Speech Language Pathology and Audiology Workforce Analysis

I. Introduction

The purpose of this project was to determine the current and projected speech language pathology and audiology workforce for the Winnipeg Regional Health Authority (WRHA) and in doing so to predict the likelihood of a balance between supply and demand in the future. In particular, it was deemed important to identify potential workforce deficiencies with the idea to mitigate such shortages.

Originally the intention was to review the available data and develop a document similar to the WRHA RN Required Supply Model document.\(^1\) Due to the numerous challenges unique to the Allied Health Professions it was determined that as well predicting future workforce, it was important to develop an understanding of the factors affecting supply and demand. These factors have been noted to assist in formulating potential strategies to alter the future situation favourably.

The data required to make projections was not readily available and so a primary focus of the project became the development, implementation, and maintenance of the appropriate tools for projecting and monitoring the workforce so that the process was repeatable, if desired, and could remain ongoing.

The overall aim of the project was to contribute to achieving and maintaining an optimal and stable Allied Health Workforce.
II. Methodology

The first task was to define the type of data required and to determine how best to utilize the data to provide a projection of workforce. Secondly it was determined that, as the prediction of workforce balance will be based on a relatively small sample size it was important to further clarify the issues affecting workforce supply and demand.

The findings and observations noted in this discussion paper are based on a review of the current literature and related reports as well as interviews. The literature used in formulating the RN Required Supply Model was reviewed. Medline was searched using workforce and the discipline, in this case speech language pathology and audiology, health human resources, health manpower, and human resource planning. Data was collected from the registering organization, The Manitoba Speech and Hearing Association (MSHA) and from the Regional Communication Disorders Director.

The position vacancy data was obtained from the Regional Communication Disorders Director and through review of the payroll data. The position/vacancy data has not been consistently collected through the WRHA's collection system as yet.

Information regarding retirement, ages, and years of service was obtained through the payroll systems (Ceridian, Health Sciences Centre, and St. Boniface General Hospital), as the HEPP database was not usable due to varied union affiliations and a lack of common labour codes among the speech language pathology and audiology employees. This data was not available for a portion of the audiologists and so the data is incomplete in this regard.
The data collected was reviewed to determine whether there would be an appropriate supply of speech language pathologists and audiologists in the future. The number of speech language pathologists working within the WRHA is 48 and the number of audiologists is 14 amounting to a total of 62 positions. Considering these low numbers caution must be used when interpreting the data.

For the purposes of this project the need or requirement side of the equation has been based on the current requirement of the Winnipeg region, that is, the number of speech language pathologists and audiologists currently employed by the WRHA. The requirements are based on the current level of service delivery and future needs or variations to these needs have not been considered.

The identification of trends and issues affecting the language pathology and audiology workforce as well as factors affecting work life, recruitment, and retention have been outlined.

Recommendations, gleaned from the review of numerous sources, have been included for consideration.
III. Profession Description

The Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) is the national professional association in Canada and describes speech-language pathologists and audiologists as "professionals who evaluate and treat people who have speech, language, or hearing disorders."  

The American Speech-Language Hearing Association (ASHA) states, "audiologists, speech-language pathologists, and speech, language, and hearing scientists are professionals who evaluate, treat, and conduct research into human communication and its disorders. They work in schools, hospitals, businesses, in private practice, in universities, research laboratories, and government agencies, with infants and children, with adolescents and adults, and with older people".  

The Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) further describes the profession as being "concerned with the prevention, identification, diagnosis and rehabilitation of children and adults with hearing impairments and communication disorders". The professionals make use of a "wide variety of specialized instrumentation and procedures to assess hearing, speech and language". 

Human Resources Development Canada combines speech language pathologists and audiologists with other professionals. The profile notes that audiologists and speech language pathologists require a master’s degree. Certification may be required with their professional associations or they may be licensed in some provinces. Thirty percent work part-time,
which is above the average of 19% for all occupations. Twenty-one percent are self-employed compared to an average of 17% for all occupations and the numbers reporting self-employment has increased significantly over the past ten years. Eighty-nine percent are women, well above the average of 45% for all occupations. The unemployment rate was 1.6% from 1996-98 compared to a national average of 6%. Salaries are among the lowest for professional occupations but are comparable to other occupations in the health sector. Job prospects are projected to be good through 2004."

Human Resources Development Canada occupational profiles for Winnipeg noted that 170 SLPs and audiologists reported being employed with 50% working within the education system and 18.7% working in hospitals. Of those reporting, 5.7% were 15-24 years of age, 74.3% were 25-44 years of age, 14.3% were 45-64 years of age, and 5.7% were 65 years or older. Opportunity for employment was reported as being good. The major employers were noted to be government, health services, hospitals, and school divisions. Audiologists have opportunities for employment privately in hearing clinics and SLPs, if self-employed, are most likely working in the field of pediatrics. The profile noted that there has been some growth in the number of jobs for SLPs as the province has expanded the services to preschoolers. Growth was predicted to stabilize once these positions were filled. Employment opportunities would then be primarily as a result of attrition. The report noted that employers are reporting a shortage of audiologists.

In the United States Bureau of Labor Statistics 2002-2003 Occupational Outlook Handbook, speech-language pathology and audiology are ranked among the top 30, out of 700, fastest growing
occupations over the next decade. The number of audiology positions is predicted to grow 45 percent and SLP positions by 39 percent from 2000-2010. This potential growth is attributed to an aging population, medical advances resulting in increased clientele, and the increased awareness of the benefits of early intervention.\textsuperscript{15, 16}

The number of SLPs registered in the province has been gradually increasing over the past four years. (See Table 1)

<table>
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<th>Year</th>
<th>Total</th>
<th>SLP (NP)</th>
<th>Aud. (NP)</th>
<th>Dual (NP)</th>
<th>Provisional SLP</th>
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Within the WRHA a high percentage of SLPs and audiologists work part-time. (See Tables 2 and 3)

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<tr>
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<th>GGH</th>
<th>HSC</th>
<th>SBGH</th>
<th>SOGH</th>
<th>VGH</th>
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<tr>
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<td>14</td>
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</table>

Within the WRHA speech-language pathologists (SLPs) are involved in the diagnosis and treatment of swallowing and feeding disorders. As a result of this area of practice, SLPs are
important team members involved in patient management as well as discharge planning.

Pediatric SLP service is provided for children from birth to school entry, at which time they are transferred to the school division for further services. Services for this population are provided at Grace General Hospital, Victoria General Hospital, Seven Oaks General Hospital, St. Boniface General Hospital, and the Health Sciences Centre. Starting in the fall of 2003 services will also be available at the River East Access Centre. Specialty services for children from birth to 16 years of age are provided at the Children’s Hospital. These services include treatment of such conditions as head injury, cleft lip and palate, oncology, the inpatient population, and children from other areas requiring a second opinion.

In regards to pediatric audiology services, school age children are primarily seen at Concordia General Hospital, Victoria General Hospital, Seven Oaks General Hospital, and Deer Lodge Centre. The Winnipeg School Division has two audiologists on staff so children from this division are generally not seen unless a second opinion is required. Audiologists at Children's Hospital and St. Boniface typically do not see school age children except upon special request. (J.Clark, personal communication, 2002)

Adults are seen at Health Sciences Centre - General Hospital, St. Boniface General Hospital, Deer Lodge Centre, Concordia General Hospital, Victoria General Hospital, and Seven Oaks General Hospital. Other responsibilities of SLPs and audiologists include the provision of education of to other health care professionals, conducting research
and providing student placements. Professional roles are more fully described in the Profile Update.\textsuperscript{17}

St. Boniface General Hospital (SBGH) and Health Sciences Centre (HSC) require a physician's referral. Overall approximately 80% of referrals are physician generated.
IV. Literature Review

A number of reports describing the speech language pathology and audiology workforce have been generated in recent years and key points from these reports and articles are provided.

i. Profile of the Allied Health Workforce
(Winnipeg Hospital Authority - September 1999)

The Winnipeg Hospital Authority prepared this report in September of 1999. A comprehensive overview of each allied health profession employed in the Winnipeg hospital system was provided. Important issues common to the allied health professions were identified such as wage rates, recruitment and retention issues, scope of practice concerns, student education and enrollment, program management, seven-day week coverage, relief budgets, and workload measurement standards.

A proposal to develop a program in Communication Disorders and Sciences at the University of Manitoba had been discussed and was being considered by the government if the project was developed as a collaborative venture with the Province of Saskatchewan.

The supply of speech-language pathologists and audiologists in the province at the time of the report included 269 registered members, 234 speech language pathologists and 35 audiologists. Of these, 155 were working full-time and 96 were working part-time. Fifty-four reported working in hospitals, 31 full-time and 23 part-time. Eighty full-time and 48 part-time registrants worked within the school system, which was the most common place of employment, reported.

The supply of speech language pathologists and audiologists was sufficient to meet demands at the time of the report.
ii. ASHA Workforce Study- Final Report Executive Summary  
(American Speech-Language-Hearing Association - 1997)

In a study conducted by Vector Research Incorporated for the American Speech-Language-Hearing Association (ASHA) the current and future supply and demand of speech-language pathologists (SLPs) and audiologists was determined. The purpose of the study was to provide information to the Association, as well as practitioners and those considering a career in the professions.

Estimates indicated that the supply of audiologists in the U.S.A. was growing faster than the demand and that a surplus will be realized in the near future. Increased enrollment was noted as the cause of the surplus. The number of graduates increased by nearly 50 percent between 1992 and 1996. This rate of increase was five times greater than the rate of U.S. population growth. The growth is predicted to peak in 2010 and then begin to decline as a result of aging population and retirements. The situation is similar for SLPs. The supply of SLPs is growing faster than the demand at about five percent per year.

In the U.S.A. the employment of SLPs was affected by the increased demand for services in nursing homes. The percentage of SLPs employed in care homes increased four percent in 1993 to over 16 percent in 1997. It then fell to less than ten percent in 1999 due to a change in Medicare payment systems.

The study results suggested that over the short-term careers in these professions is not as positive as it was ten years ago. It also noted that in eight to ten years the demand will begin to increase and enrollments will need to increase as baby boomers retire and the aging population increases demand.
iii. Partnerships and Progress - Andrée Durieux-Smith
(Presented at the Canadian Academy of Audiology Toronto October 2001)

In this keynote address, the progress of the profession of audiology was described, concern regarding workforce issues was expressed, and recommendations were made to alleviate the situation.20

Using a United States epidemiological study and population studies, a determination was made as to the number of audiologists required in Canada. The result indicated that Canada required approximately 1745 audiologists. As of March 2001 there were approximately 989 audiologists employed in Canada indicating a shortfall of 756 (46%). The estimated number of Canadian graduates for the year 2001 was 43 (36 from Canadian universities), which would result in a shortage of approximately 57 (57%) audiologists. This predicted shortage is expected to grow as the population ages and the number of audiologists retiring increases. As well, areas of practice for audiologists have been growing furthering the need for audiologists. Proposed strategies to improve the situation included hiring graduates from the U.S.A., increasing the number of Canadian graduates, and increasing the usage of support personnel. The importance of a cooperative approach including education institutions, professional groups, government, healthcare agencies, and consumers in addressing the issue of a shortage was stressed.

Concern was also expressed in regards to a lack of PhDs in the field of audiology. This shortage impacts on the ability to conduct research in the field of audiology as well as on the potential education of future audiologists. At the time the article was written there were less than ten audiology students in PhD programs across the country. Already vacant positions exist in audiology programs in Canada. The need to conduct research was stressed particularly as a means to advance knowledge and therefore to improve the autonomy of the profession.
iv. Winnipeg Regional Health Authority Audiology Services - Recruitment and Retention Report. (November 2001)

At the time of this report, November 2001, the WRHA was experiencing difficulty recruiting and retaining audiologists. There were three vacant permanent positions reflecting 2.8 EFTs for a 24% vacancy rate. The audiology position at St. Boniface General Hospital (1.0 EFT) had been vacant since August of 2000 and the WRHA position, which was newly created in June of 2001, had not been filled. In addition, there was an unfilled LOA (1.0) at Concordia, an upcoming permanent vacancy at SBGH, and there were two one-year LOAs predicted at HSC. Vacancies at the Society for Manitobans with Disabilities and in the Interlake also had an adverse affect.

This report noted that Manitoba does not have a university program for audiologists and graduation from other programs is limited. The workforce shortage is a national and international phenomenon. Private practice opportunities have continued to grow and are more lucrative compared to publicly funded positions.

Factors Affecting Job Satisfaction as Reported by Audiologists
Included:

- Inadequate compensation for level of education
- Inequity in salaries and benefits across the region
- Lack of opportunities for career advancement
- Increased workload due to vacancies
- Inadequate clerical support
- Workplace safety issues during extended hours
- Limited flexibility in regards to hours of work
- Lack of professional respect
- Restricted continuing education opportunities
- Equipment that is outdated or non-functioning
• Difficulties competing with capital equipment requests
• Lack of computers

Report Recommendations Included:
• Consider flexible hours
• Hire clerical staff using funds from vacancies
• Assign professional leaders
• Compensate regional team leader
• Provide clerical support for extended hours
• Allocate a secretary responsible for Allied Health Recruitment
• Implement a bursary program
• Allocate permanent clerical support
• Provide appropriate compensation based on training and years of experience
• Provide honorariums to students
v. Communication Disorders Service: A Review of Speech-Language Pathology and Audiology in Winnipeg Hospitals
(May 31, 2000, update November 2001)

The Coordinator of the Communication Disorders Service conducted this review in 1999. The aim of the review was to better understand the population served, the services available, the issues affecting service delivery, and the opportunities available to improve service. The review was extensive and outlined the current level of service delivery as well as making recommendations in regards to future program needs.

Services Provided:
Audiology service is primarily diagnostic with some prevention and promotion services being provided. Diagnostic equipment was not being fully utilized during regular operating hours.

Speech-language pathology services for preschoolers had been recently expanded. The need for common guidelines for particular programs was identified. Direct therapy is the primary service provided. Wait list times remained a concern.

Speech-language pathology services for adults are rehabilitative in nature. Services are not equitably available across the region.

Key Points:
- Clients experience long waits for service
- Services may not be available to clients assigned a low priority
- Availability of services is not equitable across sites
- 80% of clients are based in Winnipeg with the remainder (20%) from rural areas
- Numbers of clients is increasing
• A need to work jointly with service providers outside of the hospitals was identified but resources were not available to provide this service
• Organizational structures vary from site to site

Recommendations Included:
• Formulate and implement a shared service vision
• Organize services to best meet the needs of the clients and ensure that resources are distributed equitably throughout the region
• Evaluate services on an ongoing basis

Report Update November 2001:
A common organizational structure was determined which included the transfer of Pediatric Speech-Language Pathology resources to the sites where services are delivered.

Audiology Services

Key Points
• Proposal for computerization of a central intake system with a targeted completion date of January 2002
• Extended Hours of Operation Proposal was approved and has been implemented as staffing allowed - implementation has not been maximized due to staff shortages
• A Standards of Practice Committee has been established
• Core Services Recommendations have been developed
• Recruitment and retention difficulties persist
• Equipment repair and updating is required
Priorities Included:

- Implement recruitment and retention strategies
- Regional management of caseloads
- Resolve workplace issues
- Provide access to continuing education funds
- Replace outdated equipment
- Review compensation and resolve wage disparities

Pediatric Speech-Language Pathology Services

Key Points:

- Services have been expanded to include an Intake Screening Process and Parent Education Modules
- Developed improved working relationships with community resources
- Pediatric SLP services will be included in the River East Access Centre
- Unequal distribution exists across the region and space limitations have restricted ability to expand services
- Waits for service remain long - screening occurs within two months of receiving referral but clients wait one year for assessment and treatment
- Prevention and promotion activities have not been developed and implemented due to inadequate resources
- Regional policies and procedures are lacking
- Children who would be more appropriately served by the Pediatric Outreach Therapy Program are being maintained on caseloads

Priorities Included:

- Development of regional policies and procedures
• Development of service delivery options along the continuum of care

Adult Speech-Language Pathology Services

Key Points:
• Workload Measurement Committee had been established to develop consistent reporting procedures
• Continuing Education Committee had been established
• SLP activity profile outlining current services had been developed
• Feedback had been provided to Manitoba Health regarding feeding and swallowing issues in long-term care
• SLP services remain limited at Grace General Hospital and Victoria General Hospital.
• Outpatient services remain limited

Priorities Included:
• Development of recommendations for equal access to service for clients at all service sites
• Development of recommendations for the inclusion of community based SLP services in Health Access Centres
vi. **Survey Summary Report of the Membership of the Manitoba Speech and Hearing Association (Winter 1999)**

The Manitoba Speech and Hearing Association conducted this survey in the fall of 1998. The survey was sent to 318 members and a total of 273 responses were received for a response rate of 86%. Thirty-eight responses (14%) were from audiologists and 235 (86%) were from SLPS. The information received was shared with various ministerial departments and other agencies. The report concluded that there existed a 50-50 split between member working part-time and those working full time. The majority of retirements were not predicted to occur for another 16 to 20+ years from the time of the report. The SLPs and audiologists working within the hospital system were indicating later retirements than those working within the schools or community. Of those surveyed there were 38 members who reported obtaining their degrees within Canada and 234 who obtained their degrees outside of Canada.
vii. Review of Relevant Articles

A search of Medline yielded few documents specific to speech language pathology/audiology and workforce issues. Articles that encompassed a number of allied health disciplines have been included for review.

Martin, Champlin, and Streetman (1997) surveyed a group of audiologists in an attempt to determine to what extent audiologists are satisfied with their positions and the factors contributing to their satisfaction. 25 Questions were grouped under six general categories: challenge, relations with coworkers, comfort, financial rewards, resource adequacy, and promotion. Previous studies had demonstrated that men tended to be less satisfied than women and audiologists were less satisfied compared to speech language pathologists. The survey demonstrated that audiologists in private practice were most satisfied while those in state agencies were least satisfied. Of the factors affecting job satisfaction the category of challenge was the most important to audiologists and the most important item in the category was whether the work was interesting.

Selby Smith and Crowley reviewed issues surrounding labor force planning for Allied Health in Australia.26 The need to refine the tools of analysis and to continue to identify factors affecting supply and demand were identified. The high proportion of women in allied health professions was noted, which was associated with greater demands in regards to child rearing and responsibilities in the home.

Abelson identified the need to determine why staff leave and whether the departure was avoidable or unavoidable, desirable or undesirable.27 Factors that positively affect turnover such as ambiguity, conflict, and job tension were described. Individual factors that reduce
turnover were age and tenure as well as employees having greater family responsibility. Factors that were inversely related to turnover included organizational and professional commitment and positive leader behavior. Identifying units with high turnover and planning for future needs may assist in decreasing turnover. Other managerial strategies included decreasing job pressures, implementing career development programs, providing more job autonomy and responsibility as desired by staff, and having appropriate levels of flexibility and rigidity. In regards to salary, Abelson had determined that the amount had the most influence at the entry level and decreased after that. Employees who were satisfied with most other important factors were not inclined to leave an organization, even if the pay was a little less than that at other locations.

A review paper completed by Mobley (1979) summarized a number of studies examining employee turnover. The negative relationship between turnover and tenure, job satisfaction, and satisfaction with supervision were described. Higher salaries generally resulted in higher tenure and in situations where salaries were high, if there was a perceived difference between the expected and the actual salary, tenure was shorter. The perception of status within the organization, generally demonstrated by knowledge of the organizational procedures and a perception of control, were associated with longer tenure. Mobley also noted that the availability of alternative jobs was positively associated with turnover.

The National Health Service (NHS) had been experiencing difficulties with staff recruitment and retention and health service employers identified the need to improve performance in this area. With this in mind, Gray and Phillips looked to businesses in other sectors of the economy to determine if recruitment and retention techniques used...
there could be applied to healthcare. The companies reviewed were chosen based on their importance in the economy, their varied staffing requirements, and their high percentage of female employees. The companies included Midland Bank, a supermarket chain, and British Rail.

Salaries are frequently cited as a major consideration in regards to recruitment and retention and yet there is evidence that indicates that other factors may play a major role as well. One survey of nurses who had left the NHS indicated that staffing levels were more influential than pay in their decision to leave. In regards to recruitment, nurses not currently employed claimed that the availability of part-time positions and assistance with childcare arrangements was more important than salary in determining their return to work.

Changing pay levels was identified as one method of altering recruitment and retention and was being used by other companies. The NHS has a central system whereby a review group sets salary rates. Salaries may vary based on location and difficult to fill positions have been supplemented, but otherwise managers have had little ability to alter salaries. The NHS has now given local managers more discretion in setting salaries.

As well as allowing salary adjustments, the three companies surveyed instituted policies to improve recruitment, which included; targeting recruitment, reducing organization restriction on recruitment, improving community links, increasing part-time positions, introducing new technologies and work-practices to decrease the need to recruit, implementing training for new staff, and improving information systems. Companies improved community links by liaison with the
education sectors, providing job experiences, and supporting school projects.

The three companies surveyed identified the part-time work force as the major target of their efforts. Midland Bank began heavily promoting part-time employment and ensured that part-time contracts were brought in line with full-time contracts in terms of benefits and the provision of regular work hours. Job sharing opportunities were supported whenever possible. The ability to provide time off over the summer months was supported by replacing workers with student workers over the summer when possible.

The implementation of recruitment strategies necessitated improved information systems to enable the tracking of the effect of the strategies, staff recruitment efforts, employees' career development, and the number of staff leaving as well as the reasons why they leave. British Rail implemented the use of a system that was able to monitor who applied for positions, the background of the applicant, the number interviewed, the number offered positions, and the number of jobs accepted.

The supermarket chain had implemented a "Career Bridge Scheme" which allowed staff to take temporary breaks in employment to pursue other activities. The break could be up to three years with an option of part-time employment for the subsequent two years. Midland Bank offered a similar plan for employees who had been with the company for at least two years. These employees were able to take a hiatus from work for up to five years without experiencing a loss of benefits. During the break time the employees were required to work at least two weeks each year and attend refresher meetings. The strategy of
allowing career breaks may result in increased turnover but in the long run may result in an improved supply of workers over the long term.

As many workers within the businesses surveyed were women, the provision of childcare was considered an important tool in keeping women at work. Midland Bank estimated that the cost of replacing an employee was equal to one year of salary and was about twice the cost of subsidizing childcare for four years. The Bank implemented a cost-sharing scheme with workers in the late 1980's. Employees' returning to work had risen from 30% in 1989 to 50% by late 1991.

Other strategies aimed at improving retention of staff included providing career counselling, providing additional education for managers, providing staff support during the initial months of employment, and the hiring of occupational health nurses to address health-related concerns of employees.

Improved information systems were felt to be essential. Both the Bank and British Rail routinely conduct exit interviews in order to better understand the reasons for staff leaving employment.

The evaluation of recruitment and retention strategies was encouraged to ensure cost effectiveness.
V. Other Factors Affecting Recruitment and Retention

Discussion took place with the WRHA Regional Communication Disorders Director and representatives of The Manitoba Speech and Hearing Association.

Support Personnel
CASLPA has developed a position paper on the use of support personnel in Speech-Language Pathology and Audiology. The paper indicates that the use of support personnel is supported by the organization as long as the well being of the client is ensured. The client must be informed whenever support personnel are used and the supervising clinician is ultimately responsible legally and ethically for all services provided. The support personnel must understand the limits of his or her responsibilities.

Continuing Education
Manitoba Speech and Hearing Association standards for continuing education are a minimum of 30 hours continuing education over each two-year period. A minimum of 20 hours must be in the member’s major professional area with an additional ten in a related area. Members holding registration in both speech-language pathology and audiology must obtain 20 hours in each professional area and no related activities are required.

In the November 2001 Recruitment and Retention Report, audiologists expressed dissatisfaction with continuing education opportunities.

Resources are required to satisfy the need in regards to continuing education for this progressive area of health care. The need for resources to support a dynamic continuing education program is required.
Relief Budgets
Vacancy data was not felt to accurately reflect the true staffing situation as many facilities have little or no relief budget to cover absences.

With the exception of 141 hours of relief budget available at SOGH for PANSU, relief budgets are not available within the WRHA for SLPs and audiologists. (J.Clark, personal communication, 2002)

Tables 4 and 5 describe the approximate number of weeks of vacation accrued by staff within the WRHA. The total number of weeks of vacation required to be covered within the region totals 158 weeks for SLP and 57 weeks audiology. The line described as "per week" indicates the number of staff who would be absent if the weeks of vacation were taken evenly throughout the year.

| Table 4: Years of Service and Weeks Vacation - WRHA SLP (payroll data) |
|-----------------|---|---|---|---|---|---|---|---|
|                | CGH | GGH | HSC | SBGH | SOGH | VGH | DLC | MHC | RVHC | Totals |
| 0-3            | 6   | 5   | 2   | 6    | 2    | 2   | 2   | 2   |
| 4-9            | 6   | 2   | 6   | 2    | 0    | 0   | 10  |
| 10-19          | 5   | 3   | 1   | 2    | 0    | 0   |
| 20+            | 0   | 0   | 0   | 0    | 0    | 0   |
| #Staff         | 17  | 10  | 3   | 10   | 2    |
| Weeks          | 67  | 38  | 11  | 36   | 6    |
| Per week       | 1.3 | 0.7 | 0.2 | 0.7  |

Note: Casual staff not included.

| Table 5: Years of Service and Weeks Vacation - WRHA Audiology (payroll data) |
|-----------------|---|---|---|---|---|---|---|---|---|
|                | CGH | GGH | HSC | SBGH | SOGH | VGH | DLC | MHC | WRHA | RVHC | Totals |
| 0-3            | 1   | 1   | 1   | 1    | 1    | 1   | 3   |
| 4-9            | 4   | 2   |
| 10-19          | 2   | 1   |
| 20+            | 0   | 1   |
| #Staff         | 7   | 7   |
| Weeks          | 29  | 28  | 57  |
| Per week       | 0.6 | 0.5 |

Note: Casual staff not included.
Overtime is generally recorded and taken back as time, not in salary, again resulting in a decrease in coverage. The need to have adequate and equitable relief budgets was identified.

**Wait Time for Speech Language Pathology Services**

Concern has been expressed regarding wait time for SLP pediatric outpatient services provided in hospitals. At present all referrals are screened within two months of referral. Treatment is provided approximately 12 months from the date of referral. Children with certain conditions may be seen sooner. Wait lists are an issue in regards to service delivery as well as job satisfaction. (J.Clark, personal communication, 2002) As well, HSC has stopped accepting referrals except as a carry over from inpatients. GGH does not see outpatients and VGH has one day a week available.

Priority is given to children under the age of four and adults requiring specialized assessments. Waits are about two months for priorities and about one year for non-priority referrals.

**Workload**

The American Speech and Hearing Association recommends a caseload of 25 preschool children per clinical EFT.\(^{12}\) Within the WRHA the average caseload is 40 to 60 children. As well, services are not offered uniformly across the region.\(^{17}\)

**Research**

As there is no program in Manitoba for either SLP or audiology there is no university link to assist in promoting research activities. In May 2000, 54% of audiologists, 38% of SLPs in adult services, and 20% of SLPs in pediatric services indicated they were involved in research activities. At present there is no clinical research specialist available to
assist in promoting research activities and EFTs are primarily devoted to clinical practice.  

As health care funding is being more critically associated with evidence based practice the ability to participate in research is important in ensuring that treatment is effective and based on best practice.

**Student Supervision**

Students are required to complete a specified number of hours of supervised clinical experience. The supervising SLP or audiologist must be fully registered and is ultimately responsible for any services provided by the student. The student must obtain a student membership with MSHA prior to having client contact. Clients must be informed that a student is providing the services. The supervisor must observe a minimum of 25% of all intervention sessions and 50% of all assessment sessions.

Audiologists supervise graduate audiology students for 10-12 week practicums and also provide supervision of clinicians during their provisional period of licensure.

SLPs supervise graduate students in Speech Language Pathology for 10-12 week clinical practicums and also provide supervision of clinicians during their provisional period of licensure. They may provide mentorship to colleagues seeking specific training in specialized areas. Supervision of students in the Rehabilitation Assistant Program has also been provided.

SLPs within the WRHA provide from eight to fourteen placements for students annually. Deer Lodge Centre offers as $100 per week stipend to students. University affiliations of the students have included;
University of Alberta, University of North Dakota, University of Minot, Kansas, Hays State, St. Cloud, McGill, University of Western Ontario, Dalhousie, and Moorhead State. Only Seven Oaks General Hospital reported providing recent student supervision. HSC and VGH reported having students in the past but not for some time. They have one audiology student every two to three years and the students have been from the University of Minot. (J.Clark, personal communication, 2002)

The ability to provide supervision of students is an important factor in the recruitment of new graduates. The ability to provide student placements affords the facility an opportunity to preview performance of potential staff members. When students have positive experiences they are more likely to apply for employment at that facility. It is extremely important to create a vision of a good working environment for students.

Salaries and Union Affiliations
Specific salaries will not be discussed in this document. It is important to note that salary scales and union or non-union affiliations may vary from facility to facility. (See Appendix for Salary Scale information) In general, salaries are not felt to be competitive and salaries are not equitable within the region. Salaries remain a concern for this group of professionals. There have been no substantial increases in recent years. School divisions and the private sector provide higher salaries and are the primary competition for staff. Professions with similar levels of education tend to have higher salaries.

The Canadian Association of Speech-Language Pathologists and Audiologists conducted a survey in 2001 reviewing salary scales. Average salary scales in Manitoba for speech language pathologists were close to the national average and fifth highest compared to other
In provinces. For audiologists, the salaries in Manitoba were below the national average. The average salary reported by school division employees was $53,500, compared to hospital salaries of $49,300.

The survey also asked about ease of hiring. Nineteen SLPs found it easier to hire while 85 reported greater difficulty and two audiologists found it easier to hire while 18 indicated it was harder to hire.

Within the WRHA the SLPs and audiologists are represented by a variety of unions as well remaining non-union at some sites. For SLP, Health Sciences Centre, Victoria General Hospital, and St. Boniface General Hospital are members of MAHCP. Grace General Hospital SLPs are members of UFCW. RVHC remained with CUPE. Seven Oaks General Hospital, Deer Lodge Centre, and Concordia Hospital have remained non-union. In regards to the audiologists, Seven Oaks General Hospital, Deer Lodge Centre, Concordia Hospital, and Victoria General Hospital are represented by MGEU. St. Boniface General Hospital and Health Sciences Centre audiologists are members of MAHCP.

**Work Patterns**

Hours of work within the region are generally Monday to Friday 0800 to 1700h. There is some availability of extended hours in evenings and on Saturdays. Emergency situations may require alternative hours.¹⁷

Over half of the speech language pathologists report working part-time or casual. The majority of the audiologists are reported as working full-time (71.4%).
Speech language pathology and audiology are primarily female professions and the increase in maternity benefits from six months to one year could have workforce implications.

**Certification Program**
Speech-language pathologists and audiologists are eligible for certification through CASLPA. Certification is granted to applicants who are members in good standing with the association, have a Master’s degree in audiology and/or speech-language pathology, meet practicum requirements, and complete the certification exam. Once certification has been granted members must accrue 45 continuing education equivalents over a three-year period to maintain certification. The fee for completing the exam is $350.00.\(^{11}\)

**Equipment Replacement**
The current audiology equipment is aging and requires replacement.\(^{11}\) The requests for equipment must compete with other programs for capital equipment. Audiologists are better able to provide service with equipment that is in good working order and is current in regards to standards to of practice. The provision of equipment is a job satisfaction issue as well as a recruitment issue.

**Management Structure**
A Profession Leader Survey was conducted in June 2002.\(^{32}\) The survey noted that the program management model has been implemented in an inconsistent manner across the region. There is a WRHA Regional Director of Communication Disorders. At certain facilities professional leaders for SLP have been designated with or without financial compensation. The audiology group reports no professional lead designations across the region. The perceived lack of career advancement opportunities was of concern.
At SBGH there is a Senior Audiologist and a Senior Speech-Language Pathologist both of whom report to different Rehabilitation Managers.

At HSC adult SLPs and Adult Audiologists report to the Discipline Director. Pediatric SLPs and Audiologists report to the Child Health Manager.

At SOGH the Adult SLP reports to the Rehabilitation Manager. The Pediatric SLP reports to Bev Laurila. The audiologist reports to the Regional Director.

At DLC the SLP reports to the Discipline Director and the audiologists report to the Regional Director.

At Concordia Hospital the SLP reports to Diane Wieler and the audiologists reports to the Regional Director.

At VGH the Pediatric SLP and the Adult SLP report to the Rehabilitation Manager and the audiologists reports to the Regional Director.

At GGH both the Pediatric SLP and the Adult SLP report to the Occupational Therapy Director. (J.Clark, personal communication, 2002)
VI. Education Information

A program in communication disorders is not offered in Manitoba so people seeking a career in the field must obtain their education elsewhere.

Speech-language Pathology and Audiology programs are offered at nine universities in Canada. The program is offered at the following universities; Université de Montréal, University of Toronto, McGill University, University of Alberta, University of British Columbia, University of Western Ontario, Dalhousie University, University of Ottawa, and Université de Laval. The programs are all at a master’s level and prior to admission applicants must have completed an undergraduate degree, which takes three to four years, and then continue at the master’s level for an additional two to three years depending on the program. All programs offered in Canada meet provincial licensure and Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) certification requirements.

The ability for Manitobans to enter programs in other provinces is limited. For example, the University of Western Ontario only admits two out of province students.

In North Dakota programs are offered at Minot State University and the University of North Dakota. In Minnesota programs are offered at Minnesota State University- Mankato, Minnesota State University-Moorhead, Saint Cloud State University, University of Minnesota, and the University of Minnesota Duluth. There exists a reciprocity agreement between Manitoba and Minnesota that enables Manitobans attending classes in that state to pay fees based on being a resident of the state as opposed to a non-resident fee. Fees from Minnesota were not obtainable on the Internet. Fees for programs in North Dakota
ranged from $4627.00 to $4864.00 in U.S. dollars per year. This fee
does not cover living expenses, travel expenses, etc. Minot State
University is the most commonly reported education institution for
Manitoba audiology registrants. Of the 46 audiologists registered, 34
were educated in the U.S.A. and the remaining 12 were graduates of
Canadian universities.$30$

The possibility of a program being offered in Manitoba has been
explored but as yet a final decision has not been reached.

Requests for student supervision are few, again because a program
does not exist here in Manitoba. At present an audiologist from Minot is
completing an 8-12 week practicum at a WRHA facility. This is the first
audiology student to complete a student placement in Manitoba in
three years. The practicums usually occur in the final year or during the
summer prior to the final year. Students often complete two
consecutive placements. Students are required to accrue 350 clinical
hours prior to graduation. At least 200 hours of experience must occur
within the major professional area and a minimum of 20 hours in the
minor area. There has been a recent problem with the ability of the
WRHA to provide students from Minot University with placements, as
there has been a dispute in regards to the current Agreement for
Student Practicums.

The Canadian Academy of Audiology has issued a position statement
on the Professional Doctorate in Audiology endorsing the doctoral
degree as the appropriate minimal entry-level degree for the practice of
audiology. The Academy plans to move towards this position in the
near future.$33$
VII. Registration Information

The Manitoba Speech and Hearing Association is the provincial regulatory body for speech language pathologists and audiologists. The Association operates under and enforces The Manitoba Speech and Hearing Association Act, regulations, bylaws, and Codes of Ethics. The role of this organization is to ensure that members meet the required qualifications and to address any concerns or complaints from the public. At this time the professional and the registering bodies are the same although the groups are considering separation.

Speech language pathologists and audiologists must be registered with the Association prior to practicing in Manitoba. Registrants must have obtained a Master's degree or equivalent from accredited university prior to registration.

In addition to a Master's degree, graduates from Canadian programs must have a minimum of 350 hours of supervised practice during academic training and successful completion of one year of supervised work experience. Applicants must supply copies of education transcripts and a record of their clinical hours. Applicants must also complete a provisional period of supervised practice. These criteria are the same for new graduates from an American university and American clinicians who are ASHA certified.

Continuing education credits must be achieved to maintain registration with the association. Thirty Continuing Education Credits are required over each two-year period. Of these hours at least twenty must be in the member's major professional area and the additional ten may be in a related area. For members who are registered as both a speech-language pathologist and an audiologist, twenty hours in each
professional area must be reported and the additional hours for related activities are not required.³⁰

Prior to becoming a fully registered member of The Manitoba Speech and Hearing Association (MSHA), members who have met the academic requirements including adequate student clinical hours and have been granted provisional membership must undergo a period of supervision by a fully registered practicing member of the association. Supervision activities include clinical observation and consultation and the provisional period is typically 12 months but may be reduced or extended at the discretion of the board of the MSHA. Supervision requirements must include at least 50 hours including at least 25 hours of clinical observation. A plan of supervision must be written and submitted to MSHA for approval. Reports must be submitted at six-month intervals. The supervisor's recommendation for full registration will be reviewed by the board of MSHA. If approved by the board full registration is granted once registration fees have been submitted.

Labour Mobility
Manitoba is a participant in the Agreement on Internal Trade. SLPs and audiologists must be registered with their regulatory body and have a letter from their association indicating that they are a member in good standing to be able to register in Manitoba.

A reciprocity agreement exists between the American Speech-Language-Hearing Association and the Canadian Association of Speech-Language Pathologists and Audiologists that provides mutual recognition of the national certification programs.¹¹

Applicants who are not currently registered by another jurisdiction but have graduated from a Canadian University or an ASHA Accredited
American University must submit original university transcripts, a transcript breakdown form, and a record of clinical hours signed by an authorized representative of the university program.

Applicants applying as a Foreign Trained Applicant must have their transcripts reviewed by a recognized Canadian credentialing agency. Foreign applicants must also meet Canadian immigration requirements.
VIII. Age Distributions and Retirement Information

Canadian healthcare providers are, on average, getting older. The Canadian Institute for Health Information (CIHI) reports that from 1994 to 2000 the average age has risen almost 2 years from 39.1 to 40.8 years.\textsuperscript{34}

The majority of the SLPs (54.2\%) employed by the WRHA are within the 30 to 39 age range. There are only two SLPs working past the age of 50 years.

<table>
<thead>
<tr>
<th>Age Ranges in Years</th>
<th>WRHA #</th>
<th>WRHA %</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30-39</td>
<td>7</td>
<td>100%</td>
</tr>
<tr>
<td>40-49</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50-59</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60-69</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>70+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7</td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Note: Payroll data unavailable for direct WRHA employees.

<table>
<thead>
<tr>
<th>Age Ranges in Years</th>
<th>WRHA #</th>
<th>WRHA %</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>10</td>
<td>20.8%</td>
</tr>
<tr>
<td>30-39</td>
<td>26</td>
<td>54.2%</td>
</tr>
<tr>
<td>40-49</td>
<td>10</td>
<td>20.8%</td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
<td>4.2%</td>
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<tr>
<td>60-69</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>70+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>48</td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The age distribution data is incomplete for the audiology group and so although retirement does not appear to be imminent for this group there is a gap in knowledge.
Employees are entitled to an unreduced pension benefit once their age plus years of service total 80. Information from the Healthcare Employees Pension Plan indicates that 20% of members with Magic 80 at age 50 retire and 25% at age 55 will retire. For the years 2002-2006 there are no WRHA SLPs or audiologists achieving Magic 80.

Early retirement is becoming more common and this is particularly true for the public sector with 55 being the most popular retirement age for that group. As well, women tend to retire earlier than men, likely as a result of the age difference between spouses.\textsuperscript{35}

Table 10 indicates the year at which WRHA speech language pathologists that will reach age 55, 60, and 65. For the years 2002-2006 there are no audiologists currently employed within the region who will reach these ages based on the available data.
<table>
<thead>
<tr>
<th>Year</th>
<th>Age 55</th>
<th>Age 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
IX. Determination of Future Workforce

In an attempt to project future workforce it was necessary to accurately determine the number of speech language pathologists and audiologists presently required by the WRHA, the available supply of registered workers, and the attrition/retirement rate for this group.

The predicted number of graduates for the years is not available, as an education program is not offered within the province.

Information regarding potential retirements was available but not for the WRHA audiologists as their payroll data was unavailable.

Unfortunately the rate of attrition for this group was not obtainable through the registering body or through the WRHA and so an exact prediction of workforce could not be determined. The information provided describes what is currently known about this group.

Current Workforce

Position/vacancy data has been collected by the WRHA and this data was used to determine the current requirement as well as the existing vacancies (see Appendix). The total number of vacant positions for audiology is four representing 4.0 EFTs including the two term vacancies. This reflects a position vacancy rate of 30.8% and an EFT vacancy rate of 33.9%. These rates include the term vacancies. In regards to the SLPs, there does not appear to be an immediate concern in regard to vacancies. Based on the most recent sampling there are no vacancies currently being reported. The data used was from August/September 2002, which was determined to be an accurate sample. (See Tables 11 and 12)
Table 11: Audiology Current Required Supply September 2002

<table>
<thead>
<tr>
<th>Area</th>
<th>Positions EFT</th>
<th>Vacancies Pos.</th>
<th>Vacancies EFT</th>
<th>Term Vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>12 10.8</td>
<td>2 2.0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>LTC</td>
<td>1 1.0</td>
<td>0 0.0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>13 11.8</td>
<td>2 2.0</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Note: Term vacancies are both FTE.

Table 12: SLP Current Required Supply August 2002

<table>
<thead>
<tr>
<th>Area</th>
<th>Positions EFT</th>
<th>Vacancies Pos.</th>
<th>Vacancies EFT</th>
<th>Term Vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>35 28.7</td>
<td>0 0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>LTC</td>
<td>11 8.8</td>
<td>0 0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4 2.8</td>
<td>0 0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>50 40.3</td>
<td>0 0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Overtime has not been considered in this analysis.

Supply

From the payroll data it was determined that over the past five years there have been only five audiologists entering the WRHA system that have continued employment within WRHA. This is indicative of a sustained recruitment, on average, of one audiologist per year, which equates to 12.5% of the current workforce. The number that may have entered during the same time frame and left prior to December of 2001 is unknown.

Over the last five years there have been 25 SLPs who have entered the public system and remained. This is an average of five SLPs per year, which equates to 10.4% of the current workforce. The number that may have entered during the same time frame and left prior to December of 2001 is unknown.

There are a high number of SLPs and audiologists working in part-time and casual positions throughout the region. Within the WRHA, approximately 56% of SLPs and 69.2% of audiologists work full-time, 44% of SLPs and 30.8% of audiologists work part-time. Potential
exists for these employees to increase their EFTs but it is likely the employees are working in these capacities by choice and it may be very difficult to entice them to increase hours.

A number of issues in regards to work life for audiologists and SLPs were identified as well as concern about wait times for treatment and inequities in regards to service delivery.

Attrition/Retirement
Statistics Canada reported that between 1997 and 2000, 43% of people retired before age 60 with the most popular age for the public sector being age 55.

Retirement/age data for the region was obtained through the payroll systems and the ages and Magic 80 numbers are depicted in Tables 6 to 10. The data is incomplete for the audiology group.

Retirement is not likely to be an immediate problem for the SLP group. The majority of workers, 26 SLPs, representing 54.2% of the workforce are in the 30 to 39 age group. Twenty-five percent of SLPs are over 40 years of age with only two SLPs being over 50.

For audiology the data is incomplete. For the group that data is available for 100% of the audiologists are between 30 and 39 years of age so again retirement is not likely to pose a huge problem.

There are not any audiologists or SLPs reaching Magic 80 over the next five years.

As a measure of attrition it must be remembered that although retirement may not result in an exodus from the WRHA there is
competition from the private sector and the school divisions, which may result in attrition, as well as employees leaving for other reasons.

### Calculation of Workforce

It was not possible to calculate an accurate workforce projection, as neither the licensing body nor the WRHA was able to provide an accurate rate of attrition nor were graduating numbers available for this group.

As the overall attrition rate SLPs and audiologists is unknown an exact calculation of future workforce was not possible.

The SLP group does not appear to have issues at the present time in regards to recruitment and retention. This situation will require close monitoring to ensure that adequate work force is maintained.

The audiology group is reporting significant vacancies and with a known recruitment/retention rate of only one audiologist over the past five years it does not appear likely that the situation will improve without great effort. Competition from the private sector and the school divisions is high and salaries and benefits must improve to decrease attrition.

Both SLP and audiology are primarily female professions. The increased maternity benefits may have an affect on vacancies.
X. Discussion

The analysis of projected workforce indicates that it is likely that vacancies for audiologists will persist if strategies to recruit and retain audiologists are not actively pursued. Current vacancies total four positions. The vacancy rate for audiology by position is currently 30.8% and it is 33.9% by EFT. The rates have been higher over the past year and there is a likelihood that these rates will increase. As benefits and salaries within the private sector are generally better than in the public sector recruitment from the private sector is not likely to be successful. Based on previous payroll data only one audiologist was recruited and retained each year for the past five years.

The vacancy rate for audiology is high and it should be noted that this vacancy rate does not take into consideration the "vacancies" created by minimal or non-existent relief budgets, which further decreases staffing. As well, overtime has not been considered in this equation. The possible effect of the increased maternity benefits is also likely to increase the term vacancy rates.

The rate of attrition and the reasons for this attrition are at this time unknown. Relocation, retirement, career change, maternity leaves, and educational pursuits are likely some of the reasons behind the departures from practice. Further information about these departures and possible incentives for continuing to practice need to be obtained, as it is likely that recruitment alone will not result in a stable workforce. The high cost of turnover should be acknowledged and resources directed towards retention of existing staff as well as recruitment of new employees.

At present, there does not appear to be a recruitment and retention problem for the SLP group. This situation requires close monitoring as
a high proportion of therapists work within the school system and salaries and benefits are higher within that system. If shortages were to develop within the school divisions it could spill over into the WRHA.

It must be remembered that the results of the analysis may be influenced by many factors. It will be important to continue to maintain the tools of the analysis and to monitor the predications. Exit tracking of employees would assist in more accurate assessment of career movement.

The limitations of this analysis include:

1. Payroll data for approximately 50% of the audiologists wasn't available and so was not included in the analysis.

2. Position /vacancy information is based on the most recent sample only.

3. The impact of the availability of work within the private sector, with the likelihood of improved benefits and greater flexibility, is difficult to measure.

4. Overall, the numbers are small therefore the potential exists that minor variations may lead to discrepancies over time.

5. The vacancy information, payroll data and the licensing body information only reflect the status at one point in time.

6. As the overall rate of attrition was not available, an accurate reflection of future workforce was not obtained.
7. There has been no consideration regarding the possibility of increased demands based on aging populations. The analysis is based on requirements for the year 2001.
XI. Recommendations

The WRHA recently allocated $150,000 to support recruitment and retention of audiologists. The funds were provided for equipment and tuition relief/moving expenses for new recruits. It was stipulated that the maximum amount to be provided to a new recruit was to be $3,000 pro-rated according to EFT and based on a 1-year return of service agreement. The $3,000 would be paid to any site regardless of whether or not the WRHA was the employer. Funds, not used for recruitment, were used to purchase audiology equipment. (J.Clark, personal communication, 2002)

Aggressive recruitment strategies will need to be implemented to ensure an adequate supply of audiologists. Competition from the private sector exists for this group. Salaries need to be competitive and benefits appealing to recruit and retain these professionals. As a program for training SLPS and audiologists does not exist in Manitoba it is critical that student placements be facilitated and stipends or other incentives be provided. The provision of student placements and perhaps summer employment for potential recruits may be assistive in exposing students to the WRHA environment. There may be a need to aggressively recruit directly from the universities. This may involve the provisions of financial aid for tuition fees in return for service or signing bonuses as described above.

Specific Recommendations

- Continue to update equipment as required.
- Provide competitive salaries and benefits to remain competitive with the private sector.
- Provide adequate and equitable continuing education opportunities.
Aggressive recruiting of audiology graduates/students to ensure a stable workforce.

Focus on benefits and strategies that would appeal to the young female group of workers with benefits such as childcare and flexible scheduling.

Continue to promote the provision of student placements.

Continue with refinement of the position/vacancy reporting, including analysis of reasons for attrition.

Develop an annual workforce document including a review of positions and vacancies, age ranges, graduating class numbers, recruitment and attrition patterns, etc.

Ensure that strategies are initiated throughout the region so that facilities are not recruiting from each other.

Strategies, such as those described in the Profile documents listed below, should be implemented to ensure that the current workforce remains within the WRHA. Strategies that may encourage staff to increase hours should also be explored.

Recommendations in regards to improving recruitment and retention of SLPs and audiologists made in the WRHA Profile of the Allied Health Workforce included:17,18

- Improve salaries.
- Provide equitable benefits.
- Provide opportunities for advancement including research, clinical specialist, and management positions.
- Improve financial support for continuing education.
- Ensure that resources for SLP and audiology are adequate.
- Enhance flexibility in scheduling.
- Implement Audiology Professional Leader roles at each site.
There are many strategies that may positively impact on workforce. The following strategies have been cited by numerous sources as potentially having a positive influence on retention and recruitment of health care professionals.

The American Hospital Association Commission on Workforce for Hospitals and Health Services has created a document that presents the recommendations of the Commission for changes that will result in a long-term solution to the shortages of health care workers. A number of these recommendations are included in the list of possible strategies. Their recommendations fall into five categories; foster meaningful work, improve the culture of the workforce, attract and retain a diverse workforce, work with others, and build support within the broader society. This report notes that careers in health care are viewed as less attractive. The reasons for this falling out of favour must be explored and resources dedicated to improving the image of work in healthcare. The report emphasized the need to retain workers as well as recruit new employees. The Commission advocated making human resources a priority within healthcare and that reports should be developed that measure the vacancy, retention, and turnover successes as well as problem areas.

**Recruitment and Retention Strategies**

1. Create an environment where staff are kept informed of new procedures, work processes, etc. to promote their involvement in decision making and ensure they feel part of the organization.

2. Continue to assess worker satisfaction and to identify factors affecting satisfaction by conducting surveys, utilizing performance evaluation systems that would capture these factors, etc. Determine the
characteristics of meaningful work and direct resources to meeting the
needs of staff in this regard. The Work Life Survey, which has been
completed, should provide the basis for this recommendation.

3. Develop and provide management education programs for interested
workers with the intention of developing leaders in the field.

4. Create excellence in management by providing existing managers with
mentors, appropriate education, and time to perform the job well.

5. Develop a strategy to ensure competitive salaries based on education,
experience, and competencies.

6. Recognize that student placements can provide an excellent
opportunity for staff recruitment. Promote student supervision by
ensuring that caseloads are manageable and that staff are provided
incentives to provide this service. The provisions of stipends, return for
services agreements, and other incentives should be investigated to
attract students.

7. Provide incentives for new employees such as assistance with national
exam fee funds in lieu of service commitment, relocation allowances,
etc.

8. Provide equitable relief budgets to allow for adequate coverage as well
as providing the ability to accurately assess workload.

9. Develop a regional plan for continuing education including funding to
cover workload and course fees, appointment of a coordinator to
develop programs, and a system to provide access to library
resources. This will assist in the development of an evidence-based
approach to practice as well as meet the need for ongoing continuing education. The development of an evidence-based approach to practice may also result in a more manageable approach to caseloads.

10. Review the program management model and its effect on staff. Review implementation across the region and determine what aspects are working best and areas that are problematic.

11. Explore the feasibility of developing a casual pool of workers for the region or developing relief workers with special training and remuneration.

12. Continue to provide a variety of employment opportunities including full-time and part-time positions and the possibility of flexible hours and job sharing situations.

13. Use the position/vacancy system to track retention, turnover, reasons for leaving, etc.

14. Attempt to retain older workers by ensuring that work opportunities exist that are not too physically demanding, provide opportunities for the mentoring of less experienced employees, and adjust retirement plans to allow for part-time/casual work that will not affect pension benefits.  

15. Provide salary incentives for long service as well as rewarding long term employees in other ways.

16. Provide assistance with childcare either through on-site daycare or financial support.
17. Attempt to track difficult to fill positions and areas of practice which may be perceived as less attractive and develop strategies to promote these areas of practice. Identify areas where vacancies have not been an issue as well as difficult to fill positions and determine the factors affecting these scenarios.

18. Create a line of funding that would specifically address issues affecting recruitment and retention.

19. Continue to direct resources towards the development and refinement of tools to permit meaningful data collection and further analysis of workforce to ensure the availability of an adequate workforce in the future. The development of an annual workforce report that would review position/vacancy data, issues, retirement, etc. would be of benefit.

20. Encourage all interested parties to work together to monitor trends and develop strategies to deal with workforce issues.\textsuperscript{6}
XII. Conclusion

The likelihood of an ongoing shortage of audiologists has been proposed. Efforts must be directed towards mitigating this situation quickly and with a vision to continually monitor and adjust efforts as required. In regards to the speech language pathology workforce, at present there does not appear to be major concerns regarding workforce shortages but issues around work life have been identified and may require addressing.

Analysis of the reasons for attrition is required to determine if the departure of an employee is avoidable or unavoidable, desirable or undesirable.\(^{27}\) It must be accepted that a certain portion of employees ultimately desire to work in private endeavors or leave for other reasons and that their departure is unavoidable. What is not known is which employees would leave regardless and which would be retainable under different working conditions.

Further refinement of the position/vacancy reporting system will assist in the development of a greater understanding of work patterns as well as ensuring an understanding of attrition and recruitment.

There is a need to better understand the movement patterns of speech language pathologists and audiologists throughout their careers and to continue to monitor the many factors that may influence retention and recruitment. As strategies are implemented, assessment of their effectiveness must be ongoing.

A better understanding of the nature of the workforce patterns and the factors that motivate maximum participation in the work force will improve personnel supply estimates of the future.
This process should be seen, as a continuous quality improvement process in which there are regular up-to-date estimates, including developments occurring on both the supply and requirement side. This continuous process will allow for further identification of trends in recruitment and retention of the Winnipeg Regional Health Authority’s speech language pathology and audiology workforce.
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## Appendix

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