

# Health Human Resources: Forecasting Needs in Northwestern Ontario 2013-2025



## EXECUTIVE SUMMARY & CONCLUSION

MARCH 2013



**North Superior**  
Workforce Planning Board



**Ontario**

North West Local Health  
Integration Network

Réseau local d'intégration  
des services de santé  
du Nord-Ouest



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**North Superior**  
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Réseau local d'intégration  
des services de santé  
du Nord-Ouest

# EMPLOYMENT ONTARIO



LE RÉSEAU DU MIEUX-ÊTRE  
**FRANCOPHONE**  
DU NORD DE L'ONTARIO



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## Acknowledgements

**North Superior Workforce Planning Board (NSWPB)** and the **Northwest Training and Adjustment Board (NTAB)** are two of the 25 Workforce Planning Zones in Ontario who are sponsored by the Ministry of Training, Colleges and Universities. As non-profit, non-government organizations, they play important roles in facilitating local planning, creating, and leveraging partnerships and providing timely intelligence and leadership to help address both current and emerging local labour market issues.

As project lead for the Health Human Resources Study, NSWPB's organizational goals are outlined below:

### **Vision:**

Our human resource pool will be strategically aligned, competitively positioned and progressively developed to meet future social and economic demands across Northwestern Ontario.

### **Mission:**

Connecting community partners to improve the quality of life in our communities through workforce development. The North Superior Workforce Planning Board will:

- Build a strategic workforce readiness plan
- Create a dynamic, responsive process to satisfy current needs and prepare people for emerging labour market opportunities within a global economy
- Leverage community alliances to maximize labour market capacity and competitiveness

### **Mandate:**

Leading in the creation of innovative labour market solutions by:

- Providing authoritative and evidence-based research
- Identifying employment trends
- Targeting workforce opportunities
- Initiating workforce development strategies

The **North West Local Health Integration Network (LHIN)** is a non-profit organization that works with health care providers, communities, and the public to set priorities and plan health services in Northwestern Ontario. The North West LHIN oversees the integration and coordination of local health services to make it easier for clients/patients to access the care they require. In addition, The North West LHIN is responsible for allocating funding for a variety of health services throughout Northwestern Ontario, including:

- Hospitals
- Community Care Access Centres (CCACs)
- Community support service organizations (e.g. homemaking, personal assistance, etc.)
- Long-term care homes
- Community Health Centres
- Community mental health and addictions agencies

Le **Réseau du mieux-être francophone du Nord de l'Ontario** is an organization that supports better access to quality health care services in French for Francophones living in Northern Ontario.

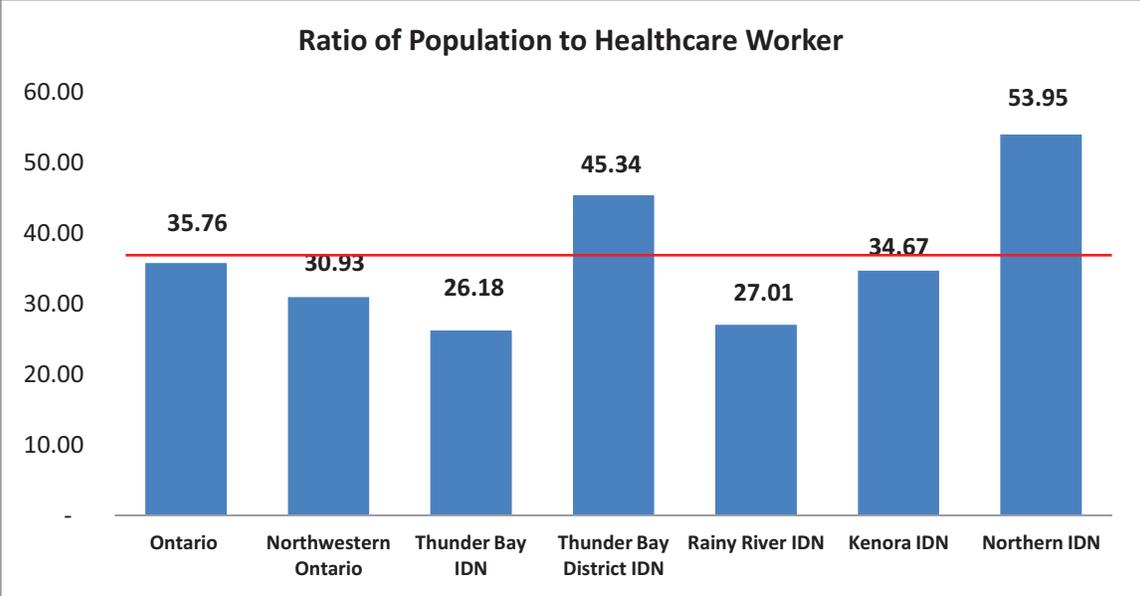
# Executive Summary

Healthcare providers in Northwestern Ontario are in continuous recruitment mode. With workers migrating in and out of communities, there is a constant strain on the human resources side of the healthcare sector. Add to that an aging population with escalating healthcare needs, an increase in retirement rates, and a forecasted increase in population by 2025, “a perfect storm” will be brewing unless the forecasted rise in demand for healthcare workers is addressed in due time.

The North Superior Workforce Planning Board (NSWPB) and Northwest Training and Adjustment Board (NTAB) in partnership with the North West Local Health Integration Network (LHIN) and the Réseau du francophone de mieux-être francophone du Nord de l’Ontario have produced the following report as a means of responding proactively to the looming storm, and thereby allowing stakeholders collectively to enact measures to mitigate its effect.

Based on the 2006 Census, the ratio of population to healthcare worker is 35.76 across the Province of Ontario. In comparison, Northwestern Ontario’s ratio is 30.93 (see Figure 1.1). However, it is important to note that the population to worker ratio does not account for the fact that Northwestern Ontario is the province's most sparsely populated region. In other words, Northwestern Ontario’s population density equals 0.4 persons per square kilometre compared to 14.72 in Ontario. This means that delivery of healthcare services is more complex and requires a different approach for Northwestern Ontario.

Figure 1.1: Ratio of Population to Healthcare Worker<sup>1</sup>



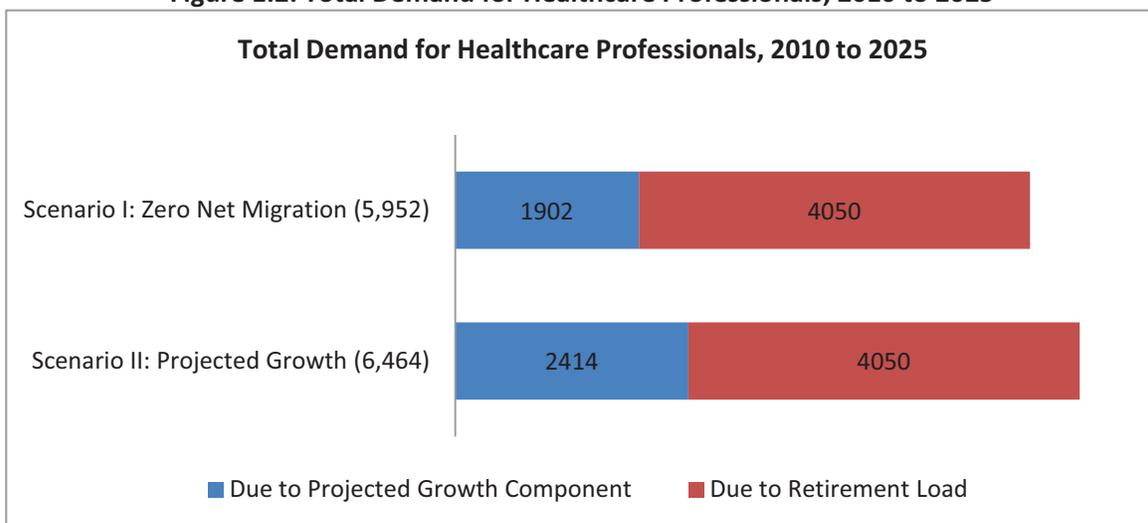
This study in Health Human Resources takes an in-depth look into the healthcare labour force of Northwestern Ontario. It provides projections of future demand for healthcare workers resulting from

<sup>1</sup> Based on 2006 Census of Canada

retirement as well as the changing size and age distribution of the population. The study examines human resources needs of both the traditional and non-traditional healthcare sectors.<sup>2</sup>

The results of this study indicate that there will be more demand for healthcare in the future. Not taking into account the current vacancies, there will be a need to recruit between 5,952 and 6,464 new healthcare professionals in the next 12 years. Figure 1.2 shows the projected number of retirements, and the number of healthcare workers that will be required for both a zero net growth economy (Scenario I), or one with some growth (Scenario II). Considering that the healthcare sector employs approximately 11,035 people in Northwestern Ontario, the turnover could become debilitating.

**Figure 1.2: Total Demand for Healthcare Professionals, 2010 to 2025**



In group consultations with LHIN-funded Health Service Providers, many participants agreed that with responsibility for multiple divisions within their own organization and the demand on their time working on current shortfalls, most have not considered their future human resources needs. Participants noted concern of losing large number of experienced staff in supervisory and managerial positions at a time when they very much require strong leadership to assist in addressing current and future challenges to ensure successful delivery of healthcare programs and services. Many of their Senior Administrators are preparing to retire within the next five years, leaving a knowledge and experience gap that will also be hard to fill. Participants in the focus groups suggested that all of these factors are leading to the brewing of “a perfect storm”.

When faced with considering their options, remedies that focus groups offered included the following:

- Providing training opportunities in leadership, mental health, and complex care
- Enhancing educational programs with cultural and language training (French and Aboriginal)
- Expanding placement opportunities
- Balancing compensation
- Harmonizing pension plans

<sup>2</sup> Non-traditional healthcare occupations are defined to include social workers, community and social services, family, marriage and other related counsellors, recreation, sports and fitness program supervisors, psychologists and inspectors in public and environmental health and occupational health and safety.

- Sharing recruitment resources
- Integrating administrative services
- Promoting healthcare professions to youth, Francophone, and Aboriginal groups
- Finding solutions to timely accreditation when hiring qualified foreign-trained workers

## **Purpose**

The main objective of this study has been to analyze and forecast the specific healthcare resource demands in Northwestern Ontario during 2010-2025.

The resulting future demands study will be used by North Superior Workforce Planning Board (NSWPB), Northwest Training and Adjustment Board (NTAB), Réseau du francophone du mieux-être francophone du Nord de l'Ontario, and the North West Local Health Integration Network (LHIN), as well as other stakeholders concerned with developing the workforce within the health sector over the next 10 years. It provides reliable projections to employment service providers for planning and programming service delivery in healthcare. In addition, information may be shared with post-secondary institutions for their consideration in assessing and implementing career courses and curriculum.

## Integrated District Networks IDNs

The availability of healthcare professionals directly impacts the well-being of those who live in Northwestern Ontario. A recommendation of the North West LHIN Health Services Blueprint was to develop a ten-year plan in order to properly forecast specific human resources impacting healthcare demands within the five IDNs in Northwestern Ontario. The five IDNs and their Local Health Hubs (LHH) are specified to coincide with the regions shown in the following Table.

The first three IDNs cover the same area as the NSWPB and the last two are closely aligned with NTAB (see Table 1.1). This study reports all estimates and projections for Northwestern Ontario as a whole as well as for each IDN as there are wide-ranging differences in community accessibility and service offerings between and within each IDN.

**Table 1.1: North West Local Health Integration Network**

<b>Integrated District Network (IDN)</b>	<b>Local Health Hub (LHH)</b>
<b>City of Thunder Bay</b>	City of Thunder Bay
<b>District of Thunder Bay</b>	Greenstone
	Manitouwadge
	Marathon
	Nipigon
<b>District of Rainy River</b>	Terrace Bay
	Atikokan
	Fort Frances
	Rainy River
<b>District Kenora</b>	Emo
	Kenora
	Red Lake
<b>Northern</b>	Dryden
	Sioux Lookout

A detailed breakdown of communities included in each local health hub is provided in Appendix I.

## Study Sections and Key Results

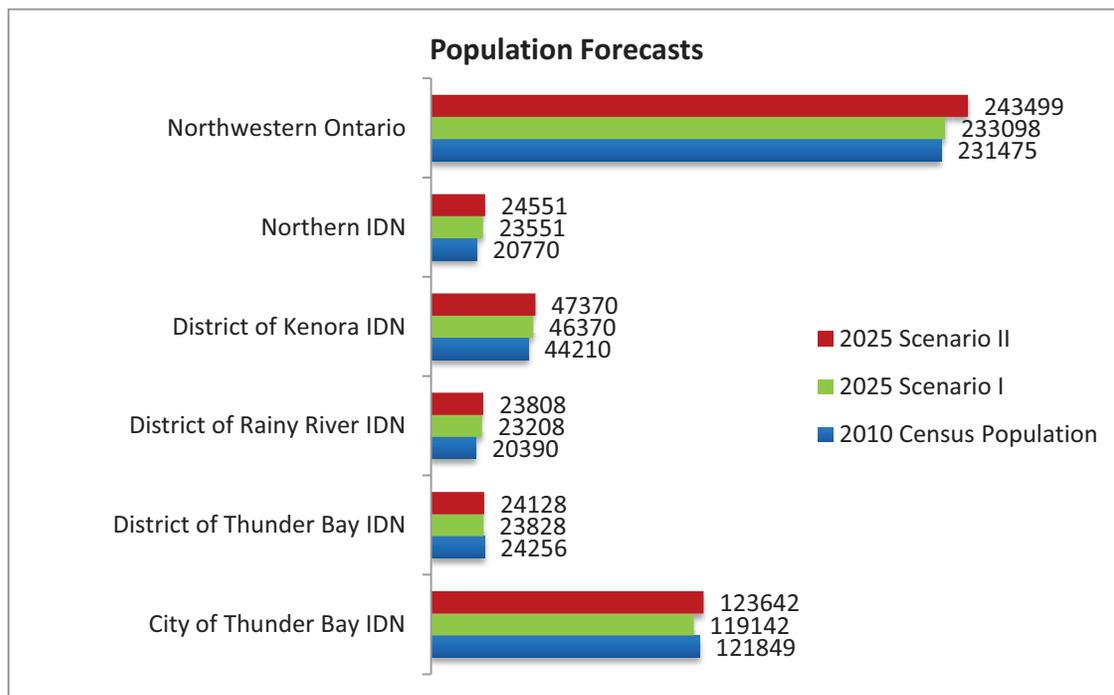
### Part II: Population Trends and Characteristics in Northwestern Ontario (2010 to 2025)

This part examines population trends and characteristics in various IDNs in Northwestern Ontario during 2010-2025. Two scenarios are considered:

- Scenario I assumes zero net migration during the forecasting period.
- Scenario II assumes a conservative population growth during the forecasting period resulting from an expected growth in the economy.

In Scenario II, Northwestern Ontario's population is expected to increase from its level of 231,475 in 2010 to 243,498 in 2025 as shown in Figure 1.3. This represents an increase of a 5.19 percent during the forecasting period. Scenario I predicts an increase to 233,098 or a 0.7 percent.

**Figure 1.3: Population Forecasts**

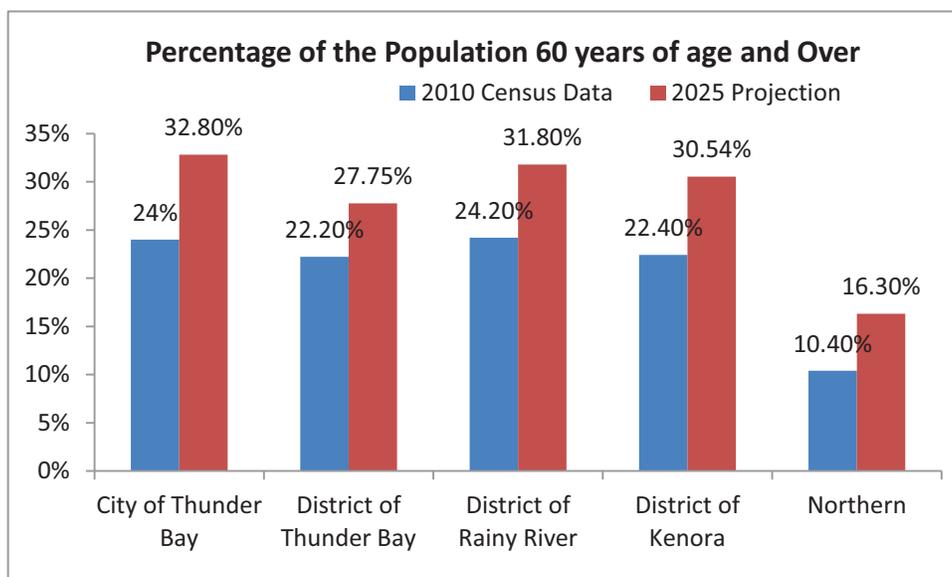


In Scenario II, the population changes that take into account economic growth from 2010 to 2025 are:

- The City of Thunder Bay IDN population is expected to increase from 121,849 in 2010 to 123,642, an increase of 1.47 percent
- The District of Thunder Bay IDN is expected to stay relatively constant 24,128.
- The District of Rainy River IND population will increase from 20,390 in 2010 to 23,808, a 16.76 percent increase.
- The District of Kenora IDN population will rise from 44,210 in 2010 to 47,370, a 7.14 percent increase.
- The Northern IDN population will increase from 20,770 in 2010 to 24,551, the largest increase at 17.2 percent.

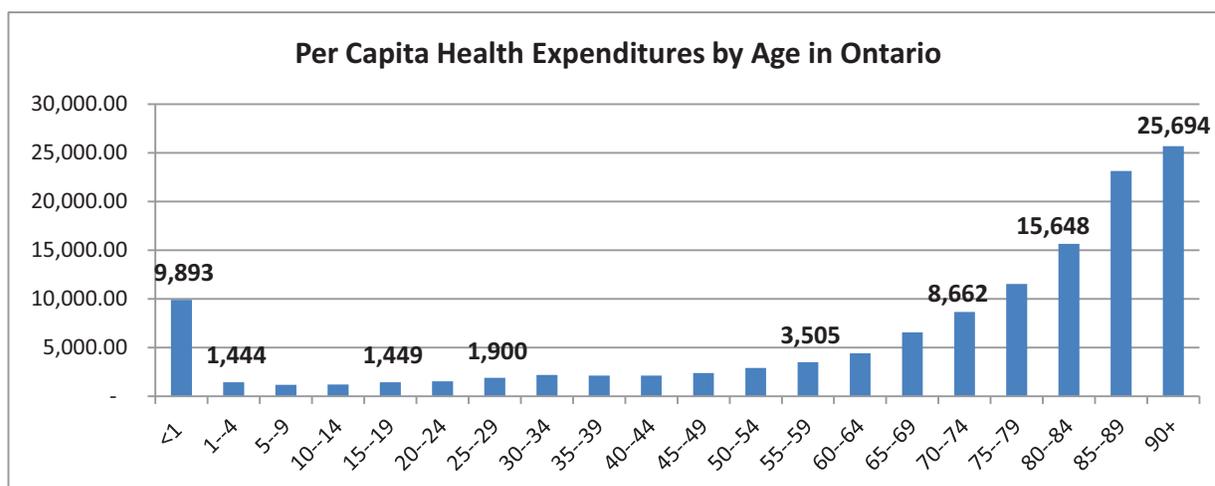
Under both scenarios, the age composition of population will change significantly during 2010-2025. Northwestern Ontario's population is aging. Under Scenario II, the percentage share of population aged 60 and over will increase from 22.3 percent in 2010 to 30.8 percent in 2025. In other words, one-third of Northwestern Ontario's population will be 60 years and over in 2025. Figure 1.4 demonstrates the shift in each of the IDNs.

**Figure 1.4: Forecast of Percentage of the Population 60 years of age and over (2025) based on Scenario II**



In general, as population ages, the demand for healthcare services increases. For example, per capita health expenditures rise from \$2,895 per person aged 45 to 49 to \$6,556 for individuals between the ages of 65 to 69<sup>3</sup>. Figure 1.5 demonstrates the relationship between age and health expenditures in Ontario in 2010.

**Figure 1.5: Per Capita Health Expenditures by Age in Ontario**



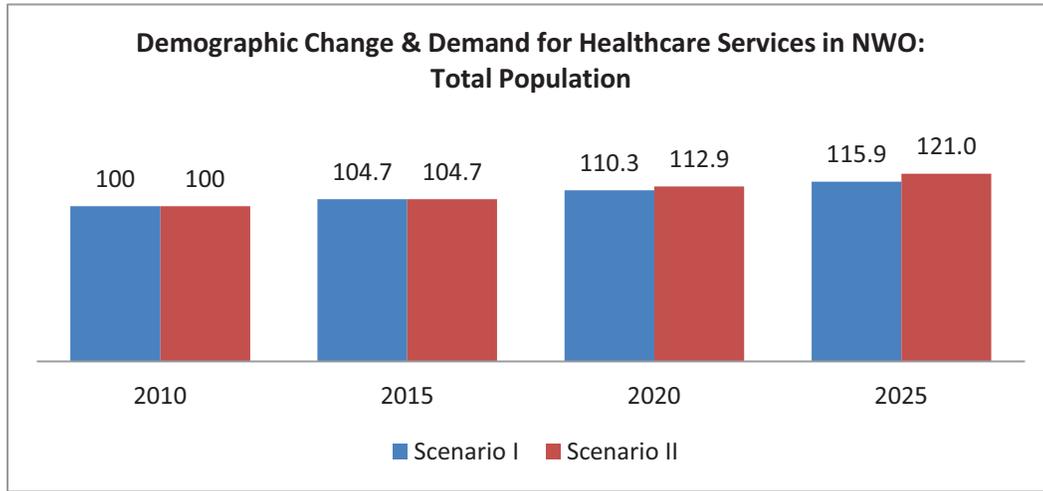
<sup>3</sup> Canadian Institute for Health Information, National Health Expenditure Trends, 1975 to 2012, p. 155.

## Key Results: Population Trends and Characteristics

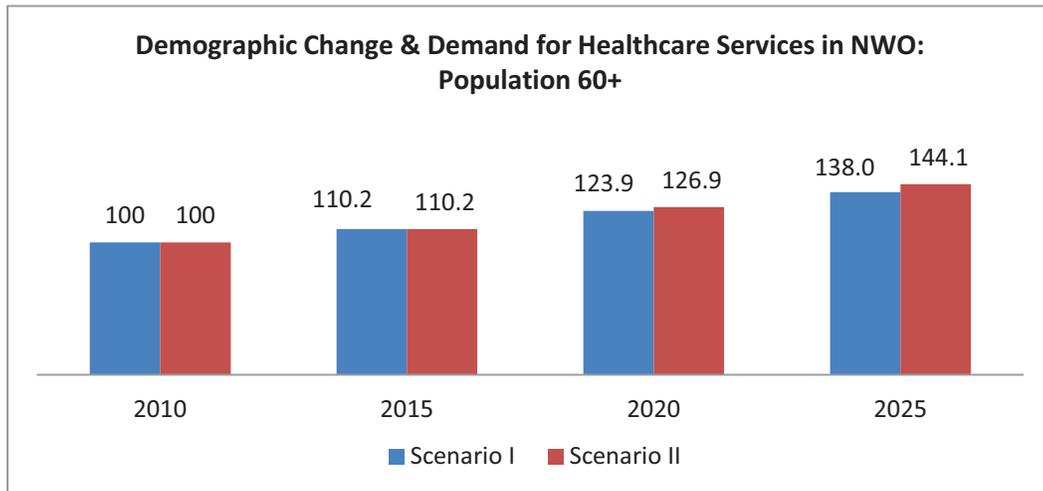
- **The City of Thunder Bay IDN's** share of population aged 60 and over will increase from 24.0 percent in 2010 to 32.5 percent in 2025. Similarly, the share of those aged 65 and over will increase from 17.2 percent in 2010 to 24.8 percent in 2025, an increase of approximately 44.2 percent.
- The share of population aged 60 and over in the **District of Thunder Bay IDN** will increase from 22.2 percent in 2010 to 36.29 percent in 2025. The percentage share of those 65 and older will rise from 14.4 percent in 2010 to 27.7 percent in 2025, an increase of approximately 92.3 percent.
- The population share of those 60 years and over in the **District of Rainy River IDN** will increase from 24.2 percent in 2010 to 31.8 percent in 2025. Similarly, the share of those over 65 years of age will increase from 17.4 percent in 2010 to 24.3 percent in 2025, a rise of approximately 40.0 percent.
- The **District of Kenora IDN's** share of population aged 60 and over will increase from 22.4 percent in 2010 to 30.54 percent in 2025. Similarly, the share of those aged 65 and over will increase from 15.37 percent in 2010 to 23.15 percent in 2025. This represents an increase of approximately 50.6 percent.
- The **Northern IDN** has the youngest population among all regions in Northwestern Ontario. The share of those aged 60 and over equaled 10.4 percent in 2010. This is expected to increase to 16.3 percent in 2025. The share of those 65 years of age and older will increase from 6.9 percent in 2010 to 10.9 percent in 2025.

Figures 1.6 and 1.7 show the combined impact of changing size and age distribution of population on demand for healthcare services in Northwestern Ontario.

**Figure 1.6: Demographic Change and Demand for Healthcare Services in Northwestern Ontario**



**Figure 1.7: Demographic Change and Demand for Healthcare Services in Northwestern Ontario 60 years of age and over.**



### Part III: Estimating Growth-Demand for Healthcare Workers in Northwestern Ontario

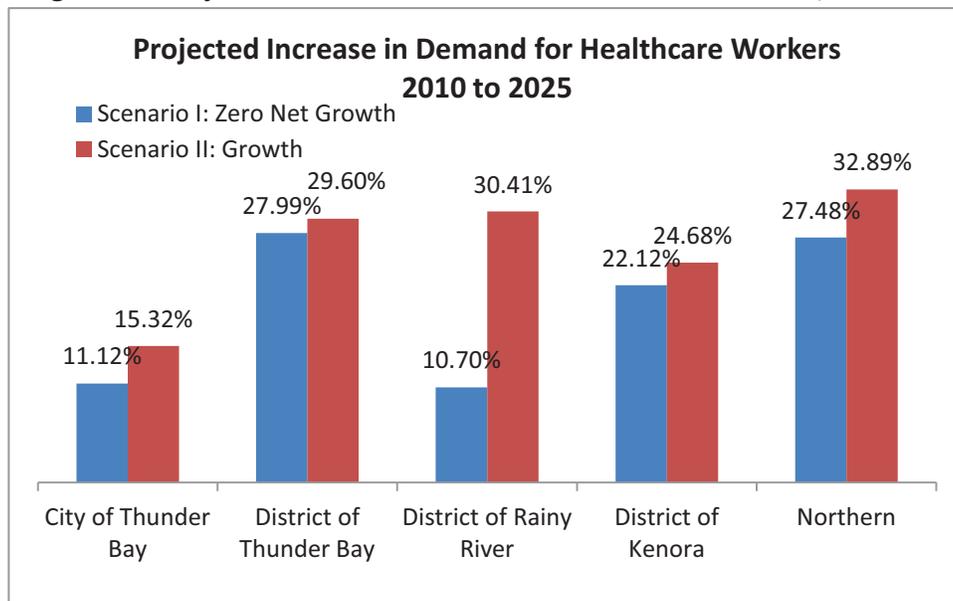
In this section the growth-demand indicators are estimated based on the size and age distribution of Northwestern Ontario’s population as well as information on healthcare expenditure per capita in Ontario. The results show that changes in size and age distribution of Northwestern Ontario’s population will have significant impact on demand for healthcare workers in the coming years.

The overall demand for healthcare workers in Northwestern Ontario is expected to increase by 15 to 21 percent during the projection period. During the same period, healthcare demand by the population aged 60 years and older is expected to increase by 38 to 44 percent.<sup>4</sup>

#### Key Results: Estimating Growth-Demand for Healthcare Workers in Northwestern Ontario

- The overall demand for healthcare workers in **Northwestern Ontario** is expected to increase by 15.87 percent (scenario I) or 21.03 percent (scenario II) during 2010-2025. The demand by the population aged 60 years and older is expected to increase by 37.95 percent (scenario I) or 44.12 percent (scenario II) during the same period.

Figure 1.8: Projected Increase in Demand for Healthcare Workers, 2010 to 2025



- Demand for healthcare workers in the **City of Thunder Bay IDN** will increase by 11.12 percent (scenario I) or 15.32 percent (scenario II) during 2010-25. Demand by the population 60 years of age and older will rise by 28.75 percent (scenario I) or 33.62 percent (scenario II) during the same period.

<sup>4</sup> Results for the non-traditional healthcare occupations are provided in the main body of the report.

- Demand for healthcare workers in the **District of Thunder Bay IDN** is expected to increase by 27.99 percent (scenario I) or 29.60 percent (scenario II) during 2010-25. Demand by those aged 60 and over is expected to increase by 74.28 percent (scenario I) or 76.48 percent (scenario II) during the same period.
- Demand for healthcare workers in the **District of Rainy River IDN** is expected to increase by 10.70 percent (scenario I) or 30.41 percent (scenario II) during 2010-25. Demand by those aged 60 and over is expected to rise by 26.80 percent (scenario I) or 49.39 percent (scenario II) during the same period.
- Demand for healthcare workers in the **District of Kenora IDN** is expected to increase by 22.12 percent (scenario I) or 24.68 percent (scenario II) during 2010-25. Demand by the population aged 60 and over is expected to rise by 47.93 percent (scenario I) or 51.12 percent (scenario II) during the same period.
- Demand for healthcare workers in the **Northern IDN** is expected to increase by 27.48 percent (scenario I) or 32.89 percent (scenario II) during 2010-25. Demand by the population aged 60 and older is expected to increase by 72.75 percent (scenario I) or 80.08 percent (scenario II) during the same period.

Table 1.2 shows the estimated number of new entrants required to satisfy the growth demand for selected National Occupation Classification (NOC) groups in the five IDNs in Northwestern Ontario during 2010-2025.

**Table 1.2: Estimated number of required new hires: 2010 to 2025**

<b>City of Thunder Bay IDN</b>	<b>2010-2015</b>	<b>2015-2020</b>	<b>2020-2025</b>
Nursing-Related Occupations (NOC:3152, 3233)	160	109	105
Assisting Occupations (NOC: 3413, 3414)	92	62	60
Medical Technologies (NOC: 321)	33	22	21
Therapy Assessment Professionals (NOC: 314)	19	13	13
Physicians (NOC: 3111, 3112)	19	13	13
Paramedics (NOC: 3234)	10	6	6
<b>District of Thunder Bay IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	28	25	22
Assisting Occupations (NOC: 3413, 3414)	10	9	8
Medical Technologies (NOC: 321)	10	9	8
Therapy Assessment Professionals (NOC: 314)	1	1	1
Physicians (NOC: 3111, 3112)	6	5	5
Paramedics (NOC: 3234)	6	5	5
<b>District of Rainy River IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	4	43	35
Assisting Occupations (NOC: 3413, 3414)	3	30	24
Medical Technologies (NOC: 321)	1	8	6
Therapy Assessment Professionals (NOC: 314)	0	4	3
Physicians (NOC: 3111, 3112)	0	5	4
Paramedics (NOC: 3234)	1	9	7
<b>District of Kenora IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	5	39	35
Assisting Occupations (NOC: 3413, 3414)	3	23	21
Medical Technologies (NOC: 321)	1	6	5
Therapy Assessment Professionals (NOC: 314)	1	7	6
Physicians (NOC: 3111, 3112)	0	3	3
Paramedics (NOC: 3234)	1	8	7
<b>Northern IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	17	15	15
Assisting Occupations (NOC: 3413, 3414)	14	13	13
Medical Technologies (NOC: 321)	9	8	8
Therapy Assessment Professionals (NOC: 314)	1	1	1
Physicians (NOC: 3111, 3112)	1	1	1
Paramedics (NOC: 3234)	4	4	4

As we saw above, the current level of healthcare professionals per person in the District of Thunder Bay IDN and Northern IDN are below the provincial average. Therefore, an increase in the estimated demand for new entrants will be required to compensate for the current deficit in those jurisdictions. In other words, the number of required new entrants in the District of Thunder Bay IDN and Northern IDN should be multiplied by a factor of 1.27 and 1.51, respectively.

## Part IV: Profile of Healthcare Providers in Northwestern Ontario and its Sub-Regions

A detailed profile of healthcare providers in Northwestern Ontario and its sub-regions based on a special tabulation obtained from Statistics Canada's 2006 Census<sup>5</sup> is supplied in this section. Employment in the healthcare sector accounts for 10.1 percent of total employment in Northwestern Ontario. The healthcare sector is an important component of the regional economic base. However, unlike forestry and mining industries, the healthcare sector is a non-cyclical, growing component of the regional economic base and plays a stabilizing role in the regional economy. In addition, given the relatively high labour compensation and high value-added nature of the industry, the employment and income multipliers associated with the sector are relatively high, implying relatively significant employment and income resulting from each dollar of spending on the regional health industry.

The National Occupation Classification (NOC) manages the collection and reporting of occupational statistics and provides labour market information. For this study, all the occupations within the structure and skill type of "Health" that start with the number three (3) are referred to as "traditional" healthcare occupations. Occupations in the field of healthcare that did not fall under these NOC codes are referred to as "non-traditional" healthcare occupations. Most are from NOC Major Group 41, Social and community service professionals, which includes: Psychologists, Social Workers, and Family, Marriage and Other Related Counsellors.

Northwestern Ontario's traditional healthcare sector employs an estimated 7,470 individuals. Employment in the non-traditional healthcare sector equals 3,565. Together, the traditional and non-traditional healthcare sectors account for approximately 11,035 workers in Northwestern Ontario.

### Traditional Health Occupations

Table 1.3 shows the top six traditional healthcare professions. These occupations comprise 86.9 percent of total employment in traditional healthcare sector in Northwestern Ontario.

**Table 1.3: Traditional Healthcare Providers: Top six healthcare professions by number of employees (2006)**

Selected Occupational Groups	20-49	50-54	55-59	60-64	65+
Nursing-Related Occupations (NOC: 3152, 3233)	1,540	415	535	370	170
Assisting Occupations (NOC: 3413, 3414)	1,115	255	160	135	85
Medical Technologies (NOC: 321)	375	80	90	75	10
Therapy Assessment Professionals (NOC: 314)	290	25	20	40	10
Physicians (NOC: 3111, 3112)	175	25	50	15	80
Paramedics (NOC: 3234)	225	55	25	15	20
TOTAL	3720	855	880	650	375

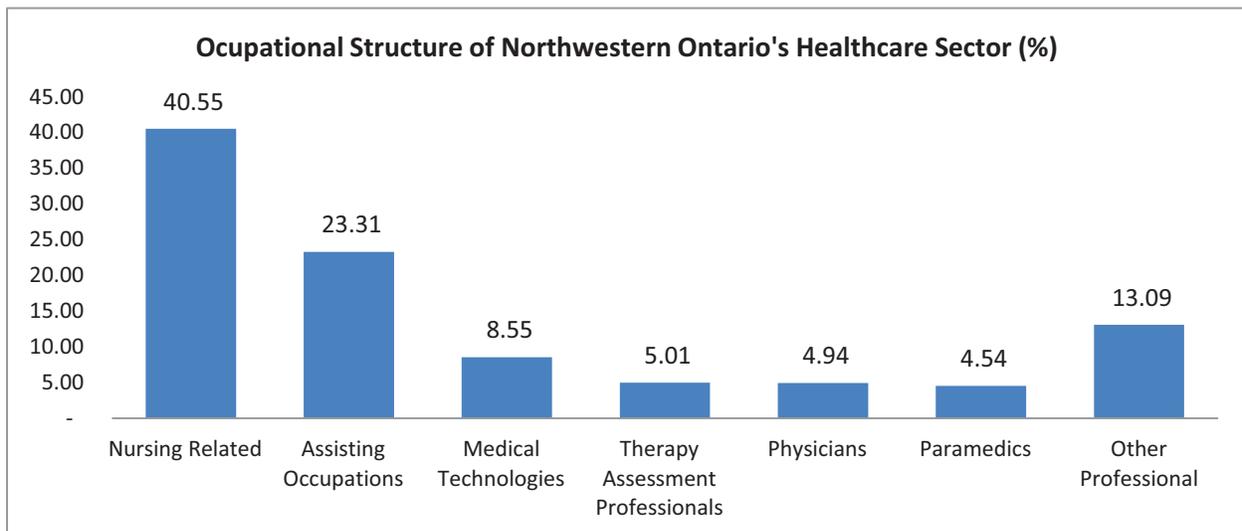
- Registered nurses represent almost 34.0 percent of total employment in Northwestern Ontario's healthcare sector. Licensed practical nurses represent 6.6 percent of the workers. Together, the nursing related occupations represent almost 40.5 percent of employment in Northwestern Ontario's healthcare sector.

<sup>5</sup> Census 2011 data on occupational distribution of employment in Northwestern Ontario's healthcare sector were not available at the time of writing the present report.

- Assisting occupations in health care account for 23.3 percent of employment. This group includes nurse aides, orderlies and patient service associates and other assisting occupations in support of the health services. Together, the nursing and assisting occupations in health care account for 63.9 percent of total employment in Northwestern Ontario’s healthcare sector.
- Medical technologists and technicians account for 8.55 percent of employment followed by therapy and assessment professionals (5.0%), physicians (4.9%) and paramedics (4.6%).
- Women account for the majority of employment in the sector making up 81.8 percent of workforce.

Figure 1.9 shows the occupational structure of the traditional health occupations classified under the NOC Health category.

**Figure 1.9: Occupational Structure of Northwestern Ontario’s Healthcare Sector<sup>6</sup>**



**Non-Traditional Healthcare Sector:**

- The non-traditional healthcare sector is dominated by community and social service workers who account for 55 percent of total employment in that sector followed by social workers (22.0%) and family, marriage and other counsellors (12.6%)
- Women account for 75.8 percent of employment in the non-traditional healthcare sectors.

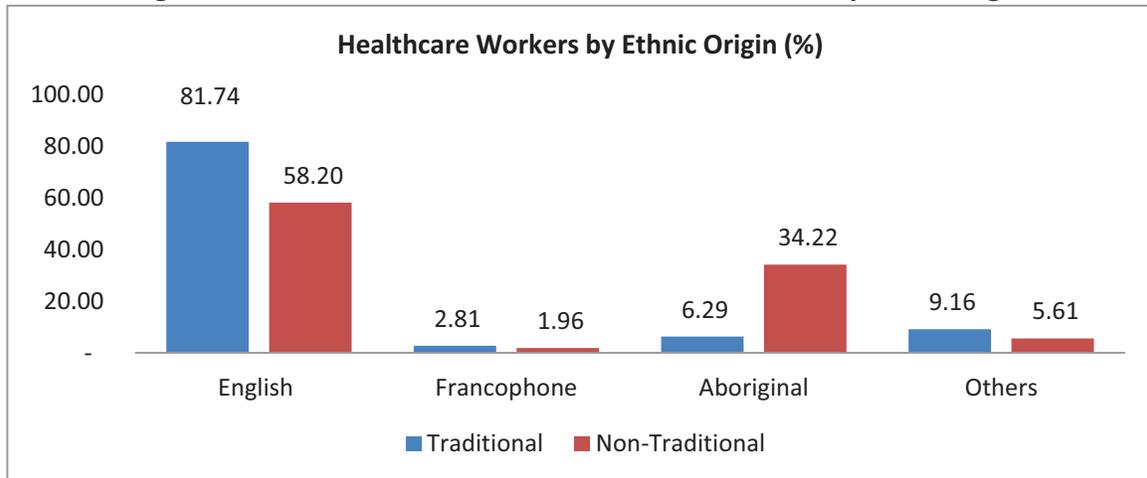
<sup>6</sup> Statistics Canada, 2006 Census

### Ethnic Origin

Figure 1.10 shows that the share of Francophone workers in the regional healthcare sector is slightly below their population share. The same is true for the non-English, French or Aboriginal population. While the share of the Aboriginal population in the traditional healthcare sector is below their population share, they represent a much larger share of employment in the non-traditional healthcare sector of the regional economy.

- 81.74 percent of all workers in the traditional healthcare sector are of English origin compared to a much lower rate of 58.2 percent in non-traditional healthcare.
- 9.2 percent of healthcare providers are of non-English, French or Aboriginal origin followed by 6.3 percent Aboriginal and 2.8 percent Francophone.
- Aboriginal workers comprise approximately 34.2 percent of non-traditional healthcare workers followed by non-English, French or Aboriginal (5.6%) and Francophone (2.0%).
- Non-English, French or Aboriginal origin individuals account for approximately 11.6 percent of the regional population

**Figure 1.10: Healthcare workers in Northwestern Ontario by Ethnic Origin**



### Key Results: Profile of Healthcare Providers in Northwestern Ontario and its Sub-Regions Highlights

- The healthcare sector employs approximately 4,655 people in the **City of Thunder Bay IDN**. The non-traditional sector employs almost 1,605 people. Together, the traditional and non-traditional healthcare sectors account for 10.6 percent of total employment in the City of Thunder Bay IDN.
- There are approximately 535 individuals employed in the traditional healthcare sector of **District of Thunder Bay IDN**. An additional 350 are employed in the non-traditional sector. Together, they comprise almost 7.3 percent of total employment in that region. The sector is dominated by women who account for 80.4 percent of employment in the traditional and 78.6 percent of employment in the non-traditional healthcare sectors.

- The **District of Rainy River IDN**'s traditional healthcare sector employs approximately 755 individuals. In addition, approximately 375 people work in the non-traditional healthcare sector. Together, they account for 10.9 percent of total employment in the District of Rainy River IDN. The sector is dominated by women who account for 86.1 percent and 72.3 percent of employment in the traditional and non-traditional healthcare sectors, respectively. Men account for 11.9 percent of healthcare providers in the traditional sector and 24.7 percent in the non-traditional healthcare sector of The District of Rainy River IDN.
- Approximately 1,275 persons work in the traditional healthcare sector in the **District of Kenora IDN**. An additional 725 work in the non-traditional healthcare sector. Together, they comprised 9.3 percent of total employment in Kenora in 2005. The District of Kenora IDN's healthcare sector is dominated by women who account for 78.4 percent of employment in the traditional and 72.4 percent of employment in the non-traditional healthcare sectors.
- Approximately 385 people work in the traditional healthcare sector in the **Northern IDN**. An additional 515 individuals work in the non-traditional healthcare sectors in that region. Together, they represent 12.9 percent of total employment in that region. The majority or 72.2 percent of healthcare providers in the traditional sector are women. Women account for 63.1 percent of employment in the non-traditional sector.

## Part V: Survey and Focus Group of Healthcare Providers and Results

A relatively large sample of healthcare providers was surveyed during the course of the study. The survey provided information on the demographic characteristics of patients, clients and residents in various IDNs within Northwestern Ontario. It also presented information on the percentage allocation of healthcare resources among patients by age. Finally, it provided data on the turnover rate among healthcare providers in Northwestern Ontario.

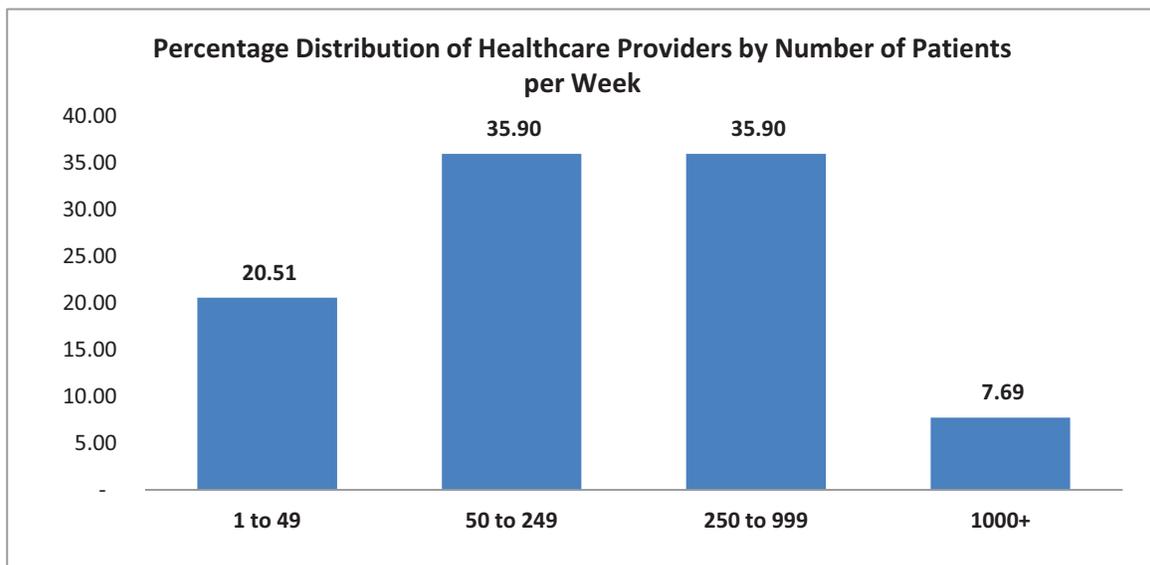
Focus groups, also held during the study, provided some of the healthcare employers' perspectives on the future of the labour force in healthcare.

### Key Results: Survey

A survey along with an introductory letter was sent to 93 LHIN-funded health service providers in Northwestern Ontario. An overall completion rate of 48.2 percent was achieved.

Figure 1.11 classifies healthcare providers in the survey by the number of service users (patients, residents and clients) they usually serve in a typical week.

**Figure 1.11 Percentage Distribution of Healthcare Providers by Number of Patients per Week, based on Survey Results**

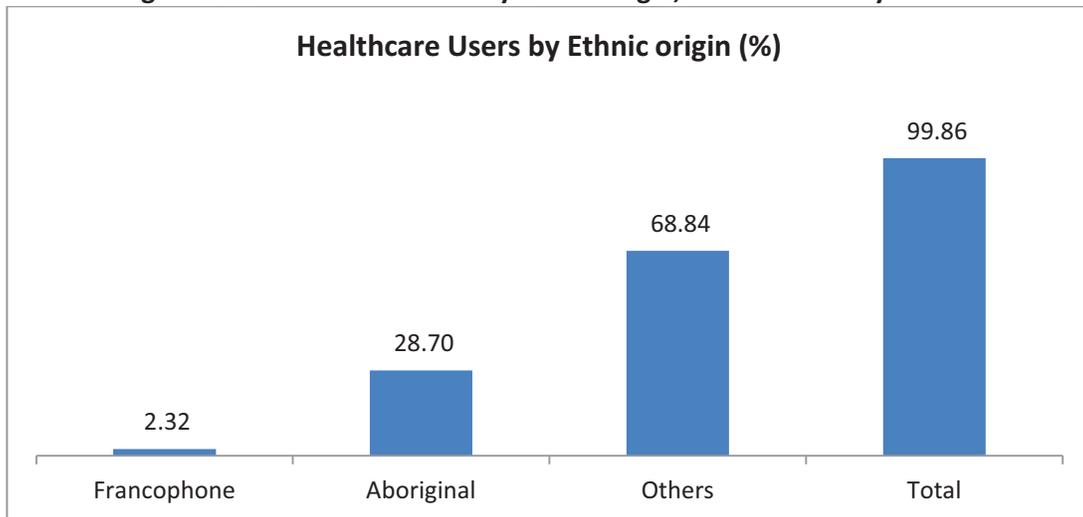


Regarding the number of service users being served, 20.5 percent of the healthcare providers in Northwestern Ontario are relatively small, servicing an average of 22.1 service users per week. 35.9 percent are medium size serving an average of 111.6 users per week. A similar percentage of healthcare providers are relatively large, serving 523.2 service users per week. Only 7.7 percent of healthcare providers are very large serving an average of 2,414.7 service users per week.

Figure 1.12 shows that 2.3 percent of service users are Francophone, 28.7 percent are Aboriginal and the rest or 68.8 percent are non-Francophone or Aboriginal. The share of the Francophone patients is slightly below their population share. 70.0 percent of institutions do not have a formal mechanism to identify Francophone patients which can explain a relatively lower share of Francophone patients

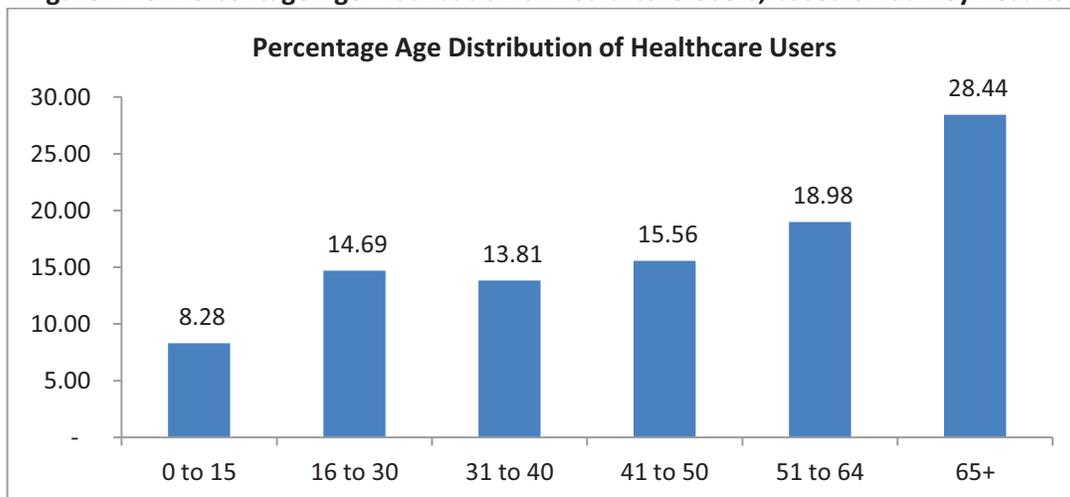
compared to their population share. The share of the Aboriginal patients is larger than their population share in Northwestern Ontario.

**Figure 1.12: Healthcare Users by Ethnic Origin, based on Survey Results**



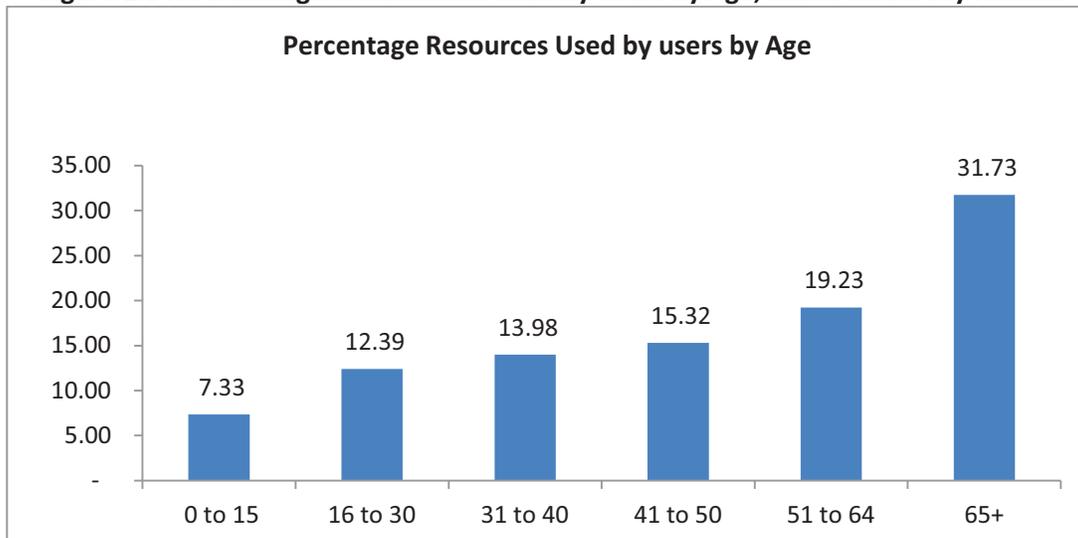
Approximately 28.4 percent of patients are 65 years of age and older. Figure 1.13 shows that 18.98 percent are between 51 and 64 years of age. Together, 47.4 percent of patients, residents and clients in Northwestern Ontario are over 51 years of age. This matches the Statistic Canada data for the percentage of population who are 50 years of age and older in Northwestern Ontario.

**Figure 1.13: Percentage Age Distribution of Healthcare Users, based on Survey Results**



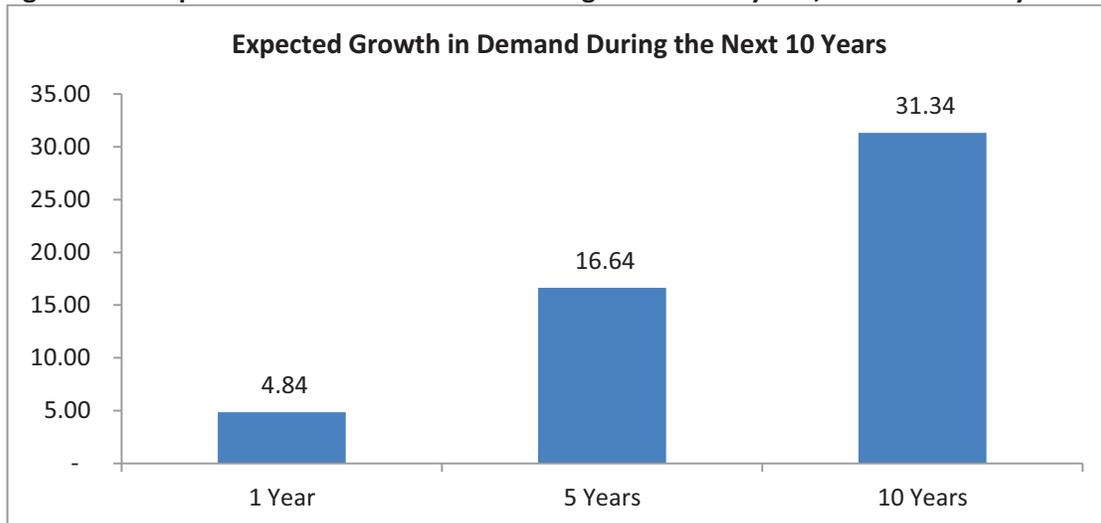
Two factors affect the amount of resources used by different age groups. First, an aging population increases the number of people in higher age categories and thus increases the quantity of healthcare demanded by older age groups. The second factor relates to the intensity of demand by older patients. There exists a direct relationship between age and quantity of healthcare demanded. Figure 1.14 shows the percentage of healthcare resources used by patients, clients and residents by age in Northwestern Ontario.

**Figure 1.14: Percentage of Resources Used by Users by Age, based on Survey Results**



The survey results confirm that as population ages, their demand for healthcare services increases. This is also reflected in the expectation of service providers regarding expected growth of demand for their services in the coming years as shown in Figure 1.15.

**Figure 1.15: Expected Growth on Demand During the Next 10 years, based on Survey Results**



Based upon the survey responses, healthcare providers expect demand for their services to increase by 31.3 percent during the next 10 years. This expectation is consistent with the aging of Northwestern Ontario's population.

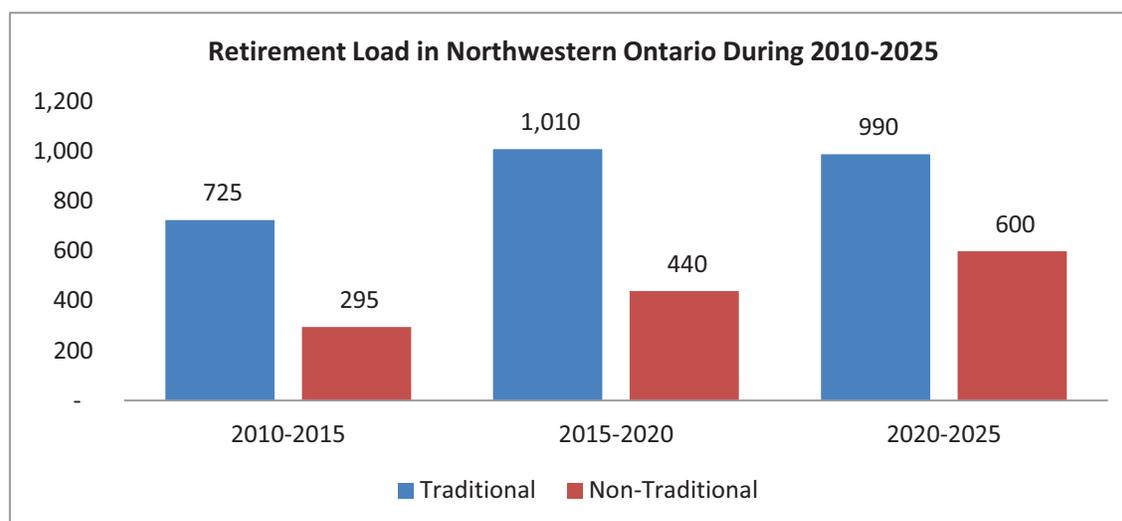
### **Key Results: Focus Groups**

- Focus group discussions were also conducted to validate the information from Statistics Canada. A total of 23 LHIN-funded organizations chose to participate in focus groups. The list represented a cross-section of services, staff sizes, and districts.
- Human Resource professionals across the region identified challenges in recruiting and retaining staff throughout the region that included: limited applicants, remoteness of work locations, financial compensation, work/life balance, and lack of recruiting resources.
- All districts reported predicted shortfalls in all areas of healthcare. The ones noted during the focus group included: Senior Management, Supervisory, and Leadership Positions, Dietitians, Physicians, Psychiatrists and Adolescent Psychiatrists, Personal Support Workers, a Bariatric Surgeon, Medical Laboratory Technicians, Specialists in Fetal Alcohol Spectrum Disorder (FASD), and Information Technologists. In surveys of the Focus Group participants, in addition to the ones noted, there are current vacancies and there will be significant vacancies in the next 5 and 10 years for: Registered Nurses, Registered Practical Nurses, Nurse Practitioners, and Physiotherapists.

## Part VI: Healthcare Demand Projections in Northwestern Ontario

The future demand for healthcare occupations is comprised of two separate components. The first is the growth component of total demand for healthcare providers was shown previously in Figure 1.15. The second component estimates the need to replace those workers who retire over the forecast period. This constitutes the retirement-replacement, or retirement load component of the future demand for healthcare workers. The retirement load is estimated using detailed data on the occupational distribution of healthcare workers by age in various Northwestern Ontario regions.<sup>7</sup>

**Figure 1.16: Projected Retirement Load in Northwestern Ontario 2010 to 2025, Traditional Healthcare Occupations**



### Traditional Healthcare Occupation Retirement Load

An estimated 725 or 9.7 percent of healthcare workers in Northwestern Ontario will retire during **2010-2015**. Registered nurses (285) account for the largest number of retirees during that period followed by nurse aides, orderlies and patient service associates (125) and registered practical nurses (85). During 2010-2015, the occupations with the largest retirement rate (% of workers retiring in each occupation) include dental technologists and technicians (33.3%), chiropractors (30%), dentists (17.2%), registered practical nurses (17.2%) and medical radiation technologists (17.1%).

Focusing on the **2015-2020** period, a total of 1,010 or 13.5 percent of healthcare workers will be retiring during that period. The occupations with the largest retirement load include registered nurses (410), nurse aides, orderlies and patient service associates (130) and registered practical nurses (125). The occupations with the highest retirement rate during 2015-2020 include all veterinarians, optometrists (50%), medical technologists (30.0%), registered practical nurses (25.2%) and specialist physicians (22.2%).

Finally during **2020-2025**, 990 or 13.3 percent of healthcare workers will be retiring. The occupations with the largest retirement load include registered nurses (385) and nurse aides, orderlies and patient

<sup>7</sup> Retirement load by occupation for all regions are discussed in the report.

service associates (210). The occupations with the highest retirement rate include all denturists, opticians (44.4%), dentists (20.7%) and pharmacists (19.5%).

### Non-Traditional Healthcare Occupation Retirement Load

Among the non-traditional healthcare occupations, 8.2 percent or 295 workers are expected to retire during **2010-2015**. An estimated 12.3 percent or 440 workers are expected to retire during **2015-2020** and 16.8 percent or 600 workers are likely to retire during **2020-2025**. In other words, as Northwestern Ontario's population ages, the retirement rate is projected to increase from 4.0 percent during 2005-10 to 16.8 percent in period 2020-25. The occupations with the largest retirement load include community and social service workers followed by social workers and family, marriage and other counsellors.

### Estimates of Retirement Load for Various IDNs in Northwestern Ontario

Table 1.4 shows the estimated number of new entrants required in selected occupational groups to compensate for those healthcare providers who are expected to retire during the 2010-2025 period.

**Table 1.4: Estimated Retirement Load for Traditional Healthcare Occupations by IDN**

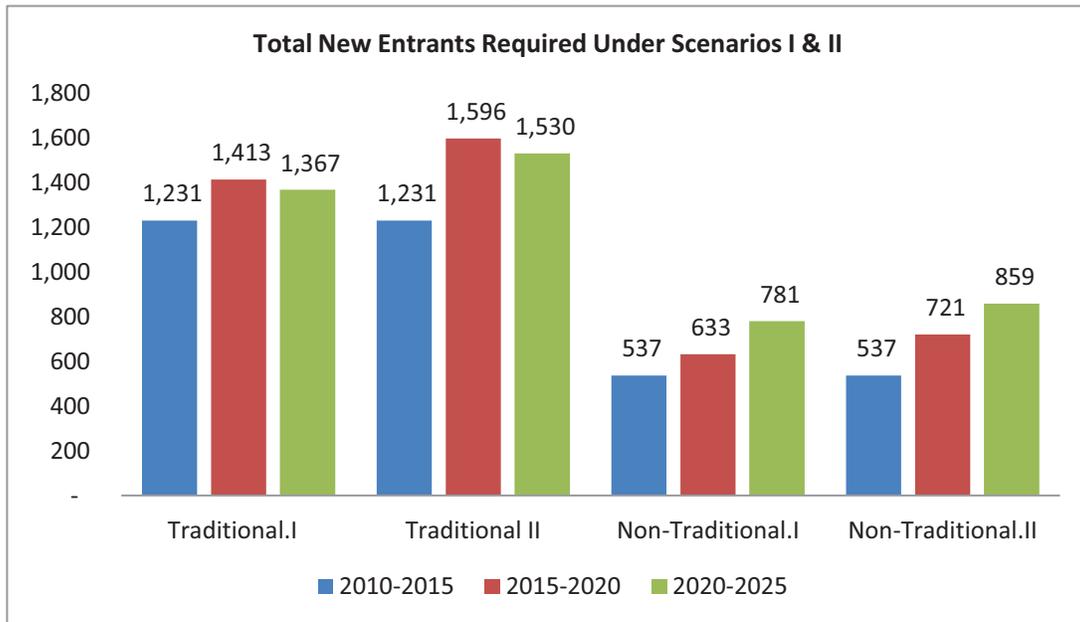
City of Thunder Bay IDN	2010-2015	2015-2020	2020-2025
Nursing-Related Occupations (NOC:3152, 3233)	265	285	285
Assisting Occupations (NOC: 3413, 3414)	90	65	185
Medical Technologies (NOC: 321)	60	65	15
Therapy Assessment Professionals (NOC: 314)	35	10	25
Physicians (NOC: 3111, 3112)	25	35	10
Paramedics (NOC: 3234)	0	10	30
<b>District of Thunder Bay IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	25	45	35
Assisting Occupations (NOC: 3413, 3414)	10	10	10
Medical Technologies (NOC: 321)	10	10	10
Therapy Assessment Professionals (NOC: 314)	0	0	0
Physicians (NOC: 3111, 3112)	0	0	0
Paramedics (NOC: 3234)	0	10	15
<b>District of Kenora IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	55	75	50
Assisting Occupations (NOC: 3413, 3414)	30	50	30
Medical Technologies (NOC: 321)	0	20	0
Therapy Assessment Professionals (NOC: 314)	0	0	0
Physicians (NOC: 3111, 3112)	0	10	0
Paramedics (NOC: 3234)	0	10	10
<b>District of Rainy River IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	15	90	50
Assisting Occupations (NOC: 3413, 3414)	15	15	25
Medical Technologies (NOC: 321)	10	10	10
Therapy Assessment Professionals (NOC: 314)	0	0	0
Physicians (NOC: 3111, 3112)	0	0	15

Paramedics (NOC: 3234)	20	0	10
<b>Northern IDN</b>			
Nursing-Related Occupations (NOC:3152, 3233)	20.00	30.00	10.00
Assisting Occupations (NOC: 3413, 3414)	10.00	20.00	10.00
Medical Technologies (NOC: 321)	-	-	20.00
Therapy Assessment Professionals (NOC: 314)	-	-	-
Physicians (NOC: 3111, 3112)	-	-	-
Paramedics (NOC: 3234)	-	-	10.00

**Total Demand for Healthcare Workers: Number of Required New Entrants into the Healthcare Sector in Northwestern Ontario**

Figure 1.17 demonstrate the total number of new entrants needed to replace those who retire as well as accommodating the growing demand for healthcare services caused by demographic changes in Northwestern Ontario. This equals 4,001 in the traditional and 1,951 in the non-traditional sectors during 2010-2025 if there is zero net migration (Scenario I). The expected number of new hires increases to 4,347 in the traditional and 2,117 in the non-traditional sectors under Scenario II, a moderate population growth assumption.

**Figure 1.17: Total Number of New Entrants Required in Healthcare Under Scenarios I & II, 2010 -2025 in Five Year Increments**



The top 10 occupations in terms of the number of new entrants required to accommodate the expected future needs are:

1. Registered nurses (1,517 to 1,634)
2. Nurse aides, orderlies and patient service associates (684 to 743)
3. Registered practical nurses (326 to 349)
4. Other assisting occupations in support of health services (167 to 189)
5. Paramedics (153 to 169)
6. Pharmacists (114 to 124)
7. Medical laboratory technologists and pathologists' assistants (115 to 123)
8. Physiotherapists (110 to 120)
9. Dentists (106 to 113)
10. Medical Radiation Technologists (101 to 109).

In addition, there is a need for approximately 88 to 96 specialist physicians as well as 63 to 71 general practitioners. The nursing occupation remains most vulnerable to shortages because of the large numbers needed. At the same time, a shortage of even a small number of healthcare providers in technical specializations can interrupt healthcare delivery in Northwestern Ontario.

The top three non-traditional healthcare occupations in terms of new entrants required are:

1. Community and social service workers (975 to 1,065)
2. Social workers (441 to 477)
3. Family, marriage and other related counsellors (283 to 304)

## Conclusion

By examining the people who live and work in Northern Ontario, it is evident that the future of healthcare is of concern. Human Resource professionals in healthcare agree that the perfect storm is on the horizon. This study has identified the following three causative factors contributing to the “perfect storm”. In the next ten years, there will be:

1. An aging population that will require more healthcare
2. An increase in the number of retirements due to the aging workforce
3. A rise in population due to natural increases and a predicted upturn in the economy

Add to that:

- Current vacancies are hard to fill in many facilities and locations
- Small, rural communities that are not as desirable to new graduates
- Unequal pay and benefits between hospital and non-hospital settings
- Retirement of leadership without adequate succession solutions
- Day-to-day pressures taking precedence over future planning
- Limited recruitment resources
- Physicians reducing their capacity in efforts to achieve a better balance between work and life
- Varying ability to provide French Language Services



The evidence suggests that pressures on the labour force in healthcare will increase over the next ten years. Here's what currently available numbers demonstrate in Northwestern Ontario:

- Traditional healthcare workers = 7,470
- Non-Traditional healthcare workers = 3,565
- 91.1% of healthcare workers are employees
- 8.9% are self-employed
- 81.8% of traditional healthcare workers are women
- 75.8% of non-traditional healthcare workers are women
- 81.7% of traditional healthcare workers are of English origin, 6.3% are Aboriginal, and 2.8% are Francophone
- 58.2% of non-traditional healthcare workers are of English origin

In the near future, 29 percent of the healthcare workforce who are 50 years of age or older will retire. The most notable are:

- 44% of physicians
- 35% of nurses (RNs and RPNs)
- 28% of medical technologists
- 25% of non-traditional healthcare workers (community social services)
- 22% of assisting occupations
- 18% of assessment professionals
- 18% of paramedics

## Healthcare Professionals' Recommendations for Preparing for the Storm

Healthcare professionals throughout the region have identified a number of suggestions to help prepare for the oncoming storm.

### **Educational Opportunities**

The feedback from participants shows that there needs to be more educational opportunities that support healthcare. Integration of cultural training that highlights Aboriginal and Francophone culture into the curriculum would be beneficial. Quality leadership training in the coming years is essential. More training in mental health and complex care was also identified as an area that will be needed as geriatric care increases. And finally, they need more capacity to expand placement opportunities as many new recruits come from those willing to relocate for educational purposes.

### **Recruitment**

A Recruitment Centre that represents a health hub or district may streamline the recruitment process and give relief to Senior Administrators who have a number of other responsibilities. Not all facilities can dedicate staff to recruitment, and attendance at career fairs and events can be costly and time consuming.

Promotional efforts that highlight healthcare professions should target Aboriginal and Francophone populations to ensure that the workforce reflects the population. For short-term gains in French Language Services, targeting healthcare graduates that are Francophone or fully bi-lingual would be a good first step. Working with secondary school boards that service French speaking and Aboriginal populations to raise the awareness of the opportunities in healthcare may alleviate more help increase

French speaking and Aboriginal personnel ratios in the long-run. Finally, working with colleges, universities, and post-secondary institutions was identified as an excellent recruitment tool and provided opportunities for new graduates to appreciate the benefits of living in smaller and rural communities.

### **Harmonization of Wages and Benefits**

Disparate wages between the hospital and non-hospital environments make it difficult for non-hospitals to retain staff. The same qualifications are required, but the pay at hospitals is much more attractive. Similarly, benefits for smaller organizations can't compete with the larger facilities. If they were comparative, people may stay longer. If they were portable, there may be ways to share staff and facilitate learning opportunities between organizations.

### **Find Administrative Efficiencies**

It was suggested that smaller organizations could share some administrative functions and utilize common information technology to create efficiencies. Examples brought up by participants included using similar and/or shared human resources as well as financial database so that reporting and collaborating would be easier.

### **Support Immigration**

There are many talented healthcare professionals outside of Canada; however, the immigration process is too time consuming and complicated for many of the smaller and rural organizations to tackle. More effort needs to be made to find solutions to eliminate barriers and streamline accreditation of qualified medical professionals from other countries.

The issue of a shrinking labour force and increased demand for healthcare services needs to be addressed with short-term and long-term strategies put in place. When comparing the IDNs within the Northwestern Ontario, the Northern IDN has the least amount of healthcare personnel and the largest predicted increase in population at 23 percent. The healthcare issues that they face in the future will be monumental and needs to be addressed.

Along with many other healthcare programs to build up the labour force, Northwestern Ontario has taken on the challenge of creating a Northern School of Medicine. Additionally, investment is being made in research and innovation at the Thunder Bay Regional Research Institute where they employ a range of professionals from laboratory technicians to experimental scientists. Cancer Care Ontario has recently located offices in Thunder Bay creating even more opportunities in the healthcare field. Due to the scope of this study, these occupations were not included, and further investigation will be required to estimate their future recruitment needs.

Now, more than ever, potential students, recent graduates, and healthcare professionals need to know the opportunities that await them in the field of healthcare in Northwestern Ontario.



# North Superior

Workforce Planning Board

*“Connecting community partners to improve the quality of life  
in our communities through workforce development.”*