SPECIAL ARTICLE

THE HOME-CARE MEDICAL PROGRAM OF THE WINNIPEG GENERAL HOSPITAL*

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INTRODUCTION

THE PATIENT with a long-term illness has medical needs that are not always met by the facilities available in a large general hospital. These needs have been met in several centres by a variety of home-care programs, some community-based, some hospital-based, and some of them catering only to patients with specific diseases or disabilities.[1-6]

Two major considerations led to the establishment of the home-care program of the Winnipeg General Hospital. It was felt that in the majority of cases, patients with chronic illness prefer to be cared for in their homes if help is provided, and that such care is more satisfactory and economical than that provided in hospitals.

While home care is not a substitute for necessary hospital care, it may be expected to bring about a decrease in hospital bed occupancy, particularly since the patient considered most suitable for home care is chronically ill and contributes disproportionately to hospital patient days. The discharge of long-term patients from the Winnipeg General Hospital has been a problem, partly because of the relatively high proportion of indigent patients.

Over the years, various methods have been evolved to facilitate the discharge of long-term cases. The social service department of the hospital was instrumental in determining the patient's social needs and arranging his discharge to his home with the assistance of a number of community agencies. The outpatient department provided care to such patients able to return to that department but lacked facilities to carry care into the home. Patients requiring long-term bed care were discharged to the chronic wards of the Winnipeg Municipal Hospitals and to the nursing homes under the direction of the City Health Department. Home nursing services were provided by the Victorian Order of Nurses whenever requested. However, there were patients who did not fit into any of these categories and others whose transfer to long-term beds tended to block these indefinitely. In many instances, discharge to a nursing home or municipal hospital could be avoided by the provision of equipment, nursing, homemaking services and medical supervision in the patient's own home.

Therefore, in 1957, steps were taken to establish a home-care program in the Winnipeg General Hospital to be administered from the outpatient department with funds from Federal-Provincial health grants. The program came into effective operation in August of 1958. Numerous enquiries and visits from interested persons in other centres have prompted us to publish our experience to date.

REQUIRED FACILITIES

Since the hospital already had at its disposal a wide variety of services which have been previously mentioned, the major requirement in setting up a home-care program was the establishment of a central office in the outpatient department, the acquisition of a few additional personnel, funds, and the administrative authority to co-ordinate all these facilities as described in the following sections. In establishing a home-care program it was planned that duplication of services already available in the community would be avoided.

METHOD OF OPERATION

Referrals are received from the wards of the Winnipeg General Hospital and Municipal Hospitals, from the outpatient department of the Winnipeg General Hospital, from private physicians and from other agencies outside the hospital, such as the Victorian Order of Nurses. The patients are referred by attending doctors, interns, nurses and social workers. Each case is assessed by the nursing co-ordinator and the medical co-ordinator, to determine suitability and requirements for home care, since all cases are not suitable for such services. Those patients whose care is particularly complicated are usually referred to nursing homes or to the chronic wards of the Winnipeg Municipal Hospitals. Patients with advanced heart disease or malignancies, who are unable to return to the outpatient department or to the doctor's office, can very often be managed easily at home with the provision of nursing aid and medical visits. Some patients and their relatives are elderly, and without the provision of homemaking assistance they cannot assume the increased work load imposed by a bed-ridden patient. A small group of cases suitable for home-care services are patients with advanced respiratory disease requiring the frequent administration of oxygen under pressure. The bedridden case of multiple sclerosis has also proved to be suitable for home care, as have patients with a wide variety of other conditions.

The patient is discharged to his home once satisfactory arrangements have been made for his

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continued care in that setting. Nursing and homemaker visits are arranged as advisable, and periodic reports regarding the progress of the patient are obtained from the nursing and homemaking personnel. Day-to-day problems in management are handled by the nursing co-ordinator and the medical co-ordinator of the plan. Where required, medical visits are made by the resident house staff or the patient's physician. No attempt is made to supplant the functions of the outpatient department or to provide full hospital services in the home. The patients return to the outpatient department of the hospital or to their private physicians for treatment and investigation that cannot easily be given at home. In certain cases, readmission to hospital is arranged to facilitate intensive treatment of the patient or to provide relatives with a welcome vacation from the responsibility of caring for home-care patients. All patients in the program are reviewed weekly by the medical and nursing co-ordinators in an effort to maintain a high standard of medical care in the home.

PERSONNEL

The medical co-ordinator (part-time) supervises the program and makes the original decision as to selection of cases. He is assisted in the day-to-day medical supervision of home-care patients by a part-time medical assistant.

The nursing co-ordinator was obtained through the auspices of the Victorian Order of Nurses and she has proved to be an essential part of the home-care program. As has been mentioned, for many years the Victorian Order of Nurses has provided home nursing to patients in the Winnipeg area, and because of their considerable experience in this field, it was felt that the necessary co-ordination of medical and nursing needs could best be met by a nursing co-ordinator from the ranks of that organization. A great deal of the nursing co-ordinator's time is spent in organizing the home-care needs of patients and handling the patients' day-to-day requirements.

The secretary serves an important role in the program, handling the records as well as answering the large number of telephone calls from both patients and interested agencies, which are directed to the home-care office. The easy accessibility of the secretary and the nursing co-ordinator by telephone has proved to be a major reason for the success of the program. It has been found that patients and relatives derive considerable comfort and reassurance and require fewer doctors' and nurses' visits as a result of easy and frequent telephone communication with the home-care office. The secretary and the nursing co-ordinator also arrange the provision of medications, equipment and nursing supplies for the patients.

The provision of homemaking services is a major problem. This service is supplied by the Family Bureau of Greater Winnipeg, which has given every assistance. However, it is apparent that the supply of homemakers is limited and occasionally patients must remain in the hospital longer than necessary before a suitable homemaker can be found.

Without the resources of the social service department and the outpatient department of the hospital, the home-care program could not function adequately.

The social service department comprises six trained medical social workers, all of whom contribute valuable services to the home-care plan. The hospital social workers very often are aware of problems arising from the discharge of patients and will frequently initiate a patient's referral for home-care services. In addition, the social worker's special knowledge regarding the provision of welfare benefits is utilized in many ways to implement home-care arrangements. Without this sort of assistance, a full-time medical social worker would be required. The nursing co-ordinator, as a result of long experience with the Victorian Order of Nurses, is cognizant of many of the social needs of the patients, and because of her previous experience knows where assistance can be found. As the volume of patients increases, it is possible that the employment of a full-time medical social worker may be necessary.

The outpatient department is of great value in facilitating home care. Many patients are brought back to the outpatient department for diagnostic tests and treatment that cannot be given at home. Without the availability of these facilities, the economic and satisfactory operation of the program would be much more difficult, although we are aware of home-care programs in other centres which are community-based and not hospital-based.

ANALYSIS OF THE HOME-CARE CASES

Since the inception of the home-care program in August 1958, 178 patients have received home-care services. The great majority of the cases were accepted during the past year, as indicated in Table I.

TABLE I.

	No. of cases	*Days of care*
Aug. 1/58 - Sept. 30/60 (26 months)	178	33,598
Oct. 1/59 - Sept. 30/60 (12 months)	151	24,617

The major diagnoses of these patients are outlined in Table II.

The remainder of the statistics deal only with the last 12-month period (October 1, 1959, to September 30, 1960). During this time, 151 patients received home-care services. Sixty-five of these were discharged from hospital under the program and 86 were enrolled from outside the hospital. The majority of these patients, 130 in number,

TABLE II.

Major diagnoses in all cases		
Chronic heart disease		36
Arteriosclerotic and hypertensive.	24	
Rheumatic	12	
Chronic pulmonary disease		22
Emphysema	17	
Others	5	
Advanced malignancy	35	
Neurological disease		
Cerebrovascular	25	
Neurological (e.g. multiple sclerosis)	20	
Paraplegia	5	
Fractures	4	
Rheumatoid arthritis	7	
Others	24	
Total	178	

were indigent; the remaining 21 were private patients. The sex distribution was 90 females and 61 males. The age distribution is shown in Table III.

It may be seen from the age distribution (Table III), and from Table II, that most of the patients were elderly and were suffering from chronic degenerative and neoplastic diseases. It is not surprising that 38 died while on home care during the year, and that 59 of 151 patients required 76 readmissions to hospital. However, 29 were discharged from the program, as they no longer required this type of care. At the present time, the daily census of patients fluctuates at about 100, which seems to be optimal for the present staff and facilities.

TABLE III.

Age (years)	*No. of cases*
0 - 10	2
10 - 20	4
20 - 30	2
30 - 40	7
40 - 50	9
50 - 60	22
60 - 70	28
Over 70	77

The following case report illustrates many of the problems encountered in providing home care:

Mrs. P., aged 75 years, had suffered a traumatic paraplegia some years before and required several periods of hospitalization because of bladder infections, decubitus ulcers and increasing senility. In June of 1958 she was on a chronic-care ward in the Winnipeg Municipal Hospital and it seemed likely that she would remain there. However, her husband, who was 75 years of age, was very anxious to have her at home, and she was accepted for home care in June 1958. The family was indigent and the home contained the bare necessities. A hospital bed, wheelchair, bedpan, and other minor nursing aids were provided. The Victorian Order of Nurses visited the patient at daily or twice-daily intervals to provide nursing care, and the Family Bureau provided housekeeper services from time to time to help with heavy cleaning. Dressings and pads required for the patient's care were obtained from the Winnipeg General Hospital and medications were obtained in the usual way through the hospital outpatient department. On several occasions the patient was brought to the outpatient department for treatment and on two occasions she was admitted to hospital for 16 days and 12 days, for intensive treatment of her bowel and bladder disorders.

ECONOMICS

The cost of the various services provided during the year is set out in Table IV.

The average per diem cost per patient was $1.78, of which administration costs account for 52 cents. This does not include drugs which are supplied from the Winnipeg General Hospital Dispensary under the same arrangements as are applicable to all outpatients.

TABLE IV.—USAGE OF HOME CARE SERVICES IN THE PAST YEAR (151 CASES)

		Cost
Home nursing	—136 cases	$14,192.
Housekeeping	— 50 "	9,863.
Equipment	— 19 "	955.
Transport	— 88 "	1,197.
Physiotherapy	— 5 "	315.
Supplies	— 36 "	1,802.
Doctors' house calls	— 98 "	2,370.

In order to assess roughly the financial saving, which is of course not the prime reason for the program, all cases were reviewed. From our experience with these and similar cases, the saving of hospital and nursing home bed days was estimated and is depicted in Table V. Under the heading of "hospital days" we have grouped together the acute hospital bed and chronic or long-stay hospital bed days that we consider had been saved.

TABLE V.—SAVING OF BED OCCUPANCY

	Days	
	Hospital	*Nursing home*
Aug./58 - Sept. 30/60— 178 cases (26 months)	15,930	12,733
Oct. 1/59 - Sept. 30/60— 151 cases (12 months)	12,069	9,919

COST SAVING

Cost of:	*Hospital care*	*Nursing home care*	*Home care*	*Saving*
Aug./58 - Sept. 30/60 (26 mos.)	$286,470	$47,749	$66,059	$268,430
Oct. 1/59 - Sept. 30/60 (12 mos.)	217,242	37,196	43,736	210,702

This past year's saving of hospital and nursing home days is approximately equivalent to full occupancy of 33 hospital and 27 nursing home beds. In addition, since the beginning of the program, re-admissions to hospital have been prevented or earlier discharge achieved in 32 cases, 18 of whom were cared for in this program during the past 12-month period.

In Winnipeg, an average hospital bed costs $18.00 per day and a nursing home bed $3.75 per day. The cost saving can, therefore, be roughly estimated.

DISCUSSION

The home-care program has now been in operation for 26 months and certain conclusions can be drawn from our experience. There are real benefits to be gained from the institution of a home-care plan. With such services available, patients can very often be discharged earlier than would otherwise be the case, and in many instances, with adequate home care, re-admissions to hospital can be prevented. In both of these ways, active hospital beds can be saved and utilized in a more advantageous manner. There is also a financial saving which is readily apparent from the data presented.

More important is the benefit of the home-care program to the patient, which has been its most gratifying aspect. It has been the experience of everyone associated with this program that patients and their relatives are happier and much prefer medical care in their homes to institutional care, if they are adequately supported. Initial reluctance on the part of relatives to assume responsibility for the long-term care of chronically ill patients has invariably been rapidly dispelled by the knowledge that the resources of the home-care program are available to them on a 24-hour basis.

A further benefit has resulted from the involvement of medical students and interns in the home-care program. For some time, fourth-year clinical clerks have been assigned in rotation to various families receiving home care and have participated in their management under the supervision of the intern staff and the medical co-ordinators. In this way, students and interns have been made aware of the long-term problems of chronic care and have observed the advantages of a home-care program. It is expected that this will result in an increased awareness of the possibilities of home care.

The most important requirement for the successful operation of a home-care plan is the provision of adequate medical and nursing attention. In addition, however, there must be a small central staff who can co-ordinate the various services required for the successful management of the patient at home. In our experience, this can only be achieved in a situation where doctors and nurses are continuously available, as they are in the outpatient department of any large hospital. It also seems important to us that interested and co-operative personnel must be chosen to ensure the successful establishment of a home-care program.

There are some limiting factors. One of these is the homemaking services, as the availability of competent homemakers is not always adequate to deal with the demands. Patient referral does not necessarily occur spontaneously, and active case-finding on the part of the home-care team is necessary if adequate utilization of hospital beds is to be achieved. It seems to us that case-finding will always be an important function of the home-care team, particularly in the earliest stages of such a program.

In conclusion, we feel that the home-care program described in this report has proved to be of real benefit in a variety of ways. It was initiated as a pilot project, but in only two years of operation it has become a firmly established service of the hospital outpatient department.

REFERENCES

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PAGES OUT OF THE PAST: FROM THE JOURNAL OF FIFTY YEARS AGO

THE PROPRIETARY SCHOOL

The last vestige of the proprietary school of medicine has passed away from Canada, and medical education is now wholly in the hands of the universities. The change has been forced by the inexorable march of science these forty years past. In the outset all schools of medicine were in reality, if not in obvious appearance, proprietary schools. One was an adjunct to a hospital; another arose out of rivalry; and more had their origin in personal ambition or in professional strife.

It was easy in those days to open a medical school. All that was required was a few bodies for a perfunctory dissection, and a lecture room in which the professor could recite an elaborate epitome of his text-book, or relate the experiences which he encountered upon his daily rounds. If a microscope or two were added, then the equipment was complete. Access to a hospital was a manoeuvre to bewilder a rival rather than an integral part of the course. It was easy, also, to obtain a faculty at a time when the armamentarium of a surgeon was a knife and a piece of string, and his mental equipment a resolution to let blood; when the main qualification of a professor was a sure facility in speech and a certain capacity to entertain.

Students, too, were not hard to come by. The man who was tired of being a tailor, who found irksome the laborious monotony of the farm, or the man who would improve his social and financial status in the world,—all these were eager to avail themselves of the services of an institution which was willing to minister to their ambition on such easy terms. Even the length of the session was made as short as possible, so that needy students might return to their legitimate and gainful employments with the least delay.—Editorial, *Canad. M. A. J.,* 1: 1091, 1911.