

REPORT ON THE COMMITTEE ON PROSTHETIC-ORTHOTIC EDUCATION

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COMMITTEE ON PROSTHETIC-ORTHOTIC EDUCATION (CPOE).

The members of the parent committee are well-qualified clinicians and educators who are selected on the basis of knowledge and experience in their field and whose judgment is respected by their professional associates. They are not necessarily actively engaged as practitioners in the care and management of the orthopedically disabled, but have a background of experience in this area. Membership includes seven orthopedic surgeons (three of whom are consultants or advisors to the prosthetic-orthotic educational programs at the University of California at Los Angeles, New York University, and Northwestern University), one surgeon, one physical therapist, one occupational therapist, one nurse, one prosthetist, one orthotist, one representative of the Prosthetic and Sensory Aids Service of the Veterans Administration, and one dean of a school of health-related professions.

The Committee meets once a year, usually in Washington, D.C., and invites representatives from both civilian and Federal agencies and organizations having interests in common with CPOE. The members review and approve conduct of the overall program, act in an advisory capacity in the solution of problems concerning prosthetic and orthotic education, help in identifying educational needs, and suggest programs that will enhance the educational opportunities of those involved in the care and management of the orthopedically disabled. All members of CPOE and its subcommittees are appointed by the Chairman of the Division of Medical Sciences, National Research Council, subject to approval by the President of the National Academy of Sciences.

CPOE's Steering Committee is composed of the chairmen of the four subcommittees, who meet only at the discretion of the Chairman of CPOE.

SUBCOMMITTEE ON PROSTHETICS CLINICAL STUDIES

The members of this Subcommittee, established in 1961, are well-known orthopedic surgeons and physiatrists who are in charge of amputee clinics throughout the country. They were selected on the basis of their willingness to participate in a long-range followup study (the Prosthetics Clinical Study) related to the socio-economic, medical, vocational, and rehabilitation status of amputees reporting to their clinics. The followup information was to be submitted one or more times a year over a 5-year period. Detailed, pre-coded, four-page forms were developed for submission of information by various members of the amputee clinic team, *viz.*, the physician, the therapist, the prosthetist, and in some instances, the social worker. Initial data forms were submitted in 1962, and the last forms in 1966. The final followup forms can therefore be expected not later than 1971.

To date, basic information on over 1,800 cases has been edited in the CPOE office and transferred to IBM cards at the data processing center. Although information on the 1,800 cases will yield considerable valuable data, the volume of forms submitted is far below initial expectations. The complexity of the form and the fact that information was dependent on more than one individual, account, in part at least, for a limited participation. Personnel turnover has also affected participation.

Followup information has been disappointing in terms of quality and quantity, and, at this date, submission of the forms has diminished significantly, in spite of reminders that are sent out at regular intervals. This relatively poor showing is attributed to difficulties encountered in reaching patients once they have received a prosthesis. Form letters developed in this office and made available to the clinics have been used in an effort to contact patients. The response to these letters by the patients has been poor, and oftentimes the forms are either incomplete or illegible. At the first of the year an all-out effort is to be made to pull in as many followups as is possible.

At the last meeting of this Subcommittee in January 1968, it was decided that a basic run be done on all initially submitted data. Suggestions for tabulations would then be made, and the available data subjected to analysis.

The Facility Case Record Study also comes under the aegis of this Subcommittee. Information for this study, on over 8,000 amputees, was obtained from standard record forms used by the prosthetists. This information was not precoded and required many man-hours of work to translate the information to a coding system. Analysis of the results and preparation of reports are being accomplished in the CPOE office. Results of this study are of value to clinicians and others involved in the management of the amputee and provide:

1. Documentation of current prosthetics practices in various regions of the United States.
2. A description of a good cross section of the fitted amputee population in terms of age, sex, cause, level, and side of amputation.
3. Information relative to source of patient referral, source of payment for prostheses, time to delivery of prostheses, and durability of prostheses.

SUBCOMMITTEE ON SPECIAL EDUCATIONAL PROJECTS IN PROSTHETICS AND ORTHOTICS

In January of 1967 Dr. H. W. Glattly, then Executive Secretary, CPOE, wrote to Miss Cecile Hillyer, Chief of Training Division, Vocational Rehabilitation Administration (now Rehabilitation Services Administration, Social and Rehabilitation Service), Department of Health, Education, and Welfare, suggesting that the CPOE's interests be extended into the area of long-term or definitive training and education of individuals in the fields of prosthetics and orthotics, and proposing that a subcommittee be formed for the purpose of supplementing the work of other interested agencies in this area. The proposal for such a subcommittee was met with full approval of the VRA, and CPOE was encouraged to move ahead with plans. Members represent the various agencies and associations involved in prosthetics and orthotics.

The first activity of the Subcommittee was to investigate the current status of orthotists and prosthetists in terms of manpower, education, age, experience in the field, and salary, and to obtain from the practitioners projected educational and manpower needs and salary scales. The data from a survey prepared to obtain the above information are now being analyzed in the CPOE office.

It is expected that the findings from this survey will:

1. Provide institutions which conduct prosthetic and orthotic educational programs with information that will assist in determining requirements for personnel at various educational and training levels.
2. Provide prosthetists and orthotists with pertinent information about their own field, which will prove useful in recruiting activities and in guiding the future professional development, not only of individual prosthetists and orthotists, but of the field itself.
3. Provide information which will be helpful in setting guidelines and goals for upgrading educational standards.

One of the more distant goals of this Subcommittee is to assist, as appropriate, in development of criteria for establishment of courses and

new schools which would then lead to the development of essentials of an approved course in prosthetics and orthotics, recognized by the AMA Council on Medical Education or some other accrediting body. In the meantime, the Subcommittee plans to explore ways in which it can contribute to the overall effort in ensuring a supply of prosthetists and orthotists qualified to provide good services to the orthopedically disabled.

THE SUBCOMMITTEE ON ORTHOTICS

This Subcommittee was established by CPOE in 1965 to explore channels through which an educational program in orthotics might be developed. Two orthopedic surgeons, one educator, and three orthotists serve on the Subcommittee. Confronting the group at its first meeting were the facts that orthotics could claim no delineated body of knowledge, such as characterizes prosthetics, and that what is known, taught, and practiced in orthotics is largely based on experience and observation, and not on scientific laboratory findings. The entire area of orthotics is complex, particularly as it relates to prescription, fitting, and function. In an effort to clarify one small segment of the field, the Subcommittee decided to investigate current practices among orthopedic surgeons, the first study being an attempt to determine the types of external support most frequently prescribed by physicians in treatment of various types of low-back conditions and the results expected from the use of specific supports. A concurrent survey was made of a selected group of orthotists in an effort to determine criteria of construction and fit.

Findings from this study are expected:

1. To serve as a guide to educators in the selection of materials to be taught.
2. To document current orthotics practices which may be used as a baseline for future studies.
3. To identify disparities in orthotics practice related to prescription, fabrication and fit, and thereby hopefully to stimulate investigation ultimately leading to application of scientific principles in various types of external support.

THE SUBCOMMITTEE ON EDUCATIONAL MATERIALS

This Subcommittee exists by reason of relinquishment of functions by two former subcommittees, *viz.*, the Subcommittee on Medical Education in Prosthetics and the Subcommittee on Paramedical Education in Prosthetics. Following a successful effort to incorporate prosthetics subjects in medical and paramedical educational programs, these two subcommittees were left with one primary objective: the review, devel-

opment, and distribution of prosthetic and orthotic educational materials. It was therefore decided to assign this function to one subcommittee.

At this time, the annotated bibliography, which was started by the Subcommittee on Paramedical Education and which covers all published prosthetic and orthotic articles listed in *Index Medicus* for a period of 12 years, is being completed in the office of the Committee on Prosthetic-Orthotic Education. A review of new prosthetic-orthotic films was accomplished about a year ago, and another meeting for this purpose will be held when a sufficient number of new films are available to justify such a meeting.

CPOE STAFF, NATIONAL RESEARCH COUNCIL

The staff includes one executive secretary, one part-time professional assistant, and one secretary.

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CPOE is supported by grants from the Prosthetic and Sensory Aids Service, Veterans Administration, and the Rehabilitation Services Administration, Social and Rehabilitation Service, Department of Health, Education, and Welfare.

RECENT CPOE MEETINGS

The Subcommittee on Orthotics, CPOE, met at the Americana Hotel in New York on January 17, 1969. The Chairman, Dr. Jacquelin Perry, reviewed the surveys completed on external support in the treatment of low-back pain and stated that a report was being prepared for publication.

Mr. Charles Rosenquist discussed the results of a survey of orthotics facilities on construction of orthotic appliances. The findings, which reflected marked discrepancies related to brace measurements and methods of measurement, have been forwarded to the Conference of Orthotists, American Orthotic and Prosthetic Association. It is hoped that this group will be interested in appraising current methods of measurements in the construction of spinal orthotic devices and will consider possibilities of implementing a more standardized approach than that currently practiced.

Description of the New York University pilot course on spinal orthotics for physicians was presented by Dr. Ralph Lusskin and Mr. Warren Springer and followed by a discussion relative to the possibility of sponsoring seminars or workshops in this area. Syllabi of courses and other educational materials used in various spinal orthotics educational pro-

grams will be assembled in an effort to determine what is being offered on this subject. Attending the meeting were Jacquelin Perry, M.D., Chairman; Herbert E. Pedersen, M.D., Chairman, CPOE; E. Burke Evans, M.D., Hans R. Lehneis, Charles Rosenquist; Roy Snelson; Ralph Luskin; Warren Springer; and Barbara R. Friz, Executive Secretary, CPOE.

Several meetings have been held recently to make plans for the Geriatric Amputee Workshop which will be held in the summer of 1969. The following panels and panel chairmen were selected: Richard Warren, M.D., Care of the Patient with Vascular Disease; Herbert Pedersen, M.D., Amputation Surgery; Augusto Sarmiento, M.D., Postoperative Care; Frank Clippinger, Jr., M.D., The Prosthesis; Robert Mazet, Jr., M.D., Prognosis of the Geriatric Amputee Following Surgery; and Claude N. Lambert, M.D., To Fit or Not to Fit.

The Ad Hoc Committee to Review Prosthetic-Orthotic Visual Aids met at the Institute of Rehabilitation Medicine in New York on March 26, 1969. The following films were reviewed: "Checkout Procedure for Unilateral Below-Elbow Prosthesis," "Nursing Care of the Amputee," "Non-operative Treatment of Scoliosis and Round Back with Milwaukee Brace," "Immediate Postsurgical Fitting of the Upper Extremity," "Technique of Biceps Cineplasty," "Congenital Absence of the Lumbar Spine and Sacrum," and "Juan Irigoyez Yepez." Reviews of these films will be incorporated, along with previously reviewed films, in a booklet which will be available from the Committee on Prosthetic-Orthotic Education. Present at the meeting were: Muriel Zimmerman, Chairman; Joan Edelstein; Hans R. Lehneis; Phyllis E. Porter; Alan Smith, M.D.; Elizabeth Davies; and Barbara R. Friz.

A meeting of the members of the Subcommittee on Special Educational Projects in Prosthetics and Orthotics was held at the Americana Hotel in New York on January 18, 1969. Basic tabulations compiled from the data submitted in the Manpower Survey were presented to the group who discussed the final disposition of the data. The findings will be published.

The advisability of a survey of graduates of prosthetic and orthotic degree programs was considered, but it was the consensus that the survey conducted by the AOPA education committee should be studied, after which it would be determined if and when another more inclusive study should be conducted.

Attending this meeting were J. Warren Perry, Ph.D., Chairman; Florence Knowles; Herbert B. Warburton; Herbert E. Pedersen, M.D.; Sidney Fishman, Ph.D.; William M. Bernstock; Charles O. Bechtol, M.D., and Barbara R. Friz.