

Training may in one case make only the difference between secure and insecure sitting; in another, between safety and danger in going up and down curbs. Other patients may make considerable improvement over a period of time. If these are growing children, it is sometimes difficult to tell how much of the progress was due to training and how much to maturation. But the physical therapist who wishes to do justice to his cerebral palsied patient must have as many balance technics as possible at his disposal.

REFERENCES

- Akerblom, B.: *Standing and Sitting Posture*. A.-B. Nordiska Bokhandeln. Stockholm 1948.
- Deaver, G. G. and Brown, M. E.: *The Challenge of Crutches*. Institute for the Crippled and Disabled. New York City 1950.
- Dorinson, S. M., et al: A support for teaching head control in cerebral palsy. *Phys. Ther. Rev.* 34:168, 1954.
- Gray, James: *How Animals Move*. Cambridge University Press (United Kingdom) 1953.
- Guibor, G. P.: Some eye defects seen in cerebral palsy, with some statistics. *Am. J. Phys. M.* 32:342, 1953.
- Harris, Dorothy M.: Crutch balancing. *Phys. Ther. Rev.* 30:424, 1950.
- Hipps, Herbert E.: Six year report on the use of the cerebral palsy chair-brace. *Southwestern Med.* 37:238, 1956.
- McGraw, Myrtle B.: *The Neuromuscular Maturation of the Human Infant*. Columbia University Press. New York 1943.
- National Society for Crippled Children and Adults, Inc.: *Cerebral Palsy Equipment Manual*. Chicago, Ill. 1950. *Therapeutic Equipment for Cerebral Palsied Children*. Chicago, Ill.
- Shriner, M.: *Foundations for Walking*. National Society for Crippled Children and Adults, Inc. Chicago, Ill. 1951.
- Spencer, H.: *A Glossary of Scientific Terms in the Cerebral Palsy Field*. Columbia University College of Physicians and Surgeons. New York, 1956.
- Zausmer, E.: Evaluation of strength and motor development in infants. *Phys. Ther. Rev.* 33:575, 1953.

The Organization and Development of a Physical Medicine and Rehabilitation Service Within the Framework of a Welfare Agency

Geneva R. Johnson, B.S., Beatrice A. Levy, Jack B. Mohney, M.S., M.D.

Baylor University College of Medicine, Department of Physical Medicine and Rehabilitation, since April, 1954, has operated and maintained a small rehabilitation unit for the indigent and aging indigent, with particular emphasis on the clients of the Houston-Harris County Board of Public Welfare, Houston, Texas.

In April, 1945, the Houston-Harris County Board of Public Welfare opened a convalescent home in the Old Jefferson Davis Hospital building, the former city-county hospital. Forty-five beds were provided on the fourth floor. Medical care was obtained at Jefferson Davis Hospital the present city-county hospital which is the

teaching facility for Baylor University Medical School.

In the fall of 1952, and again in the fall of 1953, unsuccessful attempts were made to establish a Physical Medicine and Rehabilitation Service in the Old Jefferson Davis Hospital. This unit was to serve the patients living in the convalescent home. Money for equipment and operation, including salaries, was furnished by two interested families in the community. Definitive care in physical medicine was offered. These efforts failed due to lack of a firm policy of admissions and discharge in the convalescent home. Turn-over of patients was too slow to make it economically feasible to continue a restorative program.

With the institution of the Department of Physical Medicine and Rehabilitation at Baylor University College of Medicine in January, 1954, it was requested that the unit at Old Jefferson

Geneva R. Johnson, Coordinator, Department of Physical Medicine, Medical College of Georgia, Augusta—formerly Physical Therapist and Coordinator of Services, Rehabilitation Unit, Department of Physical Medicine and Rehabilitation, Baylor University College of Medicine, Houston, Texas; Beatrice A. Levy, Occupational Therapist, and Jack B. Mohney, M.D., Chairman, Department of Physical Medicine and Rehabilitation, Baylor University College of Medicine, Houston, Texas.

Davis Hospital be re-activated. In late March of that year, the facility was re-opened. No real change had been made in policies governing admissions and discharges of patients in the convalescent home.

When the unit re-opened, the staff consisted of one physical therapist, one nonprofessional, untrained aide, and the physiatrist, who was available for consultation one-half day each week. Part-time janitorial service, electricity, water, and heat were supplied by the Board of Public Welfare.

Physical space for operation was one room, 20 feet by 42 feet, located on the second floor of the Old Jefferson Davis Hospital building. This was accessible from the fourth floor by self-service elevator, and by elevator or steep, unrailed stairs from the outside. In order to reach the department, it was necessary to pass through a clinic operated by another agency.

Originally, the treatment program was designed primarily for the patients living in the convalescent home. The long range plan was for expansion which would allow extension of service to other clients of the Board of Public Welfare.

Most of the patients initially referred had received treatment in physical medicine and rehabilitation previously. Aims of treatment had not been clearly understood by the nursing staff and the patients. As a consequence, gains made through treatment had been lost. Many of these people had become inactive and some had again become virtual bed patients.

In the early phases, it had been necessary to take all patients referred. Of the 37 patients living in the convalescent home, 8 were selected by the physiatrist as candidates for physical medicine. These represented the usual disabilities of arthritis, cerebral vascular accident, fractures, central nervous system diseases, and spinal cord lesions. The treatment load increased to 14 by the end of the first month of operation and continued to increase gradually. With one exception, the patients were 50 years of age or older. Within six months, the patients first referred from the convalescent home had achieved maximum benefits.

The program consisted of treatment in the department and on the ward with the usual modalities of physical therapy. Diversional activities were encouraged outside of the treatment program and for a time were carried on in the rehabilitation unit and on the ward on an individual basis. These activities were under the supervision of the physical therapist and on the

prescription of the physiatrist. As more patients began to participate in this program, it became too time consuming for the physical therapist. Efforts were made to continue with the use of volunteers and later with a part-time crafts instructor. Neither of these attempts proved satisfactory and the program was discontinued as a supervised project.

The nursing staff of the convalescent home, the social case worker, and her supervisor seemed unable to accept or acknowledge the purposes of a treatment program in physical medicine; therefore, no efforts were made to release patients from the convalescent home or to plan for their discharge after maximum benefits had been reached. There were few new admissions to the convalescent home, and as a result, to the Physical Medicine Service.

To prevent the collapse of this carefully nurtured program, a shift in the emphasis of treatment load became imperative. Repeated efforts were made by the physical medicine staff to acquaint the Director of the Board of Public Welfare with the services available to outpatients. In October, 1954, the physiatrist was invited to speak to the entire social case work staff of the Welfare Department about the role of physical medicine in the rehabilitation of the physically disabled. The social case workers had not been aware of the value of early rehabilitative care or of how the Physical Medicine Service could benefit the disabled client being carried on relief status.

Although there was evident interest in the work being done in the rehabilitation unit, actual participation by the social case workers did not take place at this time. There had, as yet, been no opportunity to demonstrate the worth of early care or to show how this could save valuable time for the client and shorten the period of welfare assistance.

Soon after inauguration of this unit, the physical medicine staff recognized the potentiality for its growth and service to the community. To increase the usefulness of the unit, an occupational therapist was added to the staff in December, 1954.

In March, 1955, the Executive Director of the Board of Public Welfare, in an earnest desire to offer the best kind of service to his clients, united with the physical medicine staff to plan the first inclusive meeting of supervisory personnel from his department, the convalescent home, and from the physical medicine department. The chief supervisor of social case workers, superin-

tendent of nurses of the convalescent home, the social case worker of the convalescent home, Executive Director of the Board of Public Welfare, the physiatrist, occupational therapist, and physical therapist were present. At this meeting, attempts were made to explain the position of each group as it related to the patient. The Director of the Board of Public Welfare was asked to clarify the purpose of the convalescent home.

Objectives of the physical medicine and rehabilitation treatment program were defined as:

1. To assist the patient to achieve some measure of self-discipline,
2. To help the patient to understand his disability,
3. To attempt to reestablish work habits,
4. To increase work tolerance and endurance,
5. To help the patient to develop as much physical independence as possible.

Underlying these objectives was the basic philosophy that preservation of human dignity was equally as important as restoration of physical function.

The physiatrist asked if beds could be reserved in the convalescent home for patients who needed intensive care in physical medicine. A specific number of beds could not be allocated to this purpose, but assurance was given that any time a bed was needed, it would be provided if the applicant met the Board of Public Welfare eligibility requirements.

A procedure for referral and acceptance of outpatients was outlined. Only patients referred from Jefferson Davis Hospital would be considered for outpatient treatment, since necessary medical work-ups, X rays, and laboratory tests could be more readily obtained for the indigent patient through the city-county hospital. The physiatrist also requested that all outpatients have a tuberculosis and venereal disease clearance before admission to the Physical Medicine Service.

The Director of the Board of Public Welfare explained the difficulties involved in discharging patients from the convalescent home. Many of these patients had no families or homes to which to return. Nursing homes were woefully overcrowded. Age, disability, and past work records placed many in the so-called "unemployable" category. The use of foster homes was suggested as a possible solution for those who required custodial or domiciliary care. This was accepted as a valuable suggestion that merited investigation. The low budget allowed for this kind of placement, however, does not permit a wide

selection, and desirable and suitable homes for this purpose are difficult to locate.

Out of this joint conference came the realization of the many problems confronting each service. Until this meeting, neither group had fully appreciated the concept of the individual operation of two related, yet independent agencies. At this time, it was decided that bimonthly meetings of this same staff should be held in order to establish joint policies and procedures. It was also requested that these meetings should include discussion of patients who were already receiving treatment in the rehabilitation unit. Another request was that the social case worker whose client was being reviewed be present to give the social summary and to participate in the discussion and plans for the patient's treatment program and eventual termination.

The chief case supervisor was asked to survey the case load of the Board of Public Welfare to determine how many clients were receiving aid because of physical disability. A short case history was prepared on each of these and this summary was submitted to the physiatrist. From this group, he chose a number who should be sent to Jefferson Davis Hospital for evaluation and possible referral to the physical medicine department.

By this procedure, several patients were referred and accepted for treatment; 4 were lower extremity amputees, who had been provided with prostheses by the State Office of Vocational Rehabilitation. Very little, if any, preparation had been given before the prosthesis was received, and no training in the use of the limb had been provided. Tangible results of concentrated treatment on a few selected patients impressed the social case workers with its value and inquiries came about the possibilities of treatment for other clients. In the course of the following 9 months, 20 outpatients were added to the treatment load. Of this number, 2 were brought into the convalescent home to receive intensive care in the rehabilitation unit.

The increasing outpatient load immediately brought certain difficulties. Finally, a form requesting necessary basic information was drafted for use of the social case worker. This form was sent along with the client when he reported to the hospital for an appointment. The examining physician could quickly supply the requested information and add any pertinent remarks or information, if his evaluation indicated referral to the Physical Medicine Service. This form was returned to the social case worker by mail and then delivered to the rehabilitation

unit. An appointment was made for the patient to be seen by the physiatrist. The social case worker made the necessary transportation arrangements and informed the client of his appointment date and time. If possible, the worker came with the client for this first examination. A summary of the patient's hospital chart was prepared by the physical medicine staff before the patient reported for the initial examination.

An outstanding problem was transportation. First of all, the location of the rehabilitation unit was in an isolated section of the city where bus transportation was not within walking distance for the handicapped. The cost of cab fare was prohibitive. Red Cross motor service could provide a limited amount of transportation, but could not meet the needs because of lack of volunteer services. In time this need was made known to Volunteer Community Services, a United Fund Agency, by the Director of the Board of Public Welfare. An effort was made to establish a transportation corps to serve the rehabilitation unit. While this started off well, the corps dwindled to one faithful driver who donated one day a week. A philanthropic group, which became aware of the pressing need, made a regular monthly donation to a transportation fund.

Other difficulties encountered were indifference, in some cases, or refusal of the patient to accept what the long range treatment program meant for him. A long-term disability and a lengthy period of dependence on others to meet his basic needs had destroyed motivation for independence. In some instances, because of heavy case loads, social workers were unable to follow up with frequent home visits.

A valuable standardized form resulted from the need of the physical medicine staff to have immediate basic social information about the referred client. This was to help in planning a suitable program in the unit and for home care. Information was requested about the patient's former employment, his reaction to the suggestion that he be evaluated for possible referral to Physical Medicine Service, and the physical conditions of his home. The latter influenced the type of home program the patient could reasonably be expected to follow. If the client was admitted for treatment, a thorough social service summary was prepared and presented at combined staff conference when the patient was reviewed.

In addition to the problems encountered in treating outpatients, there were many involved in the care of inpatients. When a patient reached

maximum benefits in the rehabilitation unit, he could not be quickly dismissed from the convalescent home. Several of these patients were maintained on a treatment program many months past the ideal termination point. The objection to this was that time, space, and staff were not available for a maintenance program. On the few occasions when the patient was discharged and remained in the Convalescent Home, there was a rapid regression to pretreatment level or below.

The difficulties with the convalescent home patients resulted primarily from lack of staff understanding and absence of adequate medical direction. The convalescent home staff consisted of one registered nurse, seven practical nurses, three female aides, and one male porter. Suggestions for self-care ward activities were frequently disregarded as a matter of expediency. The Home was usually filled to capacity. Preparing a patient to meet a physical medicine schedule was an added burden when the staff was unable to see how this would alleviate their load. As patients improved and assumed some of their own care, this attitude began to change, but the change was slow in coming.

Carry-over from the treatment program was further hampered by the physical facilities of the convalescent home. Bathrooms were inaccessible to the patient by wheel chair because of narrow doors, poorly arranged interiors, or a step up or down. Crowded conditions did not leave space for a communal dining room or indoor area for socialization and recreation. A partly sheltered porch garden, which was reached by ascent of a long ramp, and the hallway were the available recreational areas.

In spite of these adverse conditions, from March, 1955 to November, 1955, 4 patients were admitted to the Home from Jefferson Davis Hospital for the express purpose of receiving intensive rehabilitative care. Ten other patients admitted received care when it was indicated. Discharge from the convalescent home continued to be the insurmountable obstacle.

A dramatic change in attitudes and concepts of treatment occurred in December, 1955, with the addition of a new superintendent of nurses. In September, 1955, a trained male social case worker had been transferred to the Home on a part-time assignment. These changes in personnel increased understanding of common problems and made it possible to have a more stable and reciprocal relationship between the convalescent home staff and physical medicine staff.

The common concern of those engaged in the

CHART I

DISTRIBUTION OF PATIENTS BY AGE GROUPS
(April, 1954—November, 1956)

20-29	30-39	40-49	50-59	60-69	
7	10	24	44	20	
Total					105

treatment of patients, and their awareness for the need of staff medical service, resulted in an agreement between the Board of Directors of the City-County Welfare Department and Baylor Medical School administration to provide such service. A physician joined the staff of the convalescent home in June, 1956, on a part-time basis.

From the beginning it was realized that a staff physician in the convalescent home would be the integral part of the machinery of successful operation. The fortunate choice of a physician who is vitally interested in the total rehabilitation process has added immeasurably to the strength of the whole program.

The purpose of the convalescent home was analyzed and restated. Criteria for admission were established and an admission board appointed. To be eligible for admission, applicants must meet these requirements. Discharge policies have been reorganized and executed. Patients eligible for pensions—those who are blind, who receive old age assistance, or are totally disabled, must be placed in another facility as they are no longer eligible for welfare assistance.

This new interpretation of the purpose of the convalescent home has brought about a change in its name. It is now called the Convalescent Ward and thought of as an extension of service of Jefferson Davis Hospital, even though there is no administrative connection.

Before admission to the Convalescent Ward, a patient is evaluated for referral to the physical medicine department. This makes institution of early treatment possible and results have been far superior. All patients in the Convalescent Ward have had a medical workup since June, 1956. Reports are available in the Ward office.

In October, 1956, the social case worker was assigned full time to the Convalescent Ward. Social histories have been completed on all patients and are also available to the staff. The social worker now has time to prepare the patient to accept discharge from the physical medicine department and subsequently from the Convalescent Ward.

Each week the entire patient load of the Con-

valescent Ward is reviewed briefly by the physical medicine staff and the professional staff of the Convalescent Ward. Progress reports are given on patients receiving treatment in the rehabilitation unit. Regular staff ward rounds are made weekly. Any staff member may request review of a patient by the bimonthly combined staff conference.

Combined staff conferences are well organized and the feeling of unity of purpose is apparent. All social case workers have been included in these conferences and have slowly grown to accept physical medicine as one of the sources of assistance for clients.

When a patient is admitted to the physical medicine and rehabilitation department, a combined staff conference is held immediately to discuss:

1. Medical history;
2. Present physical, social, and emotional condition;
3. Goals of treatment;
4. Possible disposition or termination of the treatment period; and
5. The patient's expressed goals for himself.

From this initial conference, the staff is able to formulate a common attitude and approach to the patient so he is not receiving conflicting statements from various staff members.

Volunteer Community Services has continued its interest in the transportation problem. Several new volunteers have accepted responsibilities in the corps and while this problem has not been resolved, it is far less acute.

After 30 months of operation, this facility remains in the same confined area; however, space for physical expansion was made available in February, 1955. Detailed plans for expansion were drawn up by the physical medicine and rehabilitation staff. The plans included office area for physicians and staff, social case worker, vocational counselor; dressing, waiting, and examining rooms; enlarged treatment areas for physical therapy and occupational therapy; shop for vocational training, testing work tolerance and endurance; and a large recreation area. Larger quarters will necessitate an increase in personnel, not yet provided for in any budget.

It is the opinion of those most directly responsible for the development and growth of this unit that its greatest contribution has been in educating a certain segment of the community. It has been possible to achieve a better understanding of intradepartmental functions, of the in-

CHART II

DISPOSITION OF PATIENTS TREATED IN REHABILITATION UNIT

Between April, 1954, and November, 1956

Disposition	Number
To employment	20
Maximum benefit. Discharge to home*	15
Discharge to home care*	14
Maximum benefit. Discharge to Convalescent Ward *	10
Failed to report (Transportation, lack of interest, etc.)	9
Discharged to home *	5
Transferred to other facility *	5
Discharged from Convalescent Ward * (Pension, failed to return, needed bed space, disciplinary measure)	5
Discontinued treatment. Illness*	3
Maximum benefit. To Vocational Training *	2
Deceased	2
	90
On Treatment Program	15
	105

* Being Maintained by Board of Public Welfare.

igent and aging patient and his needs, and the problems confronting each department in its relationship with the patient.

While it has not been possible to succeed with each person referred to the Physical Medicine Service, the results have been encouraging. (See chart 2.) Cost of treatment has been kept to a minimum.

The treatment program has been geared to acquiring functions as rapidly as possible. One advantage of having the physical therapy and occupational therapy sections in such close proximity has been that the patient's progress could be constantly evaluated and guided by both therapists.

SUMMARY

The Physical Medicine and Rehabilitation Department of Baylor University College of Medicine has operated a small rehabilitation unit as a pilot project in total rehabilitation of the disabled indigent and aging indigent who are clients of the Board of Public Welfare of Harris County. While all facilities for total rehabilitation have not been housed under one roof, all necessary services have been available. Some more readily than others.

Multiple problems have been encountered and some remain. In the Department of Welfare these center around lack of trained social case workers, lack of knowledge about medical problems and disabilities on part of the workers, lack of funds to assist with a program of expansion, and heavy case loads which prevent adequate home follow-up by social case workers.

In the Convalescent Ward there are problems of untrained personnel without proper understanding of rehabilitation aims, unsuitable living quarters, inadequate staff to care for patients and also supervise activities of daily living, and slow discharge of patients who have reached maximum benefit.

In general the program is hampered because of limited funds for necessary equipment, such as braces, wheel chairs, splints, bed boards, foot boards, over-bed bars; cramped treatment area with no space for private examination or quiet treatment, office space, waiting room, or dressing rooms for patients or staff; lack of transportation for patients.

This has been a rewarding and worthwhile project which can serve as an example to other communities, regardless of size. Resources in this community have been utilized to provide a select group of disabled persons with an opportunity to lead productive lives. Assistance has come from the following sources:

1. Private
 - a) Baylor University College of Medicine.
 - b) Thrift Shop.
 - c) Citizen groups.
 - d) Goodwill Industries.
2. State
 - a) Office of Vocational Rehabilitation.
 - b) State Crippled Children.
3. Community Aid—Red Feather Agency
 - a) Jewish Guidance Service.
 - b) Community Volunteer Services (Community Council).
 - c) American Red Cross.
 - d) Speech and Hearing Center.
 - e) Visiting Nurses Association.
4. Social Agencies
 - a) Board of Public Welfare.
 - b) Catholic Charities.

A rehabilitation center to serve the nonpaying and part-paying patients of Harris County should be the natural outgrowth of this established nucleus.