amount did not include the costs of most of the physician visits made to home care patients, which were paid by the patients themselves or by the department of public assistance. In a very few instances the costs of physician visits were paid by the IHCP. Frequently, arrangements were made by the IHCP with other agencies to provide services for which the patient would make direct payment to the other agency. No record was kept of the costs of these services.

From available records in the program, the net expense of operating the IHCP for 1952 was derived as follows:

Cost of services charged directly to IHCP	$12, 443. 90
Less refunds from patients for specified services	311. 16
Net direct expenses	12, 132. 74
Estimated cost of services charged to visiting nurse society operating account	15, 956. 16
Total expenses (direct and indirect)	28, 088. 90
Less approximate income earned by field staff in fees from home care patients or agencies	3, 650. 00
Net expense	24, 438. 90

The larger proportion of direct services to patients provided by the field staff of the IHCP and the Visiting Nurse Society were paid for by the IHCP. Services for 24 patients, or about 28 percent, were paid completely by IHCP (exclusive of physician services.) Seventy percent received at least part of their home care services through payments made by IHCP, with the remainder being paid for by patients themselves or by third parties, such as life insurance companies, the American Cancer Society, and the department of public assistance. The details on recorded costs of providing services to patients during 1952 are shown in table 1, including costs of direct services, administration, and overhead that have been charged to the IHCP budget.

Only two patients (2 percent) paid for all services provided to them in home care (table 2). Twenty-nine patients (about 34 percent) paid for part of their services. The remaining 55 patients (64 percent) did not pay for any of their home care services (exclusive of physician services.) Of payments made in behalf of patients, two life insurance companies paid for

Table 1. Recorded costs of providing services, Philadelphia Intensive Home Care Plan, calendar year 1952

Type of service	Amount
Cost of services charged directly to IHCP account:	
Coordinator of nursing	$3, 473. 42
Physical therapist	2, 982. 92
Occupational therapist	718. 37
Secretary	1, 505. 32
Medical consultant	1, 971. 62
Speech therapists and private physicians for patients	300. 50
Housekeepers	334. 45
Medical supplies, surgical appliances, etc	342. 78
Office supplies	56. 42
Publicity	658. 10
Conference expenses	100. 00
Total direct expenses	12, 443. 90
Refunds from patients for services:	
Speech therapists	124. 50
Housekeepers	20. 00
Medical supplies, etc	166. 66
Total	311. 16
Net direct expenses	12, 132. 74
Estimated cost of services charged to VNS operating account:	
Maintenance for field staff (2½ persons): [1]	
Carfare	937. 50
Nursing supplies	250. 00
Overhead	5, 800. 00
Salary for field nurse not included in direct costs (1 full-time nurse)	3, 408. 00
Overhead for nurse coordinator and secretary	3, 480. 00
Administrative overhead for special project [2]	2, 080. 66
Total from VNS operating account	15, 956. 16
Total expenses, direct and indirect	28, 088. 90
Less approximate income through fees from home care patients [3]	3, 650. 00
Net expense	24, 438. 90

[1] Staff used for nursing, physical therapy, and occupational therapy visits.

[2] 8 percent of total Visiting Nurse Society project expense.

[3] Includes fees paid by patients and those paid in behalf of patients by insurance companies and the department of public assistance.

NOTE: The average gross cost per patient-day during 1952 was $2.07 (based on gross expense of $28,088.90 divided by 13,589 total patient-days). The average net cost per patient-day was $1.80 (based on net expense of $24,438.90 divided by total patient-days).

Table 2. Number of patients, by method of payment for services, exclusive of visits by physicians, Philadelphia Intensive Home Care Plan, calendar year 1952

Method of payment [1]	Patients	
	Number	Percent
Total	86	100
Full payment by patients or families	2	2
Part-pay by patients	29	34
Remainder paid by:		
Intensive home care plan (IHCP)	23	27
Life insurance companies and IHCP	5	6
American Cancer Society and IHCP	1	1
No payment by patients	55	64
All payments made by:		
IHCP	24	28
Life insurance companies and IHCP	16	19
American Cancer Society and IHCP	2	2
Department of Public Assistance and IHCP	13	15

[1] With very few exceptions, all fees for private physician visits are paid by the patients themselves or by the department of public assistance and are paid directly to the physician. The methods of payment for patient services indicated in this table are for all other services to patients, except physician visits.

part of the services for 21 patients, or about one-fourth of the total patients. The department of public assistance made payments for part of the services provided to 13 patients, or about 15 percent.

Operational Policies and Procedures

The Philadelphia Intensive Home Care Plan offered a combination of medical and allied services to selected persons of all age groups with long-term illness living in the Germantown area. Persons with tuberculosis and mental illness were not considered eligible for care in the home. Referrals were accepted from any individual or agency in the community, but patients were considered for care only with the consent of their private physician. Medical abstracts and social summaries were requested from private physicians and hospitals for all patients referred.

Patients were visited by the medical director and the nursing coordinator to determine suitability for care. Patients were considered eligible if they met the following broadly stated criteria:

1. The patient's needs could be met in the home.
2. The patient and family wanted the service.
3. The patient's home environment was physically suitable.
4. The patient wanted to be at home and a responsible member of the household was able and willing to provide adequate care.

Patients considered suitable for care were discussed with the patients' own physicians by the medical director. The need for services such as nursing, physical and occupational therapy, social service, and housekeeping were discussed and detailed orders for patient care were secured. Following this discussion, persons who were to be concerned with patient care met in conference to plan for instituting services.

There was interchange of information on patient care among the personnel of the program, the private physicians, and personnel of other participating agencies. The methods used included written reports, individual and group conferences, telephone calls, and case records.

An individual folder which included identifying data, medical abstracts, correspondence, monthly summary reports from private physicians, and monthly reports from personnel providing direct services was maintained for each patient. Cumulative progress notes were recorded on separate records by persons responsible for each type of service. When the patient was discharged, these notes were filed in his folder.

In addition to the initial planning conference at the time a patient was admitted to the program, periodic evaluation conferences were held to discuss patient progress and future plans. All personnel working with the patient were invited to attend these conferences.

Services to Patients

Care was provided to 86 persons during the calendar year 1952. The average monthly census was 40. The amounts and types of services are indicated in table 3. (For detailed data by diagnostic category, see table 10.)

Medical Services. Direct medical services to

Table 3. Services to 86 patients,[1] Philadelphia Intensive Home Care Plan, calendar year 1952

Type of service	Patients receiving services		Number of visits [2]	Visits per patient receiving each service	Average number of visits per total caseload
	Number	Percent			
Physician	69	80	651	9.4	7.6
Clinic	7	8	10	1.4	.1
Medical consultant	53	62	63	1.2	.7
Nursing coordinator	60	70	78	1.3	.9
Nursing	72	84	1,566	21.8	18.2
Physical therapy	58	67	1,045	18.0	12.2
Occupational therapy	32	37	283	8.8	3.3
Speech therapy	7	8	151	21.6	1.8
Casework service (Family Society)	5	6	[3]		
Housekeeping [4]	9	11	N. A.		
Hospital equipment [4]	4	5	N. A.		
Medical supplies and appliances	7	8	N. A.		

N. A.—Complete data not available.

[1] This table is based upon the total number of different patients receiving any kind of service during 1952. Some of these patients would have been on the program for the entire year and some, for at least several months during the year. Other patients would have been discharged within a short time after the start of the study year or admitted shortly before the year was ended. This latter group of patients would have received many services while on the program which would not be included in this table. For example, medical, nursing, and other services would have been given to these patients either prior to or following the study year.

[2] Or other unit of service.

[3] Units of services provided were not comparable.

[4] It is known that many additional patients received these services through arrangements made by the program. The costs were paid directly to the providing agencies by the patients themselves, thus no record of them was kept in the program.

NOTE: X-ray and laboratory services were provided to patients on the program, but data on these services were incomplete.

patients were provided by private practitioners in the Germantown area. All patients were visited by their physician sometime while on the program. Of 86 patients active on the program during the study year, 69, or 80 percent, received a total of 651 visits, or an average of 9.4 visits per patient. The remaining 17 patients, for whom no physician's visits were recorded, were probably patients discharged from the program a short time after the study year began or admitted just prior to the close of the study year.

Nursing Services. Direct nursing care was provided by the staff of the Visiting Nurse Society and the Starr Centre Association. The range of services included personal care, dressings, injections, health instruction, orthopedic nursing, and teaching members of the family how to care for the patient. A total of 1,566 visits were made to 72 patients during the study year, an average of 21.7 visits per patient who received nursing care.

Physical Therapy. Physical therapy was provided by registered physical therapists on the staff of the Visiting Nurse Society. The services included such procedures as corrective exercises, massage, lamp treatments, wax therapy, and crutch walking. A total of 1,045 visits were made to 58 patients during the study year. This amounted to an average of 18.0 visits to each patient receiving this service.

Occupational Therapy. Occupational therapy was provided by therapists on the staff of the Visiting Nurse Society. A total of 283 visits were made to 32 patients during 1952. This amounted to an average of 8.8 visits to each patient receiving the service.

Speech Therapy. Speech therapy was provided by a private therapist to 7 patients, who received 151 visits (an average of 21.6 visits per patient receiving the service).

Social Services. The Family Service Society (Germantown office) provided casework service to five families of home care patients. The service was centered primarily around problems created within families by the patient's presence in the home. In addition, a caseworker from the Family Society served in a consultant

capacity to the home care staff on nine cases.

In addition, consultation on special problems was provided to staff nurses by the mental hygiene consultant (nurse) on the staff of the visiting nurse society.

Other Services. Housekeeping services, hospital equipment, drugs, medical supplies, and appliances were supplied in a limited number of instances through the program. The figures shown in table 3 do not include the patients who may have secured these services through their own resources or from other agencies in the community.

Data on X-ray and laboratory services provided to patients were very incomplete, since no record was kept of these services when they were arranged for by the patients themselves.

Characteristics of Patients

About 46 percent of the total 86 patients served during 1952 had been referred for service by the Visiting Nurse Society or by the Starr Centre Association, another health agency, (table 4). Private physicians accounted for 31 percent of the referrals during the year. Hospitals referred about 17 percent and the remainder came from other agencies and institutions.

Of the 48 patients newly admitted for service during 1952, about 52 percent had been referred by nursing agencies, with an accompanying decrease in the proportionate numbers referred by private physicians and hospitals.

Table 4. Source of referrals of patients, Philadelphia Intensive Home Care Plan, calendar year 1952

Source of referrals	Total patients served		New admissions during year	
	Number	Percent	Number	Percent
Total	86	100	48	100
Visiting Nurse Society	28	32	20	42
Starr Centre Association [1]	11	13	5	10
Private physicians	27	31	14	29
Germantown Hospital [2]	11	13	5	10
Other hospitals	4	5	1	2
Other agencies and institutions	5	6	3	7

[1] A health and nursing agency.
[2] Most of these referrals came from the social service department of the Germantown Hospital.

Table 5. Patients receiving home care services, by age and sex, Philadelphia Intensive Home Care Plan, calendar year 1952

Age (years)	Sex					
	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	86	100	22	100	64	100
Under 15	0	0	0	0	0	0
15–44	15	18	2	9	13	21
45–64	30	35	8	36	22	35
65 and over	40	47	12	55	28	44
Unknown	1	(1)	-----	(1)	1	(1)

[1] Percentages are computed exclusive of patients whose ages are unknown.

NOTE: Median age for both sexes, 62 years; for females, 61 years; for males, 67 years.

Age, Sex, and Diagnosis. Of 86 patients receiving home care services on the program during the calendar year 1952, 70, or about 82 percent, were 45 years of age or older (table 5). Forty-seven percent were 65 years of age or older, and there were no patients under 15 years. Almost three-fourths of the patients were females.

Vascular lesions affecting the central nervous system, arthritis, and accidents ranked first, second, and third, respectively, as the primary diagnostic categories for which patients were given care during 1952 (table 6). Together these three categories accounted for 67 percent of all patients. Vascular lesions were the primary diagnosis of 32 patients, or about 37 percent of the total. Arthritis was the primary condition being treated in 14 patients, or 16 percent. Of this number, 13 patients were ill with rheumatoid arthritis and 1, with osteoarthritis. Of the 12 patients with accidental injuries, 11 had fractures of the hip, pelvis, or lower extremities, and 1 patient was suffering from paralysis due to electric shock. Diseases of the central nervous system, exclusive of vascular lesions, comprised the fourth largest disease group. Nine patients on home care were in this category.

Length of Patient Stay. During the study

year 1952, the 86 patients on the home care program received 13,589 days of care, an average of 158 days, or almost 23 weeks per patient (table 7). Interim stays in the hospital of some of these patients were not included in the above figures.

Many of the 86 patients who received services during 1952 had been on the program before and remained after the study year. Their entire length of stay up to the date of the study was 26,002 days, or an average of 302 days per patient. Thirteen of these patients, or 15 per-

Table 6. Patients receiving home care services, Philadelphia Intensive Home Care Plan, by diagnostic category, calendar year 1952

Primary diagnostic category [1]	Patients receiving services	
	Number	Percent
Total	86	100
Heart disease (410–443)	2	2
Vascular lesions affecting central nervous system (330–334)	32	37
Other cardiovascular disease (400–402, 444–468, 754)	2	2
Malignant neoplasms (140–205)	6	7
Diabetes mellitus (260)	4	5
Diseases of central nervous system (except vascular lesions) (340–357, 751)	9	11
Arthritis (720–727)	[2] 14	16
Accidents (N800–N999)	[3] 12	14
All other specified diseases (residual)	[4] 5	6

[1] Includes only the primary diagnosis for which each patient was receiving services. Figures in parentheses are Sixth Revision, International List numbers.

[2] Includes 13 patients with rheumatoid arthritis and one with osteoarthritis.

[3] Includes 11 patients with fractures of the hip, pelvis, or lower extremities, and 1 patient with paralysis.

[4] Includes 1 patient in each of the following disease categories: disease of the respiratory system, digestive system disease, skin disease, disease of the bones or other organs of movement, disease of the genitourinary system.

Table 7. Length of stay on program, patients served during Philadelphia Intensive Home Care Plan, calendar year 1952

Period on program	Number of patients	Number of days	Average number of days per patient
During study year 1952 [1]	86	13, 589	158
For entire time on program, up through April 15, 1953 [1] [2]	86	26, 002	302
Interim periods spent in hospital during entire time on program	13	635	49

[1] Does not include interim days spent in the hospital.

[2] The date of the field study of this program.

Table 8. Discharges of patients from home care, by reason for discharge, Philadelphia Intensive Home Care Plan, calendar year 1952

Reason for discharge	Number	Percent
Total	54	100
No further need for home care	34	63
Referred to other agency or institution	12	22
Death of patient	4	7
Moved from area served	1	2
Service refused (by physicians or patient)	3	6

NOTE: This table does not include patients who were admitted to the hospital for a temporary stay and later returned to the home care program. In this program, patients admitted to the hospital for interim periods are not considered as discharged. During 1952, 8 patients spent interim periods in the hospital totaling 292 days, or an average of 37 days per patient. One patient was discharged to a nursing home during the year and later readmitted to the program. There were no other readmissions during 1952.

Table 9. Patients admitted to home care, Philadelphia Intensive Home Care Program, April 1949–December 1952

Calendar year	New admissions	Total patients on program	Average monthly census [1]
Total	177	----	----
April–December 1949	19	19	8
1950	52	64	23
1951	58	97	38
1952	[2] 48	[3] 91	40

[1] As of end of each month.

[2] Does not include 1 patient readmitted to the program.

[3] This total differs from the figure for number of patients in 1952 shown elsewhere in this report. All other tables in the report were based on the 86 patients actually receiving some kind of services during 1952. In this table, the figure for total patients includes those patients who did not receive service but who were in the hospital for interim periods and who were expected to be returned to home care, and who thus were not discharged from the program.

Table 10. Types and number of services provided to patients, by diagnostic category, Philadelphia Intensive Home Care Plan, calendar year 1952

Primary diagnostic category [1]	Total patients receiving any services	Type of visit								Conferences [2]
		Physician	Clinic	Medical consultant	Nurse coordinator	Nursing	Physical therapy	Occupational therapy	Speech therapy	
	Number									
All diagnoses	86	651	10	63	78	1,566	1,045	283	151	53
Heart disease (410–443)	2	43	------	2	2	31	--------	--------	--------	------
Vascular lesions affecting central nervous system (330–334)	32	236	------	27	31	306	485	77	144	16
Other cardiovascular disease (400–402, 444–468, 754)	2	9	------	3	3	42	30	21	--------	2
Malignant neoplasms (140–205)	6	94	2	2	4	253	78	--------	--------	------
Diabetes mellitus (260)	4	25	1	2	3	20	59	2	--------	2
Diseases of central nervous system (except vascular lesions) (340–357, 751)	9	43	------	4	5	226	48	43	7	5
Arthritis (720–727)	14	126	6	9	13	468	226	114	--------	15
Accidents (N800–N999)	12	43	1	8	11	166	99	19	--------	7
All other specified diseases (residual)	5	32	------	6	6	54	20	7	--------	6
	Percent									
Heart disease (410–443)	2	7	------	3	2	2	--------	--------	--------	------
Vascular lesions affecting central nervous system (330–334)	37	36	------	43	40	20	46	27	95	30
Other cardiovascular disease (400–402, 444–468, 754)	2	1	------	5	4	3	3	7	--------	4
Malignant neoplasms (140–205)	7	14	20	3	5	16	7	--------	--------	------
Diabetes mellitus (260)	5	4	10	3	4	1	6	1	--------	4
Diseases of central nervous system (except vascular lesions) (340–357, 751)	11	7	------	6	6	14	5	15	5	10
Arthritis (720–727)	16	19	60	14	17	30	22	40	--------	28
Accidents (N800–N999)	14	7	10	13	14	11	9	7	--------	13
All other specified diseases (residual)	6	5	------	10	8	3	2	3	--------	11

cent, spent interim periods in the hospital and then returned to the home care program for further care. Altogether, these patients spent 635 days in the hospital for interim stays, or an average of about 49 hospital days per patient.

Of the 54 patients discharged during 1952, 34 (about 63 percent) were discharged because they had no further need for the specialized services of home care (table 8). Twenty-four of the patients in this group were able to resume activities of daily living under the supervision of their private physicians, while 10 patients required some additional care either from their families or from the Visiting Nurse Society. Other reasons for discharge of patients were as follows: 12 patients, or about 22 percent, were referred to institutions or other agencies for further care; 4 patients died while on home care; 1 patient moved from the home care area, and 3 refused the services of home care.

In this program, patients admitted to the hospital for interim periods and later returned to home care are not considered as discharged. During 1952, 8 patients spent interim periods,

Table 10. Types and number of services provided to patients, by diagnostic category, Philadelphia Intensive Home Care Plan, calendar year 1952—Continued

Primary diagnostic category [1]	Total patients receiving any services	Type of visit								Conferences [2]
		Physician	Clinic	Medical consultant	Nurse coordinator	Nursing	Physical therapy	Occupational therapy	Speech therapy	
	Average number per patient									
All diagnoses		7.6	[3]	[3]	[3]	18.2	12.2	3.3	1.8	[3]
Heart disease (410–443)		21.5				15.5				
Vascular lesions affecting central nervous system (330–334)		7.4				9.6	15.2	2.4	4.5	
Other cardiovascular disease (400–402, 444–468, 754)		4.5				21.0	15.0	10.5		
Malignant neoplasms (140–205)		15.7				42.2	13.0			
Diabetes mellitus (260)		6.2				5.0	14.8	0.5		
Diseases of central nervous system (except vascular lesions) (340–357, 751)		4.8				25.1	5.3	4.8	0.8	
Arthritis (720–727)		9.0				33.4	16.1	8.1		
Accidents (N800–N999)		3.6				13.8	8.2	1.6		
All other specified diseases (residual)		6.4				10.8	4.0	1.4		

[1] Only the primary diagnosis for which each patient was receiving services is used. Numbers in parenthese are Sixth Revision, International List numbers.

[2] Includes evaluation, family service, mental health, nutrition, occupational therapy, and physical therapy conferences.

[3] The number of these services was too small to be figured on a per patient basis.

totaling 292 days, in the hospital, an average of 37 days per patient.

Developments Within the Program

Services expanded greatly in the first 4 years of operation of the program. As the home care census increased, the time of the nursing coordinator was increased from half to full time. The staff of the Visiting Nurse Society was increased to allow the time of one full-time physical therapist and a half-time occupational therapist to provide additional services to home care patients. In 1952, a private speech therapist was obtained. Projected plans included changing the name from the Philadelphia Intensive Home Care Plan to the Philadelphia Home Care Program, and an arrangement with the Jewish Family Service to provide casework services to Jewish patients.

By December 1952, 177 different patients had been admitted to home care since the program's beginning in 1949 (table 9). Although only 19 patients were on the program during 1949, by 1951 there were 97 patients.

In February 1953 staff was being obtained to extend the program to West Philadelphia, which has a population of 350,000 persons.

Collection of Data

A number of different records pertaining to home care patients and services were kept in this program. Patient record folders were filed separately for active and inactive patients. These folders contained identifying data, requests for services, and detailed reports of various services provided to patients, including private physician services. The activity file for active and inactive cases contained summary data on services provided to patients. Other records pertaining to patient services kept in the program included daily reports of visiting

nurses and physical therapists, daily call slips, authorizations for payment for specified services, a file of participating private physicians, and a patient logbook kept for each diagnosis.

A monthly statistical report was compiled in the program showing a total number of patients under care during month, admissions, discharges, and amount of services. A summary was made each month of services provided to each patient and entered on the patient activity record. A cumulative summary was kept of the number of patients, by diagnosis for which they were receiving different types of services.

Since this home care program provided services to a relatively small number of patients, data were abstracted for all patients receiving services during the calendar year 1952. These data were readily obtainable from the activity file of patients. Supplementary information on housekeeping services, speech therapy, hospital equipment, and appliances was obtained from payment records. Data were not obtainable from the program records for X-ray and laboratory services and for the total referrals and reasons for rejection of patients. Certain allied services, including equipment and supplies paid for by the patients were obtained through arrangements with other agencies. No record of these services was kept by the program.

King County Hospital Extension Service

Seattle, Wash.

Origin of the Program

In the Seattle-King County area, the King County Hospital System provides hospitalization to the indigent and medically indigent. In July 1952, on the recommendation of the Seattle Health and Welfare Council, the King County Hospital Extension Service was begun, with the following specific objectives:

1. To provide better medical care for the chronically ill in the community.
2. To achieve greater spread of the tax dollar.
3. To provide practical educational experience for medical and nursing students.

Services available to patients in their homes included medical, nursing, and social services. Medications and medical supplies, laboratory tests, orthopedic appliances, hospital equipment, transportation, and home teaching were furnished when necessary.

The home care program was financed by the State department of health, the agency that has the legal administrative responsibility for providing medical, dental, and allied services to the indigent and medically indigent in the State of Washington.

Program July 1952–April 1953

The information contained in this section of the report relates to the first 10 months of operation, July 1, 1952–April 30, 1953. Statistical data were abstracted for each patient from patient card files kept in the program. Additional information was obtained from statistics already compiled by the program. Cost data were taken directly from the program accounting records.

Administration

The responsibility for the administration of the program was delegated by the general superintendent of the hospital to the medical director of the hospital, who devoted approximately half time to the program. In addition to the director, the staff consisted of a part-time coordinator of nursing, two medical social workers, and a secretary. Medical care was provided to patients by fourth-year medical students from the University of Washington School of Medicine, under the supervision of the director of the hospital extension service.

The coordinator of nursing devoted approximately three-fourths time to the program and participated in program planning and policy formulation, in the selection and evaluation of patients for home care, and in medical education through informal, individual conferences and participation in case discussions. She was responsible for the nursing evaluation of the suitability of patients for home care and the coordination of the nursing aspects of patient care. Approximately one-quarter of her time was spent on teaching activities for the University of Washington.

The two medical social workers (one employed in August 1952, the other in January 1953), participated in overall program planning and policy formulation, developed relationships with community social agencies, made social evaluations on all patients referred, and provided casework services to patients and their families. In addition, through formal and informal discussions, they participated in the educational programs for medical students.

A car was owned and maintained by the hospital extension service for staff transportation.

Arrangements were made with other departments within the hospital to provide the following services to patients:

Medical consultant services in the outpatient department by the staff of the King County Hospital.

Medications listed in the hospital formulary, through the hospital pharmacy, at cost.

Medical supplies through the hospital central supply at cost.

Laboratory and other diagnostic tests processed in the hospital laboratory.

Hospital equipment and sickroom supplies through the hospital supply room.

Ambulance transportation by the hospital.

Arrangements were made with the Combined Nursing Services of the Seattle-King County Department of Public Health and the Visiting Nurse Service to provide nursing care to patients in their homes and to submit monthly progress reports on individual patients. Services were to be provided at a rate of $3 per visit.

Arrangements were made with the Seattle school system to provide home teaching for children on an individual basis.

Source of Funds and Costs of Services. According to available figures, $20,798.98 was spent by the program during the first 10 months of operation. Details for the recorded cost items are shown in table 1. The largest single item was salary expense, which accounted for more than 58 percent of the total costs shown. It should be noted that these figures do not include laboratory tests, X-rays, physical therapy, and such overhead expenses as utilities, telephone, and space, all of which were provided by the King County Hospital.

Table 1. Recorded costs of services provided by the King County Hospital Extension Service, July 1952–April 1953

Type of service	Cost
Total	$20, 798. 98
Salaries [1]	12, 044. 69
Special services [2]	3, 081. 25
Medical supplies and drugs [3]	375. 50
Hospital equipment and appliances [3]	788. 05
Transportation [4]	286. 33
Automotive equipment [5]	1, 678. 92
Office supplies and equipment	2, 544. 24

[1] Includes monthly salaries of the following personnel: medical director (half time), $500; chief medical social worker (from August 1952), $345; medical social worker (from January 1953), $340; stenographer, $235; and nurse (part time), $250.

[2] Virtually all of this expense was for visiting nurses at $3 per visit.

[3] These services were supplied at cost by the hospital.

[4] Includes transportation of patients by ambulance and cab; mileage allowance for the medical director's car averages about $17 per month; and gasoline for 1 hospital car averages about $12 per month.

[5] Purchase of car for the medical director.

It must be remembered that the cash expenditures by the program had not stabilized, since it had been in operation for less than a year at the time of study. This was reflected in the figures showing cost per patient-days' stay. For the first 6 months, July–December 1952, the average cost to the program per patient-day was $2.75. For the next 4 months, January–April 1953, because of an increase in the number of patients served, the average cost per patient-day had fallen to $1.33. The cost per patient-day paid out of county hospital funds averaged $1.93 for the 10 months.

Operational Policies and Procedures

The policy of the hospital extension service was to provide care to selected indigent and medically indigent patients living in Seattle and referred from the wards of the King County Hospital. Persons whose incomes were no larger than the established budgets of the department of welfare were considered to be medically indigent.

With the exception of active pulmonary tuberculosis and severe neurotic syndromes, patients with chronic diseases were eligible for care. Patients were not accepted for care in the home until a diagnosis and plan for treatment had been made.

Patients who were considered by the ward personnel as possible candidates for home care were referred to the home care department, where a medical, nursing, and social evaluation was begun. Medical suitability was determined by the director of the program.

All patients considered medically suitable for home care were referred to the nursing and social service staff for evaluations.

Criteria for Service. Patients were considered suitable for home care if they met certain criteria outlined by the staff of the program.

The medical criteria were:

1. Patient did not regularly require more than one visit a week by a physician.

2. Patient did not require intravenous injections, oxygen therapy, or other procedures, which, in the opinion of the director, were more appropriately performed in the hospital.

The nursing criteria were:

1. The physical environment of the home was such that the patient could receive adequate care.

2. The necessary sickroom supplies and equipment were available and procurable.

3. The patient was willing to go home and there was a responsible member of the household who could be taught to provide the necessary care and who was willing to assume this responsibility.

Criteria for eligibility for social service were:

1. The patient was medically indigent and lived in Seattle. (Financial information supplied by hospital business office.)

2. The patient had a home in which to receive care.

3. The patient wished to be cared for at home and the family attitudes and relationships were such that they were conducive to the patient's welfare.

4. If necessary, there was a person capable of assuming responsibility for the patient.

Following the individual evaluations, a joint decision was made to accept or reject the patient for care in the home, and appropriate hospital personnel were notified of the decision. When services of community agencies were required, the case was referred by telephone and later confirmed in writing. There was interchange of information on patient care between members of the home care staff and personnel of other agencies. Methods used included records and written reports, telephone calls, informal conferences, scheduled staff conferences, and case conferences.

Records. An individual cumulative case record was maintained for each patient. This record included a medical abstract from the hospital record, progress notes by the physician and summary reports and correspondence from community agencies participating in patient care. Social service records in summary form were maintained in a separate file.

Conferences. Formal staff conferences were scheduled every week to discuss problems, evolve policy, and plan for patient care. Staff from other agencies providing care to patients were invited to attend conferences at which patient care plans were discussed.

Services to Patients

According to records kept in the program, services were provided to 101 different patients during the first 10 months of operation of the program. This figure does not include three patients who were accepted for care but who did not actually receive any home care services during the period. Two of these patients were admitted for a day or two, and were then transferred back to the hospital. One patient was admitted 2 days before the end of the period, but no services were provided during that time. The recorded amounts and types of services provided to patients by the program during the 10-month period are shown in table 2. Detailed data on services provided by diagnostic category are given in table 3.

Medical Services. Physician services to patients in the home were provided by fourth-year medical students from the University of Washington School of Medicine under the supervision of the director of the program. The range of services included followup physical examinations, administration of medications, and collection of blood for routine laboratory tests. Patients requiring medical consultation and more complicated diagnostic or therapeutic procedures were brought into the outpatient department or were transferred back to the hospital. A total of 1,108 visits were made to the 101 patients during the 10-month period—an average of 11 visits per patient. Based on the average length of stay of 107 days during the period, patients were visited by the physician on an average of about once every 10 days.

Nursing Services. Direct nursing care to patients was provided under the direction of the Combined Nursing Services of the Seattle-King County Department of Public Health and the Visiting Nurse Service. The services included such procedures as dressings, injections, irrigations, personal care, health instruction, and teaching members of the household how to care for the patient. Sixty-six patients, or 65

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Table 2. Services to patients, King County Hospital Extension Service, July 1952–April 1953

Type of service	Patients receiving services		Number of visits	Average number of visits —	
	Number	Percent		Per patient receiving each service	Per total caseload
Total patients receiving any service [1]	101	100			
Physician	101	100	1,108	11.0	11.0
Nursing	66	65	1,087	16.5	10.8
Medical social service [2]	12	12	[3]		
Clinic [4]	11	11	22	2.0	.2
Laboratory	31	31	[3]		
X-rays	2	2	N. A.		
Medications and medical supplies	90	89	[3]		
Hospital equipment	6	6	[3]		
Appliances	4	4	[3]		
Visiting teaching	1	1	N. A.		
Ambulance or cab	44	44	N. A.		

N. A. Complete data not available.

[1] Does not include 3 patients who were accepted for care, but to whom no home care service was actually provided during the period. Two of these patients were admitted for 1 or 2 days, then were transferred to the hospital. 1 patient was admitted 2 days before the end of the period, but no services were provided during that time.

[2] This figure includes patients who were visited in the home after they had been accepted on the program. All patients received social service during the evaluation, prior to acceptance.

[3] The amounts of these services were not obtained since the variation in the units of service was too great for comparability.

[4] Includes visits to medical specialists in the clinic and physical therapy services.

NOTE: Only those services to patients that were recorded on patient summary cards kept by the program are shown in this table.

percent of the total served by the program during the first 10 months of operation, received 1,087 visits, or an average of 16.5 visits per patient.

Social Services. Medical social services were provided by the two social workers on the home care staff. The range of services included evaluation of social suitability for home care, referral to community agencies, and direct services to patients and families. All of the patients were evaluated for social suitability and, in addition, 12 patients, or 12 percent of the total, received home visits following their acceptance on the program. Direct casework service was provided in situations in which emotional problems centered around the patient's illness and care in the home. In addition to the 12 percent of the patients receiving casework service, an unrecorded number of contacts were made with community agencies and with relatives and friends of patients in behalf of the patients.

Other Services. Medical consultation, physical therapy, X-rays, laboratory tests, medications and medical supplies, and hospital equipment were provided as needed by the hospital. The types and amounts of these services are shown in table 2.

Characteristics of Patients

Age, Sex, and Diagnosis. Of the total 101 patients, 40 percent were males (table 4). Only 4 patients were under 15 years of age; 84 were 45 years of age or older, and 66 of these had passed the 65-year mark.

Heart disease, accidents, and malignant neoplasms ranked first, second, and third, respectively, as the primary diagnoses for which patients received services (table 5). These three disease categories together accounted for about 52 percent of all patients served. There were 21 patients with heart disease. Seventeen patients had accidental injuries, of which 12

Table 3. Amount of various services provided, by diagnostic category, King County Hospital Extension Service, July 1952–April 1953

Primary diagnostic category [1]	Total patients receiving any service	Type of visit		
		Physician	Nursing	Clinic
	Number			
All diagnoses	101	1,108	1,087	22
Heart disease (410–443)	21	224	179	12
Vascular lesions affecting central nervous system (330–334)	11	120	219	3
Other cardiovascular disease (400–402, 444–468, 754)	7	57	38	------
Malignant neoplasms (140–205)	14	107	112	------
Diabetes mellitus (260)	10	159	170	2
Arthritis (720–727)	7	107	87	------
Accidents (N800–N899)	17	160	109	5
All other diseases	14	174	173	------
	Percent			
Heart disease	21	20	17	55
Vascular lesions affecting central nervous system	11	11	20	13
Other cardiovascular disease	7	5	3	------
Malignant neoplasms	14	10	10	------
Diabetes mellitus	10	14	16	9
Arthritis	7	10	8	------
Accidents	17	14	10	23
All other diseases	13	16	16	------
	Average number per patient			
All diagnoses	------	11.0	10.8	0.2
Heart disease	------	10.7	8.5	.6
Vascular lesions affecting central nervous system	------	10.9	19.9	.3
Other cardiovascular disease	------	8.1	5.4	------
Malignant neoplasms	------	7.6	8.0	------
Diabetes mellitus	------	15.9	17.0	.2
Arthritis	------	15.3	12.4	------
Accidents	------	9.4	6.4	.3
All other diseases	------	12.4	12.4	------

[1] Primary diagnosis only is shown for each patient. Figures in parentheses are Sixth Revision, International List numbers.

were fracture cases. Malignant neoplasms were the primary illnesses of 14 patients.

The fourth highest group of diagnoses was vascular lesions affecting the central nervous system. Eleven patients were being treated in this diagnostic group. In fifth place, diabetes mellitus accounted for the diagnoses of 10 patients. These 5 major disease categories accounted for 73 percent of the patients served.

Of the 101 total patients served during the 10-month period, 72, or 71 percent, were receiving public assistance payments from the welfare department.

Table 4. Patients receiving services, by age and sex, King County Hospital Extension Service, July 1952–April 1953

Age (years)	Sex					
	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	101	100	40	100	61	100
Under 15	4	4	2	5	2	3
15–44	13	13	3	7	10	16
45–64	18	18	9	23	9	15
65 and over	66	65	26	65	40	66

NOTE: Median age for both sexes, 68.0 years; for females, 70.0 years; for males, 66.5 years.

Length of Patient Stay. Since the program had been in operation for only 10 months at the date of study, all patients were newly admitted during the period and their lengths of stay would therefore be less than if the program had been in operation longer. The 101 patients received 10,792 patient-days of care. (This does not include the stay for the 3 patients who were accepted for home care but received no services during the study period.)

The average length of stay of the 101 patients was 107 days during the 10-month period. About 40 percent of the patients were on the program for more than 120 days, or more than 4 months (table 6). About 70 percent remained on home care for at least 61 days or more.

Referrals and Discharges. All patients referred to the program were patients on the King County Hospital wards. During the 10-month period, 332 patients had been evaluated for hospital extension service with the following results:

	Number	*Percent*
Total patients screened	332	100
Patients accepted	[1] 104	31
Patients rejected	217	66
Special problems, pending	11	3

[1] Includes 3 patients who did not receive any services during the period.

Slightly less than one-third of the patients screened were accepted for home care.

A special study of the reasons for rejection of patients was done by the program's social service personnel. A 50-percent random sample was selected from the total patients rejected during the first 10 months of operation plus those still pending at the end of the period. Of 114 patients in the sample, 44 percent were rejected due to program policy on eligibility: 23 patients needed housekeeping service, which was not provided by the program; 20 patients lived outside the geographic limits of the program; and 7 patients were financially ineligible (table 7). Social reasons accounted for 26 percent of the total, or 30 patients. Twenty-one of the rejections in this group were due to the family or the patient being unwilling or unable to accept home care. In seven of these cases the homes were unsuitable, and in two, the patients themselves were unsuitable because of severe emotional problems. Fifteen patients, or 13 percent, were rejected because their medical condition changed after the time of referral. Nineteen patients, or 17 percent of the total, preferred other types of medical care to the home care plan.

To obtain data on the total patients removed from home care for any reason during the 10-month period of program operation, transfers of patients back to the King County Hospital must be included with discharges from the program. During the study period, 48 patients were either transferred back to the King County Hospital wards or discharged at least once.

Fifteen patients were removed from home care two or more times during the period. Altogether there were 67 transfers or discharges (table 8).

Thirty patients were transferred back to the hospital 41 different times. This comprised 61 percent of the total times that patients were removed from home care during the period.

Table 5. Patients receiving services, by primary diagnosis, King County Hospital Extension Service, July 1952–April 1953

Primary diagnostic category[1]	Patients served	
	Number	Percent
Total	101	100
Heart disease (410–443)	21	21
Arteriosclerotic heart disease and coronary disease (420)	8	8
Rheumatic heart disease (410–416)	5	5
Other heart disease (421–443)	8	8
Vascular lesions affecting central nervous system (330–334)	11	11
Other cardiovascular diseases	7	7
Rheumatic fever (400–402)	2	2
Other diseases of circulatory system (444–468, 754)	5	5
Malignant neoplasms (140–205)	14	14
Diabetes mellitus (260)	10	10
Arthritis [2] (720–727)	7	7
Accidents [3] (N800–N999)	17	17
All other diseases	14	13
Tuberculosis (nonrespiratory) (010–019)	1	1
Allergic, endocrine system, and metabolic disease (240–254, 270–289)	2	2
Disease of central nervous system (except vascular lesions) (340–357, 751)	1	1
Diseases of respiratory system (470–527)	3	3
Diseases of digestive system (530–587, 756)	2	2
All other diseases (residual)	5	4

[1] Figures in parentheses are Sixth Revision, International List numbers.

[2] Includes 5 patients with rheumatoid arthritis and two with other forms of arthritis.

[3] Includes 12 patients with fractures and 5 with other forms of injury.

NOTE: The diagnoses for the 4 children under 15 years of age on the program were as follows: 2 with rheumatic fever, 1 with congenital heart disease, and 1 newborn infant whose invalid mother was also on home care.

Table 6. Patients receiving services, by length of stay, King County Hospital Extension Service, July 1952–April 1953

Length of stay (days)	Patients served	
	Number	Percent
Total	101	100
1–60	30	30
61–120	30	30
121–180	17	17
181–240	23	22
241 and over	1	1

These patients became too ill for home care, needed special procedures done in the hospital, or their home situation warranted transfer to the wards. In many instances, these patients were transferred to home care again after a short interim in the hospital.

Other important reasons for discontinuation of home care were discharges of patients to the outpatient department or to private physicians. Nine discharges made to outpatient departments and seven made to private physicians comprise 24 percent of all removals of patients from home care. With the exception of those patients who moved outside the area served by the program or who died at home, only about 10 percent of the discontinuations of patients from home care occurred without provision being made for further care.

Since the program was new, data on discharges are not representative of what would happen after the program had been in operation for a longer time.

Table 7. Reasons for rejection of patients in sample,[1] King County Hospital Extension Service, July 1952–April 1953

Reasons for rejection	Patients rejected	
	Number	Percent
Total patients in sample	114	100
Patient needed housekeeping or attendant service	23	20
Patient lived outside geographic limits of program	20	18
Patient found financially ineligible for care	7	6
Patient or family unwilling or unable to accept	21	18
Home condition unsuitable for required care	7	6
Patient had severe emotional problems	2	2
Medical condition changed (improved, regressed)	15	13
Patient preferred other medical care	19	17

[1] A random 50-percent sample of patients evaluated and rejected during the period or still pending at the end of the period.

Table 8. Transfers or discharges of patients from home care, King County Hospital Extension Service, July 1952–April 1953

Reason for discharge or transfer	Discharges or transfers	
	Number	Percent
Total	67	100
Transferred to hospital	41	61
Discharged to outpatient department	9	14
Discharged to private physician	7	10
Died	2	3
Dropped [1]	2	3
Moved	1	2
Reason for discharge not recorded	5	7

[1] Patients discharged because of lack of cooperation on the part of the patient or family, or for other reasons.

NOTE: 48 patients were removed from home care at least once during the period; 15 of these patients were removed 2 or more times.

Home Care and Professional Education

Since its inception, the hospital extension service has been used for the education of fourth-year medical students at the University of Washington School of Medicine and for selected nursing students who were candidates for the bachelor and master degrees at the University of Washington.

Medical Education

The 74 students in the fourth-year class participated in the program. The educational program was established with the following objectives:

1. To develop a home call technique.
2. To learn by actual observation the course of one or more chronic diseases.
3. To learn the interplay of physical and emotional factors in disease.

4. To learn about the work of various community agencies.

Each student was assigned a patient whom he followed throughout the year. The students were responsible for furnishing physician service in the home. They made periodic visits and were also available for home visits at all times upon request of patients. Approximately 2 hours per week were spent by each student on the home care program.

The students, with the approval of the medical director of the program, were also responsible for referrals for other kinds of service. Prescriptions for drugs were countersigned by the medical director.

The medical director, who supervised student activities, was also clinical associate professor of medicine at the University of Washington School of Medicine. Supervisory methods included individual conferences after student visits, and visits by the medical director to patients' homes unaccompanied by the students. These visits were made periodically to check on the status of patients, as judged necessary from student reports on the patient's condition.

In addition to conferences with the medical director, the students discussed the care of individual patients with the public health nurse and the social workers at frequent intervals. The medical director met the students as a class four times a year to discuss home care.

Approximately a third of the students used the information on their home care patients for social case study reports, a number of which were selected for presentation to the whole class as part of the course in public health.

Nursing Education

During the first 10 months of operation, nursing educational experience in the home care program was limited to two selected nursing students from the University of Washington. One student for the bachelor's degree, who was interested in chronic illness, spent 4 hours weekly for 11 weeks observing and participating in planning for the care of patients in the wards of the King County Hospital and in the home care program.

Another student observed in the home care program as a part of a research project for her thesis for her master's degree.

The coordinator of nursing, who was adviser to these two students, planned for the observation, for conferences with the medical social workers and physicians, and for the students' participation in program activities. The educational experience of these students was to be evaluated by the faculty of the University of Washington department of nursing education and the coordinator of nursing, and plans for extension of field work experience were to be dependent on this evaluation.

Developments Within the Program

The program began operation in July 1952 with a staff composed of the director, a coordinator of nursing, and a secretary. Two medical social workers were added, one in August 1952 and one in January 1953. Projected plans at the time of the study included the addition of a full-time medical assistant to the director, another medical social worker, and a secretary.

The director hoped that the range of service might be expanded in the near future to include physical therapy in the home.

Since the program had only been in operation for about 10 months at the time of the study, the general characteristics as portrayed by quantitative data were not yet stabilized. A picture of the growth of the program during its first 10 months of operation is readily demonstrated by the following monthly data showing the number of patient-days:

Month:	*1952*	*Number of patient days*
July		29
August		258
September		617
October		979
November		1, 291
December		1, 370
	1953	
January		1, 344
February		1, 380
March		1, 740
April		1, 784
Total		10, 792

Collection of Data

A visible card file contained identifying data on patients, diagnoses, admission and discharge dates, visits, and other service data. Cards for patients were filed in the following categories: active patients, readmissions to the hospital, discharged patients, deceased patients, and candidates for hospital extension service. Patient record folders were kept in separate files for active and for inactive patients. Each folder contained detailed reports from the physicians who visited patients, as well as records of nursing referrals and orders. A rejection file showed reasons for rejection of each patient. Separate bill files were kept on a monthly basis for nursing service, drugs, hospital equipment, and appliances.

A weekly census list of patients on the hospital extension service was routinely compiled by program personnel. A monthly statistical report showed the number of patients on home care, admissions, discharges, patient days, and total amounts of various services provided to patients. At the time of the study, the medical social workers were making a special study of the total costs of care, by diagnostic group, for all discharged patients.

Since the hospital extension service was relatively small, it was decided to abstract information for each patient served. The data were readily obtainable from the visible card files on patients, with supplementary information obtained from other files and from the routine reports in the program. Because it was felt advisable to obtain data on patients and services for as long a period as possible, abstracts of patient records were made covering the period July 17, 1952–April 30, 1953. Since the hospital extension service was in process of growth during this period, the information obtained, particularly on costs and services, would not be representative of data obtained after the program had been in operation for a year or two.

University of Vermont Home Care Program

Burlington, Vt.

Origin of the Program

The University of Vermont Home Care Program was established in 1925 by Dr. J. N. Jenne, dean of the College of Medicine at the University of Vermont. Services to patients began in 1927. The purposes of the program were to provide free care in the dispensary and at home to indigent and medically indigent residents of the city of Burlington, and to expand the clinical facilities available for the teaching of fourth-year medical students.

Through an agreement between the City of Burlington and the College of Medicine, the responsibility for the administration and operation of the program was delegated to the university. From its beginning, the program was jointly financed by the city and the university. Services available to patients at the dispensary included medical, surgical, pediatric, dermatology and allergy, and mental health. Services provided in the home included physician's services and, through community agencies, nursing services and limited social services upon request from the physician. Medications and medical supplies were available in limited amounts.

Program 1951–52

This section of the report covers services provided in the home during the fiscal year July 1, 1951–June 30, 1952. No attempt will be made to describe the clinic program. Statistics and cost data were obtained from figures compiled by the program and from a 5-percent sample of physician's home visits during the year.

Administration

The responsibility for the administration and operation of the program was vested in the assistant dean of the College of Medicine. He devoted approximately one-tenth of his time to the home medical service and was responsible for the quality of medical care provided to patients and for the teaching aspects of the program. Direct medical services to patients were provided by a resident from the Mary Fletcher Hospital, one of the teaching hospitals of the College of Medicine. This resident was assigned full time to the home care service. The resident had a College of Medicine appointment and served as preceptor to medical students during their assignment to the program.

Medications and medical supplies that were stocked by the free dispensary were provided to patients in their homes. Additional medications and supplies were purchased for patients by the public welfare agency and the Howard Relief Society.

The following services were arranged for:

1. Nursing services without charge through the Burlington Visiting Nurse Association.
2. Social services without charge through the public welfare agency, Howard Relief Society, and the Catholic Charities.
3. Hospitalization at the Mary Fletcher and the Bishop DeGoesbriand Hospitals.
4. Transportation and ambulance service, through the police department.

Source of Funds and Costs of Services. Since the home medical service was operated in conjunction with the free dispensary (outpatient clinic) and since many facilities were used jointly, the funds for operation of the two programs were in one budget. For the fiscal year July 1951–June 1952, total funds of $26,803.04 were used for operation of the free dispensary and home medical service. The City of Burlington provided $11,100 of this total; the remaining $15,703.04 came from the University of Vermont.

The cash disbursements for operation of the home care program and the dispensary, exclusive of the mental hygiene clinic, during 1951–52 were as follows:

Total cash expenses	$26, 803. 04
Salaries	11, 540. 00
Director, (assistant dean of College of Medicine)	5, 095. 00
Dispensary nurse	3, 045. 00
City physician	3, 400. 00
Wages	2, 689. 00
Clerk, part-time	900. 00
Janitor	1, 789. 00
Operating expense (drugs, surgical supplies, phone, rent, maintenance, and office supplies)	12, 128. 04
Purchases of equipment	446. 00

Of the expenses listed above, the salary of the city physician ($3,400) can be applied entirely to home care, since he spent all of his time on this service. It was estimated that the director spent approximately one-tenth of his time working on the home medical service; thus, about $500 of his salary could be charged to home care. An undetermined proportion of the operating expense item would also be charged to home care. Cost figures were not available for certain services provided by other agencies in the community. These services included nursing visits, laboratory tests, X-rays, social services, and transportation.

Operational Policies and Procedures

The policy of the home medical service program was to accept referrals 24 hours a day from any individual or agency in the community. Except for obstetrical, active pulmonary tuberculosis, and mental cases, patients in all disease categories were accepted for care. However, in unusual situations, patients with mental illness or active pulmonary tuberculosis were cared for in the home until another plan could be made.

Calls for service were received through a telephone answering service and were relayed to the resident, who was responsible for providing service.

All persons requesting service were visited by the physician at least once. If they were found to be eligible for service, a plan for care was made.

Individual cumulative medical records were kept. They contained such information as histories, summary reports from other medical facilities, physical findings, and medical progress notes.

There were no formal conferences at which the physicians and representatives from community agencies discussed patient care, but there were frequent informal conferences between the physicians and the staffs of the nursing agency, the Howard Relief Society, and the public welfare agency.

Services to Patients

There was no record of the number of patients or of the services furnished to them other than medical services during the fiscal year 1951–52.

Medical Services. Direct medical services to patients were provided by the resident and fourth-year medical students under the supervision of the program director.

The range of medical services included histories, physical examinations, uncomplicated diagnostic and laboratory procedures, dispensation of drugs, and administration of parenteral drugs. Revisits were based on patient needs.

Patients requiring specialized medical consultation were admitted to one of the two Burlington hospitals.

During the fiscal year 1951–52, a total of 7,212 home medical visits were made to patients by the resident and the medical students.

Nursing Services. Direct nursing services were available upon request through the Burlington Visiting Nurse Association without charge and in accordance with its usual policy. The range of services included such care as dressings, injections, irrigations, personal care, health instruction, and teaching members of the household how to care for the patient, and occasional assistance with such procedures as abdominal taps.

Social Services. Financial assistance, child placement, and some counseling services were available to home care patients upon request

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by the physician. The agencies providing these services were the Burlington Welfare Department, the Howard Relief Society, and the Vermont Catholic Charities.

Other Services. Laboratory tests, X-rays, drugs, medical supplies, transportation, hospital equipment, and sickroom supplies were provided. Since most of the arrangements for these services were on an informal basis and no records were kept, it was impossible to obtain data on the amounts of services provided.

Characteristics of Patients

No record was kept of the number of different patients served in this home care program each year, nor were compilations made of the ages, diagnoses, or other characteristics of patients. There were on file records of approximately 5,000 different patients who had received home care services at some time between 1946 and 1953. It was estimated by program personnel that about 1,500 to 2,000 different patients were served each year, about 200 of whom were chronically ill patients who received a home visit by a physician at least once a week, plus additional services as needed.

During the study, a count was made of approximately a 5-percent sample of patients who had received home medical visits. It was found that, of 408 medical visits in the sample, 118, or about 29 percent, were made to patients with chronic illness.

Home Care and Professional Education

The University of Vermont College of Medicine appointed a hospital resident from the Mary Fletcher Hospital to provide home medical care for a 6-month period. The resident was required to have at least 1 year of internship and was selected from the residents in medicine.

The resident, under the supervision of the director of the dispensary, was responsible for medical services in the home to indigent and medically indigent patients. He supervised the fourth-year medical students during their assignment to the service and, in addition, made rounds at the Mary Fletcher Hospital to evaluate and approve patients for home care. He also made weekly rounds at the City Poor Farm, where he gave medical care to 8 to 10 patients with chronic illness. He likewise visited public assistance recipients in nursing homes.

The 44 students in the fourth-year class were assigned to the service for 2 or 4 weeks full time. Students with only 2-week assignments spent an additional 2 weeks with a general practitioner. Only two or three students were assigned at any one time. The objectives of the training were:

To gain experience with illness at home.

To learn about types of illness not seen in a hospital or outpatient department.

To obtain training in the management of patients with acute and chronic illness at home.

To observe the effects of marginal living on health;

To increase social consciousness.

Each student was oriented to the program by the resident on the first day of his assignment. Students were responsible for accompanying the resident on home visits, planning with the resident for the course of treatment, and making followup visits. Students were also responsible for following patients admitted to the Mary Fletcher Hospital and for checking supplies and keeping the physician's bag ready for use.

In the future, it is planned to have the students attend the dispensary every afternoon during their assignment to the service. This will allow the students to see the patients who have been referred for outpatient service.

Developments Within the Program

During the first 20 years, the program was operated by having a local physician provide home medical services to patients and participate in the teaching of medical students. This physician was employed by the College of Medicine of the University of Vermont. In 1947, the plan was changed and a hospital resident was assigned for 1 year to provide care to patients and to assist the program director with the teaching and supervision of medical students.

In the fiscal year 1952–53, the resident assignments were for a 6-month period, but, beginning with the fiscal year 1953–54, the

resident assignments were to be for a 4-month period.

The trend in numbers of home medical visits has been upward during the past 5 fiscal years, from 4,796 visits in 1947–48 to 7,212 visits in 1951–52 (see table). However, the number of home visits has always been

Physician visits and costs of care, University of Vermont Home Care Program

Fiscal year	Physician visits			Costs of dispensary and home care
	Total	Dispensary	Home	
1947–48	11, 065	6, 269	4, 796	$24, 843
1948–49	13, 317	6, 811	6, 506	22, 661
1949–50	13, 738	8, 363	5, 375	31, 732
1950–51	15, 406	8, 062	7, 344	27, 242
1951–52	15, 151	7, 939	7, 212	26, 803

fewer than the number of dispensary (clinic) visits made each year. In 1951–52, about 700 fewer home than clinic visits were made. The difference was greater in most of the preceding years.

Collection of Data

An alphabetical patient record file has been kept in this program and contains the names of all patients who have received home visits by a physician at some time since 1946. These records show data on visits by physicians and progress reports. A daily logbook is kept and shows the date of visit, name of patient, and name of physician. No separate records are kept of nursing visits, laboratory tests, X-rays, social services, or other services. These services are arranged for home care patients on an informal basis with other agencies, and it would be difficult, if not impossible, to collect numerical data on them.

Routine monthly statistics kept in this program consisted of a count of home visits by physicians, tallied along with the patient's visits to the dispensary. Cost data was kept jointly for free dispensary and the home medical service, since many of the same personnel and facilities were used for both programs.

No data were abstracted for individual patients in this home care program. It would have been necessary to sort out needed data on patients from the physicians' progress reports, a lengthy task not feasible in the time allotted for this study. Furthermore, since only data on physicians' services would be available from these records, the data on all services to patients thus obtained would be very incomplete.

Figures for this study were obtained from data already compiled in the program. In addition, a tally was done of a 5-percent sample of home visits by physicians during a year, to determine the ratio of visits to chronically ill patients and visits to acutely ill patients.

Alameda County Tuberculosis Home Care Program

Alameda, Calif.

Origin of the Program

The Department of Institutions of Alameda County, Calif., is responsible for the institutional care and treatment of indigent and medically indigent tuberculosis patients in the county. These patients receive care in three institutions: Highland–Alameda County Hospital, a general hospital, at Oakland; Fairmont Hospital of Alameda County, a chronic disease hospital, at San Leandro; and the Arroyo–Del Valle Sanitorium, at Livermore.

The Alameda County Home Care Program for tuberculosis patients was established in July 1949 by the Alameda County Department of Institutions to alleviate a shortage of beds and to reduce long hospital waiting lists.

The purposes of the home care program [1] were:

1. "To assure adequate medical supervision for all tuberculosis patients on the county home care program.
2. "To insure as far as possible free choice of physician by the patient and free acceptance of patient by the physician."

Services available to patients include medical care, medications, and medical supplies, X-rays, laboratory procedures, transportation, hospital equipment if needed, and, to a limited extent, nursing care and social services.

Program 1952

This section of the report is primarily concerned with a description of the program during the third year of operation (calendar year 1952).

Administration

Overall responsibility for administration of the home care program was delegated by the director of the department of institutions to the assistant superintendent of Fairmont Hospital. A medical board composed of the chief of the tuberculosis service, Alameda County Institutions, the superintendent of Arroyo-Del Valle Sanatorium, and three panel physicians appointed yearly met as often as necessary to assist the director of the program in formulation of policy and in overall operation of the program. Specifically, their functions included promulgating regulations for medical treatment of the patient and maintaining a panel of approved physicians to care for tuberculosis patients in their homes.

Arrangements were made with the department of institutions to provide the following services:

1. Social services by staff members of the medical social service department.
2. Laboratory and other diagnostic tests.
3. Medications and medical supplies at cost.
4. Ambulance transportation for patients.
5. Hospitalization in the appropriate facility as required.

Arrangements were made with other individuals and agencies in the community to provide the following services to patients:

1. Medical care by selected private physicians at the rate of $30 per patient per month.
2. Nursing service by the local health departments and the local visiting nurse associations. Nursing services were provided by the health departments without charge. The visiting nurse associations of Berkeley and Oakland were paid at the rate of $75 per month per nurse January–June and $135 per month per nurse July–December 1952 to provide nursing care in the home to all types of patients, including those with tuberculosis referred from the Alameda County Department of Institutions.
3. X-rays in the home by commercial firms at scheduled rates.

Source of Funds and Costs of Services. All funds used in this program were provided through the Alameda County Department of

[1] County of Alameda Department of Institutions: Care of tuberculosis patients in the home. Unpublished paper.

Table 1. Costs of providing services to patients, Alameda County Tuberculosis Home Care Program, calendar year 1952

Type of service	Cost
Total [1]	$15, 778. 37
Payments to private physicians [2]	14, 460. 87
Administration [3]	372. 50
X-rays	945. 00

[1] Does not include additional administrative salaries and costs (particularly at Fairmont Hospital), overhead costs, or costs of nursing, medical social service, laboratory, and drugs.

[2] Payments at the rate of $30 per month per patient.

[3] Figured at a fixed percentage of administrative costs at Highland-Alameda County Hospital.

NOTE: Average cost per patient-day during the year was $1.13 (based on 13,973 days divided into the available cost, $15,778.37).

Institutions. The total identifiable costs for the home care program amounted to $15,778.37 in 1952 (table 1).

More than $14,000 of this amount constituted payments to the private physicians who visited patients, at a rate of $30 per month per patient. The cost of providing X-rays ($945) and a small amount for administration were allocated to the home care program. Many other costs of providing services to the home care patients were paid out of other budgets of the department of institutions, and could not be identified as home care costs. Among these items were nursing and social services, laboratory procedures, drugs, overhead costs, and additional administrative costs.

Operational Policies and Procedures

The policy of the Alameda County Home Care Program was to accept referrals of indigent and medically indigent patients with a diagnosis of tuberculosis from the wards of the Alameda County institutions, including Highland and Fairmont Hospitals and Arroyo-Del Valle Sanatorium, and from waiting lists for admission to these three institutions.

Patients were placed on the home care program by certification of the assistant superintendent of Fairmont Hospital. Certification was based on the following provisions: [2]

1. Determination of medical eligibility by the superintendent of Arroyo, for patients from that institution, and the chief of tuberculosis service for Fairmont and Highland Hospital patients.

2. Determination of social and financial eligibility by the social service department of the Alameda County Institutions. Certification for continuing home care at county expense was repeated at practical intervals.

3. The health department, within whose jurisdiction the patients lived, investigated and certified those homes where conditions were adequate from a public health standpoint to permit the return of patients as home treatment cases.

Except in unusual situations, all patients accepted for home care were required to spend a period of 6 weeks in a tuberculosis ward in one of the hospitals. This was done in order to initiate appropriate therapy and to teach the patient and his family the essentials of isolation and care at home.

All patients accepted for care in the home selected a physician from the panel maintained by the medical board. This physician became responsible for the patient's total treatment, and requested such services as he considered essential to the patient's welfare.

Records maintained for home care patients consisted of bimonthly reports from the panel physicians and communications from community agencies.

Conferences to discuss policy and problem cases were scheduled every 3 months. These conferences were attended by the assistant superintendent of Fairmont Hospital, the superintendent of Arroyo-Del Valle Sanatorium, the chief of tuberculosis service at Highland Hospital, panel physicians, health officers and the supervisors of nursing from the various health departments, representatives of the medical social service staff from the three institutions, and representatives from the welfare department.

Weekly medical conferences were held to discuss the clinical aspects of selected tuberculosis patients both in institutions and on home care. These conferences were attended by the residents and the visiting staffs of the hospitals and by the health officers.

Services to Patients

During the calendar year 1952, care was provided to 93 patients with active tuberculosis.

[2] See footnote 1.

Table 2. Patients served,[1] by age and sex, Alameda County Tuberculosis Home Care Program, calendar year 1952

Age (years)	Sex					
	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	93	100	47	100	46	100
Under 15	1	1	-----	-----	1	3
15–44	52	68	23	56	29	80
45–64	17	22	12	29	5	14
65 and over	7	9	6	15	1	3
Unknown	16	([2])	6	([2])	10	([2])

[1] Does not include 2 patients who received only drugs through the program.

[2] Percentages are computed exclusive of patients whose ages are unknown.

NOTE: Median ages: both sexes, 36 years; males, 43 years; females, 31 years.

Although the administrative plan provided for medical, nursing, and social services to patients in their homes, as well as medications, X-rays, and hospital equipment and supplies, no records were available to show the amounts and types of services provided during the study year.

Characteristics of Patients

At the time of the study (June 1953), there were 1,675 tuberculosis cases—active and inactive—in Alameda County, according to a register kept by the department of institutions. Only cases known to the department of institutions were listed in this register, although there were other cases in the area. During 1952, the home care program of Alameda County Institutions provided services to 93 patients with active tuberculosis. Two additional patients received only drugs through the program. Of the total 93 patients, 52 were new admissions to the program during the year.

Age, Sex, and Diagnosis. The age and sex of the patients on the program are shown in table 2. There were no age data for 16 patients. Fifty-two patients (68 percent of those whose ages were known) fell in the age group 15–44 years. Of the remaining patients of known age, one was under 15 and the rest were 45 years or older. Seventeen patients were 45–64 years of age and seven were 65 years and over.

Males and females were almost equally represented on this program, with 47 male and 46 female patients. More males were in the older age groups. Eighteen men (almost 44 percent of those whose age was known) were in the age groups 45 years and over. Only 6 women (17 percent) were 45 years of age or older. This follows the general pattern of sex differences in incidence of tuberculosis by age group.

The majority of patients on the program were in the moderately advanced stage of tuberculosis (table 3). Fifty-eight patients (62 percent) were at this stage of infection. The smallest number, 12 patients, were minimal cases of tuberculosis. Twenty-three patients were in the far-advanced stages of the disease.

Length of Patient Stay. A total of 13,973 patient-days of care were provided by this program during 1952. Some of the 93 patients were on the program for the entire year; others, for much shorter periods. The average length of stay was 150 days per patient.

Many of the patients served during 1952 had been on the program prior to that time, and many were continued on home care subsequent to 1952. The total length of stay of this group of patients, including time prior to, during, and after 1952, amounted to 26,821 days. The average length of stay per patient was 288 days, or almost double the time for 1952. Thirty-nine percent of the patients were on the program for less than 180 days, or about 6 months (table 4); 33 percent were on the program for approximately 1 year or longer.

Discharges. Sixty different patients were discharged from the home care program during

Table 3. Stage of infection in patients served [1] on the Alameda County Tuberculosis Home Care Program, calendar year 1952

Stage of infection	Patients served	
	Number	Percent
Total patients	93	100
Minimal	12	13
Moderately advanced	58	62
Far advanced	23	25

[1] Does not include 2 patients who received only drugs through the program.

Table 4. Patients receiving services, by total length of stay on the program, Alameda County Tuberculosis Home Care Program, calendar year 1952

Length of stay (days) [1]	Patients served	
	Number	Percent
Total	93	100
Less than 180	36	39
180–359	26	28
360–539	20	22
540–719	6	6
720 and over	5	5

[1] Total length of stay of patients as of May 31, 1953, at which time 22 of the total patients served during 1952 were still active. The total length of stay was thus not complete for this group. For the 93 patients, total patient-days as of May 31, 1953, were 26,821. The mean length of stay was 288 days; the median, 213 days.

Table 5. Reasons for discharge from home care, Alameda County Tuberculosis Home Care Program, calendar year 1952

Reasons for discharge	Discharges	
	Number	Percent
Total	61	100
To clinic	45	74
To hospital	9	15
To private physician	2	3
Died	2	3
Moved out of area	1	2
Unknown reason	2	3

NOTE: 60 different patients were discharged during 1952; only 1 patient was discharged twice during the year. A total of 14 patients were readmitted once to the program during the year; 7 of these were patients who had been discharged earlier in the same year; and the other 7 had been discharged in the previous year (1951)

1952. The total of 61 discharges is accounted for by the fact that 1 patient was discharged twice during the year. The largest number of discharges (45, or 74 percent of the total) were patients able to attend the clinic for further care (table 5). Nine patients were discharged to the hospital for needed care or procedures; 2 patients were released to the care of a private physician; and 2 died while on the home care program.

Of the 60 patients discharged during 1952, 7 were readmitted to home care during the same year. Four of these patients were readmitted after an interim stay in the hospital and 3, after a term on clinic care. In addition, there were 7 patients readmitted to home care during 1952 who had been discharged during the previous year, making a total of 14 readmissions to the program in 1952.

Developments Within the Program

There have been no major changes in the administration and operation of the program since it began operation in July 1949.

The program started with 26 patients served during the first 6 months of operation (July–December 1949). The highest number of patients (127) were served during 1951.

Year	*Number patients served*
July–December 1949 (6 months)	26
1950	118
1951	127
1952	[1] 93

[1] Does not include 2 patients who received drugs only.

Collection of Data

Patient record folders were kept for each home care patient in the medical record library at Fairmont Hospital, the county chronic disease and custodial institution. The following records were kept in each folder: medical authorization for home care; notification of discharge from hospital; summary of patient's hospital record, including identifying data; and bimonthly progress reports from visiting physicians. Separate card files of home care patients and physicians were kept at the Highland-Alameda County Hospital by the office manager for Alameda County Institutions. Admission and discharge data on patients were kept in these files.

No routine statistics were compiled by this home care program. Since the program was relatively small, it was decided to make individual abstracts of patient data for purposes of this study. The data on admissions, discharges, and length of stay were obtained for each patient from the card files. Data on age, sex, and diagnosis were obtained from the record folders. The amounts of various services provided to home care patients were not abstracted, since these data were very incomplete for some services and not available for others.

Programs of Home Care in Social Agencies

The descriptions of the programs of the Benjamin Rose Institute and the Chicago Welfare Department are included in this report, not because they are primarily concerned with home medical care but because they provide such services as an integral part of their programs and thus meet the total needs of their clients.

The Benjamin Rose Institute

Cleveland, Ohio

The Benjamin Rose Institute is a private social agency which was established in 1909 from a trust fund set up by the will of Benjamin Rose, who bequeathed his estate to be used for the care of older people. The purpose of the institute is: "To grant assistance to older persons in trouble and in need, in such a way as to help them maintain their self-respect and place in the community."

Women over 60 and men over 65 years of age who are Cleveland residents and of Anglo-Saxon origin are eligible to apply for care. Applicants are accepted only after a careful analysis of their social and economic needs and only when it is determined that their needs cannot be met through other community resources. Some of the clients accepted by the institute are not primarily in need of financial assistance but are in need of other services provided by the institute, such as counseling, casework services, medical care, or nursing home placement.

The institute is administered by an executive director who is responsible to a board of 15 women, as stipulated in the Rose will.

From 1909 to 1929, the institute's program consisted chiefly of providing financial assistance to its clients. However, in the early 1930's, the program began to broaden in an effort to meet the total financial, health, and social needs of its clientele. The nucleus of the institute program today is a staff of social caseworkers who are responsible for evaluating client needs and for coordinating institute and community resources to meet these needs.

Since the present study was concerned primarily with medical services provided to clients in their homes, this report does not include a description of the total program of the Benjamin Rose Institute.

Because complete medical care was an integral part of the total program for clients of the institute, any type of medical care needed was provided. In addition to hospitalization and institutional care, a plan for providing services to clients in their homes was inaugurated in 1940. Services include medical, nursing, social casework, dental, and housekeeping services, physical and occupational therapy, and transportation. Drugs, medical supplies, appliances, and sickroom equipment are furnished as needed.

The home medical service of the institute is administered by the executive director, with the assistance of a medical advisory committee.

The institute's first objective in treating the older person is prevention of disease. All applicants undergo a physical examination to dis-

cover conditions—which may or may not be known to the applicant—and to apply treatment which may insure prolonged activity. This examination is given by one of the physicians from the panel that serves the institute. Patients who require treatment for any condition are referred to the physician of their choice, provided that he is a member of a hospital staff and that he is willing to work within the limitations established by the institute. If a client has no private physician, he may select one from the panel maintained by the institute. Physicians are paid on a fee-for-service basis at the rate of $5 for a home visit. Except in emergencies clients are requested to secure prior authorization for care.

Nursing services are provided by the Cleveland Visiting Nurse Association; physical therapy, by the Rehabilitation Center; and housekeeping services, by the Family Service Association—all at scheduled rates.

Prescribed medications are purchased from reputable pharmacies, which allow a discount to the institute.

Transportation for patients is provided through the use of taxis and private ambulances.

Characteristics of Beneficiaries

Statistics and cost data shown for this program are for the calendar year 1952. They were obtained from abstracts of individual records and from data already compiled by the program.

Two hundred and eighty-three persons were beneficiaries of the institute during 1952. Forty-three of these were new admissions, 31 died, and 3 were discontinued as beneficiaries during the year. The remaining patients were on the program for the entire year.

The average age of the beneficiaries was about 80 years. Only 68 persons, or 24 percent of the total beneficiaries,were under 75 years of age. The same number, 68 persons, were 85 years of age or older (table 1). About 92 percent, or 259 beneficiaries, were women.

It was not possible to differentiate, for statistical purposes, between those receiving so-called home care and those receiving other types of medical care. The data which follow pertain to the total caseload of the institute during the study year 1952.

About 91 percent of the beneficiaries were known to be under medical care for various types of illnesses. The existence of any illness was not known in the remaining 9 percent. Of the 257 beneficiaries being treated for illness, 148 persons were receiving medical care for 1 illness, 60 persons for 2 illnesses, and 40 persons for at least 3 illnesses. There were 9 beneficiaries known to be receiving medical care outside the auspices of the institute, whose type or number of illnesses was not recorded in the program.

	Number	*Percent*
Total beneficiaries	283	100
With no illness [1]	26	9
One illness	148	53
Two illnesses	60	21
Three illnesses	40	14
Unknown illnesses [2]	9	3

[1] Beneficiaries with no illness for which they were known to be receiving medical care.

[2] Beneficiaries who were known to be receiving medical care through their own resources outside the institute, but for whom the types of illnesses being treated were not recorded.

The types of illness found among the beneficiaries of the institute in 1952 are shown in table 2. Three diagnostic categories together made up about 49 percent of the total primary diagnoses of the beneficiaries. Heart disease,

Table 1. Beneficiaries on program, by age and sex, Benjamin Rose Institute, calendar year 1952

Age (years)	Sex					
	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	283	100	24	100	259	100
Under 60	[1] 4	1	-----	-----	[1] 4	1
60–64	11	4	[2] 2	8	9	4
65–74	53	19	4	17	49	19
75–84	137	48	10	42	127	49
85–94	64	23	6	25	58	22
95 and over	4	1	1	4	3	1
Unknown	10	4	1	4	9	4

[1] Includes 4 women who were invalids: 2, aged 51 years; 1, 51 years; and 1, 38 years.

[2] Invalid husbands of women on the program.

NOTE: The average age of the beneficiaries was about 80 years.

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Table 2. Beneficiaries receiving medical care, by diagnostic category, Benjamin Rose Institute, calendar year 1952

Diagnostic category [1]	Primary diagnoses only		All diagnoses	
	Number	Percent	Number	Percent
Total diagnoses	257	100	397	100
Heart disease (410–443)	48	19	72	18
Vascular lesions affecting central nervous system (330–334)	38	15	43	11
Other cardiovascular disease (444–468)	19	7	31	8
Malignant neoplasms (140–205)	8	3	11	3
Diabetes mellitus (260)	10	4	12	3
Anemias (290–293)	3	1	9	2
Psychoses and psychoneuroses (300–318)	7	3	10	3
Diseases of central nervous system—exclusive of vascular lesions (340–357)	8	3	8	2
Diseases of eye (370–389)	14	5	36	9
Diseases of digestive system (530–587)	2	1	15	4
Diseases of genitourinary system (590–637)	4	2	6	1
Arthritis and rheumatism (720–727)	39	15	60	15
Other diseases of bones and organs of movement (730–749)	6	2	7	2
Accidents (N800–N999)	23	9	29	7
All other specified diseases (residual)	19	7	39	10
Unknown diagnoses [2]	9	4	9	2

[1] Numbers in parentheses are International List numbers, sixth revision.

[2] Although these beneficiaries were known to be receiving medical care, all of it was being obtained outside the auspices of the institute, and no record was kept by the institute of the types of illnesses.

which was the primary diagnosis of 48 persons (19 percent of the total) ranked first. Arthritis and rheumatism, the second highest category, accounted for the primary illness of 39 beneficiaries. Vascular lesions affecting the central nervous system ranked third, with 38 beneficiaries being treated primarily for this category of illness.

The fourth highest primary diagnostic category was accidental injuries, most of which were fractures. Twenty-three beneficiaries were being treated for accidental injuries. Virtually all of the primary illnesses being treated among the beneficiaries were chronic in nature, as indicated by the categories shown in table 2.

Table 2 shows not only the primary diagnoses found among the beneficiaries, but also the second and third diagnoses. Although there were 257 beneficiaries known to be under medical care for one or more illnesses, a total of 397 conditions were being treated in these persons. Heart disease again ranked first and was present as a primary or secondary illness in 72 of the beneficiaries. Arthritis, which ranked second as a primary or secondary diagnosis, was found among 60 beneficiaries. Cerebrovascular lesions were being treated among 43 persons, and diseases of the eye among 36 persons.

Of the 249 beneficiaries still on the program at the end of 1952, 153, or 61 percent, were living in a protected environment, such as a nursing home, boarding home, institution, or a residence home for the aged. One hundred and ten beneficiaries, the largest number in a protected environment, were living in nursing homes (table 3). Ninety-six beneficiaries lived in their own homes, in apartments, or in rooms.

Medical Services

Although 91 percent of the beneficiaries were known to be receiving medical care during 1952, only 74 percent were receiving that care at institute expense. Table 4 shows the number of beneficiaries receiving each type of medical service provided through the auspices of the institute. One hundred and fifty-eight different

Table 3. Living arrangements for beneficiaries of of Benjamin Rose Institute, as of December 30, 1952

Living arrangement	Beneficiaries	
	Number	Percent
Total	249	100
Living in own home, apartment, or room	96	39
Living in protected environment	153	61
Nursing home	110	44
Boarding home	19	7
Belford House [1]	10	4
Braeburn House [1]	12	5
Other institutions	2	1

[1] Residence homes operated by the Benjamin Rose Institute.

Table 4. Beneficiaries receiving medical care, by types of services provided, Benjamin Rose Institute, calendar year 1952

Type of service	Beneficiaries receiving medical care	
	Number [1]	Percent
Total beneficiaries	283	100
No medical care services [2]	74	26
Physician (home or office)	158	56
Social services	283	100
Nursing (home)	34	12
Dental care	36	13
Psychiatric consultation	1	([3])
Physical therapy	2	1
Occupational therapy	1	([3])
Housekeeping	18	6
Medications	151	53
Special medical supplies	21	7
Eye glasses	26	9
Hospital inpatient care [4]	9	3
Ambulance or taxicab transportation [5]	79	28

[1] Unduplicated count of beneficiaries receiving each service.

[2] Beneficiaries who received no medical care services through arrangements made by the institute. It was known that some of these beneficiaries did procure medical care through their own independent arrangements, for which they paid the entire cost themselves.

[3] Less than 0.5 percent.

[4] Does not include 24 beneficiaries whose hospital care was paid from other funds.

[5] 55 beneficiaries were provided ambulance service, and 49 had taxicab service paid for during the year.

persons, or 56 percent of the total, were provided with physician's services. One hundred and fifty-one persons received medications. Ambulance or taxicab transportation was provided to 79 persons, or 28 percent of the total beneficiaries. Varying numbers of beneficiaries were provided with many other types of services, including nursing, dental care, psychiatric consultations, physical therapy, occupational therapy, housekeeping services, and hospital care. They also received special medical supplies and eyeglasses.

Source of Funds and Costs of Services

During 1952, the institute budget included $18,350 for medical care. An additional $3,000 was budgeted for housekeeping service, making a total of $21,350 available for these two categories.

The net cost of medical care for beneficiaries paid by the institute during 1952 amounted to $19,290.22. The average annual medical care cost for each beneficiary was $68.16. Although this figure included housekeeping service for beneficiaries, it included neither the cost of social service provided because of illnesses of beneficiaries nor the cost of administering the medical care program for them. In addition, it was known that a number of beneficiaries received all or part of their medical care through means outside the institute. The above cost figure does not, therefore, represent all medical care received by the beneficiaries during the year.

Refunds for medical and hospital care from beneficiaries, relatives, and private agencies totaled $1,326.34 during 1952. Refunds from Aid for the Aged amounted to $709. Adding these refunds to the net costs paid by the institute would yield a gross cost of $21,325.56 for medical care provided through the program during 1952. Detailed data on net costs of medical care paid by the institute are shown in table 5.

Table 5. Recorded cost of providing medical care to beneficiaries, Benjamin Rose Institute, calendar year 1952

Type of service	Cost [1]
Total	$19,290.22
Physician visits (home or office)	2,553.04
Nursing visits (home)	2,880.90
Dental care	997.38
Psychiatric consultation	15.00
Physical therapy and occupational therapy	142.00
Housekeeping	2,997.35
Medications	4,540.62
Special medical supplies	134.61
Eye glasses	368.81
Hospital care [2]	3,887.91
Ambulance and taxi	772.60

[1] Includes only those costs paid by funds of the Benjamin Rose Institute. It is known that a number of beneficiaries procured all or part of their medical care through independent arrangements, at their own expense, or at the expense of a third party. Also not included here are costs of medical care provided through arrangements of the institute, but where the cost was refunded by Aid for Aged or by other sources. (Aid for Aged refunded $709.00; beneficiaries, relatives and private agencies refunded $1,326.34 for hospital care and other medical care.)

[2] Includes both inpatient care and outpatient services such as X-rays and laboratory tests.

NOTE: Average annual medical care cost for each beneficiary was $68.16.

Collection of Data

Although extensive home medical care was available to beneficiaries, when needed, it was impossible to differentiate completely, for statistical purposes, between those receiving "home care" and those receiving other types of medical care. In the first place, the terms "admission to" and "discharge from" home care did not apply in this program. The beneficiaries received all types of medical care wherever needed—at home, in the doctor's office, in a boarding home or nursing home, in a hospital, or elsewhere. Since medical service in the home was an integral part of the total medical care provided, no clear-cut separation of patients on home care could be made; for example, would a single medical visit in the patient's home be classified as home care, or a single nursing visit, or even two or three visits? And how would beneficiaries be classified who receive housekeeping service due to illness but little or no medical care through the institute? To make any distinction, it would have been necessary to set up an arbitrary definition of "home care" for specific use in this particular program, with obvious pursuant difficulties. Therefore no attempt was made to differentiate "home care" from other forms of medical care provided to each beneficiary.

A record of the medical services provided through the institute was available in the beneficiaries' ledger. Information on age, sex, diagnosis, and living arrangements were readily obtainable from social service case records.

Chicago Department of Welfare

Chicago, Ill.

Origin of the Program

The Chicago Department of Welfare is responsible for providing general assistance to indigent residents of Chicago. Its program is designed to aid recipients in a manner that will conserve and develop human resources, create opportunities for self-development, and contribute to the general welfare of the individual, the family, and the community. This philosophy has guided the development of individualized case services, and has led to a steady increase in the scope and intensity of services available to recipients.

The importance of health in overall plans has long been recognized by the department, and a comprehensive plan for medical care was organized in 1933. In addition to the medical care program, the department operates a convalescent home, and has responsibility for casework services, vocational counseling, training and placement, home economics services, and services to children in foster homes and institutions.

The medical section of the department's service bureau is responsible for—

1. Determining the employability of applicants and recipients and establishing their work limitations, if any.
2. Providing types of medical care not immediately essential to maintain life, but necessary to make a person physically able to support himself and his family; for example, dental care, medical appliances, eye glasses, and elective surgery.
3. Providing medical and convalescent care to recipients who were acutely or chronically ill or who had been injured.
4. Participating in the formulation of general assistance policies and procedures relating to medical care.

In order to meet these responsibilities, the bureau has made arrangements to furnish a full range of services, including medical care, nursing care, medical social service, dental care, physical and occupational therapy, and such supplementary items as special diets and

prosthetic appliances. The arrangements provide that such services may be given in the patient's home, nursing or convalescent homes, outpatient departments, or in the hospitals, depending upon the needs of the individual patient.

Program 1952

Because this study was concerned primarily with medical services provided to patients in their homes, no attempt has been made to describe the total medical care program of the Chicago Department of Welfare, but only to outline the framework within which the home care is provided. All statistical and cost data were obtained from figures already compiled by the program.

Administration

The medical service section was administered by a medical social worker administratively responsible to the director of the special services division of the department of welfare. In addition to the director, the staff of the medical services section included medical social workers, medical aides, nurses, physicians, and clerical personnel.

There were four standing committees whose functions were to advise and consult with the director of the medical service on policy formulations and technical aspects of program operation.

An Advisory Committee on Health and Medical Care met once every 2 months. This committee included such representation as physicians; dentists; nurses; hospital and clinic administrators; representatives of the taxpayer group, including a lawyer or business executive; and a member to represent civic groups such as the League of Women Voters and the Parent-Teachers' Association.

The specific functions of this committee were as follows:

1. To recommend to the commissioner of welfare general policies or procedures designed to improve the health and medical program.

2. To advise and assist in coordinating the health and medical program with other community activities in the field of health and medical care, and to promote sound community planning in this field as it may affect, or be affected by, the health and medical program of the department.

3. To consider applications from medical agencies in the community—particularly hospitals, clinics, and nursing agencies—for authority to participate in the program and to recommend to the department acceptance or rejection of each application.

4. To advise on rates of payment for services of physicians, dentists, and nurses; for hospital and clinic care; and for drugs and other expenditures for the health and medical program.

5. To consider questions which may arise regarding services provided by medical agencies or related to the administration of the program and to investigate such questions and make recommendations regarding disposition.

A second advisory committee called the Medical Advisory Committee was appointed by the Chicago Medical Society and consisted of eight physicians who represented the various medical specialty fields. This group met once each month and served as medical technical advisers to the staff of the medical service section in maintaining standards of medical care. The committee reviewed reports on problem areas, made recommendations on fees in unusual situations, invited panel physicians to appear before the committee to discuss questionable medical practices, reviewed with the physician the policies of the medical society and the department of welfare, and, when considered necessary to protect the quality of medical care, advised that individual physicians be dropped from the panel. Individual members of the committee were available to answer technical questions between the regular meetings.

There were two other standing advisory committees, one on dental care and one on drugs. These committees met when necessary to consider problems in their specialized fields.

Services to Patients at Home

The services provided to patients in their homes included medical service, nursing and social services, physical therapy, nutrition consultation, home teaching for children, homemaker service, selected laboratory procedures, medications and medical supplies, prosthetic

appliances, hospital equipment, and transportation.

Arrangements were made with individuals and community agencies to provide all services except social service, nutrition consultation, and homemaker service. These were provided through the welfare department.

Direct social services to patients were provided by the casework staff of the Chicago Welfare Department. Medical social workers, assigned from the medical service to the various units of the welfare department, provided consultation to the casework staff. They interpreted patients' medical social needs, arranged for medical care, and served as liaison between the casework staff and community health agencies. Psychiatric consultation was available to the casework staff through the services of a part-time psychiatrist. Nutrition consultation service and homemaker service were available through the specialized services provided by the welfare department.

Medical services were provided on a fee-for-service basis by a roster of approximately 1,000 licensed physicians who had expressed their desire to participate in the program. Recipients selected their physicians from this roster. No formal referrals were necessary. These physicians were approved by the Medical Advisory Committee of the Chicago Medical Society. Physicians were paid at the rate of $3 per visit for day calls and $4 per visit for night calls.

Nursing and physical therapy services, as prescribed by the attending physicians, were provided by the Chicago Visiting Nurse Association at the rate of $2 per visit, in accordance with their usual policy.

Medications and medical supplies were provided at scheduled rates by drug stores operated by pharmacists licensed in the State of Illinois. Recipients were free to use the store of their choice from among those that had an agreement with the department.

Hospital equipment and sickroom supplies were provided on loan from the department's convalescent home or, when necessary, purchased or rented through commercial supply houses. Necessary transportation was provided by public ambulances or by community ambulances and taxis at scheduled rates.

Other services available to patients included hospitalization as required, prosthetic appliances, and specialized relief grants to meet individual needs.

Characteristics of Recipients

During 1952, the Chicago Welfare Department gave some form of assistance to an average of 29,021 persons per month (18,886 cases). Of this number, a monthly average of 24,695 persons received general assistance; 4,083 children received foster care in children's institutions or foster homes; and 243 adults were cared for in institutions, including the Chicago Welfare Department Convalescent Home, the Oak Forest Infirmary, and various hospitals.

No data were kept in the department on the number of cases receiving medical care. Furthermore, home care was an integral part of the medical care program. For these reasons, it was not possible to obtain any statistics on home care in this program. The data shown here give some indication of the medical needs of recipients, of which home care is a segment.

Of 13,713 cases opened for general assistance during the calendar year 1952, 4,346 cases, or 32 percent, were opened primarily because of loss of support of the wage earner due to illness. This figure included only a few cases in which illness was a contributing, but not the major, cause of need.

A student in hospital administration at Northwestern University made a special study of medical needs, using a 10-percent sample of general assistance cases opened by the Chicago Welfare Department during September 1952. He found that within 3 months after date of opening, 92 percent of the cases in this sample had need for some kind of medical care. During a 1-month period (September 1952), 39 percent of the sample were hospitalized. All the medical needs in these cases were being cared for by the Chicago Welfare Department.

Costs of Medical Care

During 1952, costs of medical care constituted about 11 percent of the total obligations for assistance incurred by the Chicago Department of Welfare. This figure included all medical care to persons on general assistance, as well as costs of caring for persons in the Oak Forest Infirmary and for medical care provided

Obligations incurred for medical care, Chicago Welfare Department, calendar year 1952

Type of service	Amount	Percent of total
Total	$1,971,929	100
Clinic care	170,722	9
Dental care	95,314	5
Hospital care	800,281	40
Medical appliances	32,256	2
Convalescent home	234,997	12
Physician office visits [1]	50,858	3
Physician home visits [2]	61,642	3
Drugs (provided by physicians)	959	[3]
Home nursing service	16,948	1
Drugs (direct from pharmacies)	75,570	4
Miscellaneous medical [4]	83,623	4
Children's division [5]	22,663	1
Oak Forest Infirmary	326,096	16

[1] 25,429 office visits at $2 per visit.
[2] 20,423 home visits at $3 for day calls and $4 for night calls.
[3] Less than 0.5 percent.
[4] Mainly the services of the Medical Review Board, who made evaluations for employability.
[5] Services of the medical staff of the children's division.

by the children's division of the welfare department.

Detailed data on obligations incurred during 1952, by type of medical care service, are shown in the table. The total cost of medical care was almost $2,000,000. The largest single cost item shown was for hospital care, which amounted to more than $800,000, or 40 percent of the total medical care obligations. It would be impossible to sort out the cost of "home care" from the total medical care items shown in this table. Although separate figures are shown for medical and nursing visits in the home, all of this care could not necessarily be classified as "home care." (For example, one isolated medical or nursing visit in the home would not be termed "home care.") In addition, it is known that there were other types of services that were provided in the home, for which no separate figures were available.

Collection of Data

The home medical care program in the Chicago Welfare Department was operated as an integral part of the total medical care program, and no separate data on home care were available. There were no "admissions to" or "discharges from" home care in this program—home medical care was provided when needed to any person receiving assistance. Care in the home may have consisted of one visit by a physician during the year or of continued and varied medical care services throughout the entire year.

Separate records were kept in the medical division of the welfare department for all persons currently receiving medical care (many thousands at any one time). A special study could be set up to determine the types of patients served and the amounts of various medical care services provided during a specific period of time, but unless an arbitrary definition of "home care" were made, such a study would still not indicate how much home care was provided to whom during the period.

Appendix

Schedule A

Characteristics of the Community Served by the Home Care Program

Name of program _____ Address _____ Date of study _____

I. Definition of area to be studied

A. Exact geographic area served by home care program. (Accurately define area in terms of census tracts or other political subdivisions, if possible. Indicate also whether this area is coextensive with a hospital service area, a health jurisidiction, etc.)

1. If the exact area served cannot be defined in census terms, describe the census area most nearly corresponding.

B. Total community within which the home care program is located. (This must be a census-defined area, but may consist of a city, an entire metropolitan area, a county, or a borough, as in New York City. This choice will depend upon which census area would be the best for purposes of comparison with the smaller area actually served by the home care program.)

II. Age and sex distribution of the population (Source of data: U. S. Census)

Age group	*Number in home care area, 1950 and total community, 1950 by sex*
Total, all ages	
By 5-year age groups	
Unknown	

III. Description of the general socioeconomic characteristics

A. Home care area B. Total community

IV. Area in square miles:

	Number of square miles	*Source of data*
A. Home care area	_____	_____
B. Total community	_____	_____

V. Longest distance in miles from home care administrative center to perimeter of home care area _____, and longest travel time by car _____.

VI. Average annual income of families, 1950 (includes individuals who are not members of family units)

	Average annual income	*Type of average (Mean, median, etc.)*	*Source of data*
A. Home care patients	$_____	_____	_____
B. Home care area	_____	_____	_____
C. Total community	_____	_____	_____

VII. Housing characteristics, 1950 (Source of data: U. S. Census. The terminology used in this table is taken directly from census data on housing characteristics.)

	Home care area	*Total community*
A. Total dwelling units	_____	_____
B. Total occupied units	_____	_____
1. Ownership		
a. Owner occupied	_____	_____
b. Tenant occupied	_____	_____
2. Persons per room		
a. Number reporting this data	_____	_____
b. Number with 1.51 or more persons per room	_____	_____
C. Total dwelling units by state of repair and plumbing equipment		
1. Number reporting	_____	_____
2. Needing major repairs or no private bath	_____	_____
D. Average monthly rent or rental value	_____	_____

VIII. Public assistance caseloads and payments, 1950 (Source of data: _____)

Type of assistance	Number of families or cases	Number of recipients	Average monthly payment	
			Per family or case	Per recipient
A. Community, total				
1. General assistance				
2. Aid to dependent children				
a. Payments to children				
3. Old age assistance				
4. Aid to blind				
5. Aid to disabled				
6. Other				
B. Home care area, total				
1. General assistance				
2. Aid to dependent children				
a. Payments to children				
3. Old age assistance				
4. Aid to blind				
5. Aid to disabled				
6. Other				

IX. Availability of medical and health facilities in total community

A. Are hospital beds readily available for all patients? If no, describe limitations.

B. Are beds in other facilities readily available for all patients? If no, describe limitations.

C. Are outpatient facilities readily available for all patients? If no, describe limitations.

D. What other medical, social, and health services are available?

Schedule B

General Administrative Characteristics of Home Care Program

ORIGIN AND DEVELOPMENT OF PROGRAM

I. Give a brief history of the early development of the program.

II. Original objectives and philosophy of the program.

III. Original administrative agency (organization originally responsible for the administration and operation of the program. Give name and type of organization).

IV. Date services to patients began.

V. Sources of funds for the original home care budget. (Give names and types of organizations or groups contributing.)

CURRENT PROGRAM (to cover most recent fiscal or calendar year for which statistics and cost data are available. Specify year.)

I. Administrative structure of the home care program

A. Administrative agency (organization currently responsible for the administration and operation of the program. Give name and type of organization.)

B. Is home care a part of an organized medical care program? Describe

C. Other participating agencies (organizations or groups of individuals providing financial support or patient services in home or elsewhere under formal or informal agreements); indicate by agency, the type of arrangement made with the agency (contract, individual arrangement, etc.), type of service or support (for list of services see part IV, A, also indicate where services are provided outside the home) and charge for services and basis (per visit, month, etc.)

D. Secure or prepare a chart showing functional relationship of the home care unit to the administrative agency and to other participating agencies.

E. If an advisory committee exists, indicate group interests represented.

II. General groups eligible for services
(Check appropriate types)

A. ———General public

B. ———Members of specific organizations (specify name and type of organizations)

C. ———Indigent

D. ———Medically indigent (define)

E. ———Other general group criteria (specify, e. g., specific hospital, etc.)

III. Disease categories of patients accepted for care (check only one)

A. ———All disease categories

B. ———All disease categories, but preference shown to certain diseases (list these diseases and state reasons for preference)

C. ———All disease categories with specific exclusions (list exclusions, and state reasons why)

D. ———Specific disease categories only (specify disease categories, and state reasons why)

IV. Type and source of direct services to patients

A. Type of services	Source of services		If fee charged patients	
	Home care unit (check)	Other agencies (name and type of agency)	Amount and basis (per visit, etc.)	Paid through home care unit? (yes or no)
1. Medical				
a. Visiting physician				
b. Consultation				
2. Nursing				
3. Social service				
4. Physical therapy				
5. Occupational therapy				
6. Nutrition				
7. Speech therapy				
8. Health education				
9. Home teaching				
10. Housekeeping				
11. Laboratory and other diagnostic procedures (specify important types)				
12. X-rays				
a. Diagnostic				
b. Therapeutic				
13. Hospital equipment (specify important types)				
14. Medications and medical supplies				
a. Medications				
b. Medical supplies				
15. Orthopedic appliances (specify important types)				
16. Transportation				
a. Patients				
b. Staff				
c. Supplies				
e. Equipment, other				
17. Other services (specify)				

B. What services to patients are available on an "around the clock" basis and how are these provided?

V. Personnel and agencies providing services to home care patients

A. Personnel on the home care staff. Fill out a separate Schedule BB for each personnel category used in the program, covering the topics listed below.

1. Home care staff positions
2. Training and experience
3. Duties and responsibilities

B. Agencies providing a major portion of specific services to patients. Fill out a separate schedule BBB for each agency.

Schedule BB

Personnel on Home Care Staff (Year Period _____ to _____)

Name of program

Personnel category
(Physician, nurse, social worker, etc.)

I. Home care staff positions

Position*	Number of filled positions on home care staff		Duration of appointment	Source and amount of salary**		Administratively responsible to: (title of person and organization)	Technically responsible to: (title of person and organization)	Number of vacant positions on home care staff for which money is available	
	Full time	Part time		Home care budget	Other agency (specify)			Full time	Part time

*Enter appropriate titles for each position (e. g., director, supervisor, consultant, senior staff, etc.) If the same status does not apply to person with the same position title, then fill out separate lines for each.

**Either salary range for the position or the present salary of the incumbent may be used, but should be so indicated.

NOTE: List students, residents, etc., if considered part of staff.

II. Training and experience. (Use a separate sheet for each professional position on home care staff. If defined requirements or qualifications for these positions have not been set up, then outline the actual training and experience of the incumbents in the respective positions.)

A. Education (general and professional). Indicate college or university, degree, field of specialty, and year of graduation.

B. Professional work experience. Indicate title of position, years of supervised work experience, and years of unsupervised work experience.

III. Duties and responsibilities—Give in detail the duties and responsibilities of each position. (Give details of services to patients, administrative duties, program planning, teaching, recordkeeping functions, etc. Indicate whether specific services to patients are performed in home or elsewhere. List any other professional positions held by incumbents.)

Schedule BBB

Agencies Providing a Major Portion of Specific Services to Patients

I. Name and address of agency providing services to home care patients.

II. Terms of agreement with home care program.

III. Types of services provided by agency to home care patients and any adjustments made to provide these services.

IV. Category and level of personnel providing services to home care patients—(includes the professional or nonprofessional classification of personnel and their positions on the staff.)

V. If more than one level of a personnel category is used, what are the criteria for staff assignment?

VI. Give in detail the duties and responsibilities of the agency for home care services. Give details of service to patients and of administrative, teaching, supervisory, and other responsibilities.

Schedule C

Operational Policies and Procedures

Name of program Date of study

I. Information about referrals required by the home care program in addition to identifying data. (If a form is used, secure a copy, otherwise indicate kinds of information required.)
(Check information required.)

A. _____Diagnosis
B. _____Prognosis
C. _____Summary of therapeutic plan
D. _____Other (specify)

II. Admission of patients to the home care program

A. Describe procedures used for screening and evaluation of patients prior to their admission
B. Personnel categories participating in the evaluation, and the criteria they use (check categories, and list criteria used by each).
1. _____Physician
2. _____Nurse
3. _____Social worker
4. _____Other personnel categories (specify)
C. Decision to accept patient for home care (check one)
1. _____A joint decision (if so, give categories of personnel participating and means used for reaching decision)
2. _____Decision of one person (give title of person)
D. How is referral source informed of the decision?

III. Provision of services to home care patients

A. Allocation of staff to patients
1. What is the administrative plan for allocating patients to specific staff members?
2. Are staff assigned to specific patients whom they continue to serve?
3. Describe the circumstances under which personnel who were in prior attendance continue to give services to the patients after they are admitted to the home care program.
B. Description of planning conferences; indicate reasons for conference, regularity or frequency, personnel categories participating from (1) home care staff (2) other organizations
C. Requests made to other agencies for services
1. How are requests made to other agencies for services for home care patients?
(Check methods used.)
a. _____Written
b. _____Verbal
c. _____Verbal, but confirmed in writing
2. What patient information, in addition to identifying data, is transferred to the other agency? (Check types of information.)
a. _____Specific service requested from agency
b. _____Diagnosis
c. _____Prognosis
d. _____Physician's orders for patient care
e. _____Nursing summary
f. _____Social summary
g. _____Other (specify)
D. Records and reports (if possible, obtain samples of all record forms)
1. Indicate types of records kept (check)
a. _____Centralized patient records, including only services rendered by home care staff
b. _____Centralized patient records, including services rendered by home care staff and summary reports from other agencies
c. _____Other records (specify)
2. If home care program is hospital based, are patient records transferable from hospita file to the home care file?
3. Where are home care patient records filed after patient is discharged?
E. Describe the plan for interchange of information on patient care within the home care staff and between home care program and the other agencies providing services. (Discuss methods used such as conferences, summary reports, telephone calls, etc., and the frequency of use.)

IV. Discharge of patients from the home care service

A. Personnel categories determining final disposition of patients, and criteria they use (check categories and list criteria used by each)

1. _____Physician
2. _____Nurse
3. _____Social worker
4. _____Other personnel categories (specify)

B. Decision to discharge patients from home care program (check one)

1. _____A joint decision (if so, give categories of personnel participating and means used for reaching decision)
2. _____Decision of one person (give title of person)

V. Describe and give reasons for important changes in the administration and operation of the program since services to patients began and changes contemplated in the future

A. Objectives

B. Geographic area covered (present geographic area is described in schedule A)

C. General groups eligible for service

D. Disease categories eligible or preferred

E. Patient referrals

1. Sources of referrals
2. Procedures used

F. Admission procedures and criteria

G. Services to patients

1. Range of services provided
2. Allocation of patients
3. Coordination of services

H. Patient records

I. Discharge procedures and criteria

J. Size and composition of staff

K. Sources of funds

L. Other

Schedule D

Education as a Function of the Home Care Program

I. Is there a planned inservice training program for home care staff? If yes, describe the program.

II. Is there a planned educational program directed toward securing community interest and participation? If yes, describe the program.

III. Use of home care program by schools or colleges for formal teaching or training. (Fill out a separate section III of this schedule for each school or college and field of study, such as medicine, nursing, social work, etc.)

A. Details of training program.

1. Name and type of school or college (secure copy of school or college catalogue).
2. Objectives in using home care program as an educational resource (secure formal objective, if available).
3. Date that the use of home care program as an educational resource was inaugurated.
4. Level of trainee: [Undergraduate (specify year), intern, graduate (specify year), etc. If more than one level in program, fill out a separate section I of this schedule for each level.]
5. Are all persons on this level assigned to home care program? If no, describe bases for selection.
6. Number of trainees in period _____ to _____ (most recent calendar, fiscal, or school year; specify which _____).
   a. Total _____).
   b. Greatest number at any one time _____.
7. Length of assignment to home care program (specify whether part time or full time).
8. Department or service assuming responsibility for trainees' educational activities in this field.
   a. Name of department or service (if joint, so indicate).
   b. Describe relationship of this department to the school and discuss status of home care staff on the faculty.
9. Is there an orientation program for trainees? If yes, describe the program.
10. Duties and responsibilities assigned to trainees.
11. Supervision of trainees
    a. Person responsible for trainee's actual performance of home care assignment (position).
    b. Supervisory methods used (e. g., conferences, field visits, etc.).
12. On what bases are patients assigned to trainees?
13. Does trainee prepare, as an assignment, a case report (or reports)? If yes, indicate information included.
    a. When and to whom are these reports made?
    b. How are the reports used?
14. Are any changes in the present educational program planned for the future? If yes, give details, following preceding outline. Indicate how definitely each change is planned, approximate date it is to be put into effect, and reasons for change.
15. What changes would those working in the program like to make in addition to those planned?

B. Evaluation of training program.

1. Has any study been made of trainees' evaluation of program as educational technique? If yes, briefly summarize findings.
2. Evaluation of program as educational technique by:
   a. Department or service responsible for trainees' educational activities in this field.
   b. Home care staff.
3. Has any study been made of trainees' attitudes, reaction to program, etc., after leaving school? If yes, briefly summarize findings.
4. Indicate educational values for trainees of the home care teaching program that are not obtained elsewhere in the curriculum.

III. Use of home care program by schools or colleges for formal teaching or training—Continued
C. Administrative problems related to training program.
1. Where the program is not set up primarily for training purposes, have any provisions been made to augment home care staff to compensate for extra time required for teaching? If yes, describe such provisions. If no, are the services provided by trainees thought to compensate for the time required of the home care staff for their training?
2. Are there any periods when trainees are not assigned to the home care program? If yes, do these periods create a problem for the home care program? If yes, what provisions are made to meet this problem?
3. Legal status of trainee (indicate whether special status is conferred by State law or whether limitations are imposed by Medical Practices Act).
4. Explanation given to patient of trainee's position (include terminology used in referring to trainee in talking with patient).
5. Patients' attitudes toward having trainees render service. (If any study has been made of this question, secure copy of findings. If not, enter impressions of home care staff, and bases for these impressions.)

IV. Other contributions made to formal and informal educational programs by individual members of the home care staff: Give position of home care staff member, type of activity and frequency (e. g., lectures, teaching of classes), name of group to which education is directed.

V. Research studies completed, under way, or in planning stage (indicate which) in conjunction with home care program. Secure copies if possible. If not, describe briefly, including names of cooperating agencies.

Schedule E

Statistical Report of Program Operation for Period from _____ to _____

(Use most recent data available for an entire fiscal or calendar year. All data will cover this period unless otherwise specified.)

I. Total number of patients admitted to service and patient days of care during past five years. (Indicate whether calendar or fiscal.)

II. Total number of patients on service at end of each year. (Indicate whether calendar or fiscal.)

III. Referrals and admissions during the year by source

Source of referral	*Number referrals*	*Number admissions*
Total referrals		
A. Hospitals, inpatients		
B. Hospitals, waiting lists		
C. Outpatient departments or clinics		
D. Private health and welfare agencies		
E. Public health and welfare agencies		
F. Private physicians		
G. Patients or relatives		
H. Other sources (specify) _____		

IV. Number of referrals not admitted to home care program, by reason.

V. Number of patients and visits to patients referred but not admitted to home care during the year

Type of personnel	Number of patients	Number of evaluation visits		
		Total	In home	In hospital
A. Physicians				
1. Practicing physician				
2. House staff				
a. Intern				
b. Resident				
3. Medical student				
a. Third year				
b. Fourth year				
4. Consultant				
B. Nurses				
1. Visiting nurse association				
2. Health department staff				
3. Home care staff				
4. Other (specify) _____				
C. Social workers				
1. Home care staff				
2. Other (specify) _____				
D. Physical therapists				
E. Occupational therapists				
F. Nutritionists				
G. Speech therapists				
H. Health educators				
I. Home teachers				
J. Housekeepers (hours)				
K. Other types (specify)				

VI. Admissions during the year by economic status at time of admission to home care

Economic status	*Number*
Total admissions	
A. Relief status, total	
1. General assistance	
2. Aid to dependent children	
3. Old-age assistance	
4. Aid to blind	
5. Aid to disabled	
6. Other	
7. Unknown	
B. Nonrelief status, total	
1. Medically indigent	
2. Other	

VII. Referrals, admissions, patients receiving care, and discharges during the year by age and sex

Age group* and sex	A	B	C	D	E
	Referrals	Admissions	Number at beginning of year	Total patients receiving home care (B+C=D)	Discharges
A. Total, both sexes, and by 5-year age groups					
B. Males, total, and by 5-year age groups					
C. Females, total, and by 5-year age groups					

*Age as of beginning of year.

VIII. Referrals, admissions, patients receiving care, and discharges during the year by diagnosis for which home care is given. For each diagnostic category show referrals, admissions, etc. as in item VII. (Note: If data have been classified by diagnosis, use same classification and identify; if not, List C of the Sixth Revision of the International Lists of Diseases and Causes of Death, 1948, will be adapted for use in this study.)

IX. Patients on the program during the year, by pay status.

Patients' pay status		*Number*
Total		
A. No pay, total		
1. Payments by third party		
B. Part pay, total		
1. Payments by third party		
C. Full pay		

X. Discharges from home care during the year, by reason

Reason	*Number*
Total	
A. No further medical care indicated	
B. To outpatient department for further care	
C. Readmitted to hospital, total	
1. Medical reasons	
2. Home unsuitable	
D. To other institutions for continued care	
E. Death	
F. Against medical advice	
G. Other reasons (specify)	

XI. Number of patients and visits to patients on home care during the year

Type of personnel	Number of patients		Number of visits					
			Total		In home		In hospital	
	Evaluation	Service	Evaluation	Service	Evaluation	Service	Evaluation	Service
A. Physicians								
1. Practicing physician								
2. House staff								
a. Intern								
b. Resident								
3. Medical student								
a. Third year								
b. Fourth year								
4. Consultant								
B. Nurses								
1. Visiting nurse association								
2. Health department staff								
3. Home care staff								
4. Other (specify)								
C. Social workers								
1. Home care staff								
2. Other (specify)								
D. Physical therapists								
E. Occupational therapists								
F. Nutritionists								
G. Speech therapists								
H. Health educators								
I. Home teachers								
J. Housekeepers (hours)								
K. Other types (specify)								

XII. Number of patients given other services and supplies

Type of service	*Number of patients*	*Number of services*
A. Laboratory and other diagnostic procedures		
B. X-rays		
C. Hospital equipment (hospital beds, bedpans, etc.)		
D. Medications and medical supplies		
E. Orthopedic appliances (braces, shoes, etc.)		
F. Transportation		
G. Other services and supplies (specify)		

XIII. Statistics collected by the home care program

A. What statistics are regularly collected?

B. How are these statistics obtained?

C. For what purposes are the program statistical data used? (e. g., administration and program planning, etc.)

Schedule EE

Abstract of Individual Patient's Records

Time period covered in study _____ to _____
(All data will cover this period, unless otherwise specified)

I. Identifying data; name, address, patient number, birthdate, and sex.

II. Final admission diagnosis (code, using International Statistical Classification of Diseases, Sixth Revision, 1948. When care is given for multiple diagnoses, decision will have to be made as to which diagnosis to use for statistical purposes.)

A. Primary (for which home care is given) _____

B. Contributory _____

C. Other (noncontributory) _____

III. Source of referral — Date of referral
(Check one)

A. _____Hospitals, inpatients

B. _____Hospitals, waiting lists

C. _____Outpatient departments and clinics

D. _____Private health and welfare agencies

E. _____Public health and welfare agencies

F. _____Private physicians

G. _____Patients or relatives

H. _____Other (specify)

IV. Disposition of referral (check appropriate one)

A. _____Admitted to home care program — Date of admission

B. _____Not admitted (to be answered only if records on total patient referrals are available). Give reason.

V. Days of home care received during year

VI. Was this patient a recipient of public assistance at time of admission to home care program?
If yes, check category of assistance:

A. _____General assistance

B. _____Aid to dependent children

C. _____Old age assistance

D. _____Aid to blind

E. _____Aid to disabled

F. _____Other (specify)

VII. Patient's pay status at time of admission (check one)

A. _____No pay B. _____Part pay C. _____Full pay

VIII. If discharged from home care, show reason — Date discharged
(Check one)

A. _____No further medical care indicated

B. _____To outpatient department for further care

C. _____Readmitted to hospital for medical reasons

D. _____Readmitted to hospital because home is unsuitable

E. _____To other institution for continued care

F. _____Death

G. _____Against medical advice

H. _____Other reason (specify)

IX. Number of visits to patient during the year

Type of personnel	Total		In home		In hospital	
	Evaluation	Service	Evaluation	Service	Evaluation	Service
A. Physicians						
1. Practicing physician						
2. House staff						
a. Intern						
b. Resident						
3. Medical student						
a. Third year						
b. Fourth year						
4. Consultant						
B. Nurses						
1. Visiting nurse association						
2. Health department staff						
3. Home care staff						
4. Other (specify)						
C. Social workers						
1. Home care staff						
2. Other (specify)						
D. Physical therapists						
E. Occupational therapists						
F. Nutritionists						
G. Speech therapists						
H. Health educators						
I. Home teachers						
J. Housekeepers (hours)						
K. Other types (specify)						

X. Other services and supplies

(Check if provided)	*Number of services*
A. _____Laboratory and other diagnostic procedures	_____
B. _____X-rays	_____
C. _____Hospital equipment	_____
D. _____Medications and medical supplies	_____
E. _____Orthopedic appliances	_____
F. _____Transportation	_____
G. _____Other services and supplies (specify)	_____

Schedule F

Source of Funds and Costs of Services for Period from _____ to _____

(Use most recent calendar or fiscal year for which data are available)

I. Funds received and value of services used by home care program during period
   A. Funds received, total
      1. Balance of funds from previous year
      2. Income from organizations (list by amount)
      3. Income directly received from patients and families
      4. Income from other sources for services to specific patients
         a. Insurance, prepaid medical plans, etc.
         b. Welfare agencies, private charities, etc.
   B. Estimated value of personnel, other services, supplies, and space provided without charge to home care program
      1. By administrative organization
         a. Services for which *actual* value can be obtained
         b. Services for which value is *estimated*
      2. By other participating organizations (list by amount)
         a. Actual value
         b. Estimated value

II. Funds expended and estimated value of services used by home care program during period
   A. Funds expended for home care (same as IA)
      1. Direct services to patients (from III)
      2. Administrative and other expenses (from IV)
      3. Unexpended balance at end of year
   B. Estimated value of services used by home care program during period (same as IB)
      1. Direct services to patients (from III)
      2. Administrative and other expenses (from IV)

III. Cost of direct services rendered to home care patients

Type of service	Total	Expenditures from home care funds	Value of services provided without charge to home care budget	
			Actual	Estimated
Total	$	$	$	$
A. Personnel, total				
1. Physicians				
a. Practicing physicians				
b. House staff				
(1) Interns				
(2) Residents				
c. Medical students				
(1) Third year				
(2) Fourth year				
d. Consultants				
2. Nurses				
a. Visiting nurse association				
b. Health department staff				
c. Home care staff				
d. Other (specify)				
3. Social workers				
a. Home care staff				
b. Other (specify)				
4. Physical therapists				
5. Occupational therapists				

Schedule F—Continued

Type of service	Total	Expenditures from home care funds	Value of services provided without charge to home care budget	
			Actual	Estimated
A. Personnel, total—Continued				
6. Nutritionists				
7. Speech therapists				
8. Health educators				
9. Home teachers				
10. Housekeepers				
11. Other (specify)				
B. Other services and supplies, total				
1. Laboratory and other diagnostic procedures				
2. X-rays				
3. Hospital equipment				
4. Medications and medical supplies				
5. Orthopedic appliances				
6. Transportation				
a. Of patients				
b. Of staff				
c. Of supplies, equipment, and other				
7. Other services (specify)				

IV. Administrative and other expenses (indirect services)

Type of service	Total	Expenditures from home care funds	Value of services provided without charge to home care budget	
			Actual	Estimated
Total				
A. Program director				
B. Administrative staff (list positions and include educational supervision)				
C. Clerical staff				
D. Overhead (space, light, heat, etc.)				
E. Office supplies and equipment				
F. Other				

V. Describe methods used for obtaining figures in IV above

VI. Total costs of home care services related to individual patients

A. Are costs kept separately for each patient? If yes, describe how this is done, particularly for costs of services that are provided on a salary basis or are donated to the home care program. (Obtain copy of individual patient expense record, if available)

B. Does the home care program make estimates of the cost per patient day? or per patient visit? If yes:

1. Show the estimated average cost per patient day or per patient visit for each year such data are available.
2. Describe methods used to obtain these figures. (Indicate whether costs of administration, overhead, and donated services are included.)

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