Staffing Ratios in a Rehabilitation Program

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ON JANUARY 1, 1961 the State Department of Social Welfare of California put into effect a program to pay for physical rehabilitation services for the Old Age Security recipients in facilities certified by the State Department of Public Health. This program is part of the state’s implementation of the Kerr-Mills bill passed by the Congress of the United States September 13, 1960, known as the “Social Security Amendments of 1960.”

The payment of cost of rehabilitation should enable many persons needing this service to obtain it and, in turn, enable hospitals to develop such programs to meet the need. It is the intent and hope of the state that these services be made available in both public and private facilities, distributed as widely throughout the state as possible.

The standards for certification of a rehabilitation facility follow patterns well established by functioning programs and facilities throughout the country. They require the services of professional personnel to include physicians, nurses, physical and occupational therapists, medical social workers and clinical psychologists. The published criteria list the professional requirements of these personnel. However, the standards do not attempt to establish numbers of staff required in a program.

Planning and budgeting for the numbers and types of personnel needed can be handled in any of several ways. Personnel may be added as needs arise or staffing ratios may be used where the types, numbers and severity of disabilities to be treated are adequately predictable.

Administrators, whether of hospital or medical background, have varying opinions of the value of staffing ratios or formulae. Some consider them useful in developing work loads and budgets, and for planning programs. Others, believing they are misleading, unnecessarily rigid or arbitrary, prefer not to use them.

At Rancho Los Amigos Hospital, staffing ratios are used in some services but not in others, depending upon the size and degree of definition of duties within the service. Experience to date with their use encourages us to continue. The ratios used have for the most part been developed within our own experience. These represent the multitudinous influences of budgeting and programming at work in our particular environment. They cannot and should not be considered rigid patterns for use in other rehabilitation programs. They can, however, be used for comparison with other programs or as possible guides to new programs being established.

It is the purpose of this paper to present the staffing ratios used at the Rancho Los Amigos Hospital in the physical rehabilitation program, as a resource for hospitals who may be seeking such information for their own planning purposes.

Medical Staffing

A ratio of physicians to patients is difficult to establish, will vary widely between hospitals and can be very misleading. Consequently we do not use it for establishing positions for staff physicians; rather, we define a medical need and then establish the position. We can, however, arrive at an experience figure by relating the number of full-time physicians serving a given number of patients on the rehabilitation program. With this approach, our ratio turns out to be approximately one physician to 33 patients. This is misleading, however, because one physician does not confine his activities to a geographically confined group of 33 patients. The physician staff is composed of generalists and specialists, each performing specified service for a given patient. The generalist provides the day-to-day general medical care, the internist the special med-
Nursing hospitals, where one share period. The ratio cited in our program does not include numerous consultants who visit for guidance, teaching or special consultative purposes.

**Nursing**

Our nursing ratios are based on the number of hours of nursing service rendered a patient in a 24-hour period. We use different ratios in different areas of the program, the areas being defined by severity or type of disability. The ratio includes three classes of nursing personnel—registered nurse, licensed vocational nurse and attendant. The ratio excludes supervisory personnel, from the head nurse upward. It also excludes whatever clerical and educational personnel are used within the service. Through means of the ratio, the numbers and classifications of patients thus determine the number of nursing service personnel. This nursing personnel number is then distributed between professional and nonprofessional persons on a 25:75 ratio, 25 per cent professional (includes only the registered nurse) and 75 per cent nonprofessional.

The basic nursing formula used within our rehabilitation program is four hours of nursing service per 24 hours per patient. This formula is applied to a group of adult patients in a defined area of the hospital where patients are transferred for the specific purpose of engaging in an intensive program of rehabilitation. The patient group includes those with such diseases or conditions as spinal cord injury resulting in either paraplegia or quadriplegia, severe rheumatoid arthritis, amputation, hemiplegia, advanced multiple sclerosis and a variety of other neuromuscular disabilities. The average length of stay in this program for a patient is six months.

Several specifically defined rehabilitation patient groups receive nursing care beyond the basic four hours per 24 hours. They are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Hours</th>
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<td>A. Respirator patients (patients using a mechanical respirator for support of respiration)</td>
<td>10.3</td>
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<tr>
<td>B. Paralytic poliomyelitis patients (nonrespirator)</td>
<td>6.5</td>
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<tr>
<td>C. Children with severe forms of various paralytic, neuromuscular or congenital disabilities</td>
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The nursing support in the long-term care program of the hospital apart from the intensive rehabilitation program varies between 0.9 and 1.75 hours per 24 hours per patient.

**Physical Therapy**

The physical therapy staff operates with a ratio of approximately one physical therapist to seven patients. This ratio, as in nursing, excludes the top supervisory, instructor and clerical personnel. The number of staff allowed by the formula is further divided into professional and nonprofessional personnel in approximately 50:50 ratio. The professionals are registered physical therapists and the nonprofessionals are attendants. Physical therapists began using attendants at our hospital some seven or eight years ago, relatively few at first, then gradually increasing to the present 50:50 proportion.

Need for the use of nonprofessional personnel grew from the chronic shortage of registered physical therapists; and now that the therapists have learned how to train and supervise nonprofessional help, have become accustomed to it and have overcome whatever misgivings they may have had about the threat to their own job security; they would no longer care to be without attendant workers on their staff. This experience parallels that of the nursing service with regard to the use of nurses’ aides.

**Occupational Therapy**

The occupational therapy staff uses a ratio of one staff person to 14 patients. As in physical therapy and nursing the ratio includes professional and nonprofessional (attendant) personnel. This distribution is approximately three registered therapists to one attendant. The use of attendants is more recent in occupational therapy than in physical therapy, but the acceptance and use of their help followed the same pattern of development noted with regard to the other staffs already mentioned.

**Medical Social Service**

For medical social service the staffing formula is one professional worker to 35 patients. This ratio excludes the head of the department. It also excludes admissions workers whose particular assignments are the determination of financial eligibility for admission to a county facility. This department has just begun to use the services of two nonprofessional persons assisting the social worker with some of the more routine duties. Thus far the experience is good.

**Psychological and Vocational Services**

Psychologists and vocational counselors are both needed in a rehabilitation program. We have integrated these two functions and personnel into one department because of the close relationship between psychological evaluation or testing and vocational guidance or counseling. We have further attempted to combine these two functions into the same person in order to achieve flexibility of staff and to minimize further staff specialization. Approximately 60 per cent of the patients on a rehabilitation program
will require the intensive services of the psychologist-vocational counselor. The average time spent with a patient during a period of six months in hospital is approximately 40 hours. A formula of one psychologist or vocational counselor to 35 patients needing service (60 per cent of the patients in the intensive program need it) will adequately supply the service. This group of professional personnel supply psychological testing, psychotherapy and vocational counseling.

A prevocational testing clinic has been developed within this service. Experience over the past four years indicates that approximately 50 per cent of the rehabilitation patients will have need of this facility, each requiring 25 to 30 hours of service.

There are various other services or activities used in a rehabilitation program, but they are either of a nature not suitable to the working out of a staffing formula or we have not yet attempted to apply one.

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REFERENCES
