
Speech-Language Pathology and Audiology Services in Selected Hospitals in Canada

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Introduction

This is the report of a survey of speech-language pathology and audiology services provided in selected general hospitals in Canada. The survey was conducted as part of the regular service evaluation of the Department of Communication Disorders of St. Boniface General Hospital to provide information for short- and long-range planning. The primary purpose of the survey was to obtain descriptive information. A questionnaire (Appendix A) was developed and sent to other hospitals in the fall of 1985.

Methodology

For the purpose of this study, 16 hospitals were selected from the *Canadian Hospital Directory* (1984) from the provinces of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, and Nova Scotia. Fourteen of these hospitals had a bed count of 800-1,000. Two of the hospitals selected did not meet the bed count-selection criterion but were included in the sample so information could be obtained from across Canada. In each case, the hospital listed as having the highest bed number in a province was selected. Hospitals with names indicating a specialty (for example, a children's hospital) were not selected.

Results

Responses were received from 12 hospitals, a response rate of 75%. Ten, or 83%, reported university affiliations. All hospitals were in urban centres, providing services to the population within their urban areas. In addition, the hospitals were described as "regional," thus also providing services to patients living outside their immediate urban areas.

Structure and Administration

Eleven of the hospitals responding provided both speech-language pathology and audiology services. Of these, about one-third provided the services as a unified "Department of Communication Disorders," or some similar name. The other two-thirds provided services as separate departments. Administrative responsibility was reported most frequently to be to a hospital administrator, and secondly to a "Director of Rehabilitation Medicine," who in one instance was a specialist in communication disorders.

In addition to performing their administrative responsibilities, 10 of the department heads provided clinical services to patients and devoted from 5% to 90% of their work time to these activities.

Staffing Patterns

The average full-time staff complement reported by departments is shown in Table 1. It is of note that less than half of the facilities reported the use of aides. One facility reporting the use of an audiology aide also stated its intention to eliminate the aide position by upgrading it and hiring a full-time audiologist.

Referral Sources

Eight of the hospitals surveyed reported providing speech-language pathology and/or audiology services only on physician referral.

Services Provided/Populations Served

Figure 1 indicates the percentage of respondents that served specific disorder types in Speech-Language Pathology and the percentage of respondents engaged in specific clinical activities in Audiology.

Data Collection Activities

All of the departments responding reported that statistical information is collected, but only two hospitals reported using computerized systems of data collection and retrieval. The data categories reported are those required for the purpose of federal and/or provincial funding. These are in order from most to least: (1) number of inpatients, (2) number of outpatients, and (3) number of direct patient contacts (attendances).

Data relating to the amount of time spent by staff in the performance of "non-patient" activities was collected by 3 of the 12 hospitals responding to the questionnaire. "Other" data collected included patient age, type of test(s) administered, disorder type, number of discharges, and referral sources.

Activity Distribution

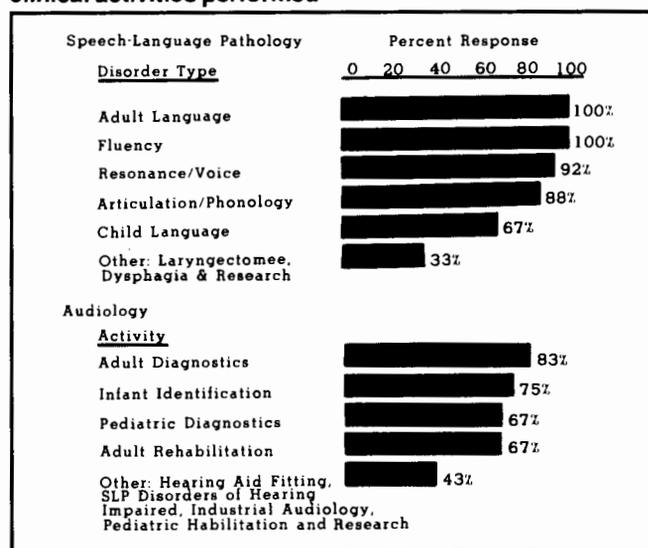
Table 2 shows the percentage and range of total staff time spent in the performance of the listed activities. Although the data collected in the ASHA *Omnibus Survey* (Hyman, 1985) is not

Table 1. Departmental staff complements

Position	Mean	Range
Speech-Language Pathologists	3.5	1.0-6.5
Audiologists	2.2	0.0-4.0
Speech-Language Pathology Aides	0.8	0.5-1.0
Audiology Aides	1.3	1.0-2.0

directly comparable, it is interesting to note these results. The *Omnibus Survey* showed the following percentages of activity: 59% direct contact with clients/patients, 20% administrative duties (including report writing and meetings), 6% supervision (of services or providers), 4% professional development, 3% research endeavors, and 8% other activities. Encompassed within "administrative duties" as defined in the ASHA survey are both "indirect contact" and "departmental administration" as defined in this survey.

Figure 1. Types of communication disorders served and clinical activities performed



The similarities between the results of this survey and those of the American survey are an indication of consistent professional practice in speech-language pathology and audiology in North America. Speech-language pathologists and audiologists are primarily clinical practitioners who devote most of their time to service activities and the least amount of their time to research and professional development.

Caseloads

Seventy-five percent of the hospitals surveyed provided information about the number of patients seen. Daily caseload sizes were calculated from the weekly or monthly information provided by the respondents. The average number of patients

Table 2. Time allocation to job-related activities

	Mean Percentage	Range
Direct Patient Contact	60%	40-75%
Indirect Patient Contact	22%	15-40%
Education	6%	0-15%
Departmental Administration	5%	0-10%
Research	5%	0-20%
Professional Development	4%	0-6%

seen per day by speech-language pathologists was six (range: 5-11), while audiologists saw an average of seven patients per day (range: 5-10). Caseloads reported by the hospitals surveyed indicated an inpatient/outpatient ratio of 25% to 75%. Ten of the hospitals reported an increase in the last five years in the number of inpatient and outpatient referrals received.

Physical Environment

The responding facilities reported an average space allocation of 3,000 square feet for an average of 6.0 E.F.T. staff, or 500 square feet per staff member. This information should be interpreted with caution because of the great variety of ways in which the facilities responded to the question. For example, some respondents reported clerical, storage, and waiting areas as well as assessment and treatment areas, while others reported only areas designated for clinical use. Future surveys should delineate more closely the types of use for which the space is allocated.

Provision of Education

Education to others is provided by 11 of the departments responding to the questionnaire. The groups receiving education from speech-language pathologists and audiologists are as follows, listed from most to least frequent: (1) speech-language pathology students, (2) audiology students and medical students, (3) nursing students, and (4) others, including nurses, occupational therapists, physiotherapists, social workers, and the public.

Computer Use

Computer use for other than data collection was reported by 67% of the departments in the following areas, in order from most to least frequent: (1) administration and clerical, (2) assessment, (3) treatment, (4) test scoring, and (5) other (making appointments). As the use of computer technology increases, it is important to document how much computers are used and with what efficacy. Documentation can help determine the cost-effectiveness of computer use.

Languages Used

The full range of speech-language pathology and audiology services are reported to be provided only in English in 58% of

the facilities. Thirty-three percent reported that services are provided in both official languages, English and French. In one case French was reported to be the only language used in the department. Italian and Spanish were the only other languages that were used, and each language was reported by one hospital.

Discussion

According to the information provided by the hospitals surveyed, a high level of similarity exists among the speech-language pathology and audiology departments surveyed. Particular similarities are evident in staffing patterns, referral sources, disorder populations served, and the allocation of time to specific activities, including direct/indirect patient care, education, administration, and research.

Most hospitals reported speech-language pathology services provided separately from audiology services. Careful documentation can highlight areas of potential fragmentation of service delivery and potential duplication of administrative and/or support service functions when the two services are provided separately. Future analysis of the relative advantages or disadvantages of unified versus separate structures will allow a more thorough exploration of the issue.

In the hospitals surveyed, the average professional staff complements were very similar, and there was a clear trend not to use aides in the provision of services. The use of aides has been a topic of frequent discussion among professionals, specifically in relation to the training and supervision. Two primary options are apparent: avoiding the use of aides entirely or establishing and enforcing specific requirements for the training and supervision of aides.

The allocation of staff time to specific activities reported by this survey as well as *The 1985 Omnibus Survey* indicate similar time use in Canada and the United States. Approximately one-half of available staff time is devoted to direct patient care, indicating that speech-language pathologists and audiologists use an equivalent amount of time to perform activities on behalf of their patients. These activities include test scoring and interpretation, conferencing with other staff or family/caregivers, coordinating appropriate resources, planning and preparing for therapy sessions, planning and preparing home activities and materials, and teaching caregivers how to conduct home programs. In addition to activities on behalf of their patients, speech-language pathologists and audiologists perform activities on behalf of the department. Examples of these activities are the collection of data, informing the director of their professional needs, maintaining competency and gaining new skills, and attendance at departmental meetings.

In the hospitals surveyed, the smallest proportion of time is reported to be spent in research. The authors suggest that research in hospitals should become more of a priority, to encourage speech-language pathologists and audiologists to observe and document more closely their service delivery models, their assessment and therapeutic techniques, and the overall effectiveness of their services. Research conducted within hospitals can complement research conducted in other facilities, such as universities.

Most departments reported an increase in referrals during the previous five years. The authors interpret this increase in referrals as an indication of increased demand for services. How departments respond to this increase is very important to the current and future practice of speech-language pathology and audiology.

The provision of service in both official languages is consistent with the French-English demographic/linguistic pattern of the country reported in the *Census of Population* (1986). The number of hospitals reporting service in English (58%) is consistent with the total Canadian population listing English as their "mother-tongue" (61%).

Summary and Conclusions

It is hoped that the information provided by this survey will help to validate some of the practices used in departments of communication disorders in acute care hospitals and will stimulate further evaluation and research on departmental structure and service-delivery models. The survey revealed more similarities in clinical practices than differences. In-depth examination of clinical practices and further discussion among professional colleagues could result in the establishment of standard service delivery systems that could benefit both professionals and the clients they serve.

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