North West
LOCAL HEALTH INTEGRATION NETWORK

North West Local Health Integration Network

Integrated Health Services Plan

October 2006

Ontario

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1.0 Provincial Context

1.1 Background and Objectives

The Government of Ontario has established the North West Local Health Integration Network and has given it the mandate for local health system transformation

The Government of Ontario has made better health care a key priority. It has established the North West Local Health Integration Network (North West LHIN) and has given it the mandate for local health system transformation through community engagement and enhanced local capacity to plan, coordinate, integrate and fund the delivery of most publicly funded health services[1].

A key activity of the North West LHIN has been and will be the development and continued refinement of an Integrated Health Services Plan (IHSP). This is the first version of the plan for the North West LHIN. It has a three year horizon and provides an initial perspective on directions for change and includes the LHIN's

- Mission
- Vision
- Priorities
- Strategies

for enhancing health care delivery through better horizontal and vertical integration of services within the North West LHIN. It is expected that the IHSP will be updated annually to reflect changes in the population, changes in the health system and to improve information and insights into both.

IHSP developed through engagement and consultation with local communities, health services providers and health service agencies

This IHSP has been developed through engagement and consultation with the local communities, health service providers, and health service agencies and through analysis of supporting population health and health planning data.

It is expected that the IHSP will be refined through further consultation with communities and providers in the LHIN.

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[1] LHINs will have responsibility for hospitals, Community Care Access Centres, community support service organizations, mental health and addiction agencies, Community Health Centres and long-term care homes. The Ministry of Health and Long-Term Care will maintain responsibility for individual practitioners and Family Health Teams, ambulance services, laboratories, provincial drug programs, provincial programs, independent health facilities and public health.

The essential principles for the development of this first IHSP have been[2]:

- Community Engagement: health needs and priorities are best developed, and decisions made, by the community, health care providers and the people they serve
- Cooperation and Coordination: communities, health service providers, Local Health Integration Networks and the government must work together to reduce duplication and better coordinate health service delivery
- Equity and Diversity: commit to equity and respect for diversity in communities, including respecting the requirements of the French Language Services Act in serving Ontario's French speaking community and recognizing the role of First Nations and Aboriginal peoples in the planning and delivery of health services in their communities; access to health services will not be limited to the geographic area of the Local Health Integration Network in which an Ontarian lives
- Accountability and Transparency: demonstrate that the health system is governed and managed in a way that reflects the public interest and that promotes efficient delivery of high quality health services to all Ontarians
- Sustainability: an integrated health system that delivers the health services that people need, now and in the future.

1.2 Provincial Vision and Strategic Directions

This initial IHSP of the North West LHIN is firmly rooted in the vision of the Ministry of Health and Long-Term Care (MOHLTC):

"A health care system that helps people stay healthy, delivers good care when they need it, and will be there for their children and grandchildren."

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The North West LHIN IHSP supports the related draft[3] strategic directions of the MOHLTC. These have been articulated by the Minister to be:

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[2] "Roadmap to the Integrated Health Service Plan", January, 2006, MOHLTC.

[3] These are draft strategic directions of the MOHLTC. Final strategic directions are expected in the spring of 2007.

1. Renewed community engagement and partnerships in and about the health care system.
   - Effective governance structures and processes
   - Community awareness and engagement are core elements/processes in local health system planning
   - Partnerships with other participants in the local health care system including public health and primary care groups
   - Active participation in local community planning processes.
2. Improve the health status of Ontarians.
   - Improved health of all Ontarians, especially groups with the poorest health status
   - Enhanced uptake of provincial disease screening programs.
3. Ontarians will have equitable access to the care and services they need no matter where they live or their socio/cultural/economic status.
   - Reduced wait times for key services
   - Reduced barriers to access
   - More effective health human resource planning and management
   - Appropriate supports to enable Ontarians to age in the most appropriate place.
4. Improve the quality of health outcomes.
   - The consumer is at the centre of the planning and co-ordination of health services and chronic disease management
   - Leadership and participation in continuous quality improvement of the health system
   - Improved integration and coordination of health services and facilities related to prevention, promotion, diagnosis, treatment, rehabilitation, and palliative care that is based on the population's need
   - Improved safety and effectiveness of health services.
5. Establish a framework for sustainability of the health care system that achieves the best results for consumers and the community.
   - Equitable allocation of health resources according to the health needs of the population including disease management
   - Optimized use of available resources to deliver health care
   - Planning and decision making is based on evidence, analysis of need and value of investment

- Efficient service delivery
- Increased use of appropriate care settings
- The local health system is moving toward an electronic health information system
- Financial stability.

2.0 Vision for Health and Health Care in the North West LHIN

The North West LHIN has adopted the vision of the MOHLTC to guide its initial efforts. Thus, the initial vision of the North West LHIN for health care in Northwestern Ontario is:

"***A health care system that helps people stay healthy, delivers good care when they need it, and will be there for their children and grandchildren***."

The North West LHIN will develop its own vision for health and health care in Northwestern Ontario that will integrate the provincial vision with the interests and needs of the people of Northwestern Ontario.

3.0 Environmental Scan

3.1 North West LHIN

Mission Statement

The mission of the North West LHIN is to:

"Develop an innovative, sustainable and efficient health system in service to the health and wellness of the people of the North West LHIN".

Providing health care services in geography so large has been and will continue to be a significant challenge

The geographic area of the North West LHIN is large. It encompasses a land mass equivalent to 47% of the province of Ontario and extends from White River in the east to the Manitoba border in the west, to James Bay and Hudson Bay in the North and to the United States border in the south. The total area covered is 458,010 square kilometres. The geographic area of the North West LHIN is larger than all of the Maritime provinces combined and many countries around the world. Providing health care services in geography so large has been and will continue to be a significant challenge.

Exhibit 3.1 North West LHIN Geographical Boundaries

The North West LHIN consists of the Districts of Rainy River and Thunder Bay, along with most of the Kenora District. The North West LHIN region is comprised of numerous small

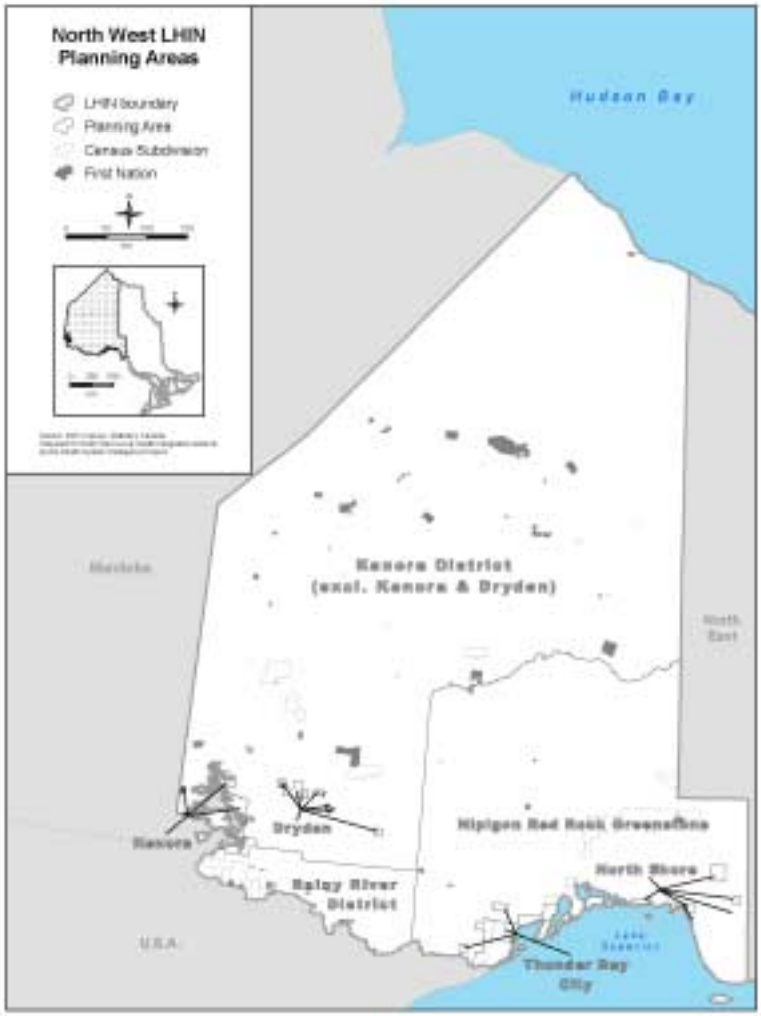
towns and First Nations communities spread throughout rural and remote areas. The geographic location of these towns

Exhibit 3.3 North West LHIN Sub-Areas and 2004 Population[5]

	NW LHIN Sub-Area	2004 Population
1	Dryden	11,850
2	Kenora	19,021
3	Kenora District (excl. Kenora & Dryden)	34,112
4	Rainy River District	22,563
5	North Shore	10,820
6	Nipigon Red Rock Greenstone	12,129
7	Thunder Bay City	132,643

Exhibit 3.4 shows the approximate boundaries of the seven North West LHIN sub-areas.

Exhibit 3.4 Map of North West LHIN Geographic Sub-Areas



[5] Population estimates by municipality provided from Ontario Health Data Warehouse by Ontario MOHLTC LHIN Information Management Support Centre.

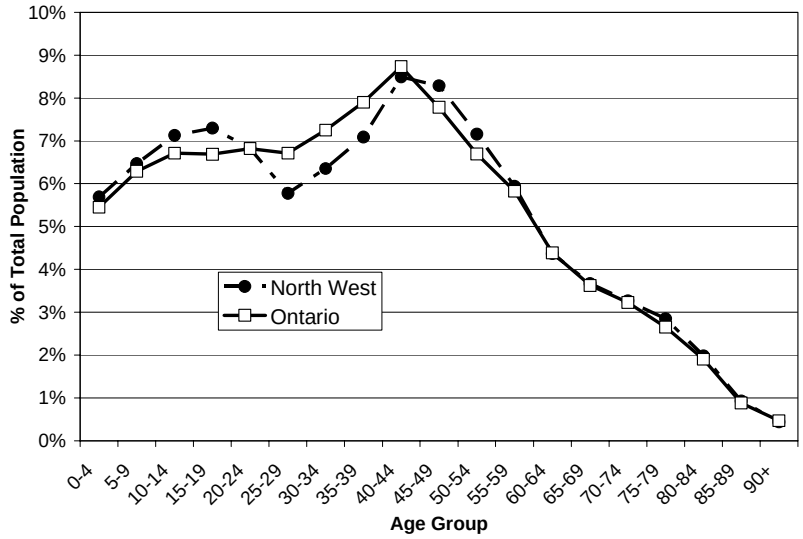
3.2 Population Characteristics

The North West LHIN is home to 242,450 (2004) people, or 2.0% of the population of Ontario. During the 1994-2004 time period the population of the Northwest decreased, on average, by 0.4% each year; the population of Ontario increased by 1.5% annually during this same time.

3.2.1 Age of Population

The population structure of the Northwest area is similar to the provincial age structure at older ages. While the percentage of those in the 10 to 19 age group actually exceeds the provincial structure, the smaller percentage of those age 25 to 39 in the Northwest relative to the province suggests youth out-migration of males and females.

Exhibit 3.5 ***Comparison of NW LHIN and Ontario % Distribution of Population by Age Cohort[6]***



Youth out-migration in Northern Ontario

A recent study of youth out-migration in Northern Ontario[7] found that the decrease in the population from 1996 to 2001 in the 15 to 29 year old age group in Northern Ontario was greater than any other age group and that youth out-migration

[6] Population estimates from unpublished, draft population data from Ontario Ministry of Finance, spring 2006.

[7] "Youth Out-Migration in Northern Ontario – 2001 Census Research Paper Series: Report #2", Training Boards of Northern Ontario.

rates have been increasing and are now at their highest levels ever. Aboriginal communities have the lowest rates of youth out-migration, and out-migration is greater for males than for females.

3.2.2 Social and Demographic Characteristics of Population

Population health indicator data

Exhibit 3.6 provides an overview of the social and demographic characteristics of the North West LHIN population[8, 9, 10]. The table shows the indicator value for the North West LHIN, the Ontario total or average value for the indicator, and then an assessment of how the North West LHIN result compares to the range of results for all of the 14 LHINs in the province.

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[8] This data, as well as the health status, health practices and outcome data presented later in this report, is taken from the data sets for the "LHIN Population Health Profiles" created by the Ontario MOHLTC HSIP in September 2005. Each LHIN has been provided with a CD of data and indicators, and with notes that provide detailed information on each indicator including definitions, data sources, methodology, limitations, and data quality concerns. Where possible, indicators were calculated using existing (standard) definitions and methods, with extensive reliance on the health indicator documentation prepared by the Provincial Health Indicators Workgroup for Core Indicators for Public Health in Ontario and the Statistics Canada/Canadian Institute for Health Information (CIHI) Health Indicators.

[9] Other sources of information about the North West LHIN population include the comprehensive analysis of the health status of children and youth in northern Ontario: Northern Health Information Partnership, "The Northern Ontario Child and Youth Health Report", June 2003.

[10] Many of the indicators presented in this chapter are based on census data collected by Statistics Canada in the 2001 Census. On some Indian reserves and settlements in the 2001 Census, enumeration was not permitted or was interrupted before it was completed. These areas, a total of 30 in the Census, are called "incompletely enumerated Indian reserves and Indian settlements". Census data for these areas are not available and therefore have not been included in any census tabulation. Statistics Canada has estimated that there was an undercount of approximately 16,000 Aboriginal residents in Ontario. The incompletely enumerated areas in the North West include Whitefish Bay, Whitesand, and Pikangikum. Indian and Northern Affairs Canada (INAC) data presented later in this report suggests that the undercount in the North West was much higher, almost 24,000 Aboriginal residents. It is recognized that the population count of Aboriginal people residing in the North West region is likely inaccurate. Although a general perception exists that this population count is an under representation, there is a lack of clarity with the data and thus Aboriginal population counts should be interpreted with caution.

Exhibit 3.6 North West LHIN Social and Demographic Characteristics[11]

Health Indicator		North West	Ontario Total / Average	Comment
Social & demographic characteristics				
	Total population, 2004	242,450	12,392,721	Lowest in Ontario
	Male population, 2004	121,623	6,119,456	Lowest in Ontario
	Female population, 2004	120,827	6,273,265	Lowest in Ontario
	Annual Population Growth Rate 1994-2004 (%)	-0.4%	1.5%	Lowest Quartile
	Dependency Ratio (2004)	48.0	45.4	Upper Quartile
	Senior Population: % aged 65+ (2004)	13.1%	12.8%	
	% of all Census families, with children, headed by Lone parent	25.5%	23.4%	Upper Quartile
	% of Lone parent families headed by Female	79.8%	82.5%	Lowest in Ontario
	% of Lone parent families headed by Male	20.7%	17.5%	Highest in Ontario
	% population reporting English mother tongue	83.2%	71.9%	Upper Quartile
	% population reporting French mother tongue	4.1%	4.7%	Upper Quartile
	% of population who are Immigrants	9.2%	26.8%	Lowest Quartile
	% of population who are *Recent* Immigrants (1996-2001)	0.5%	4.8%	Lowest Quartile
	% of population who are visible minorities	1.7%	19.1%	Lowest Quartile
	% population of Aboriginal identity	13.9%	1.7%	Highest in Ontario
	Labour force participation rate (% population in labour force)	64.9%	67.3%	Lowest Quartile
	Unemployment rate (2005)	6.7%	6.6%	
	Incidence of low income (% population age 15+ below LICO)	12.1%	14.4%	
	% of population (age 20+) with less than grade 9 education	10.6%	8.7%	Upper Quartile
	% population without high school graduation certificate	32.0%	25.7%	Upper Quartile
	% population with completed post-secondary education	43.9%	48.7%	Lowest Quartile

3.2.3 Social and Demographic Characteristics by Region

The social and demographic characteristics of the populations of each of the sub-areas in the Northwest are presented in Exhibits 3.7 and 3.8. Because the Census data used to create these indicator results under-represent the Aboriginal population, the results should be viewed with caution.

[11] LHIN Population Health Data, Prepared by MOHLTC Health Systems Intelligence Project (HSIP), July 1, 2005.

Exhibit 3.7 Socio-Economic Indicators by North West LHIN Sub-Area – 1 of 2[12]

Census Indicators	Dryden	Kenora	Kenora Dist. (excl. K. & D.)	Rainy River District	North Shore	Nipigon Red Rock Green.	Thunder Bay City
Population (2001)	11,414	17,495	29,520	21,028	10,763	16,288	121,387
Total population by sex and age groups	11,420	17,485	29,515	21,030	10,760	16,295	121,390
Total population age 65 and over	1,395	2,630	2,390	3,405	795	1,720	18,375
% population age 65 and over	12.2%	15.0%	8.1%	16.2%	7.4%	10.6%	15.1%
Total couple families	2,870	4,090	6,070	5,115	2,790	4,205	28,345
Total families with children	2,045	3,110	4,820	3,420	2,035	2,845	21,535
Total lone-parent families	515	835	1,175	740	360	550	5,770
% lone parent families	25.2%	26.8%	24.4%	21.6%	17.7%	19.3%	26.8%
Female parent	425	640	870	570	245	430	4,730
% female lone parent families	20.8%	20.6%	18.0%	16.7%	12.0%	15.1%	22.0%
Male parent	85	180	290	160	115	120	1,065
Total number of occupied private dwellings	4,430	6,825	8,985	8,230	4,110	6,250	49,325
Owned	3,365	4,810	5,690	6,395	3,295	5,120	35,535
Rented	1,015	1,770	1,810	1,710	815	995	13,805
% non-owned private dwellings	24.0%	29.5%	36.7%	22.3%	19.8%	18.1%	28.0%
Total population by mother tongue	11,200	16,965	26,170	20,570	10,730	16,225	119,775
Total population English mother tongue	9,870	15,430	19,340	18,970	8,885	12,200	99,795
% population English mother tongue	88.1%	91.0%	73.9%	92.2%	82.8%	75.2%	83.3%
Total population French mother tongue	565	405	660	455	1,355	2,415	3,470
% population French mother tongue	5.0%	2.4%	2.5%	2.2%	12.6%	14.9%	2.9%
Total population by knowledge of official languages	11,200	16,965	26,155	20,565	10,735	16,235	119,770
Neither English nor French	20	55	570	10	35	45	595
% population with no knowledge of English or French	0.2%	0.3%	2.2%	0.0%	0.3%	0.3%	0.5%
Total population by immigrant status	11,040	16,165	18,665	19,980	10,725	15,470	119,760
Total immigrants by selected places of birth	830	1,000	1,455	1,590	675	1,085	13,320
% immigrant population	7.5%	6.2%	7.8%	8.0%	6.3%	7.0%	11.1%
Total recent immigrants	70	15	165	85	10	40	620
% recent immigrant population	0.6%	0.1%	0.9%	0.4%	0.1%	0.3%	0.5%

[12] LHIN Population Health Data by Sub-Area, Prepared by MOHLTC HSIP, July 6, 2006.

Exhibit 3.8 Social & Demographic Characteristics of North West LHIN Sub-Area – 2 of 2[13]

Census Indicators	Dryden	Kenora	Kenora Dist. (excl. K. & D.)	Rainy River District	North Shore	Nipigon Red Rock Green.	Thunder Bay City
Total population by visible minority groups	11,200	16,965	26,175	20,570	10,720	16,230	119,775
Total visible minority population	115	270	205	100	260	80	2,690
% visible minority population	1.0%	1.6%	0.8%	0.5%	2.4%	0.5%	2.2%
Total population by Aboriginal and non-Aboriginal population	11,195	16,965	26,170	20,565	10,730	16,235	119,770
Total Aboriginal identity population	1,080	2,630	10,645	2,385	635	2,570	7,630
% Aboriginal identity population	9.6%	15.5%	40.7%	11.6%	5.9%	15.8%	6.4%
Total population 15 years and over by labour force activity	8,955	13,530	19,330	16,330	8,420	12,920	97,720
In the labour force	6,050	8,980	12,960	10,300	5,870	8,460	62,305
Unemployed	565	815	1,410	955	450	1,005	5,425
Participation rate (age 15+)	67.6%	66.4%	67.0%	63.1%	69.7%	65.5%	63.8%
Unemployment rate (age 15+)	9.3%	9.1%	10.9%	9.3%	7.7%	11.9%	8.7%
Population 15-24 years - Labour force activity	1,460	2,150	3,900	2,635	1,515	2,090	15,770
In the labour force - youth	1,060	1,550	2,370	1,715	910	1,325	10,790
Unemployed - youth	215	205	415	270	175	235	1,880
Youth unemployment rate (age 15-24)	14.7%	9.5%	10.6%	10.2%	11.6%	11.2%	11.9%
Total population 20 years and over by highest level of schooling	8,135	12,275	17,175	14,825	7,450	11,715	89,435
Population with less than grade 9 education	765	1,035	2,830	1,585	465	1,355	8,710
% population with less than grade 9 education	9.4%	8.4%	16.5%	10.7%	6.2%	11.6%	9.7%
Population without completed high school education	2,580	4,245	6,960	5,120	2,180	4,155	25,770
% population without completed high school education	31.7%	34.6%	40.5%	34.5%	29.3%	35.5%	28.8%
Population with completed post-secondary education	3,415	5,040	6,370	5,700	3,225	4,785	42,455
% population with completed post-secondary education	42.0%	41.1%	37.1%	38.4%	43.3%	40.8%	47.5%
Total - Population in private households	11,005	15,960	18,455	19,865	10,710	15,360	119,325
Low income	965	1,505	1,630	2,180	900	1,315	16,790
% population in low income	8.8%	9.4%	8.8%	11.0%	8.4%	8.6%	14.1%
Total households (tenant/ owner) in non-farm non-reserve private dwellings	4,360	6,550	7,000	7,895	4,115	6,020	49,245
Total households spending 30% or more of income on rent/payments	725	1,255	1,155	1,240	480	640	10,945
% households spending 30% or more of income on housing	16.6%	19.2%	16.5%	15.7%	11.7%	10.6%	22.2%

[13] LHIN Population Health Data by Sub-Area, Prepared by MOHLTC HSIP, July 6, 2006.

3.2.4 Francophone Population

Almost 10% of the residents of the Thunder Bay District (outside the City of Thunder Bay) are Francophones

The proportion of residents who are Francophone (i.e. who report French as their mother tongue) is similar to the province as a whole (4.1% versus 4.7%), but almost 10% of the residents of the Thunder Bay District (outside the City of Thunder Bay) are Francophones. The identification of residents as Francophone is based on the 2001 Census data, and there is concern within the Northwest that the true number of Francophones is under-represented in the Census data.

The communities in the North West LHIN designated for French language services under the French Language Services Act are the towns of Ignace, Geraldton, Longlac, and Marathon and the townships of Manitouwadge, Beardmore, Nakina, and Terrace Bay.

French Language Services Working Group

The French Language Services Working Group, convened by the MOHLTC, recently released their report[14] which emphasized the importance of providing the Ontario Francophone community with direct input and involvement in the organization and governance of the health care system in Ontario.

3.2.5 Aboriginal Population

North West LHIN has greatest % Aboriginal, even with under count

Based on the Census data shown in Exhibit 3.8, the percentage of the population of Aboriginal identity in the Northwest is the highest in the province (13.9%) and substantially higher than the provincial average (1.7%). However, the Census data under-represents the true number of First Nations people in the Northwest[15].

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[14] "Health Care Services for Franco-Ontarians: A Roadmap to Better Accessibility and Accountability", the French Language Health Services Working Group, October 2005.

[15] It is recognized that the population count of Aboriginal people residing in the North West region is likely inaccurate. Although a general perception that this population count is an under representation exists, there is a lack of clarity with the data and thus Aboriginal population counts should be interpreted with caution. The 2001 Census reports 31,335 people of Aboriginal identity living in the North West. Indian and Northern Affairs Canada (INAC) maintain a registry of First Nations population by band. Data from the 2005 Indian Registry System showed 55,129 First Nations residents of the North West LHIN, 76% more than reported in the 2001 Census.

Aboriginal populations have reduced life expectancy and poor health status compared to the general Canadian population

While data specifically (and separately) describing health service utilization and health care outcomes for the Aboriginal residents of the North West LHIN are not available, Canadian studies of Aboriginal health care have consistently shown that Aboriginal populations have reduced life expectancy and poor health status compared to the general Canadian population. They may also develop chronic diseases earlier in their lifespan, which has implications for requirements for long-term care and rehabilitation services.

Access to primary and community health care services for the Aboriginal population is often limited by unavailability of local services and cultural barriers. This leads to reduced use of primary and preventive care, and greater reliance on hospitals for acute care.

Research conducted by the Joint Policy and Planning Committee[16] found that communities with a higher Aboriginal population require more acute care services than would otherwise be expected.

3.3 Population Health

The MOHLTC Health Results Team – Information Management (HRT-IM) has provided each LHIN with data showing the results by LHIN of measurement of a series of population health indicators. A summary of the population health indicator results for the North West LHIN has been prepared by the MOHLTC and posted on the North West LHIN website at http://www.northwestlhin.on.ca

3.3.1 Health Status

Exhibit 3.9 shows the North West LHIN and overall Ontario results for selected general health status and health outcome indicators. The “comment” column describes how the North West LHIN results compare to the distribution of results from all 14 LHINs.

[16] “Hospital Funding Report Using 2002/2003 Data” prepared for the Hospital Funding Formula Committee of the JPPC Reference Document RD10-8 Volumes Section March 12, 2004.

3.3.1.1 Self-Reported Health Status

Residents of the Northwest report extremely poor overall health status compared to the rest of the province

Self-reported health, an indicator of overall health status, can reflect aspects of health not captured in other measures, such as disease severity, aspects of positive health status, physiological and psychological reserves and social and mental function. Residents of the Northwest report their health as "excellent" or "very good" at rates that are the lowest in Ontario (51.0%) and significantly lower than the province as a whole (57.4%).

A significant proportion of residents (37.5%, compared to 29.4% provincially) report being limited in their activities because of a physical or mental condition or health problem which has lasted or is expected to last longer than six months.

Exhibit 3.9 General Health Status and Health Outcome Indicators for North West LHIN Population[17]

Health Indicator		North West	Ontario Total / Average	Comment
General Health Status				
	% Population (age 12+) with Excellent or Very Good health	51.0%	57.4%	Lowest in Ontario
	% Population (age 12+) with an Activity Limitation (2005)	37.5%	29.4%	Upper Quartile
	Female life expectancy at birth	79.5	82.1	Lowest in Ontario
	Male life expectancy at birth	74.7	77.5	Lowest in Ontario
Health Outcomes				
	% Low birth weight babies (1999-2001)	3.7%	5.6%	Lowest in Ontario
	Preterm birth rate per 1000 (1999-2001)	54.5	70.9	Lowest in Ontario
	Infant mortality rate per 1000 livebirths (1999-2001)	5.1	5.4	
	Total Crude mortality rate per 100,000 (2000-2001)	838.8	685.7	Upper Quartile
	Age-standardized mortality rate (total) per 100,000	734.9	602.6	Highest in Ontario
	ASMR by ICD-10 chapter, rate per 100,000 (2000-01)			
	Circulatory system diseases	243.2	209.1	Upper Quartile
	Neoplasms	206.2	181.4	Upper Quartile
	Respiratory system diseases	51.1	45.4	Upper Quartile
	External causes of mortality	64.5	32.6	Highest in Ontario
	Endocrine, nutritional & metabolic diseases	37.7	26.1	Highest in Ontario
	% of all deaths that occur before age 65	24.9%	21.3%	Highest in Ontario
	% of all deaths that occur before age 75	44.5%	41.2%	Upper Quartile
	Total Potential Years of Life Lost (2000-2001 avg), rate per 100,000 population <75 yrs.	7,157	4,864	Highest in Ontario
	PYLLs by ICD-10 chapter (top 5 chapters), rate per 100.000 population age <75 (2000-2001)			
	Neoplasms	1,872.0	1,590.3	Upper Quartile
	Circulatory system diseases	1,044.7	852.9	Upper Quartile
	External causes of mortality	2,228.6	834.3	Highest in Ontario
	Perinatal conditions	112.7	266.5	Lowest in Ontario
	Symptoms, signs not elsewhere classified	301.5	234.0	Upper Quartile

[17] LHIN Population Health Data, Prepared by MOHLTC HSIP, July 1, 2005.

3.3.1.2 Life Expectancy and Mortality

Lowest life expectancy in province for Northwest residents

Life expectancy at birth is the average years of life an individual could live (using the assumption that current, cross-sectional age-specific mortality rates remain constant over the life span). Life expectancy among males and females in the Northwest is the lowest in the province.

Highest age-standardized mortality rate in Ontario for Northwest residents

Exhibit 3.10 provides age-standardized mortality and hospitalization rates as well as rates for potential years of life lost (PYLL) by ICD-10 chapter. The age-standardized mortality rate for Northwest residents is the highest in Ontario. In the Northwest, 24.9% of deaths occur before the age of 65 and 44.5% occur before the age of 75 (the Ontario percentages are 21.3% and 41.2% respectively). The percentage of deaths before age 65 in the Northwest is the highest in the province.

High mortality rates for all major causes of death

For each of the major causes of death, the Northwest rate is in the highest quartile, and is the highest in the province for external causes of mortality (e.g. injuries) and for endocrine, nutritional, and metabolic diseases (e.g. diabetes).

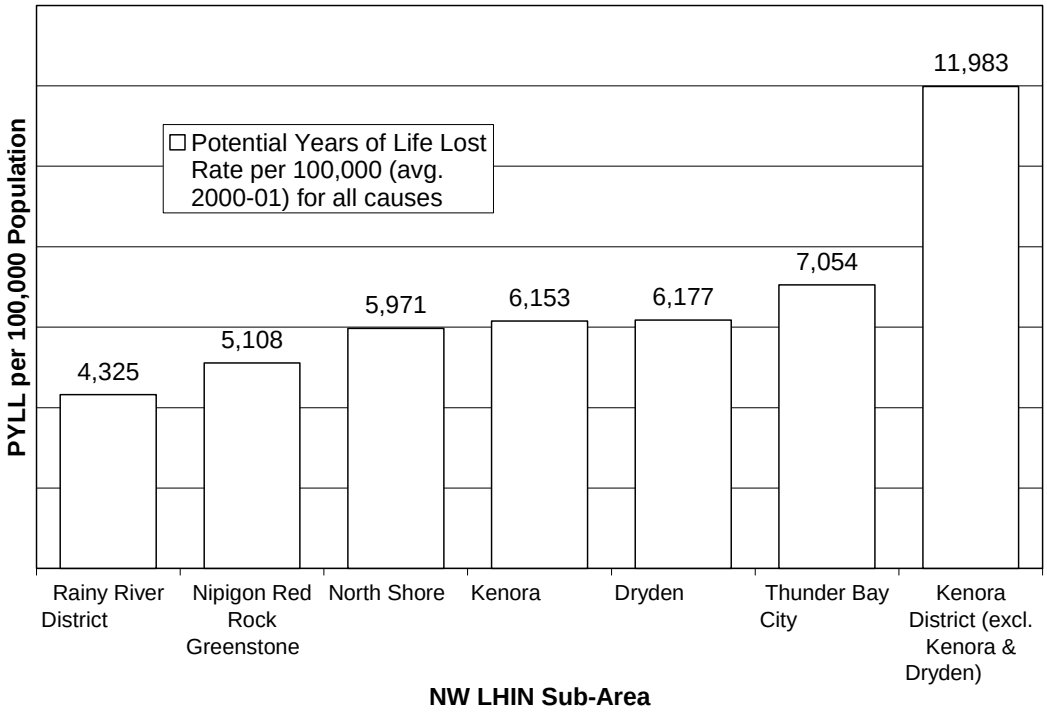
3.3.1.3 Potential Years of Life Lost (PYLL)

High PYLL for all causes except perinatal conditions

The PYLL for Northwest residents is the highest in Ontario. For the major causes of premature death, rates for Northwest residents are in the highest quartile, with the exception of perinatal conditions. The PYLL for external causes of mortality (injuries) for Northwest residents is the highest in the province.

Within the Northwest, Exhibit 3.10 shows that the PYLL for residents of the Kenora District (excluding Kenora and Dryden) is significantly higher than for residents anywhere else within the region.

Exhibit 3.10 PYLL Rate per 100,000 (avg. 2000-01) for All Causes by North West LHIN Sub-Area[18]



3.3.1.4 Low Birth Weight and Infant Mortality

Low rates of low birth weight, infant mortality, and pre-term births for Northwest residents

Low birth weight is an important determinant of infant morbidity and mortality. In the Northwest, 3.7% of infants born in 1999-2001 were of low birth weight, the lowest rate in the province. Infant mortality is a long established measure, not only of child health, but also of the well-being of a society. The infant mortality rate in the Northwest of 5.1 per 1,000 live births is slightly lower than the provincial rate of 5.4. The Northwest rate of pre-term births (per 1,000 births) is also the lowest in Ontario.

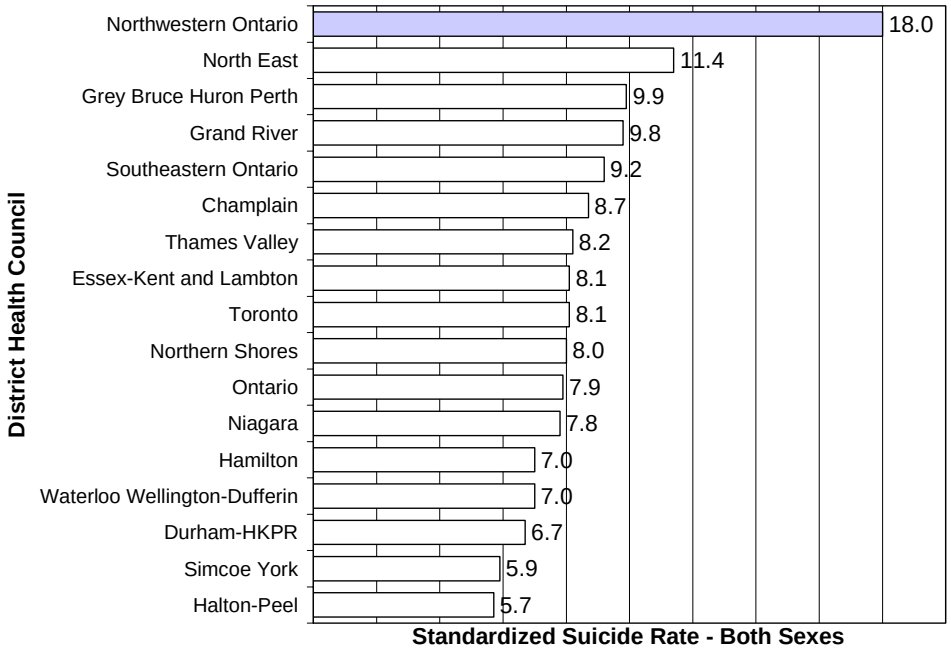
3.3.1.5 Suicide

Death due to suicide is a major social and health care issue for the Northwest. Exhibit 3.11 shows that in 2001 the age standardized rate of deaths due to suicide for Northwest residents was more than double the provincial average and much higher than for any other region.

[18] LHIN Mortality by Sub-Area Data, Prepared by MOHLTC HSIP, August 2006.

The Northwest suicide rate for males is almost double the provincial average, and the rate of death by suicide for females in the Northwest is four times the provincial average and almost three times higher than any other region. While suicide rates for males are usually much higher than suicide rates for females, the Northwest female suicide rate is higher than the Ontario average suicide rate for males.

Exhibit 3.11 Age Standardized Rate of Death Due to Suicide per 100,000 Population by Ontario District Health Council Region[19]



The high suicide rate for the Northwest is also a reflection of the high Aboriginal population. A recent Health Canada report[20] highlighted the suicide rates among First Nations youth:

"Suicide occurs roughly five to six times more often among First Nations youth than non-Aboriginal youth in Canada. Among First Nations men between the ages of 15-24 years it was 126 per 100,000, compared to 24 per 100,000 for Canadian men of the same age group. Young women from First Nations registered a rate of 35 per 100,000 versus only 5 per 100,000 for Canadian women."

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[19] Statistics Canada, Vital Statistics, 2005.

[20] "Acting On What We Know: Preventing Youth Suicide in First Nations", Health Canada Advisory Group on Suicide Prevention, 2003.

3.3.2 Chronic Conditions

Exhibit 3.12 shows the reported prevalence of chronic conditions (based on the Canadian Community Health Survey [CCHS] in 2003, and where available, 2005) and rates of hospitalization for Northwest residents.

Exhibit 3.12 Prevalence of Chronic Conditions and Rates of Hospitalization for Northwest Residents[21]

Health Indicator		North West	Ontario Total / Average	Comment
Prevalence of Chronic Conditions, 2003				
	% of Population (age 12+) with Arthritis/rheumatism (2005)	21.0%	17.1%	
	% of Population (age 12+) with High Blood Pressure (2005)	18.5%	15.2%	Upper Quartile
	% of Population (age 12+) with Asthma (2005)	8.1%	8.0%	
	% of Population (age 12+) with Diabetes (2005)	6.0%	4.8%	Upper Quartile
	% of Population (age 30+) with Heart Disease	8.0%	7.2%	
	% of Population (age 12+) with Chronic Bronchitis	2.6%	2.7%	Lowest Quartile
Morbidity: Hospitalizations				
	Crude hospitalization rate per 100,000 (2003/04)	11,650.0	8,003.0	Upper Quartile
	Age-standardized hospitalization rate per 100,000	11,237.1	7,746.7	Highest in Ontario
	Age standardized Hospitalization Rates by ICD-10 chapter (top 5 chapters), rate per 100,000 (2003/04)			
	Maternal conditions	1,422.8	1,367.8	Upper Quartile
	Circulatory system diseases	1,521.8	1,007.5	Highest in Ontario
	Digestive system diseases	1,210.7	761.2	Highest in Ontario
	Respiratory system diseases	1,106.5	624.6	Highest in Ontario
	Injury & poisoning	920.4	578.6	Highest in Ontario

Northwest residents report higher than average rates of chronic disease

Northwest residents report higher than average rates of chronic disease. The large Aboriginal population in the Northwest, with their high incidence of diabetes, makes support for chronic disease prevention and management an important consideration for the North West LHIN as it develops its first IHSP. This section of the environmental scan looks at the impact of selected chronic diseases on hospital utilization, and describes the network approach being used in Northern Ontario to coordinate management of diabetes.

Other chronic conditions reported at rates higher than the provincial average include (Exhibit 3.12):

- Arthritis/rheumatism
- High blood pressure
- Asthma

[21] LHIN Population Health Data, Prepared by MOHLTC HSIP, July 1, 2005.

- Heart disease.

The 2004/05 Canadian Institute for Health Information (CIHI) data was used to examine the rate of hospitalization of inpatients with two significant chronic illnesses: diabetes and kidney disease. Diabetes was chosen because of its impact on the Ontario population as documented in the ICES Diabetes Atlas[22], and because of the high incidence of diabetes among the Aboriginal population.

Highest rate of acute care hospitalization in Ontario for Northwest residents

A subsequent section of this chapter will examine in more detail the rates of acute care hospitalization of Northwest residents. Exhibit 3.12 shows that in 2003/04, the age-standardized hospitalization rate for Northwest residents was the highest in Ontario. For four of the five major causes of hospitalization (circulatory system diseases, digestive system diseases, respiratory system diseases, and injury and poisoning) the Northwest hospitalization rate was the highest in Ontario.

3.3.3 Health Practices and Use of Preventive Care

Poor health practices are related to risk of chronic disease, mortality, and disability

Poor health practices are known to be related to increased risk of chronic disease, mortality, and disability. Exhibit 3.13 shows the rates of specific health practices and use of preventive care services (as reported in the 2003 and 2005 Canadian Community Health Surveys) for residents of the North West LHIN. Exhibit 3.13 shows that a number of selected health practices in the Northwest are different from the province as a whole.

Daily smoking and heavy drinking rates are significantly higher in the Northwest relative to the province. Heavy drinking rates are the highest in Ontario.

Low rate of inactivity, but high rates of being overweight and obese

Northwest residents report the lowest level of physical inactivity in Ontario. However, based on Body Mass Index, 37.1% of the adult population of the Northwest is considered overweight and 22.2% are obese (both results are highest in Ontario). The combined prevalence of being overweight /obese in the Northwest (59.3%) is significantly greater than Ontario (48.5%).

[22] Hux J., Booth G., Slaughter P., Laupacis A.. "ICES Practice Atlas: Diabetes in Ontario", June 2003.

Exhibit 3.13 Rates of Health Practices and Use of Preventive Care for Northwest Residents[23]

Health Indicator		North West	Ontario Total / Average	Comment
Health Practices, 2003				
	% Population (age 12+) who are Daily Smokers (2005)	25.4%	20.7%	Upper Quartile
	% of non-smokers regularly exposed to tobacco smoke at home (2005)	12.0%	7.3%	Highest in Ontario
	% of current drinkers who are 'Heavy Drinkers' (2005)	27.8%	21.5%	Highest in Ontario
	% Population consuming fruits & veg 5 or more times daily (2005)	36.5%	41.0%	Lowest Quartile
	% Population (age 12+) who are Physically Inactive (2005)	41.2%	48.7%	Lowest in Ontario
	% Population age 18+ who are Obese (2005)	22.2%	15.1%	Highest in Ontario
	% Population age 18+ who are Overweight or Obese (2005)	59.3%	48.5%	Highest in Ontario
	% Population age 18+ with a lot of life Stress (2005)	21.3%	23.1%	
	% of passengers (age 12+) who always fasten their seatbelt	79.2%	71.8%	Upper Quartile
Preventive Care				
	% of females age 50-69 who had mammogram in last 2 yrs (2005)	76.4%	70.8%	Upper Quartile
	% of females 50-69 with Screening mammogram in last 2 yrs (2005)	48.0%	53.0%	
	% of females 18+ who had Pap test in last 3 years (2005)	74.5%	72.9%	Upper Quartile
	% Population (age 12+) who have had flu shot in last year (2005)	43.9%	41.1%	Upper Quartile
	% of Population (age 12+) who have a Regular Medical Doctor (2005)	84.5%	91.1%	Lowest in Ontario
	% of Population (age 12+) who consulted an MD in the past year (2005)	77.1%	81.5%	Lowest in Ontario
	% Population (age 12+), who consulted at least 1 Health Professional in the past year	94.0%	95.1%	Lowest Quartile

Preventive health care services can reduce morbidity and mortality

A greater emphasis on health education and primary prevention is needed. The use of preventive health services can lead to early detection of disease, which ultimately results in reduced morbidity and mortality. Mammogram, Pap smear test (for cervical cancer screening) and flu shot rates in the Northwest are higher than the provincial rates. Screening mammogram rates are lower than provincial rates.

In general, the population of the North West LHIN has a higher burden of illness and is a more vulnerable population that would be expected to require higher volumes of health care services. The combination of these greater needs and the challenges imposed by the geography and population distribution of the Northwest will mean that the priorities and action plan for the North West LHIN will be different from those of the southern LHINs.

[23] LHIN Population Health Data, Prepared by MOHLTC HSIP, July 1, 2005.

3.4 Utilization of Health Services

Appendix 3 to this IHSP lists the providers of health services for which the North West LHIN is responsible, by program area. The name, location, and 2005/06 MOHLTC base funding for the provider agency are listed.

3.4.1 Health Service Funding

Exhibit 3.14 presents the total MOHLTC base funding by sector or program area (for those programs for which LHINs are responsible) for the provider agencies located within the North West LHIN from 2002/03 to 2005/06.

The funding levels shown include only base operating funding. For many agencies there may be substantial MOHLTC funds provided each year on a one-time basis for a specific target or project. Also, the MOHLTC funds are not necessarily the source of all of the program expenditures. For example, many community service agencies are required to fundraise a portion of their total budget each year, with the amount based on the amount of their MOHLTC base funding. For most hospitals, MOHLTC funding represents just over 80% of their total revenue.

Hospitals had base funding equal to 70% of the total MOHLTC base funding for LHIN related health care providers

In 2005/06, hospitals and long-term care homes together had base funding equal to 82% of the total MOHLTC base funding for LHIN related health care providers in the Northwest. The greatest increase (in both absolute and percentage terms) in base funding has been for the hospital sector. This is primarily due to the operating cost implications of the changes in role and new facility at Thunder Bay Regional Health Sciences Centre.

Exhibit 3.14 North West LHIN Provider Agency MOHLTC Base Funding by Sector by Fiscal Year[24]

Program	Fiscal Year				% Change (02/03 to 05/06)	% of 05/06 Total
	02/03	03/04	04/05	05/06		
Hospitals	$231,909,315	$286,733,470	$310,977,200	$328,153,990	41.5%	71.3%
LTC Homes	$35,806,600	$39,275,719	$46,457,341	$49,219,739	37.5%	10.7%
CCAC	$25,282,528	$25,453,734	$27,347,110	$30,102,156	19.1%	6.5%
MH (Programs)	$18,900,023	$18,810,800	$20,859,324	$23,240,394	23.0%	5.0%
MH (Addictions)	$8,617,951	$8,579,196	$8,798,999	$9,021,536	4.7%	2.0%
Comm. Suppt. Serv.	$7,433,165	$7,447,905	$7,877,343	$8,504,173	14.4%	1.8%
Comm. Hlth. Cntr.	$3,856,048	$4,360,846	$4,701,925	$5,222,719	35.4%	1.1%
Assist. Living Suppt. Housing	$3,748,757	$3,765,518	$3,999,419	$3,963,913	5.7%	0.9%
MH (Supportive Housing)	$1,668,945	$1,690,912	$1,749,851	$1,799,180	7.8%	0.4%
Acquired Brain Injury	$1,249,348	$1,264,202	$1,143,314	$1,215,464	-2.7%	0.3%
Grand Total	$338,472,680	$397,382,302	$433,911,826	$460,443,264	36.0%	100.0%

Exhibit 3.15 compares the 2005/06 base funding per capita by sector for all 14 LHINs. The per capita calculations are based on the funding for providers located within the LHINs and resident population of the LHINs. Because some providers located in one LHIN provide substantial amounts of service for non-residents of the LHIN, and because some residents of one LHIN rely greatly on providers located in another LHIN (or another province, as is the case in the western portion of the North West LHIN), the per capita calculations do not necessarily accurately reflect the amounts or cost of care a LHIN resident actually received. For example, the calculations for the Toronto Central LHIN are based on the funding to Toronto Central providers divided by the Toronto Central population, while for hospitals located in Toronto Central, the majority of their patients live outside the Toronto Central LHIN boundaries.

[24] MOHLTC Base Funding Data, Provided by MOHLTC Finance and Information Branch, June 26, 2006.

Exhibit 3.15 2005/06 Per Capita Funding by Sector by LHIN Where Provider is Located[25]

LHIN	Funding per Capita (Total Population)										
	CCAC	Hospitals	LTC Homes	MH (Addictions)	MH (Programs)	MH (Supportive Housing)	Assist. Living Suppt. Housing	Comm. Suppt. Serv.	Acquired Brain Injury	Comm. Hlth. Cntr.	Grand Total
Toronto Central	$87	$2,593	$185	$14	$72	$15	$32	$60	$2	$48	$3,107
Ham. Niag. Hald. Brant	$144	$1,037	$247	$8	$26	$2	$15	$20	$9	$6	$1,512
Champlain	$116	$1,052	$203	$10	$37	$1	$5	$18	$1	$26	$1,469
South West	$129	$1,276	$234	$6	$42	$2	$12	$19	$6	$7	$1,732
Central East	$109	$599	$214	$4	$20	$2	$6	$16	$1	$5	$975
Central	$88	$519	$153	$2	$25	$1	$10	$14	$6	$2	$821
North East	$133	$1,131	$257	$29	$68	$4	$12	$31	$2	$12	$1,681
Mississauga Halton	$53	$568	$134	$4	$11	$0	$12	$15	$6	$0	$804
Erie-St. Clair	$124	$792	$212	$8	$34	$1	$7	$18	$1	$19	$1,217
South East	$163	$1,105	$258	$10	$55	$3	$4	$28	$7	$20	$1,653
Waterloo Wellington	$110	$669	$172	$7	$29	$1	$7	$15	$1	$16	$1,026
Central West	$117	$406	$161	$2	$22	$0	$5	$4	$0	$3	$721
North Simcoe Muskoka	$132	$685	$203	$8	$35	$2	$10	$18	$1	$7	$1,100
North West	$125	$1,360	$204	$37	$96	$7	$16	$35	$5	$22	$1,909
Grand Total	$111	$971	$198	$8	$35	$3	$11	$21	$4	$13	$1,375
NW LHIN Rank	6	2	7	1	1	2	2	2	6	3	2

The geography of the Northwest and the higher costs associated with providing services to a northern and rural, distributed population are significant contributors to the high per capita costs. Costs in the Northwest may also be higher because of the fixed costs associated with providing care to small populations[26] and the costs associated with travel.

3.4.2 Primary Health Care

The point of access for most medical care is through a primary care physician. Medical doctors also play a key role in coordinating care and managing chronic conditions. As seen in Exhibit 3.13, residents of the North West LHIN report the lowest rates in the province for access to a medical doctor (84.5%) and consultation with a medical doctor within the past year (77.1%).

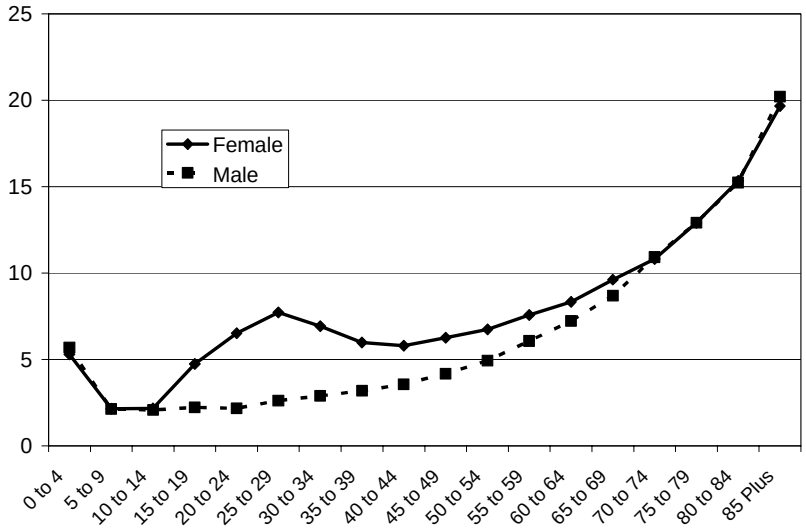
[25] MOHLTC Base Funding Data, Provided by MOHLTC Finance and Information Branch, June 26, 2006.

[26] While analysis of variable costs would remove the impact of the high fixed costs in the North West, the available data does not differentiate between fixed and variable costs.

3.4.2.1 OHIP Fee for Service (FFS) Utilization

The following Exhibit shows the rate of utilization of primary care physician services[27] (measured in terms of services per person) for North West LHIN residents by patient age and gender. The pattern of primary care shows higher utilization for females during child bearing years, and increasing rates for both genders after age 50.

Exhibit 3.16 Primary Care Services per Person for Northwest Residents by Patient Age and Gender[28]



The following Exhibit presents the age/gender standardized rates of use of primary care physician services for residents of the North West LHIN by sub-area. Telemedicine services are not included in the OHIP physician service data.

The highest rates of use of primary care physician services are by residents of Dryden, Rainy River District, and Thunder Bay City. The lowest rate of use of primary care physician services is by residents of the North Shore.

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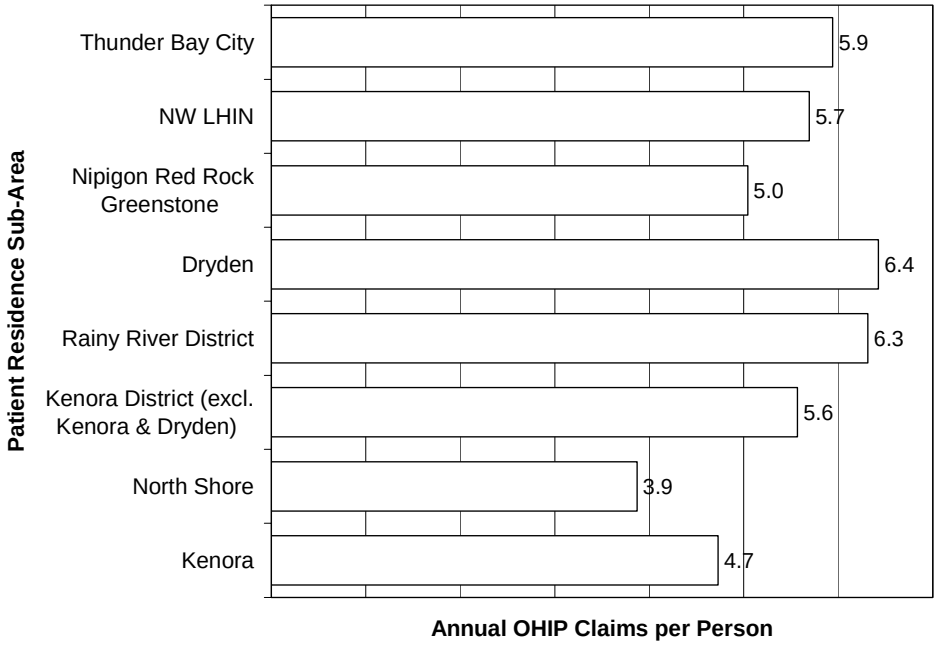
[27] This includes only FFS physician services paid for by OHIP. It excludes non-OHIP primary health care services and primary health care services provided by physicians (and others) operating under an alternate payment plan.

[28] OHIP Data Summary, Provided by MOHLTC HSIP, May 18, 2006.

Exhibit 3.17 Age/Gender Standardized Primary Care Physician FFS Services per Population by North West LHIN Sub-Area[29]



3.4.2.2 Location of FFS Primary Health Care Services

The following Exhibit shows that most North West LHIN residents access primary care providers located in the sub-area in which they live. Residents of the Kenora District most often leave the area to access primary care (most often in Kenora and Dryden). In some cases, locum physicians doing a northern tour will be recorded as physicians from outside the North (based on their normal residence), but the services they provide are in the North.

[29] OHIP Data Summary, Provided by MOHLTC HSIP, May 18, 2006.

Exhibit 3.18 Percent of 2004/05 Primary Care Physician Services for Residents of North West LHIN Sub-Areas Provided by Physician Location[30]

Provider Location	Patient Residence							
	Dryden	Kenora	Kenora District (excl. Kenora & Dryden)	Rainy River District	North Shore	Nipigon Red Rock Greenstone	Thunder Bay City	All NW LHIN
Dryden	***82.8%***	0.7%	12.9%	0.2%	0.0%	0.1%	0.1%	6.0%
Kenora	1.3%	***77.4%***	16.1%	0.9%	0.1%	0.1%	0.1%	7.2%
Kenora District (excl. Kenora & Dryden)	1.5%	14.3%	***56.9%***	0.3%	1.2%	1.0%	0.3%	8.1%
Rainy River District	0.4%	2.7%	0.3%	***70.0%***	0.1%	0.2%	0.2%	7.7%
North Shore	0.2%	0.0%	0.1%	0.9%	***62.1%***	2.2%	0.8%	2.4%
Nipigon Red Rock Greenstone	0.1%	0.0%	0.1%	0.0%	0.5%	***66.4%***	0.3%	3.0%
Thunder Bay City	3.2%	1.5%	3.8%	6.8%	11.0%	15.6%	***93.7%***	57.5%
North West LHIN Sub-Total	89.3%	96.7%	90.1%	79.0%	75.1%	85.6%	95.5%	***91.9%***
Physician from Other LHIN	7.6%	2.6%	7.9%	16.2%	18.1%	11.3%	3.9%	6.5%
North East LHIN	3.1%	0.7%	2.0%	4.8%	6.8%	3.1%	0.6%	1.6%
All Providers	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Lack of local access to primary care physician services is a contributing factor to the high rates of utilization of inpatient and ED hospital care in the Northwest

Thunder Bay City residents are most likely to access primary care services within their area (93.7% of their primary care services are provided by physicians located in Thunder Bay City). Residents of the North Shore and Rainy River sub-areas are most likely to leave the Northwest to receive primary care services (24.9% of primary care services received by the residents of the North Shore, and 21.0% of the primary care services received by residents of Rainy River District are provided outside the North West LHIN).

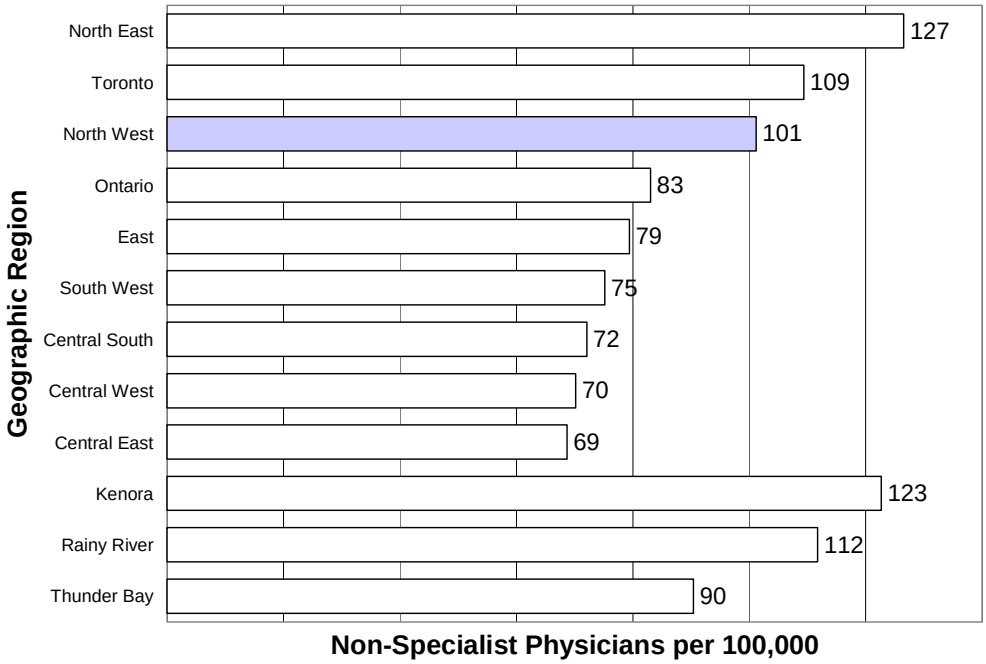
Ideally, primary care physician services should be available in every community, and at least 90% of primary care services for residents of the North West LHIN should be provided within the sub-area where they live. Only Thunder Bay residents are able to receive more than 90% of their primary physician care services in their own sub-area. Lack of local access to primary care physician services is a contributing factor to the high rates of utilization of inpatient and Emergency Department (ED) hospital care in the Northwest.

[30] OHIP Data Summary, Provided by MOHLTC HSIP, May 18, 2006.

3.4.2.3 General Practitioner Physician Supply

The Ontario Physician Human Resource Data Centre (OPHRDC) collects provincial data on physician supply by age and gender, geographic location, and specialty. The following Exhibit shows the number of general practitioners[31] per 100,000 population for the districts in the North West LHIN and for the MOHLTC planning regions. In 2004, there were 101 non-specialist physicians per 100,000 population in the North West LHIN, 22% higher than the Ontario average of 83. Each of the three districts in the Northwest has a ratio of non-specialist physicians to population higher than the provincial average.

Exhibit 3.19 General Practitioner Physicians per 100,000 Population in MOHLTC Planning Area, 2004 and selected North West LHIN Districts [32]



While the OPHRDC data suggests that the supply of primary care physicians in the Northwest is above the provincial average, there are limitations to this analysis:

- The calculations of physicians per population are based on crude rates, and don't take into account the older population in some communities in the North West LHIN.

[31] Referred to as 'non-specialist physicians' by the OPHRDC.

[32] Physicians in Ontario 2004, OPHRDC.

- Analysis of physician supply by Institute for Clinical Evaluative Sciences (ICES), based on 2001/02 data, found that Northern general and family physicians were more likely to be involved in emergency, obstetrics, inpatient care, anaesthesia and minor surgery.[33]
- Many physicians in the Northwest travel to remote communities and the time taken in travel reduces their availability for clinical activities.

3.4.2.4 Community Health Centres (CHC)

CHC Mission

The mission of a CHC is:

> "Focusing on the social determinants of health, we provide accessible, community-governed, interdisciplinary, primary health care services, including health promotion, illness prevention and treatment, chronic disease management, and individual and community capacity building."

CHCs provide primary health care, health promotion and community development services, using interdisciplinary teams of health providers

As of June 2006, there were 54 CHCs in Ontario. CHCs are non-profit, community-governed organizations that provide primary health care, health promotion and community development services, using interdisciplinary teams of health providers. These teams include physicians, nurse practitioners, dieticians, health promoters, counsellors, and others who are paid by salary, rather than through a fee-for-service system. CHCs are sponsored and managed by incorporated non-profit community boards made up of members of the community and others who provide health and social services.

CHC services are designed to meet the specific needs of a defined community. In addition, CHCs provide a variety of health promotion and illness prevention services which focus on addressing and raising awareness of the broader social determinants of health such as employment, education, environment, isolation, social exclusion, and poverty.

CHCs have long focused on comprehensive care, including primary, secondary, and tertiary disease prevention. In addition to clinical prevention, care, and treatment services, clients are supported through a host of educational, peer support, and community development programs.

North West LHIN CHCs

There are two CHCs (with four sites) in the North West LHIN:

- Mary Berglund Community Health Centre, Ignace

[33] ICES Investigative Report, "Supply and Utilization of General Practitioner and Family Physician Services in Ontario", August 2005.

- NorWest Community Health Centres, Thunder Bay Site, Longlac Site, and Armstrong Site

Satellite CHCs

As of late 2005, there were 10 Satellite CHCs funded by the Ontario government. Satellite CHCs are stand-alone centres that deliver comprehensive CHC services in areas where these services have been deemed necessary, but where the relative proximity of an existing CHC allows the Satellite CHC to be administratively supported by the existing CHC. Due to the efficiencies achieved by the Satellite CHC approach, the MOHLTC announced in November 2005 that this approach would be an integral component of the expansion of Ontario's CHC network. Between 2006 and 2008, the Ontario government will fund 22 new CHCs and 17 Satellite CHCs in diverse regions of the province.

New Satellite CHCs

There will be a new mobile satellite CHC opening in Thunder Bay in 2006/07 as part of the NorWest CHC.

Aboriginal Health Access Centres (AHACs)

Aboriginal Health Access Centres (AHACs) for First Nations, Métis, and Inuit communities were created as part of the Aboriginal Healing and Wellness Strategy, an initiative to improve access to health for Aboriginal people. There are currently 10 AHACs in Ontario serving Aboriginal people both on and off reserves, and nine of these 10 centres are also members of the Association of Ontario Health Centres (AOHC), along with the province's CHCs.

AHACs are similar to CHCs in that they are governed by Boards composed of members of the community, and deliver non-profit, interdisciplinary primary care, illness prevention, health promotion, and community development services. In addition, they also focus on traditional healing approaches, complemented by western medical approaches.

North West LHIN Aboriginal Health Access Centres

There are three Aboriginal Health Access Centres in the North West LHIN:

- Anishnawbe Mushkiki, Thunder Bay
- Gizhewaadiziwin Access Centre, Fort Frances Tribal Area Health Authority, Fort Frances
- Kenora Area Health Access Centre, Keewatin.

Community Family Health Teams

In May 2004, the Ontario government announced its intention to expand access to primary health care services in the province through creation of 150 Family Health Teams. A total of 17 of these teams have been funded as Community Family Health Teams (C-FHTs), borrowing from the CHC model several of its strong features.

C-FHTs are non-profit, community-governed organizations that provide comprehensive, patient-centred primary health care, health promotion and community development services, using multi-disciplinary teams of health providers. These teams will include physicians, nurse practitioners, dieticians, health promoters, counsellors, and others who are paid by salary, rather than through a fee-for-service system. C-FHTs are sponsored and incorporated by non-profit community boards made up of members of the community and others who provide health and social services.

C-FHTs are designed to meet the needs of a defined community and to provide accessible primary health care services to all people within their catchment area. In addition, C-FHTs provide a variety of health promotion and illness prevention services and co-ordinate the provision of chronic disease management and other self-care programs. Some C-FHTs may also provide diagnostic and other out-patient services such as X-ray, ultrasound, and minor surgery.

3.4.2.5 Family Health Teams

As part of the health care transformation agenda, the Ontario MOHLTC has introduced Family Health Teams (FHTs) intended to help provide more Ontarians with access to primary health care. It is intended that FHTs will be locally-driven primary health care delivery organizations which will include family physicians, nurse practitioners, nurses and a range of other health care professionals who are committed to working together to provide comprehensive, accessible, coordinated primary health care services to a defined population. This approach will allow physicians to work as part of a team with other health providers to focus on keeping patients healthy. The vision allows physicians, nurse practitioners, and other members of the team to practice together in a positive working environment, sharing and benefiting from the complementary knowledge and skills of their colleagues.

FHTs will serve as a focus for chronic disease management and community-based health promotion and disease prevention activities in conjunction with local public health units and other community-based health care organizations. FHTs may include, as appropriate, mental health workers, physician specialists, diagnostic services, linkages to home care services, and some outpatient surgery services. FHTs will improve access to primary health care through the introduction of interdisciplinary health teams. These teams will be developed with cooperation and input from both the community and the providers. The teams will build on the

successes of the past but may be different sizes and offer different programs, tailored to meet the needs of the local population they serve.

North West LHIN Family Health Teams

The following are the 11 approved FHTs in the North West LHIN.

- Atikokan and District FHT, Atikokan
- Dilico FHT, Fort William Reserve
- Dryden Area FHT, Dryden
- Fort Frances FHT, Fort Frances
- Fort William FHT, Thunder Bay
- Greenstone FHT, Geraldton
- Machin Medical Health Group, Vermilion Bay
- Marathon FHT, Marathon
- North Shore FHT, Schreiber
- Ears Falls FHT/Ear Falls Community Health Centre, Ear Falls
- Sunset Country FHT, Kenora, Keewatin.

While all of the FHTs listed above have been approved, they are at varying levels of development.

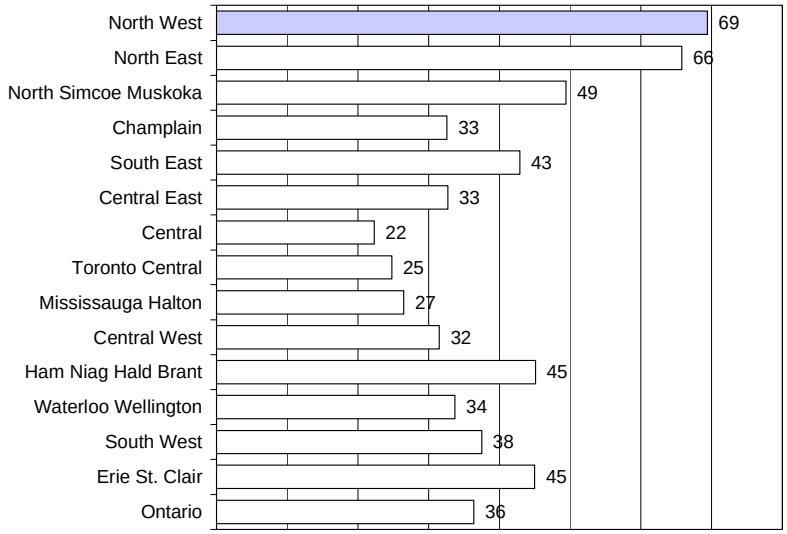
3.4.2.6 Ambulatory Care Sensitive Condition Admissions

The North West LHIN has the highest hospital admission rate in the province of patients with ambulatory care sensitive conditions

The CIHI categorizes some inpatient admissions as "ambulatory care sensitive condition" admissions, meaning that if appropriate ambulatory or community care had been available, the inpatient admission of the patient could have been avoided, either because their condition would never become so serious as to require hospitalization, or because their care could be managed on an ambulatory basis. Examples of these diagnoses include asthma, angina, and depression[34]. The rate of hospital admission of patients with these ambulatory care sensitive conditions is the highest in the province for North West LHIN residents.

[34] Health Canada Health Indicators, http://www.hip.on.ca/search/41.html.

Exhibit 3.20 ***2004/05 "Ambulatory Care Sensitive Condition" Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[35]***



3.4.3 Chronic Disease Prevention and Management

55% of total direct and indirect health care costs can be attributed to chronic diseases

The economic burden of chronic disease is estimated to be 55% of total direct and indirect health care costs.[36] According to the 2003 *Canadian Community Health Survey* (CCHS), almost 80% of Ontarians over the age of 45 have a chronic condition, and about 70% of these people have two or more chronic conditions.

The MOHLTC has developed a *Chronic Disease Prevention and Management Framework* intended to provide a common policy framework to guide efforts toward effective prevention and management of chronic disease. The MOHLTC Family Health Team "Guide to Chronic Disease Management and Prevention" (September 27, 2005) describes chronic disease management as:

"A pro-active, population-based approach that addresses chronic diseases early in the disease cycle to prevent disease progression and reduce potential health complications. Multiple strategies are used to improve the health of all

[35] CIHI Health Indicators e-publication, June 2006, accessed at http://www.cihi.ca/indicators/june_2006/en/highlights06_e.shtml.

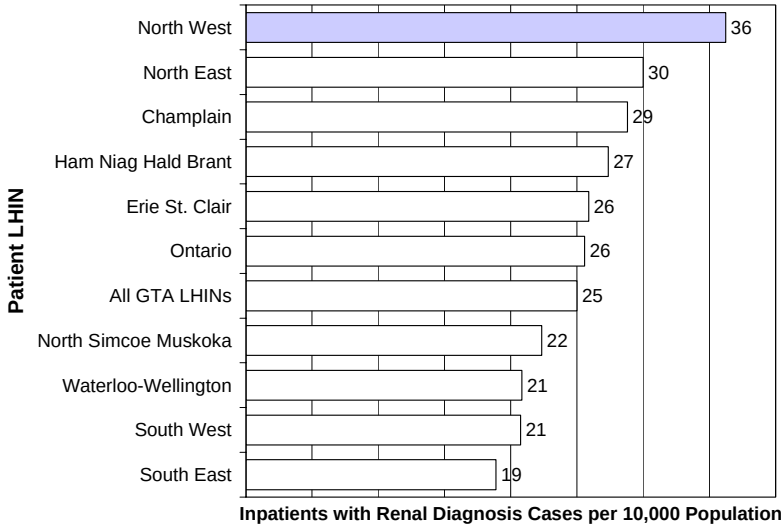
[36] "2002 Economic Burden of Illness", Strategic Policy Directorate, Public Health Agency of Canada.

patients diagnosed with specific conditions, not only those who visit the provider's office. This approach reduces the subsequent need for acute interventions in the future and allows people to maintain their independence and remain healthy for as long as possible."

3.4.3.1 Chronic Disease Patient Hospitalization Rates –Renal Disease

The following Exhibit shows the rate of inpatient hospitalization of patients with a diagnosis of renal disease for each LHIN (with the Toronto area LHINs combined). The renal disease cases include those patients with a most responsible diagnosis of renal disease and patients not admitted because of the renal disease but with a significant (type 1 or 2) diagnosis of renal disease. The rate of inpatient hospitalization of patients with renal disease in the North West LHIN is the highest in the province.

Exhibit 3.21 ***2004/05 Inpatient Admissions of Patients with Renal Disease Diagnosis per 10,000 Age/Gender Standardized Population by LHIN[37]***



3.4.3.2 Renal Services

TBRHSC Renal Services

The Thunder Bay Regional Health Sciences Centre currently has 3 nephrologists who support the Progressive Renal Insufficiency (PRI), transplant assessment, and post

[37] CIHI Discharge Abstract Database (DAD), Ontario, 2004/05 and Ontario Ministry of Finance draft, unpublished 2004 population estimates by LHIN.

transplant follow-up clinics. There are approximately 175 PRI patients and 51 post transplant patients.

Haemodialysis is provided through:

- 30 stations in Thunder Bay (three shifts/day, maximum capacity 180 patients, currently providing dialysis for 129 patients)
- Six stations in Fort Frances (currently three shifts/day, recently increased from two shifts in June 06, maximum capacity 36 patients, currently providing dialysis for 29 patients)
- Two stations in Sioux Lookout (currently two shifts/day, maximum capacity 8 patients, providing dialysis for 8 patients). Currently undergoing renovations to add an additional two stations, which will accommodate an additional 8 patients.
- There are also four stations in Kenora (three shifts/day, maximum capacity 24 patients, currently providing dialysis for 24 patients) which is a satellite dialysis unit affiliated with the Winnipeg Regional Health Authority.

In Thunder Bay, patients are taught to administer peritoneal dialysis (PD) on the unit which is open 7 days per week, from 7:30 a.m. to 11:00 p.m. There are approximately 30 patients on peritoneal dialysis.

Approximately 40% of dialysis patients are Aboriginal

Approximately 40% of dialysis patients are Aboriginal, and many of the patients do not have a regular primary care physician. Many of the First Nations patients have not previously left their home community, and having to leave to access dialysis creates stress for them, and can lead to social isolation and depression.

The lack of a vascular surgeon in the region is also a barrier, since patients must be sent out of region for creation of vascular access.

Any patients interested in doing home haemodialysis must go to Southern Ontario for their training. There is currently no home haemodialysis program offered in the North West LHIN.

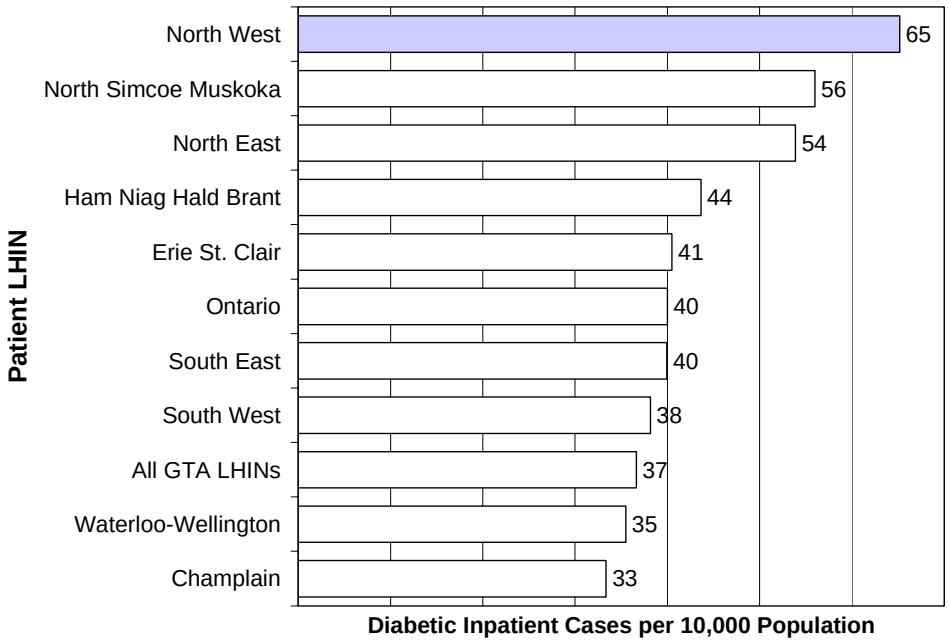
The MOHLTC has set a target rate for PD of 30% of total dialysis patients on a provincial basis. Providers in the North West LHIN have implemented several initiatives over the last year that will increase the use of PD. However, there are many challenges to achieving higher rates of PD in the Northwest including distances from service providers, delivery of medical/surgical supplies, sometimes inadequate housing conditions (e.g. water, electrical, insulation) and lower levels

of literacy. Long-term care homes and inpatient rehabilitation centres will not accept PD patients. There is minimal home support service for PD patients, which acts as a barrier to patients choosing PD.

3.4.3.3 Chronic Disease Patient Hospitalization Rates – Diabetes

The following Exhibit shows the rate of inpatient hospitalization of patients with a diagnosis of diabetes for each LHIN (with the Toronto area LHINs combined). The diabetes cases include those patients with a most responsible diagnosis of diabetes and patients not admitted because of diabetes but with a significant (type 1 or 2) diagnosis of diabetes. The rate is the highest for residents of the North West LHIN.

Exhibit 3.22 Age/Gender Standardized Rate of Hospital Admission of Patients with Diabetes per 10,000 Population[38]



While the CIHI hospital discharge data can be used to measure the number of hospitalizations of patients with diabetes, there is no data available to accurately measure the true prevalence of diabetes (or any other disease).

[38] CIHI Discharge Abstract Database, Ontario data, 2004/05, and draft unpublished population estimates by LHIN from the Ontario Ministry of Finance.

Sandy Lake First Nation in Northwestern Ontario already has the third highest rate of diabetes in the world

The *Ontario Aboriginal Diabetes Strategy*[39] reports that "Sandy Lake First Nation in Northwestern Ontario already has the third highest rate of diabetes in the world; at least 26 percent of the population have type 2 diabetes and another 14 percent are glucose intolerant (i.e., they have higher than normal blood glucose levels and are considered to have pre-diabetes)."

It also reports that "because of the increase in diabetes, Aboriginal people are also developing diabetes-related illnesses (e.g., end stage renal and kidney disease, retinopathy or loss of vision) more often and at younger ages."

3.4.3.4 Northern Diabetes Health Network

The Northern Diabetes Health Network (NDHN) is a health care organization committed to enhancing diabetes services for people in northern Ontario. The NDHN encompasses two networks of programs:

- Network of Northern Ontario Diabetes Programs
- Network of Ontario Paediatric Diabetes Programs.

NDHN, funded by the MOHLTC, offers a broad range of diabetes specialty programs to meet the needs of people in communities of northern Ontario, as well as specialized programs focusing on children and young people in selected communities across the province. The NDHN work is based on the evidence that people who access diabetes specialty programs for education and care in self-management have lower risks of diabetes-related problems.

The NDHN coordinates funding and monitors services for 38 diabetes education centres in northern Ontario, and 34 paediatric sites across Ontario. Adult diabetes programs are offered in Northwestern Ontario in Atikokan, Fort Frances, Kenora, Manitouwadge, Nipigon, Sioux Lookout, Thunder Bay, Dryden, Geraldton, Keewatin, Marathon, Red Lake, and Terrace Bay. Paediatric diabetes programs are offered in Sioux Lookout and Thunder Bay.

[39] "Ontario Aboriginal Diabetes Strategy", Ontario Aboriginal Diabetes Strategy Steering Committee, April 2006.

3.4.3.5 Ontario Aboriginal Diabetes Strategy

The Ontario MOHLTC has recently released its *Aboriginal Diabetes Strategy*.[40] The MOHLTC has acknowledged the serious impact of diabetes on Aboriginal communities and the importance of decreasing the incidence of type 2 diabetes and its related complications.

The MOHLTC, in collaboration with Ontario Aboriginal organizations and independent First Nations, established the Ontario Aboriginal Diabetes Strategy Steering Committee (OADS-SC) to develop a comprehensive, innovative provincial Aboriginal diabetes strategy.

The strategy developed by the OADS-SC sets out a long-term approach to diabetes prevention, care and treatment, education, research and coordination that can be implemented both now and in the future.

3.4.4 Emergency Department Utilization

All Ontario hospitals are required to track their emergency department (ED) visits and to categorize each visit according to the Canadian Triage Acuity Scale (CTAS). The five CTAS levels are:

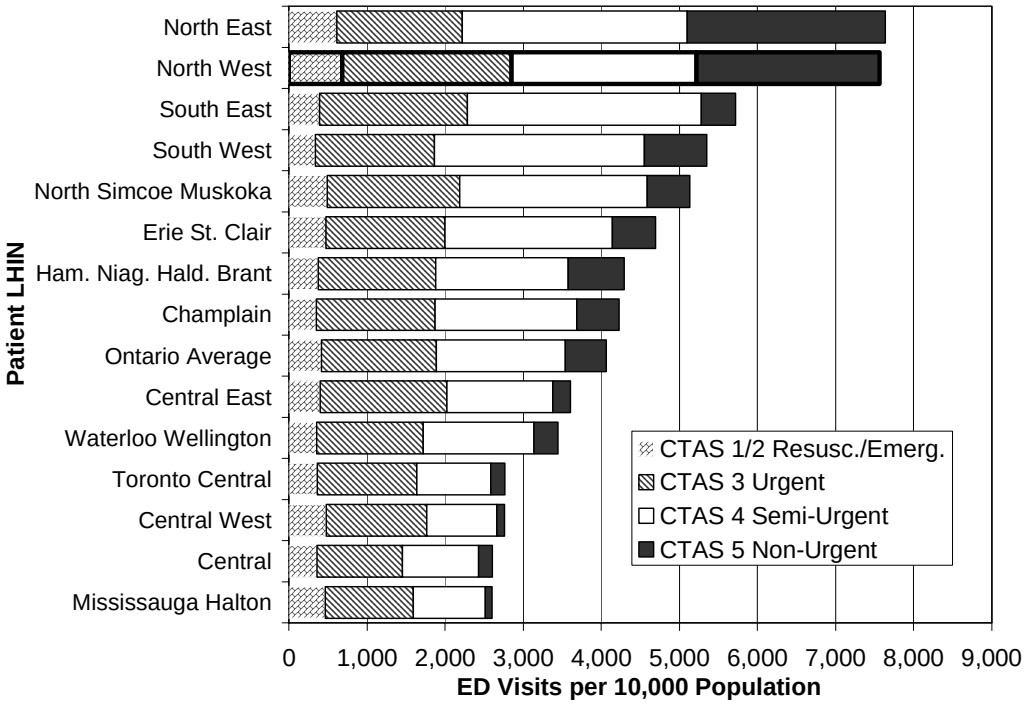
- CTAS 1- Resuscitation
- CTAS 2 – Emergent
- CTAS 3 – Urgent
- CTAS 4 – Semi-Urgent
- CTAS 5 – Non-Urgent.

Residents of the Northwest have the second highest overall rate of utilization of ED visits

Exhibit 3.23 shows the age/gender standardized ED utilization per population by LHIN (based on patient residence) by CTAS level. Residents of the Northwest have the second highest overall rate of utilization of ED visits per population.

[40] "Ontario Aboriginal Diabetes Strategy", Ontario Aboriginal Diabetes Strategy Steering Committee, April 2006.

Exhibit 3.23 2004/05 Age/Gender Standardized ED Visits per 10,000 Population by Patient LHIN[41]



However, the high ED utilization rates for both the North East LHIN and the North West LHIN are significantly impacted by the greater use of the ED for non-urgent care. Exhibit 3.24 shows a comparison of ED utilization by LHIN for non-urgent cases only. The non-urgent utilization rates for the northern LHINs are higher than the total (including all CTAS levels) ED utilization rates for some of the southern Ontario LHINs, and approximately three times the non-urgent utilization rate for the next highest LHIN. [42,43]

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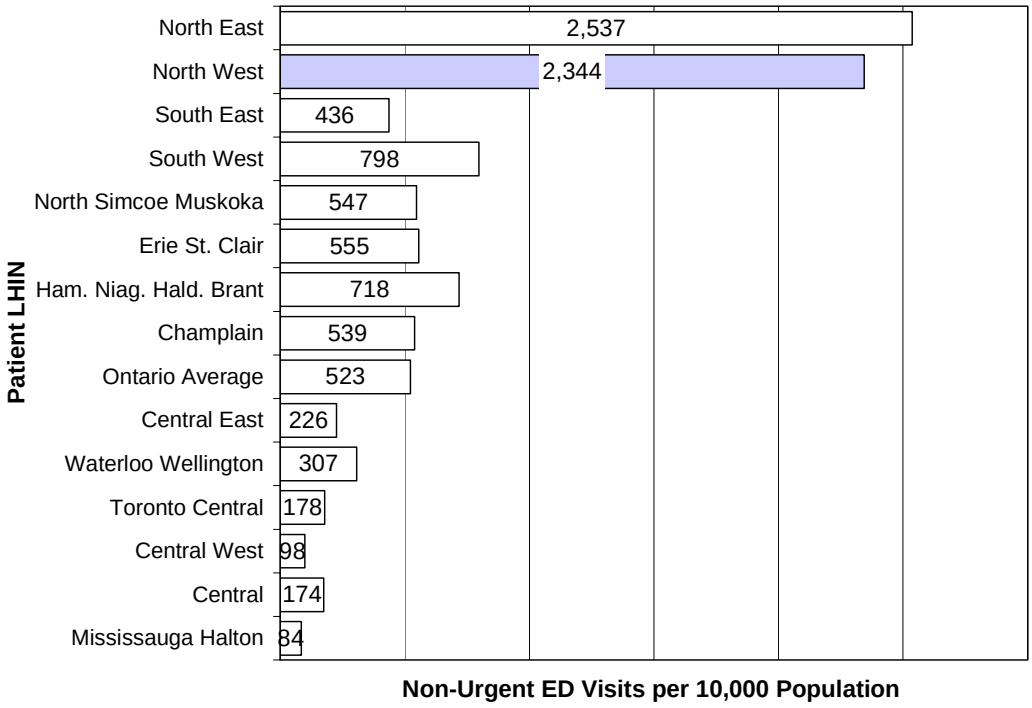
[41] CIHI NACRS Ontario data and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

[42] The ED utilization rates (both for the entire North West LHIN, and for the individual sub-areas) may also be impacted by the under-count of the Aboriginal population in the Census data.

[43] Some patients in NW LHIN hospitals are first stabilized in a nursing station before being transferred to an acute care hospital and this may impact the assignment of CTAS triage levels.

Exhibit 3.24 2004/05 Age/Gender Standardized Non-Urgent ED Visits per 10,000 Population by Patient LHIN[44]

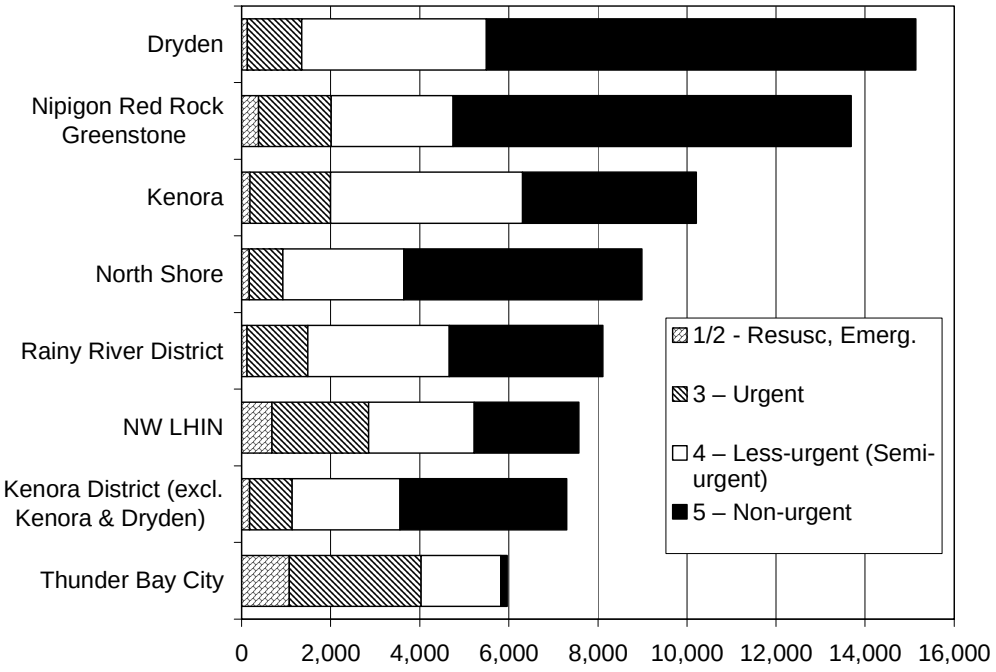


The rate of non-urgent ED visits for Dryden residents is 70 times the rate for Thunder Bay City residents

Exhibit 3.25 shows the analyses of ED utilization by the geographic sub-areas within the Northwest (patients are assigned to a sub-area on the basis of their residence). The lowest ED utilization rate is for residents of Thunder Bay City, particularly for CTAS 4 and 5 (semi- and non-urgent) visits. However, City of Thunder Bay residents have the highest rates of ED utilization for CTAS 1, 2, and 3 (resuscitation, emergent, and urgent) visits.

[44] CIHI NACRS Ontario data and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

Exhibit 3.25 2004/05 Age/Gender Standardized ED Visits per 10,000 Population by North West LHIN Patient Sub-Area[45]



ED visit rates are much higher in the North, particularly for non-urgent visits. In addition, EDs in the Northwest are also sometimes used to provide scheduled patient care. Gaining a more complete understanding of patient expectations of primary care and the role that the ED should play in the community through the community engagement process will be a priority for the North West LHIN.

3.4.5 Acute Care Hospital Utilization

More than 70% of all MOHLTC base funding for LHIN related health care provider agencies in the Northwest was for hospital services. The majority of this funding was used to provide inpatient acute care and ambulatory surgical procedures. Understanding how acute care services are used by, and provided for, the residents of the Northwest will be important for the North West LHIN as it assesses integration priorities.

[45] CIHI NACRS Ontario 2004/05 data and LHIN sub-area population estimates provided by MOHLTC HSIP.

3.4.5.1 North West LHIN Acute Care Hospitals

Exhibit 3.26 shows the volume of inpatient days and ambulatory visits for the public hospitals located in the Northwest in 2004/05. Activity levels are reported by organization, not by individual delivery site, for those hospitals with more than one site.

Exhibit 3.26 2004/05 North West LHIN Hospital Acute Care Inpatient Cases[46]

Hospital Site	IP Cases
Thunder Bay Regional Hosp	17,757
Lake-Of-The-Woods District Hospital	2,956
Sioux Lookout Meno-Ya-Win Hlth Ctr-Distr	2,318
Riverside Hlth Care Fac Inc-Laverendrye	2,038
Dryden Regional Health Centre	1,426
Red Lake Marg Cochenour Mem Hosp (The)	846
Geraldton District Hospital	689
Atikokan General Hospital	551
Nipigon District Memorial Hospital	461
Wilson Memorial General Hospital	379
Mc Causland Hospital	231
Manitouwadge General Hospital	168
Riverside Hlth Care Fac Inc-Rainy River	98
Riverside Health Care Fac Inc-Emo Site	86
NW LHIN Acute Care Total	30,004

TBRHSC recently designated as a teaching hospital

Until recently, all of the acute care hospitals in the Northwest were considered to be regional (TBRHSC) or community general hospitals. The Minister of Health and Long-Term Care has now designated TBRHSC to be a teaching hospital, with a full affiliation agreement with the Northern Ontario School of Medicine.

3.4.5.2 Hospital Use by Residents of North West LHIN

Not all North West LHIN residents hospitalized in North West LHIN hospitals

While most of the inpatient acute care provided by North West LHIN hospitals is for residents of the North West LHIN, not all of the inpatient acute care used by North West LHIN residents is provided by hospitals located in the North West LHIN.

1,661 Northwest residents hospitalized elsewhere in Ontario

In 2004/05, there were 1,661 cases of Northwest residents hospitalized in inpatient acute care beds elsewhere in Ontario, particularly for tertiary care in southern Ontario.

[46] CIHI DAD Ontario data, 2004/05.

At least 2,057 North West LHIN residents hospitalized elsewhere in Canada

There were also at least 2,057 cases of North West LHIN residents hospitalized in acute care beds outside Ontario in 2004/05, primarily in the hospitals of the Winnipeg Regional Health Authority. The hospital records for these 2,057 cases of Northwest residents hospitalized outside Ontario have been included in the analyses.

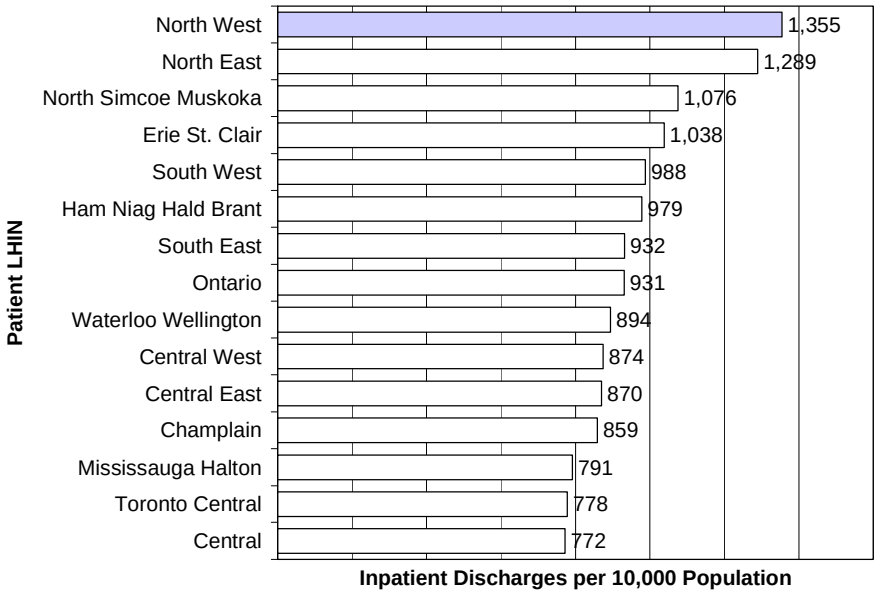
Almost 77% of the hospitalizations of residents of the North West LHIN in Winnipeg hospitals were for residents of the Kenora District (including the cities of Kenora and Dryden).

A basic measure of acute care utilization is the number of hospital separations (discharges) per 10,000 population, adjusting for the age and gender composition of the population. The process of adjusting utilization rates to take into account differences in the underlying demographic composition of the population is referred to as "standardization". Unless otherwise noted, all of the measures of acute care utilization shown in this chapter have been gender and age (using 5 year age cohorts) standardized.

The rate for acute inpatient care for residents of the North West LHIN is the highest in the province

Exhibit 3.27 compares the overall acute care discharges per 10,000 population in 2004/05 for the residents of each LHIN. All acute care discharges of North West LHIN residents from a hospital anywhere in Ontario (not just in the Northwest) are included in the calculation of the North West LHIN utilization rate. Data for Northwest residents hospitalized in Winnipeg are also included.

Exhibit 3.27 Total 2004/05 Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[47]



The overall utilization rate for acute inpatient care for North West LHIN residents is the highest in the province. The lowest acute care hospital utilization rates are found in the densely populated communities surrounding Toronto and Ottawa, where there are many ambulatory and community based services that can help patients avoid inpatient hospitalization, and where primary care providers are more available.

Exhibit 3.28 shows the total inpatient utilization per population[48] by residents of each North West LHIN sub-area. Utilization of acute care inpatient services is lowest for the residents of the City of Thunder Bay, and highest for the residents of Nipigon Red Rock Greenstone area. But even the rate for residents of Thunder Bay is very high compared to the rest of the province.

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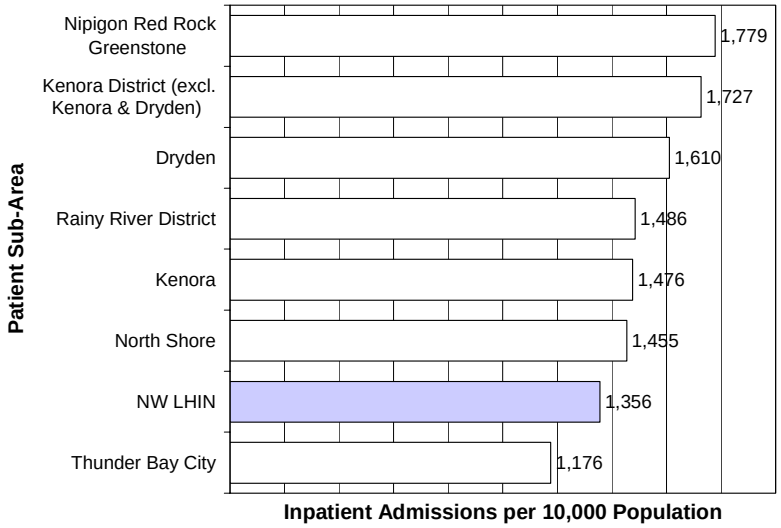
[47] CIHI Discharge Abstract Database, Ontario, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and Ontario Ministry of Finance draft, unpublished 2004 population estimates by LHIN.

[48] The population estimates used to calculate the utilization rates are based on Census data, and are therefore impacted by the under-count of the Aboriginal population. As a result, utilization rates for sub-areas with large Aboriginal populations (e.g. Kenora District) will have inflated utilization rates in these analyses.

Exhibit 3.28 Total 2004/05 Inpatient Discharges per 10,000 Age/Gender Standardized Population by North West LHIN Sub-Area[49]



Higher rates of hospital use in Northern Ontario may reflect difficulties in accessing ambulatory care services

The higher rates of hospital utilization in both of the northern LHINs may reflect less availability of ambulatory and community services, and the resulting necessary reliance on inpatient acute care. To assess this, we categorized the inpatient acute care activity by "level of care", to see whether the higher utilization was concentrated in the basic hospital services that can be avoided (to a greater extent) if a robust broader health system is available.

Northwest residents have the highest rate of utilization of Primary level inpatient acute care in the province

Inpatient acute care cases were assigned to a level of care using the Hay Level of Care Assignment Algorithm, which categorizes each case as Primary, Secondary, or Tertiary/Quaternary, based on the patient age, the Case Mix Group[50], and the "complexity"[51] of the case. The "Primary" category of the Hay Level of Care Algorithm refers to basic inpatient hospital care (i.e. patient care that one would expect any acute care hospital to be able to provide) and should not

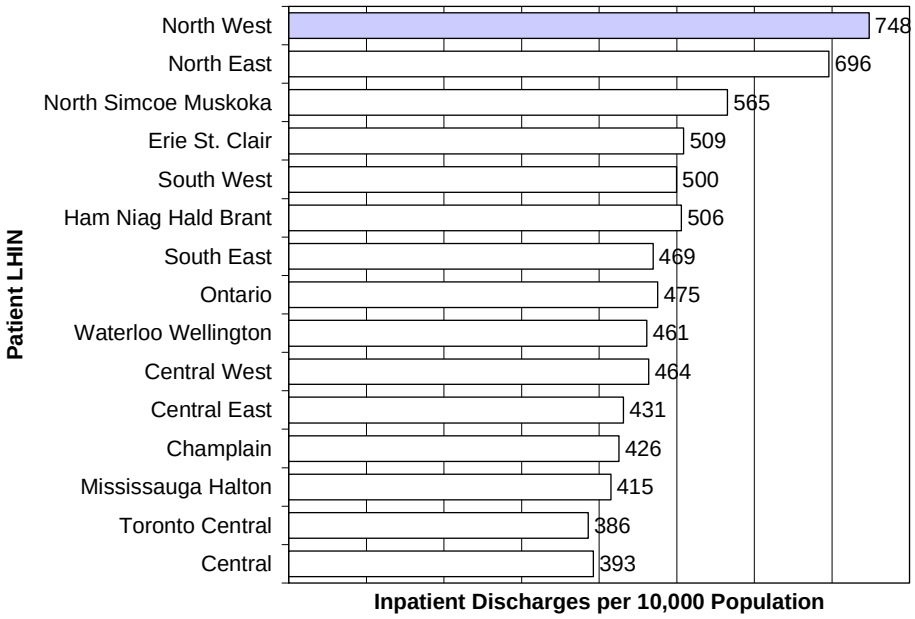
[49] CIHI DAD Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and MOHLTC HSIP population estimates by LHIN sub-area.

[50] There are approximately 500 Case Mix Groups (CMGs) used by the Canadian Institute for Health Information (CIHI) to categorize inpatient acute care activity according to the patient diagnoses and procedures they have while in hospital.

[51] CIHI assigns a complexity level to medical and surgical acute care inpatient cases on the basis of the presence of "comorbid" (additional) diagnoses that demonstrate the burden of illness faced by the patient.

be confused with community based primary care[52]. Appendix 3 provides a description of the Hay Level of Care. Exhibit 3.29 shows the utilization rates for Primary level of care inpatient hospitalizations by LHIN.

Exhibit 3.29 2004/05 Primary Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[53]



Northwest residents have the highest rate of utilization of Primary level inpatient acute care in the province. All acute care hospitals in the Northwest provide Primary level acute care services.

The rate of hospitalization of North West LHIN residents for secondary level care is the highest in the province

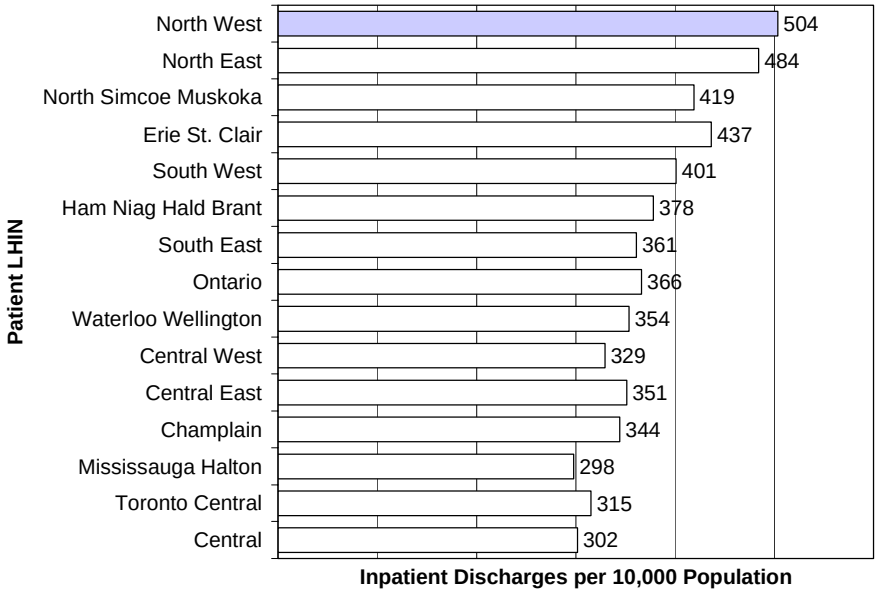
Exhibit 3.30 shows the utilization rates for Secondary level of care inpatient hospitalizations by LHIN. There is less variation by LHIN in rates of Secondary acute care hospitalization. All but the very smallest hospitals in the Northwest (i.e. those that do not offer inpatient surgery or obstetrics) provide Secondary level acute care. The rate of

[52] The National Primary Care Awareness Strategy defines primary health care as "basic, everyday health care. Primary health care could be visiting the family doctor or nurse practitioner, talking to a dietitian or a pharmacist, or calling a toll-free health advice line to talk to a health professional. It is usually your first encounter with a health care provider when you need care or advice."

[53] CIHI Discharge Abstract Database, Ontario, 2004/05 and Ontario Ministry of Finance draft, unpublished 2004 population estimates by LHIN.

hospitalization of North West LHIN residents for secondary level care is the highest in the province.

Exhibit 3.30 2004/05 Secondary Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[54]

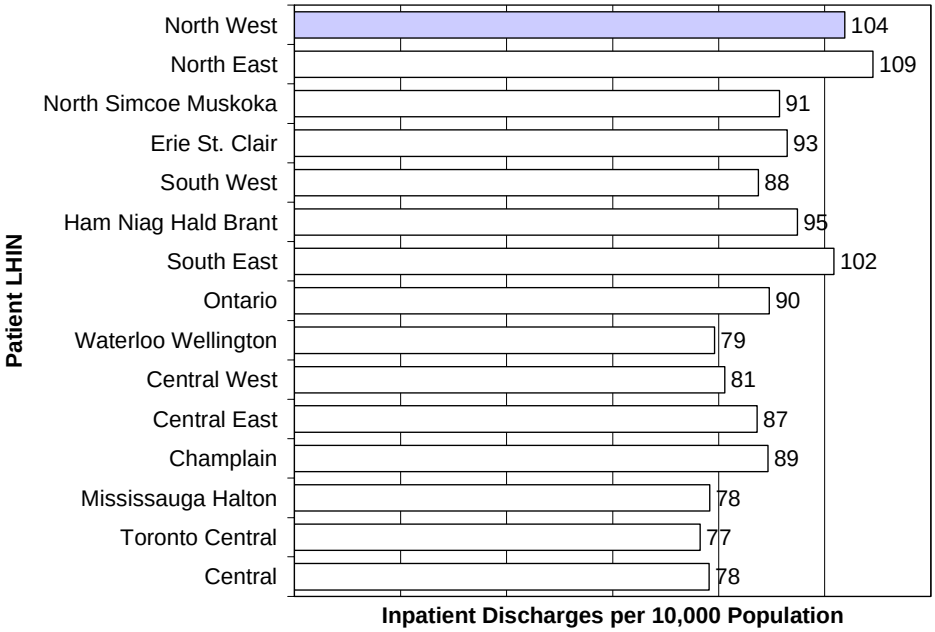


The rate of Tertiary/Quaternary hospitalizations by North West LHIN residents is second highest in the province

Exhibit 3.31 shows the utilization rates for Tertiary/Quaternary level of care inpatient hospitalizations by LHIN. Tertiary/Quaternary hospitalizations include complex medical patients, cardiac surgery and neurosurgery, and organ transplants. Tertiary/Quaternary acute care is usually concentrated in academic health science centres or large regional acute care facilities. The rate of utilization of inpatient Tertiary/Quaternary acute care by North West LHIN residents is second highest (behind the North East LHIN) in the province.

[54] CIHI DAD Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

Exhibit 3.31 2004/05 Tertiary/Quaternary Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[55]



Acute care utilization by Patient Cluster Category by LHIN

The MOHLTC has developed "Patient Cluster Categories" (PCC) that group together inpatient cases on the basis of the likelihood that their inpatient care would be managed by the same medical specialty or subspecialty.

The table in Exhibit 3.32 shows the Ontario and North West LHIN resident age/gender standardized acute care inpatient utilization rates for each individual PCC. The comment column describes how the North West LHIN rate compares to the distribution of rates for all 14 LHINs.

The PCCs for which the North West LHIN resident acute care utilization rate is the highest in Ontario are:

- Cardiology
- General Surgery
- Gastro/Hepatobiliary
- Pulmonary
- General Medicine
- Trauma
- Neurology

[55] CIHI DAD Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

- Endocrinology
- Otolaryngology
- Nephrology
- Rheumatology
- Dermatology
- Dental / Oral Surgery.

There are no PCCs for which the North West LHIN resident acute care utilization rate is in the lowest quartile in Ontario.

Exhibit 3.32 2004/05 Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient Cluster Category by Patient LHIN[56]

Patient Cluster Category	Ontario Average	NW LHIN Rate	Comment re NW LHIN Rate
All Inpatients	931.0	1,355.1	Highest
Obstetrics	126.2	142.2	Top Quartile
Neonatology	117.7	109.7	
Cardiology	86.2	156.2	Highest
General Surgery	68.9	92.3	Highest
Gastro/Hepatobiliary	64.4	119.4	Highest
Pulmonary	61.8	106.4	Highest
Psychiatry	55.2	82.8	Top Quartile
Orthopaedics	49.2	66.7	Top Quartile
General Medicine	47.7	113.2	Highest
Trauma	37.9	57.6	Highest
Cardio/ Thoracic	31.5	39.4	Top Quartile
Urology	31.3	38.6	Top Quartile
Neurology	27.4	43.1	Highest
Oncology	27.2	28.4	
Gynaecology	25.7	31.8	Top Quartile
Endocrinology	14.6	28.0	Highest
Otolaryngology	13.8	28.5	Highest
Haematology	8.4	12.0	Top Quartile
Nephrology	7.9	12.8	Highest
Vascular Surgery	6.9	10.6	Top Quartile
Neurosurgery	5.4	6.8	Top Quartile
Plastic Surgery	3.6	3.4	
Not Generally Hosp.	3.3	9.0	Highest
Rheumatology	2.6	5.2	Highest
Ophthalmology	2.5	2.5	
Rehabilitation	2.1	4.4	Top Quartile
Dermatology	1.6	3.3	Highest
Dental/Oral Surgery	0.3	0.5	Highest
Ungroupable	0.1	0.2	Highest

[56] CIHI DAD Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

The high utilization rates may reflect the poorer health status of the residents of the Northwest and the lack of availability of local health services that can reduce reliance on acute care hospitals.

3.4.5.3 Ambulatory Procedures

The prior analyses of acute care utilization focused on inpatient admissions only. Increasingly, surgical patients who previously would have required inpatient admission for their surgical procedure can now be treated on an ambulatory basis in a day surgery unit. These patients visit the hospital on the day of their procedure and are discharged before the end of that day. Communities and hospitals that report low rates of inpatient utilization may have corresponding high rates of day surgery utilization, indicating that they have been successful in shifting inpatient care to ambulatory care, and reducing the pressure on inpatient beds. Exhibit 3.33 shows the volume of ambulatory procedures in Northwest hospitals in 2004/05.

Exhibit 3.33 2004/05 Ambulatory Procedure (Day Surgery) Cases by Hospital[57]

NW Hospital	Amb. Proc. (Day Surgery)
Dryden Regional Health Centre	1,296
Lake-Of-The-Woods District Hospital	1,179
Riverside Hlth Care Fac Inc-Laverendrye	1,085
Sioux Lookout Meno-Ya-Win Hlth Ctr-Distr	938
Thunder Bay Regional Hosp	17,343
Grand Total	21,841

Exhibit 3.34 shows the age/gender standardized rate of use of day surgery for the residents of all 14 LHINs in Ontario. While the inpatient utilization rate for North West LHIN residents is the second highest in the province, the day surgery utilization rate for North West LHIN residents is only just above the provincial average.

[57] CIHI NACRS Ontario data, 2004/05.

Exhibit 3.34 2004/05 Day Surgery Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[58]

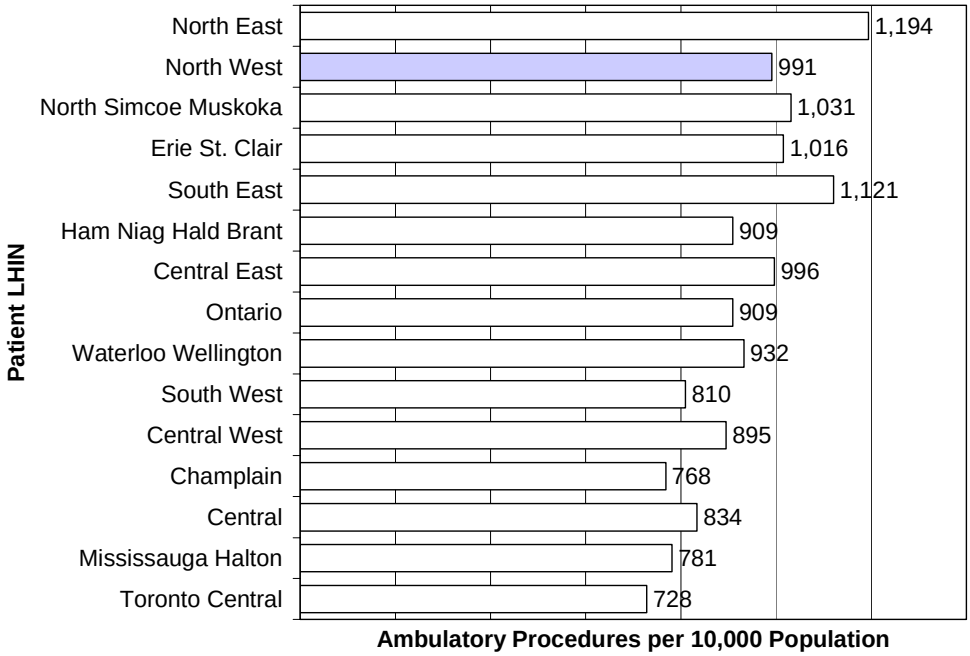
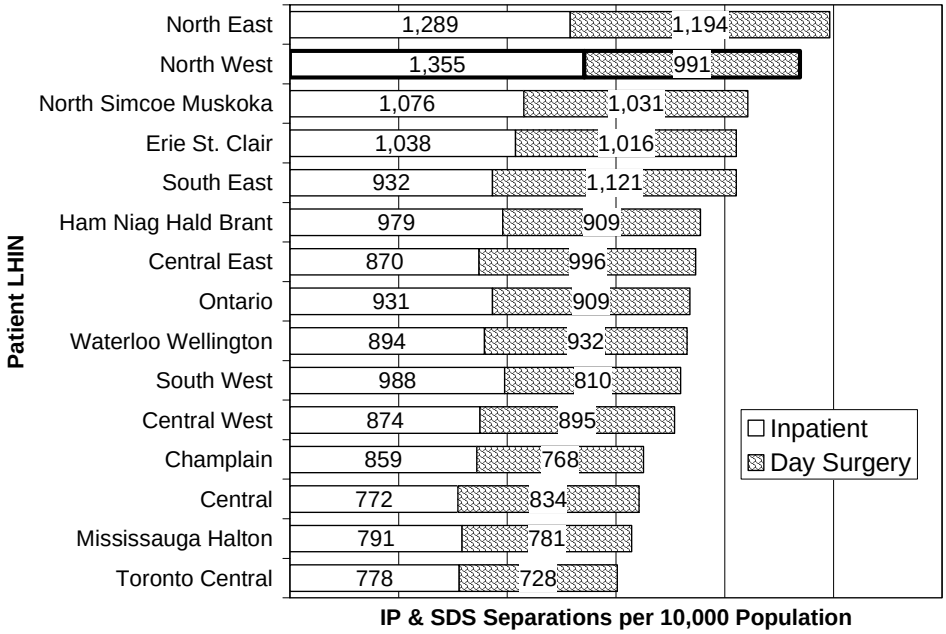


Exhibit 3.35 shows the 2004/05 combined inpatient and day surgery utilization rates for the residents of each LHIN. Once day surgery activity is included, the overall rate for the Northeast is higher than the rate for the Northwest.

[58] CIHI NACRS Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

Exhibit 3.35 2004/05 Inpatient and Day Surgery Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[59]



3.4.5.4 May Not Require Hospitalization

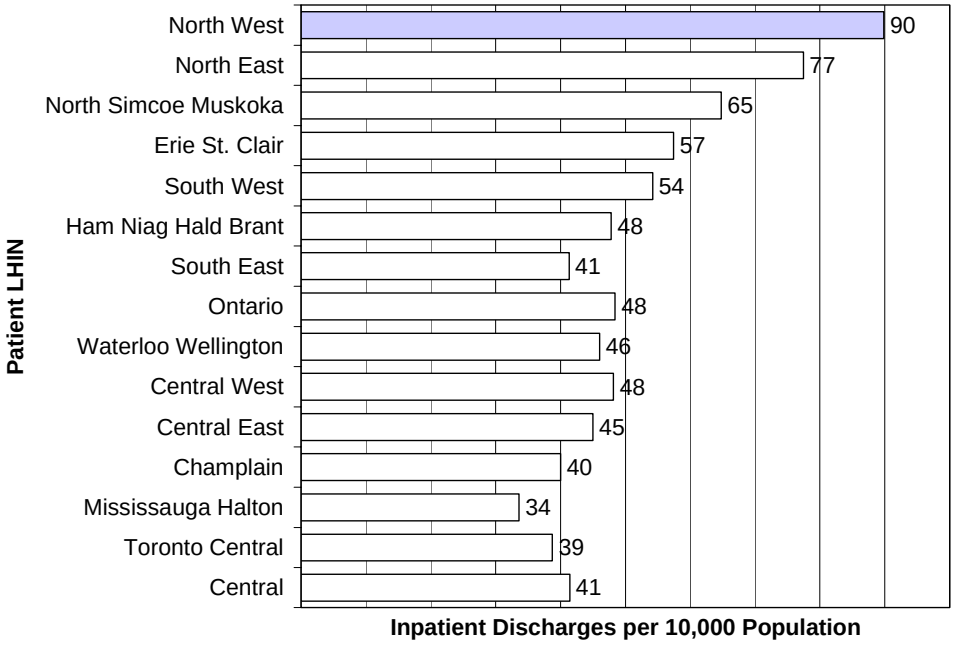
Residents of the North West LHIN had the highest rate of MNRH admissions of any LHIN in the province

CIHI categorizes some Case Mix Groups as "May Not Require Hospitalization" (MNRH). These are inpatients that, if appropriate ambulatory surgery or community services were available, would not need to be admitted to an acute care hospital. Given the high inpatient occupancy rate of most acute care hospitals in Ontario, any opportunity to avoid admissions of MNRH patients should be pursued.

Exhibit 3.36 shows the age/gender standardized rate of inpatient admissions of MNRH patients by LHIN. In 2004/05, the residents of the North West LHIN had the highest rate of MNRH admissions of any LHIN in the province.

[59] CIHI DAD and NACRS Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

Exhibit 3.36 2004/05 "MNRH" Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[60]



3.4.5.5 Location of Hospital Care

Not all North West LHIN residents obtain their acute hospital care in a hospital located in their community. Some communities do not have local access to an acute care hospital, and some of the smaller acute care hospitals do not have the full range of services that would be necessary to meet their community's needs. Exhibit 3.37 shows the percent of inpatient care used by the residents of the North West LHIN provided by each Northwest (and other Ontario and Winnipeg) hospital.

[60] CIHI DAD Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

Exhibit 3.37 Percent of Acute Care for Residents of North West LHIN Sub-Area Provided by Each Hospital[61]

Hospital Location		Patient Residence							
		Dryden	Kenora	Kenora District (excl. Kenora & Dryden)	Rainy River District	North Shore	Nipigon Red Rock Greenstone	Thunder Bay City	NW LHIN Total
1	Dryden Regional HC	***70.9%***	0.9%	1.0%	0.4%	0.1%	0.1%	0.1%	4.2%
	1 Total	***70.9%***	0.9%	1.0%	0.4%	0.1%	0.1%	0.1%	4.2%
2	Lake-Of-The-Woods	3.8%	***74.0%***	10.8%	1.4%	0.2%	0.2%	0.0%	8.6%
	2 Total	3.8%	***74.0%***	10.8%	1.4%	0.2%	0.2%	0.0%	8.6%
3	Marg. Cochenour	0.2%	0.1%	***14.3%***	0.0%	0.0%	0.0%	0.0%	2.4%
	Sioux Lookout Meno-Ya-Win HC	1.1%	0.1%	***41.6%***	0.0%	0.0%	0.4%	0.0%	7.0%
	3 Total	1.3%	0.2%	***55.8%***	0.1%	0.0%	0.4%	0.0%	9.4%
4	Atikokan General	0.0%	0.0%	0.0%	***15.5%***	0.0%	0.0%	0.0%	1.6%
	Riverside HCF-Emo	0.0%	0.2%	0.0%	***2.3%***	0.0%	0.0%	0.0%	0.3%
	Riverside HCF-Laverendrye	0.6%	1.4%	0.2%	***56.0%***	0.0%	0.0%	0.1%	6.1%
	Riverside HCF-Rainy River	0.0%	0.0%	0.0%	***2.8%***	0.0%	0.0%	0.0%	0.3%
	4 Total	0.6%	1.7%	0.2%	***76.5%***	0.0%	0.0%	0.1%	8.3%
5	Manitouwadge Gen	0.0%	0.0%	0.0%	0.0%	***12.9%***	0.0%	0.0%	0.5%
	McCausland Hosp	0.0%	0.0%	0.0%	0.0%	***17.2%***	0.0%	0.0%	0.7%
	Wilson Memorial Gen	0.0%	0.0%	0.0%	0.0%	***28.2%***	0.0%	0.0%	1.1%
	5 Total	0.0%	0.0%	0.0%	0.0%	***58.2%***	0.0%	0.0%	2.3%
6	Geraldton District	0.0%	0.0%	0.0%	0.0%	0.1%	***31.2%***	0.0%	1.9%
	Nipigon District MH	0.0%	0.0%	0.0%	0.0%	0.4%	***21.2%***	0.1%	1.4%
	6 Total	0.0%	0.0%	0.0%	0.0%	0.5%	***52.4%***	0.1%	3.3%
7	Thunder Bay Regional	11.8%	2.6%	14.4%	10.8%	30.2%	37.1%	***91.9%***	52.7%
	7 Total	11.8%	2.6%	14.4%	10.8%	30.2%	37.1%	***91.9%***	52.7%
North West LHIN Total		88.4%	79.4%	82.3%	89.2%	89.2%	90.4%	92.3%	88.7%
8	Central LHIN	0.4%	0.1%	0.1%	0.1%	***0.5%***	0.0%	0.3%	0.2%
	Central East LHIN	0.0%	0.1%	0.0%	0.1%	***0.2%***	0.1%	0.0%	0.1%
	Central West LHIN	0.0%	0.0%	0.0%	0.0%	***0.1%***	0.0%	0.1%	0.0%
	Champlain LHIN	0.1%	0.2%	0.3%	***1.1%***	0.6%	0.9%	0.9%	0.7%
	Erie St.Clair LHIN	0.0%	0.0%	0.0%	0.0%	0.0%	***0.0%***	0.0%	0.0%
	Ham Niag Hald Brant LHIN	0.4%	0.1%	0.2%	0.2%	0.9%	0.7%	***2.5%***	1.4%
	Mississauga Halton LHIN	0.0%	0.0%	0.0%	0.0%	***0.1%***	0.0%	0.0%	0.0%
	North East LHIN	0.3%	0.1%	0.1%	0.1%	***4.7%***	1.5%	0.3%	0.5%
	North Simcoe Muskoka LHIN	0.1%	0.0%	0.1%	0.0%	0.1%	***0.1%***	0.0%	0.0%
	South East LHIN	0.0%	0.0%	0.1%	0.0%	***0.1%***	0.0%	0.0%	0.0%
	South West LHIN	***0.7%***	0.3%	0.3%	0.4%	0.5%	0.2%	0.7%	0.5%
	Toronto Central LHIN	0.9%	0.3%	0.5%	0.6%	***2.4%***	1.5%	2.1%	1.4%
	Waterloo Wellington LHIN	0.3%	0.0%	0.0%	0.1%	***0.6%***	0.1%	0.1%	0.1%
	8 Total	3.1%	1.1%	1.7%	2.8%	***10.8%***	5.3%	7.1%	5.0%
In Province Total		91.5%	80.5%	84.0%	92.1%	***100.0%***	95.6%	99.3%	93.7%
	Winnipeg	7.9%	***19.0%***	15.7%	7.7%	0.0%	4.0%	0.5%	6.0%
	Other Out of Province	***0.6%***	0.6%	0.3%	0.2%	0.0%	0.4%	0.2%	0.3%

Overall, 5.0% of the inpatient hospitalizations of North West LHIN residents are provided by Ontario hospitals located outside the North West LHIN and 6.0% are provided by Winnipeg hospitals

[61] CIHI DAD and NACRS Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data.

For all sub-areas, the majority of inpatient acute care is provided by the hospitals located within the sub-area

For all sub-areas, the majority of inpatient acute care is provided by the hospitals located within the sub-area:

- Dryden – 70.9% of acute care provided locally
- Kenora – 74.0% of acute care provided locally
- Kenora District – 55.8% of acute care provided locally
- Rainy River District – 76.5% of acute care provided locally
- North Shore – 58.2% of acute care provided locally
- Nipigon Red Rock Greenstone – 52.4% of acute care provided locally
- Thunder Bay City – 91.9% of acute care provided locally.

This is particularly true for Primary level care. For Primary level of care, the percent of inpatient acute care provided by the hospitals located within the sub-area is:

- Dryden – 81.3% of acute care provided locally
- Kenora – 88.2% of acute care provided locally
- Kenora District – 63.9% of acute care provided locally
- Rainy River District – 89.3% of acute care provided locally
- North Shore – 77.2% of acute care provided locally
- Nipigon Red Rock Greenstone – 65.9% of acute care provided locally
- Thunder Bay City – 97.8% of acute care provided locally.

Only 1.4% of Primary level hospitalizations for Northwest residents are provided in Ontario hospitals located outside the North West LHIN, and 4.0% are provided in Winnipeg hospitals.

At the other end of the acute care spectrum, only Thunder Bay City residents can expect to receive the majority of their Tertiary/Quaternary care in hospitals located within their sub-area. More than 46% (46.5%) of all Tertiary/Quaternary care for Northwest residents is provided by the Thunder Bay Regional Health Sciences Centre. Approximately 35% (35.1%) of all Tertiary/Quaternary care for Northwest residents is provided in hospitals located outside the North West LHIN, most frequently in hospitals in Toronto or Hamilton. 14.1% of Tertiary/Quaternary care is provided in Winnipeg hospitals.

High need for cardiac services, but no revascularization in Northwest

Much of the Tertiary/Quaternary care provided for Northwest residents in southern Ontario hospitals is cardiac revascularization service. While the Northwest resident mortality rates and potential years of life lost due to cardiovascular disease are in the highest quartile, and Northwest residents have the highest morbidity due to circulatory system disease, cardiac surgery and angioplasty has not been available within the region.

In 2004/05, there were 51 cardiac bypass graft surgeries for North West LHIN residents performed in Winnipeg hospitals, and 30 angioplasties. There were also 190 cardiac bypass graft surgeries for North West LHIN residents performed in Ontario hospitals outside the North West LHIN, and 294 inpatient angioplasties.

TBRHSC to develop angioplasty program

The report of the Special Advisor to the MOHLTC on health services in Northwestern Ontario[62] recommended that a stand-alone angioplasty centre be established at Thunder Bay Regional Health Sciences Centre. In June of 2006, the Minister of Health and Long-Term Care announced that he had "asked the Thunder Bay Regional Health Sciences Centre to provide angioplasty services that will ensure close-to-home treatment for those who need access to this important cardiac procedure."

3.4.5.6 Acute Care Wait Times

A focus on reducing wait times for cancer surgery, cardiac procedures, cataract surgery, hip and knee replacements, as well as MRI and CT exams

The Ontario government is implementing a plan to increase access to and reduce wait times for five major health services: cancer surgery, cardiac procedures, cataract surgery, hip and knee replacements, as well as MRI and CT exams.

A new province-wide wait time data collection process was implemented in 2005. Exhibit 3.38 shows recent results of measurement of median wait times and the times for completion of 90% of cases in North West LHIN hospitals.

[62] "Integrated Service Plan for Northwestern Ontario", Report of the Special Advisor, Tom Closson, June 2005.

Exhibit 3.38 MOHLTC, Wait Times by Procedure (February to March, 2006)[63,64]

Procedure	Region	Median Wait Time (days)	Average Wait Time (days)	90% completed within (days)
All Cancer Surgery	All Of Ontario	22	36	78
	North West	17	29	53
Breast Cancer	All Of Ontario	17	24	43
	North West	17	30	50
Gynaecological Cancers (e.g. Ovarian and cervical cancers)	All Of Ontario	29	37	65
	North West	20	59	174
Bone, Joint and Muscle Cancers	All Of Ontario	14	32	80
	North West	NV	NV	NV
Thoracic Cancers (Lung and esophageal cancers)	All Of Ontario	19	25	50
	North West	21	23	37
Gastrointestinal Cancers (e.g. Colon and stomach cancers)	All Of Ontario	17	25	50
	North West	5	15	53
Head and Neck Cancers (Excluding brain)	All Of Ontario	32	55	121
	North West	27	31	74
Neurological Cancers (e.g. Brain and central nervous system cancers)	All Of Ontario	8	19	43
	North West	NV	NV	NV
Genitourinary Cancers (e.g. Prostate and bladder cancers)	All Of Ontario	34	48	98
	North West	23	36	80
Liver and Pancreatic Cancers	All Of Ontario	18	27	52
	North West	NV	NV	NV
Eye Cancers	All Of Ontario	33	45	87
	North West	NV	NV	NV
Angiography	All Of Ontario	13	16	33
	North West	19	20	35
Cataract Surgery	All Of Ontario	78	123	291
	North West	174	194	446
Total Hip Replacement	All Of Ontario	97	146	336
	North West	40	113	255
Total Knee Replacement	All Of Ontario	123	179	395
	North West	123	175	379
MRI (Magnetic Resonance Imaging)	All Of Ontario	28	40	88
	North West	26	35	81
CT (Computerized Tomography)	All Of Ontario	13	27	69
	North West	2	18	64

Wait times in North West LHIN hospitals for cancer surgery, hip replacement, and CT were generally lower than the provincial average in early 2006. Wait times in North West LHIN hospitals for cataract surgery and angiography were above the provincial average in early 2006.

[63] NV = no value.

[64] Ontario MOHLTC "Wait Times in Ontario" Website.

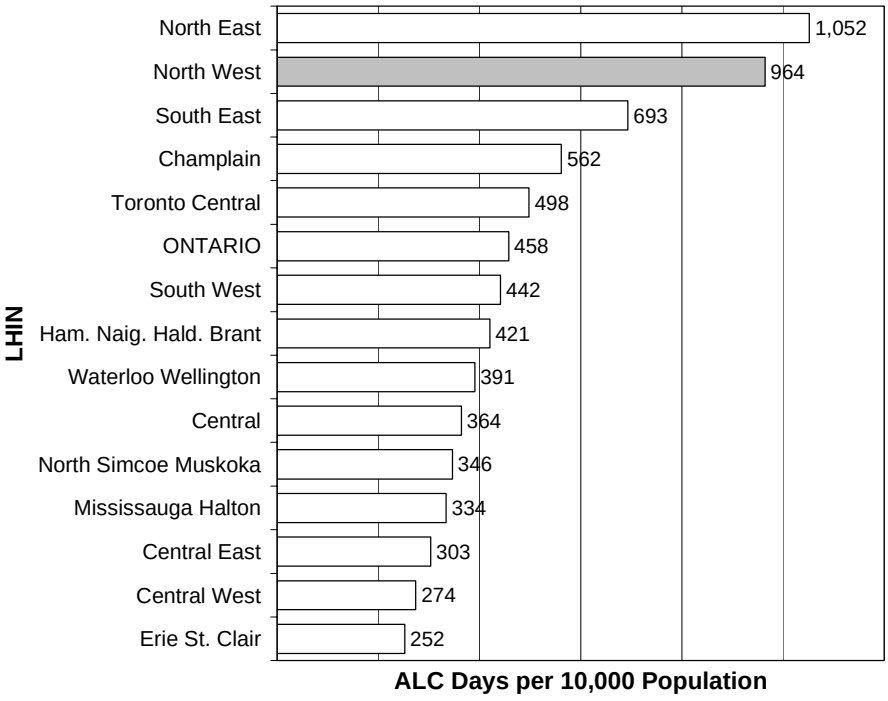
3.4.6 Alternate Level of Care

The utilization analyses above focused on acute care discharges per population as the measure of acute care hospital utilization. A challenge faced by many Ontario acute care hospitals is that their acute care beds are often occupied by patients who no longer require the type of care available only in an acute care hospital, but these patients can't be discharged because there is no place for them in an alternative care environment (e.g. LTC home bed or home with appropriate home care support services). Approximately 10% of all patient days in Ontario acute care hospitals are used by non-acute patients waiting for discharge or placement. The days these patients spend waiting are referred to as "alternate level of care" (ALC) days.

The ALC rate for North West LHIN residents is the second highest of all LHINs

Exhibit 3.39 shows the age/gender standardized rate of ALC days per 10,000 population by LHIN. The ALC rate for North West LHIN residents is the second highest of all LHINs.

Exhibit 3.39 2004/05 Age/Gender Standardized Alternate Level of Care Days per 10,000 Population by LHIN[65]



[65] CIHI Discharge Abstract Database (DAD), Ontario, 2004/05 and Ontario Ministry of Finance draft, unpublished 2004 population estimates by LHIN.

The 24,000 ALC days reported for North West LHIN residents in 2004/05 are equivalent to approximately 70 beds that were not available for patients requiring acute care.

Patients discharged to complex continuing care and long-term care spend almost half of their inpatient stay in acute care beds waiting for placement

Exhibit 3.40 shows the distribution of inpatient discharges and ALC days by discharge disposition. While only 5.5% of acute care inpatients are discharged to either complex continuing care (CCC) or a long-term care home bed, these patients account for more than two thirds of all ALC days for Northwest patients. Patients discharged to complex continuing care and long-term care spend almost half of their inpatient stay in acute care beds waiting for discharge placement.

Exhibit 3.40 Inpatient Activity for North West LHIN Patients by Discharge Disposition[66]

Discharge Disposition	IP Cases	% of All Cases	IP Days	Avg. LOS	ALC Days	% ALC	Avg. ALC per Case	% of All ALC Days
Chronic Care Facility	1,108	3.5%	22,744	20.5	10,740	47.2%	9.7	43.9%
LTC (NH/HFA)	631	2.0%	11,309	17.9	5,594	49.5%	8.9	22.9%
Home Care	3,376	10.7%	29,232	8.7	2,302	7.9%	0.7	9.4%
Home (No Home Care)	22,912	72.8%	104,336	4.6	1,816	1.7%	0.1	7.4%
Died	813	2.6%	10,679	13.1	1,769	16.6%	2.2	7.2%
Rehab	585	1.9%	4,414	7.5	1,112	25.2%	1.9	4.5%
Acute Care	1,830	5.8%	15,695	8.6	900	5.7%	0.5	3.7%
Other	205	0.7%	1,810	8.8	213	11.8%	1.0	0.9%
Grand Total	31,460	100.0%	200,219	6.4	24,446	12.2%	0.8	100.0%

3.4.7 Complex Continuing Care and Inpatient Rehabilitation

In addition to acute inpatient care, Ontario hospitals also provide CCC and rehabilitation. The following Exhibit shows the distribution of these non-acute beds in Northwest hospitals as of March 2006.

[66] CIHI Discharge Abstract Database (DAD), Ontario, 2004/05.

Exhibit 3.41 North West LHIN Non-Acute Hospital Beds by Hospital[67]

Hospital	Beds (March, 2006)	
	Complex Continuing Care	Rehabilitation
Thunder Bay St Joseph's Care Group	174	50
Kenora Lake-Of-The-Woods District	28	0
Fort Frances Riverside Health Care	20	0
Terrace Bay McCausland Hospital	13	0
Marathon Wilson Memorial General	12	0
Dryden Regional Health Centre	10	0
Atikokan General Hospital	8	0
Nipigon District Memorial	7	0
Geraldton District Hospital	7	0
Sioux Lookout Meno-Ya-Win Health Centre-District Site	5	0
Red Lake Margaret Cochenour Memorial	4	0
Grand Total	288	50

3.4.7.1 Complex Continuing Care

There are 288 complex continuing care beds in Northwest hospitals, 60% of which (174 beds) are located in Thunder Bay and managed by the St. Joseph's Care Group. 43.9% of all acute care ALC days for North West LHIN patients in 2004/05 were for patients who were eventually discharged to a complex continuing care bed.

The North West LHIN rate of use of CCC is more than double the provincial average and 90% higher than the next highest LHIN rate

Exhibit 3.42 shows the age-gender standardized complex continuing care RUGS-weighted[68] inpatient days per 10,000 population by LHIN. The North West LHIN rate is more than double the provincial average and 90% higher than the next highest LHIN rate[69].

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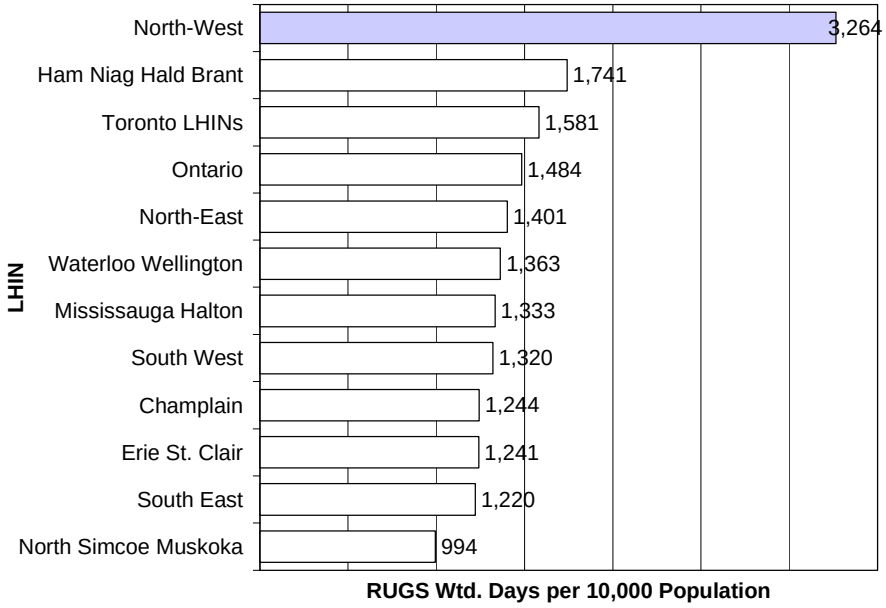
[67] Ontario MOHLTC FIM website, http://www.mohltcfim.com/.

[68] Patients in complex continuing beds are classified into resource utilization groups (RUGS) which are clinically relevant and resource-homogeneous groups based on information captured by the Resident Assessment Instrument Minimum Data Set (MDS 2.0). RUG-III is the current version of this classification system. A hospital's RUG-III weighted patient days adjusts for case mix differences in complex continuing care patients and allows comparison among hospitals.

[69] The complex continuing care data is for fiscal year 2004/05, and may not reflect current patterns of care. St. Joseph's Care Group has introduced changes in admission criteria and treatment protocols that may reduce the difference between Northwest resident complex continuing care utilization and patterns seen elsewhere in the province.

Exhibit 3.42 2004/05 Age-Gender Standardized RUGS-Weighted Complex Continuing Care Days per 10,000 Population by LHIN[70]

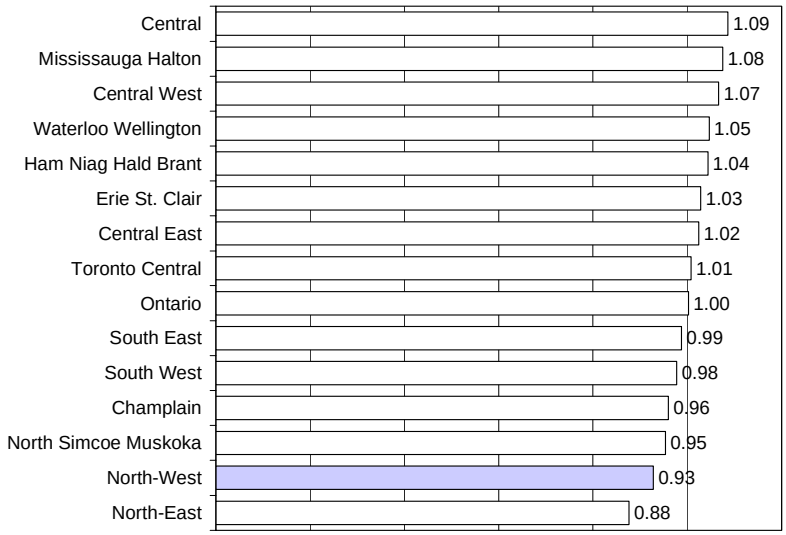


Average RUGS weight per case in Northwest and Northeast hospitals is lower than hospitals in Southern Ontario

The following Exhibit shows that the average RUGS weight per case in Northwest (and Northeast) hospitals is lower than hospitals in southern Ontario, indicating that complex continuing care beds are being used by Northwest residents with less complex requirements.

[70] Ontario Continuing Care Reporting System (CCRS) via the Provincial Health Planning Database (PHPDB), 2004/05.

Exhibit 3.43 Average RUGS Weight per Case for Complex Continuing Care Residents[71]



The very high rate of utilization of complex continuing care in the Northwest should be examined further to determine whether it reflects use of complex continuing care beds for a different resident population than occupies these beds in other LHINs, and whether there are opportunities to reduce utilization of complex continuing care beds by increasing availability of other continuing care services, such as supportive housing, home care, and long term care home beds.

3.4.7.2 Inpatient Rehabilitation

There are 50 inpatient rehabilitation beds in the North West LHIN, all located in Thunder Bay and managed by the St. Joseph's Care Group.

In 2004/05, there were 736 North West LHIN residents discharged from an inpatient rehabilitation bed. 711 (96.6%) of these patients were inpatients in Thunder Bay, 9 (1.2%) in a North East LHIN hospital, and 15 (2.0%) were hospitalized out of province. The St. Joseph's Care Group discharged 726 rehabilitation inpatients in 2004/05, 711 (97.9%) of whom were residents of the North West LHIN.

[71] Ontario Continuing Care Reporting System (CCRS) via the Provincial Health Planning Database (PHPDB), 2004/05.

The North West LHIN inpatient rehabilitation services are focused on orthopaedic and arthritis rehabilitation to a greater extent than the provincial average

The North West LHIN inpatient rehabilitation service is focused on orthopaedic and arthritis rehabilitation (76.9% of all cases) to a greater extent than the provincial average (54.9% of cases in the orthopaedic and arthritis rehabilitation categories)[72]. Only 11.5% of North West LHIN rehabilitation inpatients are stroke patients, compared to the 17.3% average for the rest of Ontario.

3.4.8 Long-Term Care

3.4.8.1 North West LHIN Long-Term Care Homes

The following Exhibit shows the number of long-term care home beds in homes located in the North West LHIN and the occupancy of the long-stay beds, as of September 2005. Most of the LTC home beds in the Northwest are fully occupied.

[72] Recent changes in the focus of the rehabilitation program at St. Joseph's Care Group may have reduced the emphasis on musculoskeletal rehabilitation and expanded access to inpatient rehabilitation for other patient groups.

Exhibit 3.44 Northwest LTC Homes and Beds as of September 2005[73,74,75]

Home Name	Sector	Long Stay Beds	Short Stay Beds	Total Beds	Long Stay Occ. %
Versa-Care Centre	NH - For Profit	161	0	161	97.5%
Roseview Manor	NH - For Profit	157	0	157	98.1%
Pioneer Ridge	Municipal	150	0	150	100.0%
Dawson Court	Municipal	150	0	150	98.7%
Grandview Lodge	Municipal	148	2	150	98.6%
Rainycrest	Municipal	144	1	145	86.8%
Pinecrest	Municipal	115	1	116	100.0%
Bethammi Nursing Home	NH - Non-Profit	107	3	110	99.1%
Hogarth Riverview Manor	NH - Non-Profit	96	0	96	99.0%
Birchwood Terrace	NH - Non-Profit	94	2	96	97.9%
Pinewood Court	NH - Non-Profit	76	0	76	97.4%
Princess Court	Municipal	64	1	65	100.0%
Thunder Bay Regional HSC LTC	NH - Non-Profit	60	0	60	98.3%
Northwood Lodge	Municipal	32	0	32	96.9%
Atikokan General Hospital	Eldcap	22	0	22	100.0%
Rainy River Health Centre	Eldcap	21	0	21	100.0%
William A. "Bill" George Ext.Care F.	Eldcap	20	0	20	100.0%
Geraldton District Hospital	Eldcap	19	0	19	100.0%
Nipigon District Memorial Hospital	Eldcap	14	1	15	100.0%
Emo Health Centre	Eldcap	12	0	12	100.0%
Manitouwadge General Hospital	Eldcap	9	0	9	100.0%
North West Total		1,671	11	1,682	98.4%

City of Thunder Bay In 2005, the City of Thunder Bay passed a resolution to advise the MOHLTC that the City will be discontinuing the operation of 300 of its 450 long-term care beds by January 2009 and that the City would work with the MOHLTC to develop a three-year transition plan which would see additional long-term care home beds operated by a not-for-profit organization.

Fort Frances The MOHLTC assumed control of Rainycrest Home for the Aged in March 2005 and appointed Riverside Health Care Facilities (Riverside) to manage the Home on its behalf. In

[73] The low occupancy for Rainycrest is because admissions were closed as of March, 2005. Rainycrest was reopened to admissions on September 19, 2005.

[74] ELDCAP beds are long-term care beds located in hospitals and other facilities that are licensed under the Nursing Homes Act, but funded under the global budget of the hospital. The Ministry of Northern Development and Mines provides financial assistance for capital construction of these units.

[75] MOHLTC Community Health Division Long-Term Care Planning & Renewal Branch, via HSIP.

April, representatives from all municipalities in the Rainy River District agreed to pursue an agreement with Riverside to make the organization the permanent administrator of the Home.

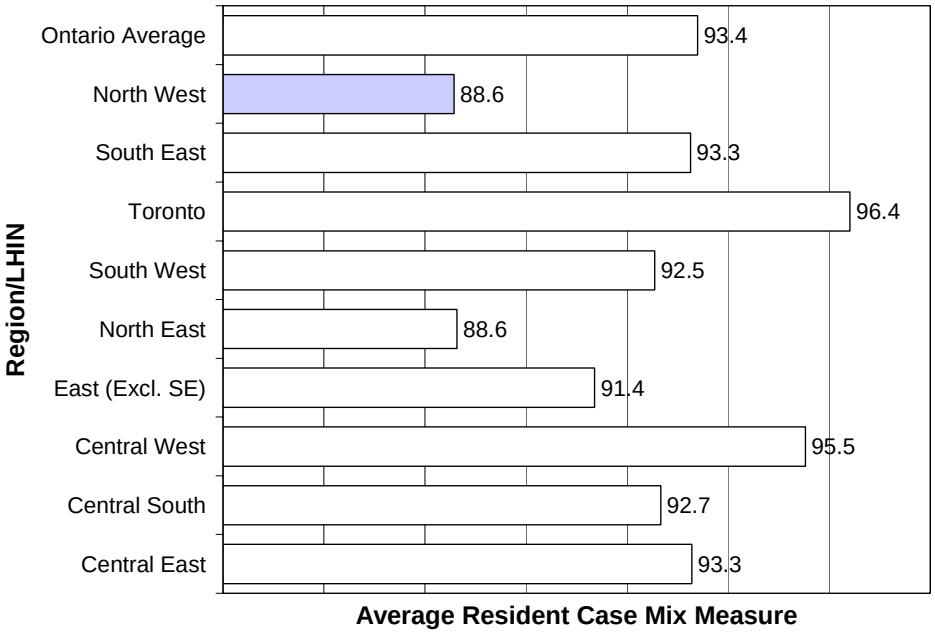
3.4.8.2 Resident Level of Care

All Ontario long-term care homes are required to classify their residents using the Alberta Levels of Care Classification tool, which assigns each resident to one of seven categories (A through G). Each category is assigned a weight reflecting the volume of care and estimated relative cost of the care required by the resident. A "Case Mix Measure" (CMM) is calculated for each home, representing the relative acuity of the residents[76]. The following Exhibit shows the average CMM for the residents of North West LHIN long-term care homes, and compares the result with the CMM of homes in the other MOHLTC planning regions.[77]

[76] The Home Case Mix Measure (CMM) is the total of the proportion of home's residents in each classification category (A-G) multiplied by category weights, totaled, then divided by the number of residents. The Home Case Mix Index (CMI) is determined by dividing the Home CMM by the Provincial CMM and then multiplying by 100.

[77] CMM data is not available at the LHIN level, only at the historical MOHLTC planning region level.

Exhibit 3.45 Average Case Mix Measure for LTC Residents in Northwest and Other Ontario Regions (2005)[78]



The Northwest and Northeast CMM for LTC residents are the lowest in the province

The Northwest (and Northeast) CMM for LTC residents are the lowest in the province. The low CMM in the Northwest may reflect lack of availability of other long-term care services that can help delay or avoid the requirement for admission to a long-term care home bed.

3.4.8.3 Long-Term Care Home Beds per Capita

The number of LTC home beds per population aged 65 years and older in the North West LHIN is second to only the North East LHIN

While long-term care home beds are not used exclusively for elderly patients, these elderly patients represent the large majority of residents of long-term care home beds in Ontario. Because of this, comparisons of LTC home beds per capita usually use the elderly subset of the population as the denominator.

The following Exhibit shows the distribution of LTC home beds by ownership by LHIN and the calculated number of LTC home beds per LHIN population aged 65 years and older.

[78] Ontario MOHLTC LTC Resident Classifications Data, 2005.

Exhibit 3.46 September 2005 LTC Home Beds by Ownership and Beds per Elderly Population by LHIN[79]

LHIN	Long Term Care Beds (September, 2005)						Pop'n 75 +	Beds per 1,000 Pop'n 75 +	% For Profit	% Municip.
	Municipal	Charitable	NH - For Profit	NH - Not For Profit	Eldcap	Total				
Erie St. Clair	1,107	235	2,773	110	0	4,225	42,598	99.2	66%	26%
South West	1,889	806	3,642	402	0	6,739	65,320	103.2	54%	28%
Waterloo Wellington	439	604	2,277	342	0	3,662	38,809	94.4	62%	12%
Hamilton Niagara HB	1,994	1,360	5,466	1,447	0	10,267	100,479	102.2	53%	19%
Central West	994	0	2,015	304	0	3,313	28,296	117.1	61%	30%
Mississauga Halton	856	0	2,684	710	0	4,250	45,104	94.2	63%	20%
Toronto Central	1,043	1,672	1,907	1,510	0	6,132	74,807	82.0	31%	17%
Central	876	997	3,578	1,634	0	7,085	80,281	88.3	51%	12%
Central East	1,953	296	6,030	1,177	0	9,456	90,822	104.1	64%	21%
South East	1,368	243	1,927	167	0	3,705	36,146	102.5	52%	37%
Champlain	1,335	1,453	3,484	1,116	0	7,388	69,801	105.8	47%	18%
North Simcoe Muskoka	539	155	1,477	359	0	2,530	27,072	93.5	58%	21%
North East	1,415	139	1,966	1,047	96	4,663	38,221	122.0	42%	30%
North West	**808**	**0**	**490**	**266**	**118**	**1,682**	**15,183**	**110.8**	**29%**	**48%**
Total	16,616	7,960	39,716	10,591	214	75,097	752,939	99.7	53%	22%

The number of LTC home beds per population aged 65 years and older in the Northwest is 52.5, higher than the provincial average, and second to only the Northeast.

While the total number of LTC home beds per elderly population in the Northwest is higher than the provincial average, the large wait list, and the LTC home bed funding per capita data presented in another section of this chapter, suggests that there is unmet need for LTC services. As patterns of use of long-term care home beds by the First Nations population change, there could be increasing need for long-term care home beds, particularly in the western part of the region.

3.4.8.4 Waiting for LTC Homes

Expressed as a percentage of the total number of LTC home beds, the September 2005 community wait list for LTC homes is equal to 30.5% of the total number of beds in the North West LHIN. The following Exhibit shows that this is the second highest ratio of community wait list to beds of all of the LHINs in Ontario.

[79] MOHLTC Community Health Division Long-Term Care Planning & Renewal Branch, via HSIP.

Exhibit 3.47 Community Resident LTC Home Wait List Trend and Ratio to Total LTC Home Beds by LHIN[80]

LHIN	Sept 2005 Community Wait List	Total Beds	Wait List as % of Total Beds
Erie St. Clair	636	4,225	15.1%
South West	1,294	6,739	19.2%
Waterloo Wellington	705	3,662	19.3%
Hamilton Niagara HB	1,393	10,267	13.6%
Central West	122	3,313	3.7%
Mississauga Halton	357	4,250	8.4%
Toronto Central	1,202	6,132	19.6%
Central	970	7,085	13.7%
Central East	1,591	9,456	16.8%
South East	1,100	3,705	29.7%
Champlain	1,459	7,388	19.7%
North Simcoe Muskoka	907	2,530	35.8%
North East	836	4,663	17.9%
North West	**513**	**1,682**	**30.5%**
Total	13,085	75,097	17.4%

3.4.9 Home Care

Home care is critical to primary health care renewal

A key finding of the National Home Care and Primary Health Care Partnership Project (a two-year initiative sponsored by the Canadian Home Care Association (CHCA) and funded by Health Canada's Primary Health Care Transition Fund) is that home care is critical to primary health care renewal, and must be expanded to a broader patient population with chronic disease.

The project was implemented in Ontario and Alberta and its chief focus was to see "how an augmented role for home care — through collaborative partnerships with family physicians within a chronic disease management model — could address many aspects of the primary health care agenda."

The report says that the project results "strongly suggest that implementing two key strategies involving home care – specifically, aligning case managers with family physicians and expanding the role of home care in chronic disease management – yields significant benefits for primary health care in Canada and most importantly for patients."

[80] MOHLTC Community Health Division Long-Term Care Planning & Renewal Branch, via HSIP.

3.4.9.1 CCAC Expenditures

The following Exhibit shows the total CCAC expenditures by MOHLTC planning region, clients served, and average expenditures per client. The CCACs in the Northwest spent $31 million and provided community-based services to 11,473 clients in 2005/06. The average expenditures per client served in the Northwest was slightly above the provincial average at $2,694 per client.

Exhibit 3.48 CCAC Expenditures and Clients (2005/06) by LHIN[81]

Region	Expenditures	Total Clients Served	Total Admissions to Community Svces.	Avg. Expend. Per Client Served	% of Prov. Avg.
Central East	$ 219,718,813	86,379	57,545	$ 2,544	97.2%
Central South	$ 156,144,041	60,735	42,411	$ 2,571	98.2%
Central West	$ 201,674,498	74,858	54,472	$ 2,694	102.9%
East	$ 215,641,301	71,328	46,779	$ 3,023	115.5%
North East	$ 87,426,120	38,127	22,290	$ 2,293	87.6%
North West	**$ 30,904,475**	**11,473**	**8,886**	**$ 2,694**	**102.9%**
South West	$ 203,467,681	77,751	55,534	$ 2,617	100.0%
Toronto	$ 299,046,625	119,647	59,534	$ 2,499	95.5%
Grand Total	$ 1,414,023,554	540,298	347,451	$ 2,617	100.0%

3.4.9.2 CCAC Realignment

Throughout this year, Community Care Access Centres (CCACs) will be undergoing organizational changes that will align them with the geographic boundaries of the 14 Local Health Integration Networks (LHINs) across the province. With the reorganization to 14, CCACs will build on the experience and expertise of the existing 42 CCACs and strengthen their capacity to meet the increasing demand for home care services. This reorganization will improve consistency in service delivery and business practices, easing navigation for clients. As a result there will be one CCAC serving all of Northwestern Ontario.

[81] Ontario MOHLTC FIM website, http://www.mohltcfim.com/.

3.4.10 Community Support Services

Cost effectiveness of community support services

A recent study of the provision of community support services to seniors[82] found that:

- Community support services play an important role in maintaining the health, well-being, independence and quality of life of seniors
- Community support services are most effective when integrated and managed around the needs of the individual. Intensive case management can provide the incentive to use the minimum level of services necessary to maintain the individual at the highest possible functional status
- Community support services (CSS) make important contributions to the sustainability of the health care system as a whole by moderating demand for more costly acute and institutional care, and particularly, by reducing utilization of emergency (911) services.

The following Exhibit shows the types and volumes of community support services provided by North West LHIN CSS agencies in 2004/05.

[82] Janet M. Lum, Simonne Ruff and A. Paul Williams, "When Home is Community: Community Support Services and the Well-Being of Seniors in Supportive and Social Housing", A Research Initiative of Ryerson University, Neighbourhood Link/Senior Link and the University of Toronto, Funded by United Way of Greater Toronto, April 2005.

Exhibit 3.49 Community Support Services Provided by North West LHIN Agencies in 2004/05[83]

Community Support Service	Units of Service		# of Clients Served	Avg. Services per Client	# Waiting	Waitlist as % of Served
Public Education Coordinator	1,431	hour	4,733	0.3	0	0%
Caregiver Support - Volunteer Hospice Visiting Service	8,438	hour	3,368	2.5	0	0%
Social Recreational Service	1,404		1,324	1.1	10	1%
Psychogeriatric Consulting Services (Alzheimer Strategy)	272	hour	1,168	0.2	0	0%
Home Maintenance and Repair (First Nations Only)	53,549	hour	914	58.6	81	9%
Transportation	37,292	1-way trip	849	43.9	17	2%
Meals on Wheels	56,065	meal	793	70.7	10	1%
Community & Facility Palliative Care Interdisciplinary Ed	741	compl. course	741	1.0	0	0%
Friendly Visiting	7,984	visit	737	10.8	18	2%
Special Services For the Blind and Visually Impaired	2,223	hour	671	3.3	25	4%
Home Help/Homemaking (Paid)	45,658	hour	616	74.1	62	10%
Caregiver Support - Support and Counselling	2,293	hour	426	5.4	13	3%
Special Services For Persons with Acquired Hearing Loss	1,548	hour	423	3.7	0	0%
Case Management	402	case	402	1.0	0	0%
Diners Club/Wheels to Meals/Congregate Dining	28,021	attendance	388	72.2	0	0%
Homemaking/Personal Supp/Attendant - Elderly in SHU	52,744	hour	377	139.9	140	37%
Aboriginal Support Service	15,187	hour	326	46.6	49	15%
Caregiver Support - Training, Information and Education	617	hour	287	2.1	0	0%
Home Maintenance and Repair (Brokerage)	3,160	job	280	11.3	0	0%
Security Checks/Reassurance Service	6,663	contact	276	24.1	15	5%
Homemaking/Personal Supp/Attendant/Respite-FirstNat Outreach	12,976	hour	258	50.3	0	0%
Adult Day Service (Alzheimers/Other Aging Dementia)	5,701	full day	222	25.7	16	7%
Independence Training - ABI Outreach	5,521	hour	173	31.9	59	34%
Nursing	6,656	visit	119	55.9	0	0%
Adult Day Service (Frail Elderly)	1,495	full day	99	15.1	10	10%
Supportive Living Service - Physically Disabled Adults	34,493	24hr of service	92	374.9	76	83%
Occupational Therapy	344	visit	84	4.1	0	0%
Homemaking/Personal Supp/Attendant/Respite-Phys Dis Outreach	49,514	hour	82	603.8	74	90%
Homemaking/Personal Supp/Attendant/Respite - CCAC Outreach	10,400	hour	78	133.3	0	0%
Caregiver Support (Volunteer)	3,654	hour	78	46.8	0	0%
Caregiver Support (Paid Staff)	17,923	hour	72	248.9	53	74%
Emergency Response Systems	76	client	72	1.1	0	0%
Physician Palliative Care Education	36	compl. course	36	1.0	0	0%
Adult Day Service-Integrated-Frail/Alzheimers/Other Dementia	1,225	full day	35	35.0	0	0%
Social Work	137	visit	21	6.5	0	0%
Psychological Services - ABI	174	hour	20	8.7	0	0%
Physiotherapy	154	visit	19	8.1	0	0%
Supportive Living Service - ABI Outreach	9,438	hour	9	1,048.7	11	122%
Supportive Living Service - ABI in SHU	1,987	24hr of service	7	283.9	37	529%
Speech - Language Pathology Services	0	visit	0		0	
Grand Total	487,596		20,675	23.6	776	4%

[83] Ontario MOHLTC LHIN IM Support Group, FIM Data.

Since some clients receive multiple services, the total of 20,675 clients is not the number of distinct individuals who received CSS services from North West LHIN agencies.[84]

The following Exhibit shows the volume of community support service expenditures by community for the North West LHIN communities with the greatest expenditures. 64% of total North West LHIN community support service expenditures were spent by agencies located in Thunder Bay.

Exhibit 3.50 ***North West LHIN Communities with Largest Number of CSS Clients Served in 2004/05[85]***

Community Served	# of Clients Served	Expenditures	Expenditures per Client
Thunder Bay	7,873	$ 9,286,592	$ 1,180
Kenora	6,700	$ 1,721,389	$ 257
Fort Frances	2,607	$ 730,400	$ 280
Sioux Lookout	851	$ 452,418	$ 532
Dryden	729	$ 635,875	$ 872
Terrace Bay	300	$ 70,808	$ 236
Longlac	270	$ 36,975	$ 137
Slate Falls	144	$ 21,372	$ 148
Vermillion Bay	139	$ 25,349	$ 182
All Others	1,062	$ 1,627,586	$ 1,533
Grand Total	20,675	$ 14,608,764	$ 707

3.4.11 Respite

National Respite Report

In August 2002, the Canadian Association for Community Care completed the project *Community Care for Seniors: Helping Family Caregivers of Seniors Overcome Barriers to Respite* as a follow-up to their 1998 report on the National Respite Care Project.[86] Recommendations from the earlier project included:

- Caregivers, not care receivers, should be the target for respite care programming
- Respite is not a service but an outcome, resulting from time off from caregiving responsibilities

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[84] There is no unique patient service index maintained for CSS service clients.

[85] Ontario MOHLTC LHIN IM Support Group, FIM data.

[86] "Give Me a Break! – Helping Family Caregivers of Seniors Overcome Barriers to Care", Canadian Association for Community Care, August 2002.

- Respite care plans should be based on what people actually need rather than a preconceived set of services
- Services should be flexible, utilize a variety of settings, occur in different time slots, and integrate facility-based long-term care, community, and volunteer services.

Respite services in the Northwest

Several studies on respite services in the Northwest have been completed. Due to the increased burden on family and informal caregivers resulting from more complex and longer-term care needs of the aging population, and in order to prevent unnecessary institutionalization and caregiver stress and illness, the Northwestern Ontario District Health Council (2001) recommended continued funding to expand the range and amount of respite services and support available to caregivers.[87]

During "Understanding Clients Who Are Difficult to Serve", a one-day planning session[88], participants reported a need for enhanced respite services to provide the necessary relief for highly stressed caregivers. Session attendees also suggested that family caregivers are the experts and an array of community support services should be available to help these informal caregivers to manage care of difficult to serve clients in the community.

3.4.12 Substance Abuse and Problem Gambling Programs

3.4.12.1 Client Characteristics

Statistical data was provided by DATIS[89] that allows comparisons of substance abuse and problem gambling

[87] Northwestern Ontario District Health Council (2001). "Annual Long-Term Care Service Plan for Northwestern Ontario" (available at www.dhcarchives.com).

[88] Northwestern Ontario District Health Council (2004). "Understanding Clients Who Are Difficult to Serve" (available at www.dhcarchives.com).

[89] DATIS, a program of the Centre for Addiction and Mental Health, is funded directly by the MOHLTC, Mental Health and Addictions Branch to collect and report client descriptor and service utilization data for substance abuse and problem gambling treatment. Data does not include all addiction service providers funded by MOHLTC nor does it include addiction services provided by other federally or provincially funded health care providers, private practitioners or for-profit providers. Some addiction services do not report data to DATIS and data entry procedures vary from one provider to another resulting in inaccurate or incomplete data entry.

program clients in the North West LHIN with all Ontario clients. The following Exhibit shows that a lower percent of clients are female in the Northwest than the average in the province. While the Northwest contains only 2% of the population of Ontario, Northwest residents comprised 10% of the total Ontario substance abuse and problem gambling clients.

Exhibit 3.51 Gender, Age, and Client Type for Substance Abuse and Problem Gambling Program Clients - 2005/06 Ontario and North West LHIN Providers[90]

Gender	All Ontario		NW LHIN	
	#	%	#	%
Male	57,473	69.1%	6,164	74.0%
Female	25,718	30.9%	2,167	26.0%
Total	83,191	100.0%	8,331	100.0%
Age Group	All Ontario		NW LHIN	
	#	%	#	%
<16	2,843	3.4%	283	3.4%
16-24	14,464	17.4%	893	10.7%
25-34	17,924	21.6%	1,146	13.8%
35-54	39,643	47.7%	3,911	47.0%
55-64	6,255	7.5%	1,501	18.0%
65+	2,062	2.5%	597	7.2%
Total	83,191	100.0%	8,331	100.0%
Client Type	All Ontario		NW LHIN	
	#	%	#	%
Client - Alcohol/Drug	73,024	87.8%	7,875	94.5%
Client - Alcohol/Drug/Gambling (ADG)	2,667	3.2%	238	2.9%
Client - Gambling	2,411	2.9%	51	0.6%
Family Member of Alcohol/Drug Client	3,738	4.5%	84	1.0%
Family Member of Alcohol/Drug/Gambling Client	127	0.2%	<5	0.1%
Family Member of Gambling Client	798	1.0%	8	0.1%
Not Specified	398	0.5%	69	0.8%
Non-MH and A - Family Member	28	0.0%	<5	0.0%
Total	83,191	100.0%	8,331	100.0%

The client population in the North West LHIN is older, with only 28% under the age of 35 (compared to 42% for Ontario), and 25% over the age of 55 (compared to only 10% for Ontario). Almost 95% of clients are alcohol/drug clients. While 7.2% of all Ontario clients are gambling clients (or their families), this is the case for only 3.6% of Northwest clients.

The presenting problem substance for Northwest clients is most likely to be alcohol (88.4%), followed by cannabis (21.1%), and cocaine (8.3%).

[90] From package of statistical reports prepared for NW LHIN by DATIS.

Exhibit 3.52 Presenting Problem Substances for Substance Abuse and Problem Gambling Program Clients - 2005/06 Ontario and North West LHIN Providers[91]

Substances Used in Last 12 Months	All Ontario		NW LHIN	
	#	%	#	%
Alcohol	62,370	75.0%	7,589	91.1%
Tobacco	36,616	44.0%	2,409	28.9%
Cannabis	31,505	37.9%	2,105	25.3%
Cocaine	23,188	27.9%	955	11.5%
Prescription opioids	13,168	15.8%	905	10.9%
Glue & other inhalants	1,093	1.3%	527	6.3%
Benzodiazepines	7,890	9.5%	394	4.7%
Crack	17,112	20.6%	382	4.6%
Hallucinogens	4,838	5.8%	360	4.3%
Over-the-counter codeine preparations	3,946	4.7%	353	4.2%
Amphet. & other stimulants	4,912	5.9%	258	3.1%
Ecstasy	5,880	7.1%	233	2.8%
Other psychoactive drugs	3,731	4.5%	164	2.0%
None	3,659	4.4%	156	1.9%
Unknown	2,813	3.4%	150	1.8%
Heroin/Opium	2,902	3.5%	87	1.0%
Barbiturates	1,169	1.4%	66	0.8%
Steroids	200	0.2%	15	0.2%
Undifferentiated	276	0.3%	7	0.1%

3.4.12.2 Treatment Services

A "service" refers to a broad category of specialized addiction treatment or support that constitutes part of the continuum of care. A treatment service is comprised of programs consisting of specific activities or clinical modalities (e.g. relapse prevention, psychotherapy, family therapy, pharmacotherapy, motivational interviewing, social skills training, and crisis management).

The following Exhibit shows the service category for new North West LHIN clients in 2005/06. Almost 60% of new clients received residential withdrawal management services. This service is defined as “assistance with voluntary withdrawal from alcohol and/or other drugs to clients who are under the influence of these substances and/or in withdrawal or otherwise in crisis directly related to these substances. This care is provided in a Withdrawal Management (detox) Centre, or on an inpatient basis in a hospital.”

[91] From package of statistical reports prepared for NW LHIN by DATIS.

Exhibit 3.53 Service Category for New North West LHIN Substance Abuse and Problem Gambling Program Clients - 2005/06 [92]

Provincial Service Category	Total New Registrations	
	#	% of Total
Residential Withdrawal Management	5,968	59.2%
Initial Assessment Treatment	1,484	14.7%
Community Treatment	1,164	11.5%
Case Management	1,113	11.0%
Residential Treatment Services	205	2.0%
Residential Support Treatment	128	1.3%
Community Day/Evening Treatment	26	0.3%
Community Medical/Psychiatric	-	0.0%
Community Withdrawal Management	-	0.0%
Residential Medical/Psychiatric	-	0.0%
All	10,088	100.0%

3.4.13 Mental Health Services

The report of the North West LHIN Steering Committee[93] identified mental health and addictions (including problem gambling) as a major priority for Ontario and the Northwest indicating that this is pervasive and impacts all priorities. The Committee also noted that many individuals with a medical condition have co-occurring mental illness and/or serious substance abuse issues. The North West LHIN is particularly challenged to serve this population due to difficulties with recruitment and retention of health care professionals, vast geography, and limited accessibility to mental health and addiction services, especially in the northern part of the region.

In recent years, the Kenora/Rainy River Mental Health and Addictions Network and the Thunder Bay District Mental Health and Addictions Network have established formal linkages through joint membership to facilitate region-wide planning that supports an integrated service/system model. Integrated planning has enhanced the effectiveness in service delivery and supported efficient utilization of existing and newly acquired (Health Accord, Service Enhancement, ACTT,

[92] From package of statistical reports prepared for the North West LHIN by DATIS.

[93] Prior to the creation of the North West LHIN, this group of people was chosen to represent priority areas identified in an open forum session held on December 10, 2004.

Early Psychosis funding) regional resources. Collectively, the members of these planning tables represent all Northwest programs currently funded by the Mental Health and Addictions Branch of the MOHLTC.

There are numerous examples of service integration initiatives across the Northwest, which have been designed to improve access to services for individuals and family members and support a coordinated care across the mental health and addictions continuum and across service sectors (e.g. outpatient mental health and addictions, chronic and severe concurrent disorders, substance abuse and withdrawal management). Although numerous local and organizational integration strategies are in place, there is a general consensus that broader, enhanced coordination and integration is still needed in the Northwest.

3.4.13.1 Coordination and Integration of Mental Health Services

The recent operational review of Mental Health Services at Thunder Bay Regional Health Sciences Centre[94] emphasized the importance of coordination of Schedule 1 services (i.e. TBRHSC and Lake of the Woods District Hospital) with long-term mental health care providers:

"In restructured mental health systems operating according to contemporary practices, the Schedule I facility is the lynch pin of the community-based system. Its critical role is to offer urgent and emergent back-up assessment and consultation and episodic acute care for individuals with both serious and persistent psychiatric problems and those with acute mental health problems when their needs outstrip community resources.

In order to perform its role effectively, the Schedule I facility must be part of an integrated system of care, with its inpatient unit and psychiatric emergency services viewed by all of the players as its most essential interlocking components, upon which all of the other pieces of the system depend highly."

3.4.13.2 Community Mental Health Services

Data are not currently available.

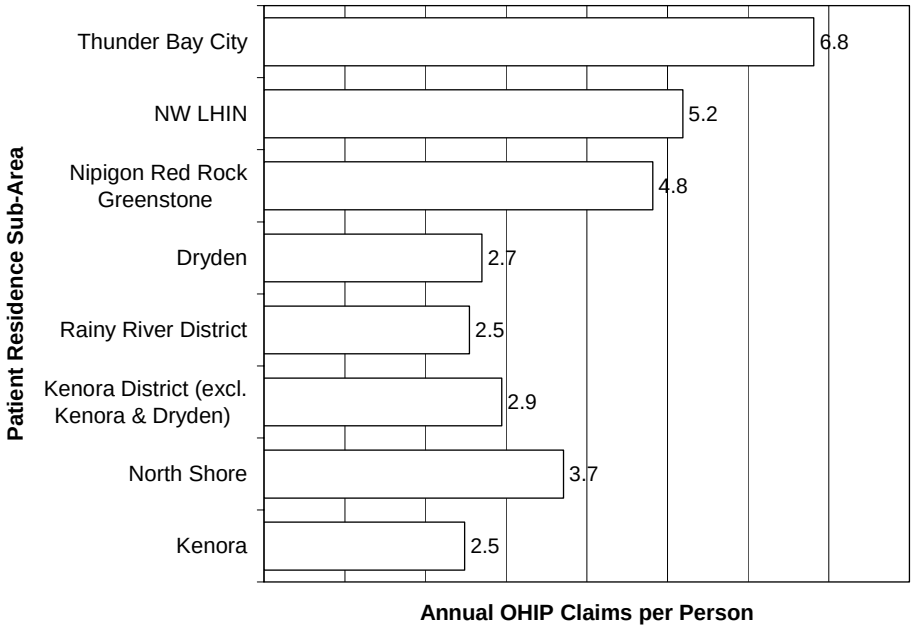
[94] Thunder Bay Regional Health Sciences Centre Operational Review of Mental Health Services Final Report April 2006.

3.4.14 Specialty Medical Care

The following Exhibit presents the age/gender standardized rates of use of specialist physician services for residents of the North West LHIN by sub-area. Telemedicine services are not included in the OHIP physician service data.

The highest rate of use of specialist physician services is by residents of City of Thunder Bay, more than double the rates for residents of Kenora, Kenora District, Rainy River District, and Dryden.

Exhibit 3.54 Age/Gender Standardized Specialist Physician Services per Population by North West LHIN Sub-Area[95]



The following Exhibit shows that only Kenora and Thunder Bay City residents receive most of their specialist physician services from physicians located in the sub-area in which they live. 86.7% of specialist physician services used by City of Thunder Bay residents are provided by physicians located in the City of Thunder Bay. While the OHIP fee for service data suggests that 78.7% of the specialist services used by Kenora residents are provided by physicians located in Kenora, the

[95] OHIP Data Summary, Provided by MOHLTC HSIP, May 18, 2006, LHIN sub-area population estimates from MOHLTC HSIP.

data does not include services provided by specialists located outside Ontario (in Winnipeg).

Exhibit 3.55 Percent of 2004/05 Specialist Physician Services for Residents of North West LHIN Sub-Areas Provided by Physician Location[96]

Provider Location	Patient Residence							
	Dryden	Kenora	Kenora District (excl. Kenora & Dryden)	Rainy River District	North Shore	Nipigon Red Rock Greenstone	Thunder Bay City	All NW LHIN
Dryden	***33.6%***	0.3%	6.9%	0.3%	0.2%	0.3%	0.2%	1.5%
Kenora	4.7%	***78.7%***	15.5%	1.2%	0.2%	0.0%	0.0%	3.6%
Kenora District (excl. Kenora & Dryden)	15.2%	4.4%	14.6%	0.3%	0.1%	0.1%	0.1%	1.5%
Rainy River District	0.3%	1.6%	3.3%	***44.1%***	0.0%	0.0%	0.0%	2.5%
North Shore	0.0%	0.0%	0.0%	0.0%	13.3%	0.1%	0.1%	0.4%
Nipigon Red Rock Greenstone	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	0.0%	0.4%
Thunder Bay City	27.8%	8.3%	***38.9%***	33.9%	***50.1%***	***73.7%***	***86.7%***	75.5%
North West LHIN Sub Total	81.5%	93.3%	79.2%	79.9%	63.9%	82.5%	87.1%	***85.5%***
Physician from Other LHIN	17.5%	6.0%	19.1%	19.0%	27.7%	14.5%	12.5%	13.7%
North East LHIN	0.9%	0.7%	1.7%	1.1%	8.3%	3.1%	0.4%	0.8%
All Providers	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

While only 13.7% of North West LHIN specialist physician services are provided by specialists located outside the Northwest, residents of the North Shore receive 36.0% of their specialist care from specialists outside the Northwest.

3.5 Health Human Resources (HHR)

Report of the Special Advisor for Northwestern Ontario indicated need to establish Northwestern Ontario-wide approach to HHR planning

The *Integrated Service Plan for Northwestern Ontario: Project Report Submitted to the Special Advisor to the Minister of Health and Long-Term Care for Ontario*, "The Closson Report" (2005), noted that there is a severe shortage of HHR in the area and attracting staff continues to be extremely difficult. Shortages have resulted in local communities and hospitals competing for physicians, nurses, and allied health professionals. The report indicated a need for a unified

[96] OHIP Data Summary, Provided by MOHLTC HSIP, May 18, 2006.

approach to staff recruitment. Comprehensive planning for HHR and collective implementation of new HHR plans within the region were noted as essential to serving the health needs of the population. Physician funding and the need to establish alternate payment plans as a mechanism to recruit and retain sufficient medical specialists and sub specialists were identified.

ICES Report on Physician Services in the North

The Institute for Clinical Evaluative Sciences (ICES) released an investigative report, *Physician Services in Rural and Northern Ontario,* in January 2006. It indicated that although there have been a wide range of physician workforce initiatives for remote and rural areas, these have focused more on recruitment than retention, and this may be contributing to high turnover rates. It advised that HHR planning must include retention strategies. Further, the need for systemic solutions to address issues in rural areas, such as policy aimed at increasing the number of available International Medical Graduates and training specialists to work in rural areas, was noted.

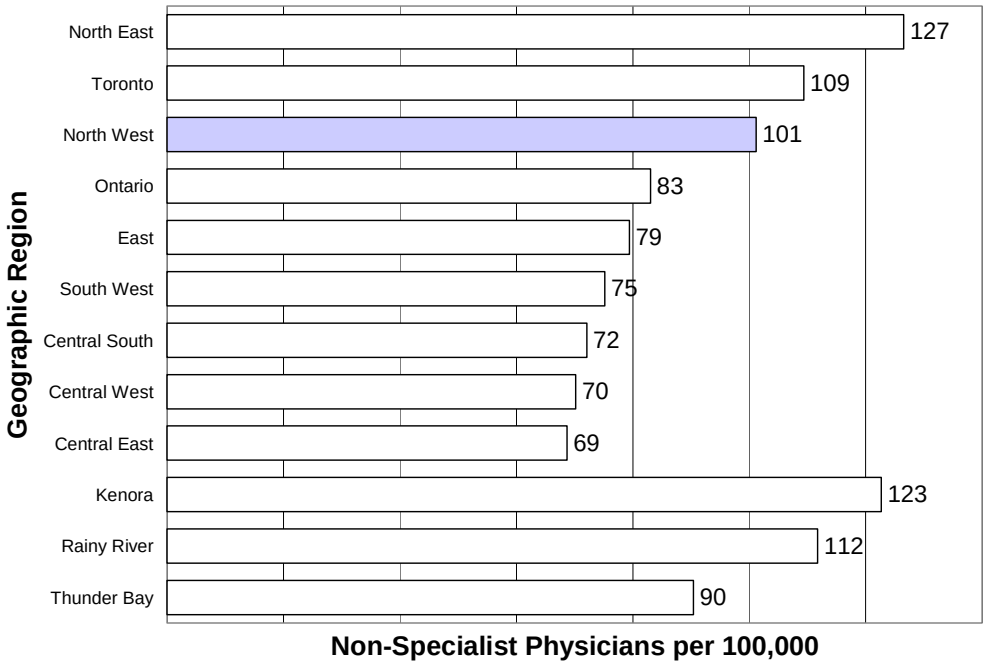
3.5.1 Supply of Physicians in the North West LHIN

Family Physicians

The northern regions of Canada have traditionally been considered under serviced in terms of family physicians. Recent data has suggested that physician supply in the North is actually better than in the rest of the province. Analysis of the best available data was completed to better understand the supply of family doctors in the North West LHIN.

The number of available physicians per population provides a comparison of the supply of services between areas. The following Exhibit shows the population-based rates of general practitioners in the LHINs and Northwest districts in Ontario in 2004.

Exhibit 3.56 Non-Specialist Physicians per 100,000 Population by North West LHIN District and MOHLTC Planning Area, 2004[97]



The North West LHIN had 101 general practitioners (GPs) per 100,000 population in 2004 (crude rate only), making it the fourth best resourced LHIN at that time. This rate is well above the provincial average of 83 GPs per 100,000 population. Comparison of the supply of family physicians to the average in Ontario should be done with caution, since the average is not an indicator of the appropriateness of current numbers of family physicians in the province. This is especially relevant given that a provincial shortage of family physicians has been identified.

There are trends in the family physician workforce in Ontario with respect to gender and age of physicians. Females now make up 33% of the family physician workforce. This represents a challenge in that, historically, women physicians tend to work fewer hours. If women make up a significant percentage of medical human resources in the Northwest, then a greater total number of physicians will be required if the supply of physician hours is to be maintained or increased.

[97] Physicians in Ontario 2004, Ontario Physician Human Resource Data Centre.

The proportion of non-specialist physicians aged 35 and below is falling, and the proportion of physicians aged 55 to 64 is increasing. As the physician workforce ages and retires, the HHR supply challenge will become more acute.

Specialists

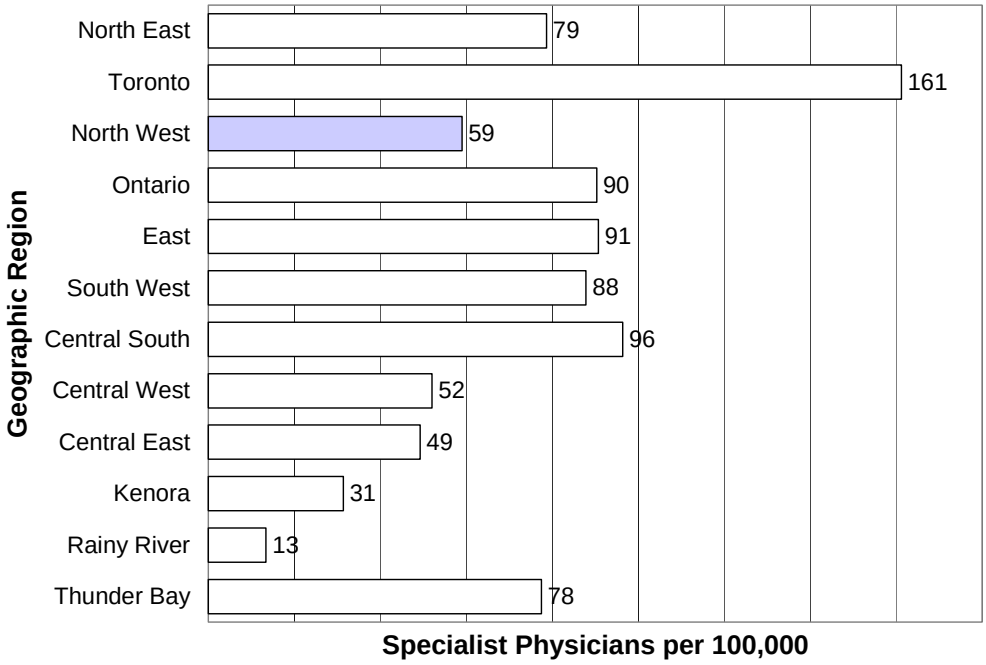
Fifty two percent of all physicians in Ontario were specialists in 2001/2002.[98] This is higher than in the North West LHIN, where in 2004 only 36.8% were specialists. A shortage of specialist physicians has been identified as a priority HHR issue for the northern and rural communities.

The North West LHIN has the lowest number of specialists of all Ontario LHINs

In both 2003 and 2004, the North West LHIN had the lowest number of specialists of all Ontario LHINs, with only 1.3% of all Ontario specialists. The North West LHIN gain of 1 specialist in 2004 was the third lowest of all LHINs. The vast majority of specialists are located in the City of Thunder Bay, where regional hospital services are sited.

The following Exhibit shows the number of specialists (crude rate) per 100,000 population for all LHINs in Ontario in 2002.

Exhibit 3.57 Specialist Physicians per 100,000 Population by Region[99]



[98] ICES – Physician Workforce Database.

[99] Ontario Physician Human Resource Data Base, "Physicians in Ontario 2004".

The North West LHIN's rate of 59 specialists per 100,000 population was lower than the provincial average of 90.

3.5.2 Supply of Nurses in the North West LHIN

3.5.2.1 Registered Nurses

The following Exhibit provides a summary of work status, sector of employment and age of Registered Nurses (RNs) employed in the Northwestern Ontario region and the province as a whole in 2005.

Exhibit 3.58 Supply, Working Status, Sector and Age of RNs, RPNs, and RN(EC) in the Northwest and Ontario in 2005[100]

Working Status, Sector, and Age	Northwestern				Ontario			
	RN General Class	RPN	RN (EC)	Total	RN General Class	RPN	RN (EC)	Total
Employed in Nursing in Ontario	2,367	956	44	3,367	89,054	24,482	594	114,130
Working Status								
Full Time	57.0%	55.4%	68.2%	56.7%	59.9%	55.0%	75.6%	58.9%
Part Time	34.4%	32.5%	20.5%	33.7%	31.2%	35.7%	21.9%	32.1%
Casual	8.6%	12.1%	11.3%	9.6%	8.9%	9.3%	2.5%	8.9%
Sector								
Hospital	64.6%	47.1%	11.4%	58.7%	63.5%	45.9%	20.5%	59.5%
Long-Term Care	18.7%	8.9%	2.1%	15.7%	8.9%	33.3%	3.2%	14.1%
Community	7.1%	37.1%	56.8%	16.4%	17.8%	12.7%	61.6%	16.9%
Other	6.8%	90.0%	25.0%	5.3%	6.8%	2.3%	8.9%	5.8%
Not Specified	3.1%	6.0%	4.7%	3.9%	3.0%	5.8%	5.7%	3.7%
Age								
<45	46.9%	46.7%	43.2%	46.8%	46.5%	44.3%	48.5%	46.1%
>=45	53.1%	53.3%	56.8%	53.2%	53.5%	55.7%	51.5%	53.9%

Although the majority of RNs work in hospitals, the Northwest had a higher percentage of RNs working in long-term care sectors than average, and fewer working in the community than average in Ontario.

The age distribution of the RNs working in the Northwest is almost evenly split between older than 45 and younger than 45. The highest volume age cohort for RNs in all work environments is for those aged 50 to 54 years.

[100] Data provided by RNAO for calendar year 2005.

Approximately 93% of RNs employed in the Northwest are female, and this proportion has held fairly constant since 1996.

3.5.2.2 Registered Practical Nurses

The following Exhibit shows the number of Registered Practical Nurses (RPNs) employed in the various regions of Ontario in 2004 and 2005.

Exhibit 3.59 Registered Practical Nurses by Ontario Region, 2004 and 2005[101]

Region	2004	2005	% Change
Central	2,980	3,057	2.6
Central Eastern	3,563	3,547	-0.4
Central Western	4,756	4,801	0.9
Eastern	2,515	2,549	1.4
Northeastern	2,122	2,078	-2.1
Northwestern	**1,018**	**956**	**-6.1**
Southwestern	3,724	3,618	-2.8
Toronto	3,559	3,613	1.5
Not Specified	191	263	37.7
Total	24,428	24,482	0.2

The previous Exhibit shows the supply of RPNs employed in the various practice sectors in the Northwest in 2005. The majority (47%) of RPNs work in hospitals, only about 9% work in long-term care and 37% work in community settings. Although the percentage of RPNs working in hospital is consistent with the provincial average, in the Northwest substantially more RPNs are employed in the community, and significantly fewer are employed in LTC homes than the average in Ontario. This variation may reflect the supply of services in the region, as well as the preferences of the populations living in the region.

3.5.2.3 Extended Practice Registered Nurses[102] and Primary Health Care Nurse Practitioners.

Of the 594 Extended Class RN(EC)s employed in Ontario in 2005, 44 of them, or approximately 7%, worked in the North West LHIN.

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[101] Data provided by RNAO for calendar year 2005.

[102] This includes Nurse Practitioners and other Advanced Practice Nursing Professionals.

Exhibit 3.60 Extended Practice Registered Nurses by Ontario Region, 2004 and 2005[103]

Region	2004	2005	% Change
Central	31	40	29.0
Central Eastern	53	63	18.9
Central Western	104	114	9.6
Eastern	72	72	0.0
Northeastern	69	80	15.9
Northwestern	**39**	**44**	**12.8**
Southwestern	72	79	9.7
Toronto	85	93	9.4
Not Specified	5	9	80.0
Total	530	594	12.1

There was an increase of almost 13% from the previous year in the Northwest. Of Ontario's 452 NPs, 23, or 5%, are employed in Northwestern Ontario.

The previous Exhibit demonstrates that the majority (69%) of RN(EC)s in the Northwest worked full-time, and that most (57%) work in community settings. The Northwest has more casual RN(EC)s, fewer employed in hospital and more employed in "other" settings than the average in Ontario. Most are employed in Thunder Bay, but a large percentage is also located in Sioux Lookout.

[103] Data provided by RNAO for calendar year 2005.

Exhibit 3.61 Health Care Professionals (2005) per 100,000 Population by LHIN[104]

LHIN	Count of Health Care Professionals by LHIN per 100,000 Population								
	Pharmacists	Occupational Therapists	Dietitians	Physiotherapists	Midwives	Registered Nurses	Registered Nurses - Extended	Registered Practical Nurses	Dentists
Central	77	48	16	55	1	427	1	96	68
Central East	63	21	11	43	2	531	3	167	26
Central West	50	15	11	31	0	348	1	85	85
Champlain	70	38	23	80	2	819	6	222	53
Erie St. Clair	68	21	13	37	1	659	7	215	51
Ham. Niag. Hald. Brant	69	43	19	63	3	764	5	229	63
Mississauga Halton	77	25	17	47	2	490	1	82	74
North Simcoe Muskoka	61	33	18	57	4	1,192	19	466	49
North East	66	30	20	46	3	523	4	198	52
North West	**69**	**36**	**25**	**52**	**5**	**967**	**18**	**391**	**48**
South East	65	34	22	58	1	910	2	331	43
South West	62	45	21	65	3	905	3	292	51
Toronto Central	122	67	42	106	4	1,294	3	181	155
Waterloo Wellington	60	32	20	57	5	567	11	197	54
Ontario Average	72	37	20	59	2	709	5	195	65
NW as % of Ont Avg.	96%	98%	128%	89%	189%	136%	403%	200%	74%

3.6 Health Care Provider Education

The review of HHR challenges for the North West LHIN highlights the need to ensure that there is a qualified pool of health care professionals available and willing to work in Northern Ontario. Providing opportunities for students to live, study, and practice in the North will support the establishment and maintenance of a strong health care workforce.

The providers of health care education physically located in the Northwest, and the range of programs they offer, are described briefly below.

3.6.1 Northern Ontario School of Medicine

Joint initiative of Lakehead and Laurentian Universities

The new Northern Ontario School of Medicine (NOSM) is a joint initiative of Laurentian University, Sudbury and Lakehead University, Thunder Bay. With main campuses in Thunder Bay and Sudbury, the school has multiple teaching and research sites distributed across Northern Ontario, including

[104] Data provided by MOHLTC LHIN IM Support Group.

large and small communities. NOSM is expected to contribute to improving the health of people in Northern Ontario.

Selection into the NOSM undergraduate program favours those who are likely to thrive in the challenging northern rural learning environments, including local applicants. The undergraduate or medical doctoral program involves students learning in small groups, much of the time in distributed community-based learning sites supported by broadband communication information technology.

Residency programs

Residency programs are offered throughout Northern Ontario by NOSM in collaboration with McMaster University and the University of Ottawa. Postgraduate education is available in family medicine and the major general specialties of general internal medicine, general surgery, orthopaedics, paediatrics, obstetrics and gynaecology, psychiatry and anaesthesia.

Continuing education

NOSM will assist with continuing education and professional development for physicians in Northern Ontario through a robust professional development calendar. Graduate studies programs offered by distance learning will allow rural physicians to undertake higher university studies and career progression without leaving their towns or practices. Some will choose an academic pathway and attain masters and PhD degrees through the medical school.

Research

NOSM recognizes research as a critical component of medical education. Research at NOSM is reflective of the school's mandate to be socially accountable to the diverse cultures of Northern Ontario. The key theme of NOSM research is tackling the questions of importance to improving the health of the people of Northern Ontario. Research areas include: biomedical, educational, clinical, public health, population health, epidemiological, psychological, and social sciences and health services research.

3.6.2 Other Educational Programs and Institutions

There are several other schools and programs focusing on educating health care professionals, including:

- Lakehead University School of Nursing
  - Lakehead University and Confederation College Bachelor of Science in Nursing Program
  - Bachelor of Science in Nursing (Post RN) Program
  - Diploma in Health Services and Policy Research
  - Lakehead University Native Nursing Entry Program

  - Ontario Primary Health Care Nurse Practitioner Program
  - Community Based BScN Program (in conjunction with Confederation College).
- Lakehead University School of Kinesiology
- Lakehead University Social Work Program
  - Honours Bachelor's degree (HBSW) programs
  - Master of Social Work (MSW) degree.
  - Lakehead University Master Of Public Health.
- Confederation College
  - Lakehead University and Confederation College Bachelor of Science in Nursing Program (4 years)
  - Community-based Bachelor of Science in Nursing (regional delivery)
  - Dental Assisting - Level I and II (1½ yrs)
  - Dental Hygiene (2 yrs)
  - Medical Radiation Technology (2½ yrs)
  - Paramedic (2 yrs)
  - Personal Support Worker (1 yr)
  - Practical Nursing (2½ yrs)
  - Pre-Health Sciences (1 yr).
- Telehealth Education – Ontario Telehealth Network
- Collège Boréal.

3.7 e-Health Readiness

Northern Ontario ICT Blueprint Vision

The vision for Information and Communications Technology (ICT) in Northern Ontario is:

> "Information and communication technology supports the processes of quality healthcare provision, access to health information and the most effective use of available resources across Northern Ontario, through collaboration and sharing of information amongst providers."

The *Northern Ontario ICT Plan* provides a foundation for the data, methods, and tools required by the organizations in the achievement of the overall vision. The ICT Plan articulates distinct directions for technology and links these back to provincial directions.

3.7.1 Northern Ontario ICT Blueprint

Highlights of the Northern Ontario ICT Blueprint findings and conclusions

Phase 1 of the Northern Ontario ICT project started in January 2004 under the leadership of the three Northern District Health Councils (i.e. Algoma Cochrane Manitoulin Sudbury, Northwestern Ontario, and Northern Shores). The process involved working with health service providers from several sectors in Northern Ontario to develop an integrated vision for information and communication technology. This project was the first of its kind in the province.

The sectors involved included hospitals, community health centres, community care access centres, regional in-patient mental health hospitals/programs, regional cancer centres, educational providers, and current regional ICT initiatives in the North (52 participating agencies).

The purpose of Phase 1 of the Northern Ontario ICT Project was three-fold:

- Conduct an inventory of the current state of ICT in Northern Ontario hospitals, CCACs, regional in-patient mental health programs, regional cancer centres, and current regional ICT initiatives
- Identify opportunities to partner and strengthen ICT linkages between northern health care providers and sectors
- Develop a common vision and strategic blueprint for action for ICT in Northern Ontario.

Highlights of the findings and conclusions of Phase 1 include:

- To date the development of the *Northern Ontario ICT Blueprint* has focused on the hospital sector (including acute care, mental health and continuing care), CCACs and Community Health Centres. Phase 2 involves further data gathering to formulate a full ICT strategy and implementation plan across acute care and community sectors
- An interim northern ICT coordination body has been established – ONe-Health – to sponsor a number of proposals to the MOHLTC's e-Health Office and Canada Health Infoway that are the direct result of the planning project
- The NWHN has developed and implemented a shared PACS and is in the process of implementing a regional EHR

- Thunder Bay Regional Health Sciences Centre and St. Joseph's Care Group currently share an information services department. Other parallel processes are occurring with the CCACs and with other regional organizations
- The hospital sector and CCACs are building their EHR capabilities, and the CCACs are upgrading to WebPMI
- The Addictions, Children's Treatment, Community Health Centre, Long-Term Care, Community Support Service and Mental Health sectors' ICT capacity will be determined in Phase 2
- TBRHSC and SJCG are implementing systems that are already building up to the EHR. A majority of the other hospitals in the Northwest are implementing the core applications of patient management consistent with the longer-term vision of an organizational EMR and the Northwest EHR
- CCACs, hospitals, LTCHs, CHCs, mental health agencies, and physician groups in the North have all identified the need to share patient information at times of transition of care among care providers – a health profile with demographic, drug, allergy, and clinical/discharge summary is needed
- CCACs and hospitals work very closely together and would like to share information electronically. CCACs use provincially mandated systems and cannot access other systems electronically. A new, web-enabled upgrade of the current software – WebPMI – is currently being developed for all CCACs to use
- Physicians value clinical viewing capability in their offices. Thunder Bay hospitals, for example, have made this feature available. The next step will be the total integration of the health record
- With the large geography and several referral centres, managing access to care is a serious issue. Automation of wait lists for those services that do not have a provincial database and availability of schedules on line, and remote scheduling are ideas being encouraged by service users.

As Phase 1 has been completed, the ONe-Health Steering Committee and two Northern Ontario LHINs have agreed to expand the ICT Blueprint to cover other sectors. Additional planning will benefit the larger health care system by expanding the number of agencies that can integrate into the common vision, thereby enhancing the usefulness of the Blueprint.

The following seven additional sectors will be the primary scope of Phase 2 (this represents over 200 agencies):

- Community mental health and addiction services (approx. 85 agencies)
- Long-term care facilities (approx. 65 facilities)
- Public health units (7)
- Independent health facilities providing laboratory and diagnostic imaging services (42)
- Children's treatment centres (5)
- Medical practitioners –
  - Primary care group practices (including minimally: the 28 approved Family Health Teams as of April 2006; and existing Family Health Groups, Family Health Networks and Rural and Northern Physician Group Agreements)
  - Fee-for-service GPs
  - Specialists.

Additionally, a secondary focus will look at:

- The ICT linkage between pharmacies, the Ontario Drug Benefit Program and the broader health system
- The ICT needs and integration requirements of community support service providers both within the CCAC service framework and broader health system
- Options, opportunities, and requirements to build patient self-management tools into the Regional ICT system.

3.7.2 Telemedicine

"Telemedicine" most commonly refers to the use of telecommunications technology like videoconferencing for medical diagnosis and patient care. Telemedicine technology can also be used for education and training. "Telehealth" is often used in Canada to refer to the use of technology to deliver all types of health care and health services (not just medical care) over distances. Generally, the term "telehealth" is used to refer to the process of using information and communication technologies (ICTs) to deliver health information, services, and expertise over short and long distances. Telehealth applications are important tools for enhancing health care delivery, particularly in rural and remote areas where health care resources and expertise are often scarce or non-existent. Examples of "telehealth" applications may include tele-consultation, tele-imaging, tele-

psychiatry, education/training in health disciplines, tele-learning, tele-mentoring, health information transfer for health care providers and health care information for patients.

The MOHLTC does not use the term "telehealth" in its broadest sense, but rather has adopted the term "telehealth" to specifically refer to its free, confidential phone service for the public to get health advice or general health information from a Registered Nurse (Telehealth Ontario). The Ministry recommends the use of the term "telemedicine", as opposed to "telehealth" for all possible variations of healthcare services using telecommunications.

Ontario Telemedicine Network

Ontario Telemedicine Network is Canada's busiest telemedicine program. Using live, two-way videoconferencing, participating clinicians apply the latest tele-diagnostic instruments - including digital stethoscopes, patient examination cameras, endoscopic equipment and digital imaging facilities - to examine and prescribe treatment so that a remote patient can "visit" an out-of-town specialist from their home community rather than having to travel. Telemedicine services prevent some transfers of patients and saves patients travel, stress, dollars and time off of work.

Keewaytinook Okimakanak Telehealth Network

Since May 2002 the Keewaytinook Okimakanak (KO) Telehealth Network has been helping to deliver telemedicine services to remote First Nations communities in Northwestern Ontario. The initial five participating communities have been expanded to include an additional 19 First Nations communities in the Sioux Lookout Health Zone[105] with additional locations being added.

The 24 First Nations communities served by the expansion project have a total of 15,957 community members, with an average community size of 665. Twenty-three communities are without year-round road access to the nearest service centre. Sixteen are located 320 to 480 kilometres by air from the nearest service centre.

KO Telehealth uses telemedicine workstations equipped with patient cameras, stethoscopes, and otoscopes. The telecommunications backbone used was the K-Net operated wireless ground and satellite network to provide health consultations, education/training sessions, and administrative meetings.

[105] Bearskin Lake, Big Trout Lake, Cat lake, Deer Lake, Eabametoong, Fort Severn, Kasabonika Lake, Keewaywin, Kingfisher, Lac Seul, Mishkeegogamang, Muskrat Dam, Neskantaga, Nibinamik, North Caribou, North Spirit Lake, Pikangikum, Poplar Hill, Sachigo, Sandy Lake, Slate Falls, Wapekeka, Webequie, and Wunnumin.

KO Telehealth was designed to be part of the community health system. Its main goals are to improve First Nations access to health professionals, enhance the level and quality of services and to reduce isolation for First Nations health workers.

4.0 LHIN Priorities for Change

The population of the North West LHIN has a higher burden of illness and is more vulnerable than the rest of the province

The analysis of the health status of the population; the utilization of health services; the number, capacity and capability of health service providers in the North West LHIN; and most importantly the community engagement and stakeholder consultation processes have demonstrated that there are significant and, in some cases urgent, priorities for improvement. In general, the population of the North West LHIN has a high burden of illness. Within the Northwest, there are several vulnerable population subgroups that would be expected to require high volumes of health care services. The Aboriginal population is especially vulnerable; it has a high burden of illness, is often located in especially remote communities, and faces linguistic and cultural barriers to accessing health services. The combination of these greater needs and the challenges imposed by the geography and population distribution of the Northwest will mean that the priorities for the North West LHIN likely will be different from those of the Southern LHINs.

We have identified several key priorities for change that will allow the system to more comprehensively and effectively respond to the health service needs of the population. It is recognized that financial and health human resources are integral to addressing the identified priority areas. It is important to note that these are all priorities for the LHIN; the order of presentation is not intended to suggest any relative importance among them.

These are:

- Access to Care
  - Primary Health Care
  - Chronic Disease Prevention and Management
  - Specialty Care
  - Mental Health and Addiction Services.
- Long-term Care Services
- Integration of Services Along the Continuum of Care
- Engagement with Aboriginal people

- Ensuring French Language Services
- Integration of E-Health
- Regional Health Human Resources Plan.

Each of these is discussed briefly in the sections following.

4.1 Access to Care

Most residents of the North West LHIN report some difficulties in accessing needed health services

Access to care is a major issue within the North West LHIN. Different communities, special needs populations[106] and geographies have different issues, but most residents of the North West LHIN report that they experience some difficulties in accessing needed health services. A major contributor to the difficulty in accessing services relates to the distance to the needed service and the deficiencies in transportation services. Analyses of health service utilization data confirm that there are significant issues of access to service. The priority areas for improving access are discussed briefly in the paragraphs following.

4.1.1 Access to Primary Health Care

Access to primary care was identified as a priority issue in all parts of the North West LHIN

Primary health care can be defined as a set of first level services that promote health, prevent disease, and provide diagnostic, maintenance, curative, rehabilitative, supportive and palliative services.[107]

Primary health care serves a dual function in the health care system:

- Direct provision of first-contact services (by providers such as family physicians, nurse practitioners, physician assistants, health educators, clinical dieticians, etc.)
- Coordination of services to ensure continuity and ease of movement across the system, so that care remains

[106] Barriers to access to health care services can include, but are not limited to: literacy level, language, culture, geography, social factors, education, economic circumstance, and mental and physical ability. Ministry of Health/Public Health Branch (1997). "Mandatory Programs and Services Guidelines".

[107] Lamarche, P., Beaulieu, M., Pineault, R., Contandriopoulos, A., Denis, J. & Haggerty, J. *Choices for Change: The Path for Restructuring Primary Healthcare Services in Canada.* Canadian Health Services Research Foundation. (November, 2005).

integrated when Canadians require more specialized services (with specialists or in hospital, for example).[108]

It is generally agreed that the scope of services offered by primary health care should include:[109,110]

- Health promotion
- Disease prevention
- Treatment of common diseases and injuries
- Primary mental health care
- Chronic disease management
- Healthy child development
- Primary maternity care
- Basic emergency services
- Referrals to and coordination with other levels of care
- Rehabilitation services
- Palliative and end-of-life care.

Challenges with access to family doctors were identified in both rural and urban locations

Difficulty in gaining access to primary care physician services was overwhelmingly identified as a priority issue in most areas of the North West LHIN[111]. Challenges with access to family doctors were identified in both rural and urban locations, all age groups and types of patients. An inadequate supply of family physicians was reported as the cause for these difficulties, especially in Geraldton and Thunder Bay. The need to travel to obtain primary care services was identified as an impediment to accessing needed health services for many living in smaller and more remote communities.

Residents of different communities have varying degrees of difficulty in gaining access to primary health care

Importantly, there appears to be significant variation in physician supply and use within the North West LHIN such that some areas may have more or less access to general practitioner services than others. Analysis of patterns of use of primary care physicians shows that residents of different communities have varying degrees of difficulty in gaining access to primary health care. See Exhibit 4.1.

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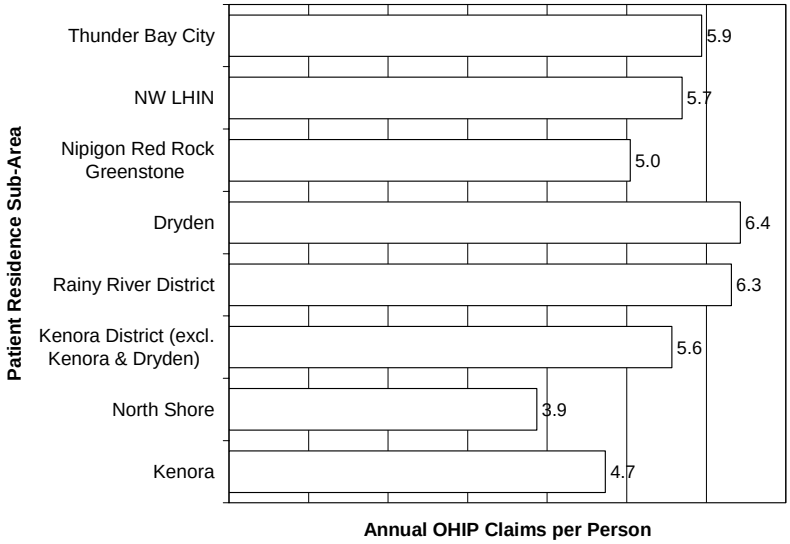
[108] Health Canada Website: About Primary Health Care at www.hc-sc.gc.ca/hcs-sss/prim/about-apropos/index_e.html

[109] Ibid.

[110] Fooks, C., *Implementing Primary Care Reform in Canada: Barriers and Facilitators*. Canadian Policy Research Networks, Inc., (January 2004).

[111] In some communities, participants in the community engagement process reported satisfaction with their access to family physicians.

Exhibit 4.1 ***Age/Gender Standardized Primary Care Physician Services per Population by North West LHIN Sub-Area[112]***



Reliance on locum physicians may not provide for continuity of care

Several communities identified that locum physicians provide primary care services in their community. Although considered to be a valued service, concerns were expressed regarding continuity of care.

There are insufficient nurse practitioners to make up for shortages of family practitioners

The use of nurse practitioners was reported to be an important source of primary health care, but it was reported that there are insufficient nurse practitioners to make up for shortages of family practitioners.

Many participants in the community engagement process indicated that people in their communities are on long waiting lists for entry into a family practitioner's practice, and even those with a family physician have problems with long waiting times to see their primary care provider.

Many people in the Northwest often access primary care through the emergency department of their local hospital

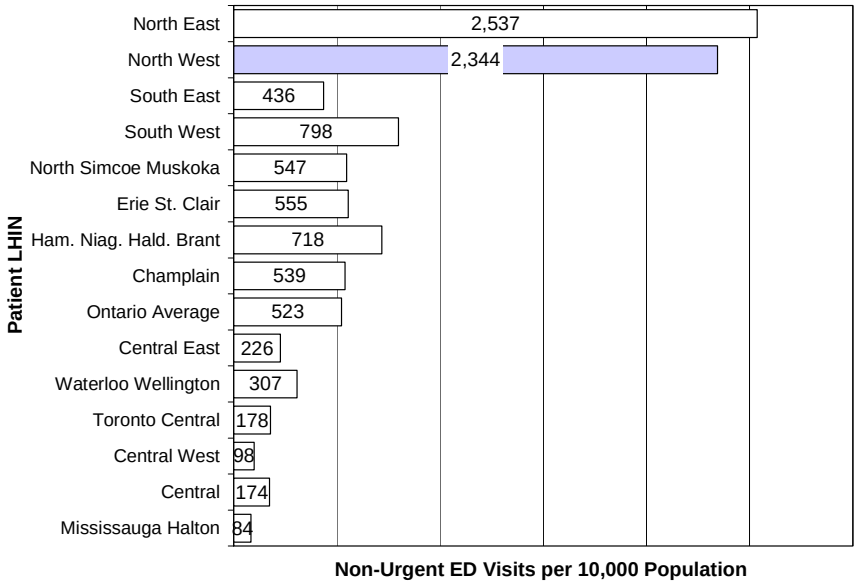
There is a perception that people in the Northwest often access primary care through the emergency department (ED) of their local hospital if they did not have a family physician or if they were unable to receive timely care from their doctor. This perception is corroborated by findings from our analysis of patterns of use of ED by the population of the North West LHIN.

There is greater use of the ED for non-urgent care in the North than elsewhere in Ontario. The Exhibit following shows

[112] OHIP Data Summary, Provided by MOHLTC HSIP, May 18, 2006.

a comparison of ED utilization by LHIN for non-urgent (CTAS Level 5) cases only. The non-urgent utilization rate for the northern LHINs are higher than the total (including all CTAS levels) ED utilization rates for some of the southern Ontario LHINs, and approximately three times the non-urgent utilization rate for the next highest LHIN.[113]

Exhibit 4.2 2004/05 Age/Gender Standardized Non-Urgent ED Visits per 10,000 Population by Patient LHIN[114]



The high rate of non-urgent ED visits in the Northwest suggests that there are opportunities to enhance availability and access to primary health care services and thereby reduce reliance on the ED for care.

There was overwhelming agreement among participants in the community engagement process that the problems resulting from inadequate access to family physicians include deficiencies in health promotion, disease prevention, continuity of care, chronic disease management and in many instances, access to basic medical care.

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[113] Some patients in NW LHIN hospitals are first stabilized in a nursing station before being transferred to an acute care hospital and this may impact the assignment of CTAS triage levels.

[114] CIHI NACRS Ontario data and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

The availability of primary health care providers in the Northwest is inadequate to the needs of the population

The findings of the community engagement processes are not reinforced by data analysis. Although the availability of family physicians in the North West LHIN is higher than the average for the province, this does not necessarily suggest that the perception of shortage is incorrect. There is strong evidence that the supply of family physicians for the province is inadequate to the needs of the population for primary health care. Delivery of health services in the North likely requires a larger supply of providers to adequately address the needs of a widely dispersed population with significant burden of illness.

- It is no longer possible for a single provider to meet the primary health care needs of a community. Providers cannot be expected to be available 24 hours a day, 7 days a week 52 weeks per year
- Many primary care physicians in the Northwest travel to remote communities and the time taken in travel reduces their availability for clinical activities
- Many primary care physicians provide hospital-based services (anaesthesia, surgical assist, etc.) which reduce the time available for primary health care services.

As a result, providing primary health care in smaller communities likely will require a higher ratio of providers to population than in larger communities.

Even if the availability of family physicians is higher than in other jurisdictions, there is significant evidence that primary health care in the North West LHIN is not effective:

- Use of EDs for non-urgent visits
- Admissions for primary care sensitive conditions
- High prevalence of chronic diseases.

The evidence suggests a need for improvements in primary health care services, especially for health education and disease management services. The difficulties in accessing primary care physicians and other primary health care providers are likely impediments to effective health education and chronic disease prevention and management in the North West LHIN.

Deficiencies in primary health care are exacerbating problems of access to specialist physicians

It has also been suggested that the shortages of family practitioners and the related deficiencies in primary health care are exacerbating problems of access to specialist physicians:

- Family practitioners may be referring to specialists more often than is necessary. With more time to spend with patients, they might be able to resolve problems without the need to refer patients to specialist and sub specialist physicians
- Family practitioners are unable to provide follow-up care after patients receive treatment by specialists. As a result, many specialists need to provide this follow-up care themselves, and this is reducing the amount of time that they have to receive new referrals.

Deficiencies in primary health care likely are having an impact on access to mental health and addiction services

Similarly, there were suggestions that deficiencies in primary health care are having an impact on access to mental health and addiction services. If there was a stronger primary health care system, people could receive primary mental health care (education, prevention and treatment) from their primary care providers. Then there would then likely be fewer people needing to access more specialized mental health and addiction services.

In addressing these issues, consideration should be given to integrated, multi-disciplinary models of primary health care that have been shown to be effective vehicles for delivering these services, especially for people with chronic diseases.

4.1.2 Chronic Disease Prevention and Management

North West LHIN residents report higher than average rates of chronic disease

North West LHIN residents report higher than average rates of chronic disease. This, combined with the large Aboriginal population in the Northwest, with their high incidence of diabetes, makes support for chronic disease prevention and management an important consideration for the North West LHIN as it develops its first IHSP.

Chronic conditions reported at higher rates than the provincial average include:

- Asthma
- Arthritis/rheumatism
- Diabetes
- Heart disease
- High blood pressure.

Majority of health care costs are for chronic diseases

The MOHLTC has developed a “Chronic Disease Prevention and Management Framework” intended to provide a common policy framework to guide efforts toward effective prevention and management of chronic disease. The economic burden of chronic disease is estimated to be 55% of total direct and

indirect health care costs. According to the 2003 Canadian Community Health Survey (CCHS), almost 80% of Ontarians over the age of 45 have a chronic condition, and about 70% of these people have 2 or more chronic conditions.

Chronic disease prevention and management should be a priority in and of itself and should also be a focus of LHIN initiatives related to primary health care and integration of services along the continuum of care.

4.1.3 Access to Specialty Care

The ability to access specialist physician care was identified as a concern in all communities, especially communities outside of the City of Thunder Bay. Supply issues, as well as issues of geographic distances were identified as barriers to access.

There are significant geographic barriers to accessing specialist care

Geographic barriers to accessing specialist physicians were routinely identified, no matter how near or distant the community was from the urban centres where specialists practice. With very few exceptions, patients are required to travel to Thunder Bay or Winnipeg and often elsewhere in Ontario to access specialist care.[115]

Poor coordination of access to specialists and related supporting services are impediments to timely access to care

Providers and the public also reported that poor coordination of access to specialists and related supporting services are impediments to timely access to care. Often people would need to travel several times to access diagnostic and treatment services. Delays or cancelled appointments were reported to cause considerable hardship for people who have to travel.

Telehealth, through the Ontario Telemedicine Network, was reported to relieve some of the issues of access to specialty care, however not all specialists use telehealth. Also, it was reported that bringing care closer to where people live through visiting clinics and specialists remove some of the barriers to accessing specialty care.

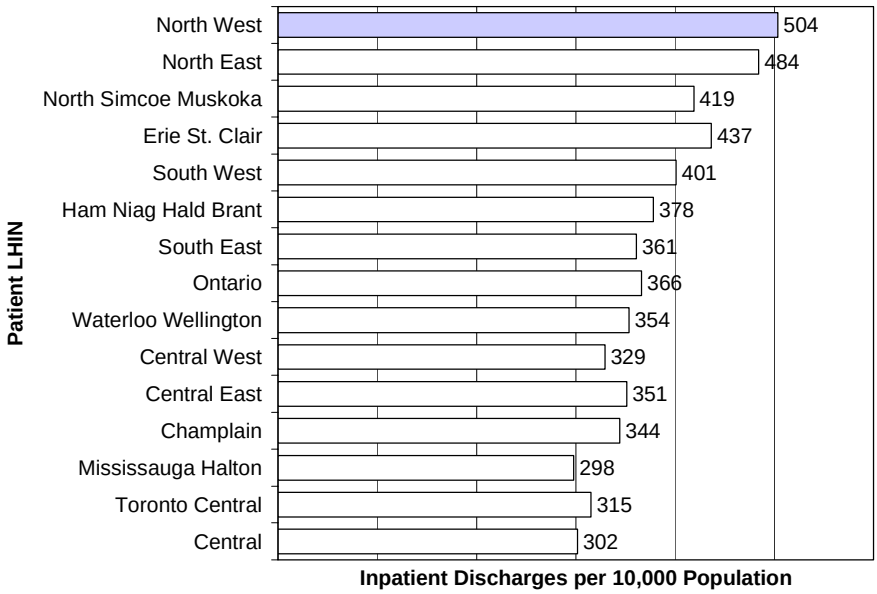
Specialty groups most commonly indicated to be in short supply included psychiatry, child and youth mental health programs, dermatology, and supports for dialysis and cardiac care.

[115] Participants reported that the regional joint replacement program (offered in Dryden, Fort Frances, and Kenora) was an improvement in accessing this important specialty service. Also, although there are mobile specialty services in the Northwest (the Eye Van and the Breast Screening Coach/Van), there may be additional needs that still need to be addressed.

Once patients are able to access a specialist physician, access to hospital treatment is as good as elsewhere in the province

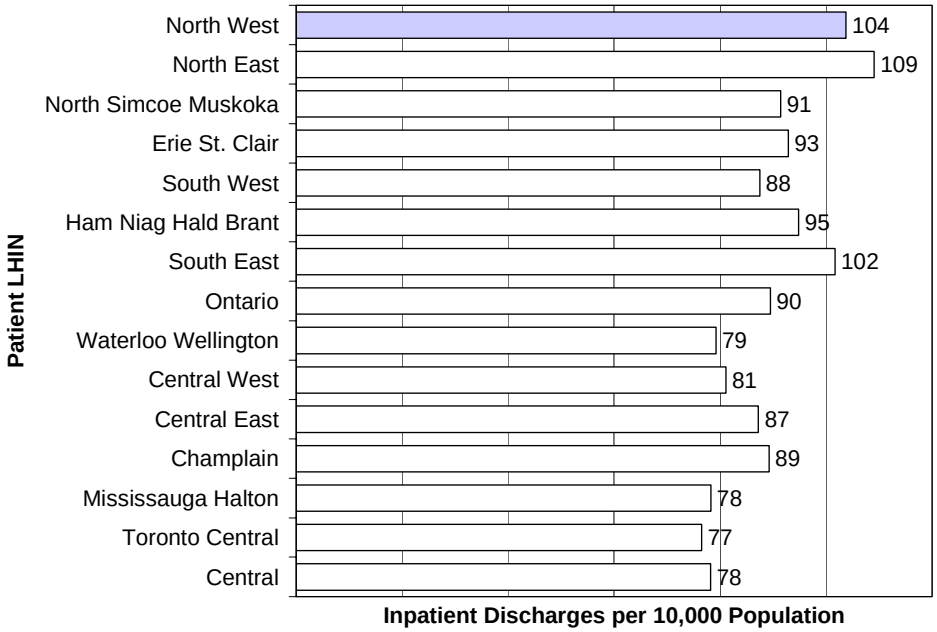
It appears, from the data regarding rates of hospitalization for secondary and tertiary hospital care, that once patients are able to access a specialist physician, access to inpatient and outpatient hospital treatment (as measured by utilization rates) is as good as, or better than, elsewhere in the province. However, many participants in the consultation process reported that access to tertiary care services at Thunder Bay Regional Health Sciences Centre was difficult for those from outside the City of Thunder Bay. A strong tertiary centre is an integral component of the health system.

Exhibit 4.3 ***2004/05 <u>Secondary</u> Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[116]***



[116] CIHI DAD Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

Exhibit 4.4 ***2004/05 Tertiary/Quaternary Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN[117]***



4.1.4 Access to Mental Health and Addiction Services

The report of the LHIN 14 Steering Committee[118] identified mental health and addictions (including problem gambling) as a major priority for Ontario and the Northwest indicating that this is pervasive and impacts all priorities. The Committee also noted that many individuals with a medical condition have co-occurring mental illness and/or serious substance abuse issues. The North West LHIN is particularly challenged to serve this population due to difficulties with recruitment and retention of health care professionals, vast geography, and limited accessibility to mental health and addiction services, especially in the northern part of the region.

There are difficulties in accessing the entire continuum of mental health and addiction services

There are reported difficulties in accessing specialized and inpatient mental health and addiction services, from crisis care to chronic community support in all communities within the North West LHIN. An insufficient supply and rationing of

[117] CIHI DAD Ontario data, 2004/05, CIHI/Hay Benchmarking Study WRHA data, and draft, unpublished population estimates by LHIN from the Ontario Ministry of Finance, spring 2006.

[118] Prior to the creation of the North West LHIN, this group of people was chosen to represent priority areas identified in an open forum session held on December 10, 2004.

services to meet the demand, and poor coordination of services were identified as factors contributing to inadequacies in the delivery of mental health and addiction services in the region.

4.1.4.1 Access to Mental Health Services

Crisis care mental health services are a particular challenge in many communities

Crisis care mental health services were identified as a particular challenge in many communities. Smaller and remote communities rely on telephone access to crisis services in Kenora and Thunder Bay (where there are Schedule 1 facilities) to support psychiatric care in the local ED. Although this support is available, communities report that they are having difficulty in gaining access to ongoing support from psychiatrists outside the Cities of Kenora and Thunder Bay. This support is limited to telehealth services. Participants reported that these services are insufficient, with long waiting times that do not support the needs of patients in crisis.

Most communities report problems accessing specialized mental health and addiction services

Most communities reported problems (e.g. geographical barriers) accessing specialized mental health services. Participants suggested those limitations and difficulties in accessing services makes 'treatable' conditions escalate into bigger and more costly, long-term medical and social problems. Providers felt strongly that access to adequate community services is required to decrease the "revolving door" of demand for crisis and acute care services.

Access issues were reported to be especially problematic with respect to psycho-geriatric services, transitional or supportive housing, walk-in mental health and addiction services, and lack of programs for those requiring more than 60 days of treatment and limited stabilization units/safe beds for mental health crisis.

4.1.4.2 Access to Addiction Services

People have a significant problem in accessing addiction services throughout the region

It is reported that people have a significant problem in accessing addiction services throughout the region. These patients often have to leave their home community to access specialized treatment. Outside of the larger communities, there are few local inpatient or specialized addiction treatment centres, detox options, withdrawal management programs (e.g. methadone maintenance) or transitional supports.

Persons living with an addiction were reported to have difficulty with medication management due to a shortage of family physicians in some communities in the Northwest.

4.1.4.3 Services for Children and Youth

Mental health and addictions services for children and youth were reported to be unmet needs in communities across Northwestern Ontario. Of particular concern is the transition between child and youth services and youth and adult services.

4.2 Long-Term Care Services

Long-term care can be provided in different settings depending on the desires, level of dependence and care requirements of each person and the availability of informal and formal systems of support

The Health Services Restructuring Commission stated that: "Long-term care is an integral component of the overall health system. Long-term care can be provided in different settings depending on the desires, level of dependence and care requirements of each person and the availability of compensating informal and formal systems of support. Long term care settings will include private residences, retirement homes, supportive housing and facilities (homes for the aged, nursing homes, chronic hospitals and units)."[119] [120]

Thus long-term care (LTC) should be considered to include the following settings and services:

- Complex Continuing Care Hospitals and Units
- Long-Term Care Homes
- Retirement Homes
- Supportive Housing
- Community Care Access Centres (CCACs): Chronic Home Care
- Community Support Services.

4.2.1 Residential Long-Term Care Services

Almost 70% of patient days spent in hospital waiting for an alternate level of care are waiting for some form of residential long-term care

People in the North West LHIN need to wait for residential long-term care services. 44% of alternative level of care (ALC) patient days in Northwestern Ontario hospitals are used by patients who are discharged to complex continuing care (chronic care). A further 23% are used by patients discharged to long-term care homes. Taken together, almost 70% of patient days spent waiting for an alternate level of care are waiting for some form of residential long-term care.

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[119] Health Services Restructuring Commission, "Transition and Change", Toronto, 1998.

[120] Chronic hospitals and units are now often referred to as Complex Continuing Care Hospitals and units.

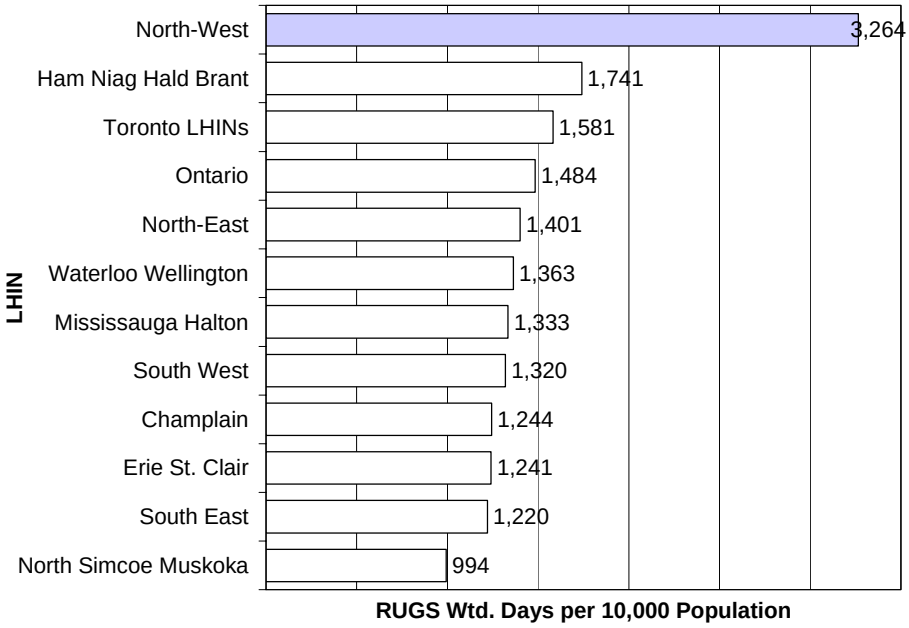
People in the community are also waiting for admission to long-term care homes. The community wait list ratio of people waiting for beds available in the North West LHIN is the second highest of all the LHINs in Ontario.

4.2.2 Complex Continuing Care Services

The North West LHIN utilization of complex continuing care is significantly higher than anywhere else in the province

Even though people need to wait for access to complex continuing care, the North West LHIN age-gender standardized utilization of complex continuing care is more than double the provincial average and 90% higher than the next highest LHIN rate. See Exhibit 4.5.

Exhibit 4.5 ***2004/05 Age-Gender Standardized RUGS[121]-Weighted Complex Continuing Care Days per 10,000 Population by LHIN[122]***



The very high rate of utilization of complex continuing care in the Northwest should be examined further to determine whether it reflects the use of complex continuing care beds for a different patient population than occupies these beds in other LHINs, whether the use of these beds is appropriate

[121] Resource Utilization Groups III (RUG-III) Grouping Methodology; the RUG-III methodology assigns facility-based continuing care residents to one of 44 resource utilization groups and assigns a weight to each group based on the relative amount of resources that a person in each group might be expected to use.

[122] Ontario Continuing Care Reporting System (CCRS) via the Provincial Health Planning Database (PHPDB).

and whether there are opportunities to reduce use of complex continuing care beds and increase the availability of other services, such as supportive housing, home care, and long-term care home beds.

4.2.3 Availability of Non-Residential Long-Term Care Services

Long-term care home beds are only one component of the long-term care continuum

Residential long-term care (in complex continuing care and long-term care homes) is only one component of the long-term care continuum. Retirement home beds, supportive housing places, and in-home services are all other ways that long-term care needs can be met. The low number of for-profit long-term care home beds (and high number of municipally operated beds) in the Northwest may reflect the challenges of profitably operating a long-term care home in small communities with low population density. This would suggest that there are relatively fewer of the for-profit retirement home beds that are more prevalent in the South, and contribute to relatively lower demand for LTC home beds in the South.

There is a need for an increased supply of alternatives to long-term care home beds

There is a lack of alternatives to residential care for those requiring long-term care services. Providers and the public reported a lack of supportive housing[123], respite care beds, and limited long-term home care services. As a result the use of long-term care home beds in the North West LHIN is higher than necessary. There was acknowledgement that in some communities, access to these alternative modalities of care could reduce the demand for long-term care home beds. Consideration should be given to promoting models that support seniors aging in place. This will require collaboration between various levels of government.

Residents are being placed in long-term care homes that are distant from their home communities

It was reported that the limited number of long-term care services and especially beds puts pressure on people who need placement to accept whatever bed becomes available, even when it is located outside of their community. This often results in situations of separation of an individual from family and friends, leading to a decline in health and a greater need for health care services.

[123] During community engagement, supportive housing was most frequently reported to be a need for seniors, individuals living with an acquired brain injury, and those living with a mental illness. It is recognized that there are other people within the North West who require supportive housing.

4.3 Integration of Services Along the Continuum of Care

There is a need to improve coordination along the continuum of care within the health care system in the North West LHIN

Cooperation, coordination, and communication among health service providers were deemed to be strengths in the North West LHIN. However, participants indicated that additional sharing of information and continued and enhanced coordination of patient care would help to improve patient access and reduce duplication of health care services.

Participants in the community engagement process overwhelmingly supported the need to improve coordination along the continuum of care within the health care system in the North West LHIN.

The continuum of care is most often described as including:

- Public Health
- Primary Health and Hospital Care
  - Health promotion
  - Disease prevention
  - Treatment of common diseases and injuries
  - Primary mental health care
  - Chronic disease management
  - Healthy child development
  - Primary maternity care
  - Basic emergency services
  - Referrals to and coordination with other levels of care.
- Secondary Health and Hospital Care
- Tertiary Health and Hospital Care
- Quaternary Care
- Post Acute Care
  - Rehabilitation
  - Transitional Care/Convalescence Care
  - Acute Home Care.
- Long-Term Care
  - Home Support
  - Chronic Home Care
  - Supportive Housing
  - Long-Term Care Homes
  - Complex Continuing Care
  - Respite Care.
- Palliative Care.

Many indicated that there is a need for an improved understanding of the roles and mandates of providers in different sectors. This understanding could lead to a mutual appreciation of the challenges and barriers faced by those providing care in various settings and lead to new ways of working together, supporting an improved "system approach" to the delivery of health care services in Northwestern Ontario.

There are opportunities to strengthen relationships in the Northwest

Opportunities identified to strengthen relationships in the North West LHIN included:

- Supporting a culture of partnership and working together among providers and the public across the North West LHIN
- Continuing and improving collaboration and communication between regional hospitals and the regional tertiary centre
- Improving the coordination and timely transfer and referral processes across sectors and organizations
- Developing patient navigator positions to coordinate services and ensure seamless transitioning through the continuum of care for high need populations such as those with chronic diseases, people from remote communities, people with language barriers, etc.
- Establishing an Electronic Health Record across all sectors to improve continuity and integration of care
- Exploring issues, crises, or gaps (e.g. ED closures, ALC) with a system lens.

Integration of services and service provision along the continuum of care will be important for people with chronic diseases

Improvement in the integration of services and service provision along the continuum of care will be especially important for the large number of people in the North West LHIN with chronic diseases. Because of the nature of their diseases, many of these people have ongoing, rather than episodic, interaction with multiple elements of the health system. Integration of services along the continuum will improve the quality of their care and minimize the disruptions in their quality of life and health that are often caused by discontinuities in the health system.

4.4 Engagement with Aboriginal People

Aboriginal populations have reduced life expectancy and poor health status compared to the general Canadian population

Canadian studies have consistently shown that Aboriginal populations have reduced life expectancy and poor health status compared to the general Canadian population.

Needed improvements in Aboriginal heath and health services in Aboriginal communities were identified in many of the community engagement sessions.

Access to services for residents of northern remote communities (especially those without all-season access roads) is an issue of significant concern. There are limited local services, and residents are challenged by the distances that they need to travel to access services.

There are significant geographic, language and cultural barriers to accessing services

In addition, there are often significant language and cultural barriers to accessing services. The lack of culturally sensitive, linguistically accessible services in the LHIN poses significant challenges to both the patients and the providers of care. Participants identified the need for services that were available in Ojibway, Cree, Oji-Cree and their related dialects (or with appropriate translation services) that include options for traditional healing and medicines. These language and cultural barriers are especially problematic with respect to tertiary services provided in Thunder Bay and Southern Ontario.

Health promotion and illness prevention programs (including screening) were identified as needed in Aboriginal communities, particularly in the northern remote communities.

In addressing the health service needs of Aboriginal peoples in the Northwest, the LHIN will need to better understand non-MOHLTC services being provided to Aboriginal people on and off reservation. The North West LHIN will need to review work completed by Aboriginal groups (e.g. The Anishnawbe Health Plan[124]).

A framework for ongoing dialogue between the LHIN and Aboriginal people will be necessary

The LHIN will need to develop and implement a framework for ongoing dialogue with the Aboriginal people within the LHIN. The provincial Aboriginal Healing and Wellness Strategy may be useful in informing the development of a framework to involve Aboriginal people in the engagement process.

[124] Sioux Lookout First Nations Health Authority. " The Anishnawbe Health Plan", July 31, 2006.

4.5 Ensuring French Language Services

Lack of access to French language services likely is affecting the health of Francophone residents of the North West LHIN

It is reported that there is a lack of health professionals (e.g. family doctors, surgeons, specialists and nurses) who can provide services in French. This is believed to be a significant barrier to accessing health services for the Francophone population in the region. Implications of the language barrier include:

- Reduced probability of using health services for preventive reasons
- Increased consultation time and use of diagnostic tests, and increased probability of error in diagnosis and treatment
- Impact on the quality of care, reduced probability of compliance with treatment, and reduced satisfaction with care and services.

The lack of access to French language services in the North West LHIN likely affects the health of Francophone residents.

4.6 Integration of e-Health

The Ontario Hospital Association 2005 Electronic Health Record (EHR) Readiness Survey found that hospitals in the North West LHIN were generally lagging with respect to implementation of internal systems, but leaders with respect to information sharing between facilities and inter-organization coordination.

The indicators where the North West LHIN hospitals were (collectively) well above the provincial average were:

- Information sharing with other hospitals
- Information sharing with physicians (highest in province)
- Inter-organizational Enterprise Master Person Index (EMPI) capability and use (highest in province)
- Inter-operability capability with EHR or other electronic patient record (EPR)
- Inter-operability use with EHR or other EPR (highest in province)
- Regional governance capability (highest in province).

These scores suggest that hospitals in the North West LHIN are relatively better prepared for sharing patient information

with each other and to a lesser extent with other providers than are hospitals in other parts of the province. This finding was confirmed in our stakeholder consultation sessions. There are suggestions, however, that hospitals could still augment the sharing of patient related information with providers in other sectors. And even more importantly, providers in other sectors should increase their sharing and improve the capability to share within and between sectors.

Sharing of patient information will improve the quality and efficiency of care

Although there has been much progress, most community engagement participants indicated the continuing need for an electronic patient record to make current patient information available to all providers along the continuum of care and across communities. Without such a tool, there will be duplication, inefficiencies and potentially errors. Sharing of information would allow providers to improve the quality and efficiency of care. It was suggested that sharing information along the continuum of care is especially important in addressing the needs of the large number of people with chronic diseases.

4.7 Regional Health Human Resources Plan

A stable workforce is a critical for a sustainable health care system in the Northwest

There is recognition that the availability of sufficient and qualified health care workers across numerous disciplines and occupation groups is one of the leading issues. Until recent efforts, no appropriate systems or structures existed to support human resource planning and development at the national, provincial or local level.

Addressing HHR is critical for North West LHIN health system sustainability

Health human resource issues were identified as a priority that must be addressed in order to implement solutions for other identified priorities in the Northwest. A stable workforce was cited as a critical element for the sustainability of the health care system in the Northwest. Achieving sustainability was reported to require the recruitment and retention of health professionals and workers. It was suggested that a regional health human resources plan could be a part of the solution.

It was suggested that a regional health human resources plan would include strategies related to job satisfaction, remuneration, education, a healthy workplace, joint recruitment strategies and incentives. Such a plan would also be important to avert crises within the health system (i.e. ED and other service reductions or closures). Maximizing opportunities for existing health human resources was emphasized. It was further suggested that supporting regulated health care professionals to work at their full scope of practice, providing opportunities for extending scopes of practice, and ensuring ongoing education and training that

supports a 'home grown' workforce may address some of the health human resource issues.

It was also suggested that the regional health human resources plan should engage sectors beyond health care (i.e. education) to develop and implement a strategy for producing the types and numbers of health personnel that will be needed in the Northwest.

Many participants in the stakeholder consultation sessions felt that the North West LHIN should take a leadership role in developing an overall health human resources plan and strategy for the region.

Underserviced Area Program has been important component of health human resources management in the Northwest

The MOHLTC Underserviced Area Program (UAP) has been an important component of health human resources management in the Northwest. However, with much of the province now designated as being underserviced, the ability of the UAP to assist in attracting and retaining health care professionals to the Northwest has been diminished. The LHIN may need to advocate for a new type of support, in addition to the UAP, to address the unique and special circumstances and needs of northern communities.

4.8 LHIN Priorities and MOHLTC Strategic Directions

The Exhibit following shows the relationship of the priorities for change of the North West LHIN with the draft strategic directions articulated by the MOHLTC. As can be seen, each North West LHIN priority for change addresses one or more of the MOHLTC strategic directions.

Exhibit 4.6 Strategic Directions and Priorities for Change

MOHLTC Draft Strategic Directions	NW LHIN Priorities for Change						
	Access To Care	Availability Of Long Term Care Services	Integration Of Services Along Continuum	Engagement With Aboriginal Communities	Ensuring French Language Services	Integration Of E-Health	Regional Health Human Resources Plan
Renewed community engagement and partnerships in and about the health care system:	X		X	X	X		
Improve the health status of Ontarians:	X	X	X	X	X		X
Ontarians will have equitable access to the care and services they need no matter where they live or their socio/cultural/economic status	X	X	X	X	X		X
Improve the quality of health outcomes	X		X	X	X	X	
Establish a framework for sustainability of the health care system that achieves the best results for consumers and the community	X	X	X			X	X

5.0 Current Activities

The following paragraphs provide a brief description of some of the current activities of the North West LHIN.

5.1 Community Engagement Activities

The North West LHIN has developed a Community Engagement Strategy (Appendix 1), that was disseminated widely to stakeholders (public and providers) across the Northwest. The staff and Board of the North West LHIN has met with over 1,700 individuals, groups, organizations and agencies while traveling over 15,000 kilometres and participating in 105 meetings, public and provider forums, round table discussions and one-on-one discussions. The North West LHIN also conducted two forums to begin discussions with Aboriginal and Francophone stakeholders. Following community engagement sessions, a volunteer database was established, comprised of interested community engagement participants. The North West LHIN is continuing with community engagement activities across the Northwest and where relevant with other LHIN areas.

5.2 Health Human Resources

The Northwest has been traditionally underserved in health human resources. In recognition of this MOHLTC and local priority, to proactively respond to the emerging theme of health human resource issues for the North West LHIN, and to gain more detailed information for the IHSP, the North West LHIN hosted *New Directions, Emerging Opportunities: A Health Human Resources Forum in the North West LHIN*, for 80 participants in June 2006.

The outcome of this forum was a call to action to move forward with strategies to address the health human resource issues facing Northwestern Ontario. A document outlining the proceedings and next steps (Appendix 4) has been broadly circulated, with a request for additional input for those unable to attend the forum.

5.3 Critical Care Strategy

The North West LHIN's Critical Care Lead has developed an inventory/audit of critical care resources for the North West LHIN. Next steps will include the development of a critical care surge capacity for the Northwest and the development of an emergency management program.

5.4 e-Health Strategy

The North West LHIN is working with its e-Health Lead to coordinate information technology planning and initiatives with health providers, consistent with the provincial e-Health Strategy. The e-Health Lead also represents the North West LHIN on the ONe-Health Committee (a pan-northern information and communication technology [ICT] committee). The North West and North East LHINs are doing collaborative planning on Phase II of the *Northern Ontario Health Information and Communication Technology Blueprint*. See Appendix 5 for ICT Background Paper.

5.5 Wait Time Strategy

The North West LHIN facilitated meetings with local providers (encompassing both administrative and clinical expertise and including several surgeons) to discuss wait times for hip and knee replacements and cataract surgery. A North West LHIN Wait Time Strategy Steering Committee has been established. Both short-term (i.e. 2006/07) and long-term strategies have been identified and will be further explored.

6.0 Action Plan

Working with our partners, we will establish specific targets and timelines for improving each change initiative

Over the next three years, the North West LHIN commits to developing plans and implementing changes to address each of its priorities, to resolve issues related to these priorities and to generally improve the effectiveness and efficiency of health services in Northwestern Ontario. Working with our partners, we will establish specific targets and timelines for improvement appropriate to each change initiative. We will report on our progress in achieving our objectives for each initiative.

Additionally, we will work with the MOHLTC to improve measurement and reporting of:

- The health status of the population
- The utilization of health services
- The quantity, quality and interaction of services provided by health service providers and organizations.

Improvement in measurement will be a fundamental requirement for evaluating our success in addressing our initial priorities for change and in determining future priorities for improving the effectiveness and efficiency of the health system in Northwestern Ontario.

6.1 Access to Care

We will work to minimize the significant problems of geographic isolation and distance in accessing and delivering health services

Over the next three years, the North West LHIN will further investigate, develop plans and work with others to implement system changes that will improve access to care across the LHIN. We will work to minimize the significant problems of geographic isolation and distance in accessing and delivering health services in the North West LHIN. We will also work to reduce the barriers to care experienced by special needs populations in the Northwest.

6.1.1 Access to Primary Health Care

Our objectives related to improving access to primary care will be to:

1. Increase the percentage of the population with regular access to a primary health care provider or team of primary health care providers.
2. Better integrate hospitals in smaller communities into the delivery of primary health care.

3. Reduce the reliance on urban emergency departments for primary health care.

To achieve these objectives, we will develop and implement regional and sub-regional strategies to:

- Increase local access to primary health care services
- Increase the volume of service delivered by primary care providers.

We will focus on further developing integrated, multi-disciplinary models of primary health care

These strategies will focus on further developing integrated, multi-disciplinary models of primary health care that have been shown to be effective vehicles for delivering primary health care services for populations and geographies similar to the North West LHIN. Importantly, we will seek out models that have been effective in addressing the unique needs of people with chronic diseases.

Primary Health Care Teams should focus on health education, disease prevention, health maintenance and treatment related to both physical and mental health

Ideally, primary health care will be provided through integrated, multidisciplinary teams. These teams would focus on health promotion, health education, disease prevention, health maintenance and treatment related to both physical and mental health. To better respond to the breadth of services required by the general and special populations in the Northwest, primary health care should incorporate not only family practitioners, nurse practitioners and registered nurses, but also other health professionals such as midwives, dieticians, social workers, health educators, etc. as appropriate to the needs of the population to be served.

Family Health Teams (FHTs) outside of Thunder Bay should be operationally integrated with the services of the CCAC and the closest hospital

Primary health care should be operationally integrated with the services of the CCAC and the closest hospital. In communities outside of Thunder Bay[125], as feasible, facilities housing primary health care teams (PHCTs) should be located within (or adjacent to) the hospital so that the PHCT can both make use of diagnostic and therapeutic services of the hospital and easily support the outpatient, ED and inpatient services of the hospital. Similarly, PHCTs and the CCAC should work closely together in providing community-based and in-home care in all communities in the Northwest (including Thunder Bay).

Health services in Dryden already follow a model much like that described here. The FHT proposal in Red Lake also will provide for much of the suggested integration of hospital and FHT services.

[125] Thunder Bay is geographically too large to suggest that all FHTs should be located in or near TBRHSC.

Focusing on the use of multi-disciplinary teams should expand the capacity of primary health care within the region by allowing health professionals, in addition to physicians, to be involved, within their scope of practice, in responding to the needs of patients.

Importantly, pre-natal care should be provided locally by midwives, general practitioners (GPs), or nurse practitioners (NPs) in as many communities as possible. Hospital-based birthing programs should operate under the Society of Obstetricians and Gynaecologists of Canada MORE (Managing Obstetrical Risk Efficiently) program or a similarly effective risk reduction/quality improvement program.

Primary care physicians will be able to devote more time to addressing and resolving the more complex medical issues of patients

Expanding the use of other professional disciplines in responding to patients' primary health care needs should allow primary care physicians to refocus their efforts. They will be able to devote more time to addressing and resolving the more complex medical issues of the primary health care team's patients. This should reduce the number of unnecessary referrals to specialists and thus should reduce the queues and waiting times to access specialist physicians. Also, if the capacity to provide primary health care is increased, specialists will be able to transfer patients back to their primary health care team and thus reduce the specialists' involvement in follow-up primary health care, again increasing the capacity of specialists and their ability to accept appropriate referrals.

6.1.2 Access to Chronic Disease Prevention and Management

We will develop and implement health education, disease prevention and diseases management strategies for chronic diseases of particular importance to population groups in Northwestern Ontario

The long-term objectives for our initiatives related to chronic disease prevention and management include:

1. Reduce the episodes of acute care related to chronic diseases.
2. Improve access to treatment and disease management services for people with chronic diseases.
3. Reduce the incidence and prevalence of chronic diseases in Northwestern Ontario.

The North West LHIN will work with public health and primary health care providers across the Northwest to develop and implement a chronic disease prevention and management strategy appropriate to the chronic diseases of particular importance to population groups in Northwestern Ontario.

The LHIN's efforts in improving primary health care and improving integration of services along the continuum of care will include a focus on the needs of people with chronic diseases.

The North West LHIN will explore specialized programs in long-term care homes for target populations (e.g. younger clients, Aboriginal clients, those with acquired brain injuries, those with dementia, developmentally challenged clients, and others).

6.1.3 Access to Specialty Care

6.1.3.1 Access to Specialists

Our objectives for this initiative will be to:

1. Reduce the number of unnecessary referrals to specialist physicians.
2. Reduce the wait time for initial access to a specialist physician.
3. Reduce geographic barriers to accessing specialist physicians.

To achieve these objectives, we will develop and implement regional strategies to improve access to medical specialists.

As has been discussed, increasing the supply and capacity of primary health care providers will reduce the use of specialist time in providing primary health care type assessments and follow-up care. This should free up specialist time for addressing the needs of appropriate referrals, decrease wait times for specialists, and expedite treatment.

We will work to work with our partners to increase numbers of necessary medical specialists and sub specialists available within the North West LHIN

Selectively, and based on its Health Human Resources Plan, the North West LHIN will work with our partners to increase the number of necessary medical specialists and sub specialists available within the North West LHIN. This too will reduce the wait time to access a specialist for assessment and treatment planning.

We will work to increase the number of specialists conducting traveling clinics

Additionally, we will work with providers to explore options to increase the number of specialists holding traveling clinics and providing specialized diagnostic and therapeutic services in communities outside of Thunder Bay. This will both reduce the geographic barriers for patients and increase the interaction between specialists and primary health care providers in communities outside of Thunder Bay.

6.1.3.2 Reduce Wait Times for Specialty Treatments

We will focus on improving the queuing mechanisms for accessing services so that patients with the highest need have priority access

Over the next three years, the LHIN will investigate the types of diagnostic and treatment services that have lengthy wait times. For these services, in concert with the provincial Wait Time Strategy, the LHIN will work with providers, across the continuum of care, to develop plans to achieve the following objectives:

1. Reduce wait times for services.
2. Improve throughput for services.
3. Increase capacity to provide services.

Wait time for treatment is a function of availability of human resources, technologies and facilities; the systems and processes for providing treatments; and the queuing models used for accessing these resources and systems. The focus of our initiatives will be:

- Improving the queuing mechanisms for accessing services
- Better management of the queues for service to ensure patients with highest need have priority access
- Improving the efficiency of service delivery
- As necessary, increasing service capacity.

6.1.4 Access to Mental Health and Addictions Services

The North West LHIN will further investigate, develop plans and work with providers to:

1. Reduce barriers to accessing existing mental health and addiction services.
2. Expand the capacity to provide mental health services and addictions services.
3. Improve the effectiveness of mental health services in treating and managing mental health disorders.

We will work to ensure timely access to appropriate mental health and addiction services for residents of the North West LHIN

An important component of this initiative (in conjunction with the initiative to increase the capacity to provide primary health care) will be the investigation of a 'shared-care' model for mental health services that relies heavily on primary health care providers as integral components of the system for maintaining and restoring mental health. Particular attention will be paid to developing and implementing models to ensure access to appropriate and timely mental health care for residents of the more remote parts of the North West LHIN.

Additionally, we will work to enhance and improve support for local crisis intervention services and improve access to outpatient and inpatient crisis services in Thunder Bay and Kenora.

The focus of these initiatives will be to:

- Increase the range of specialty services that are provided within the LHIN
- Improve access to specialized services
- Improve the integration of mental health and addiction services
- Improve the coordination and communication between mental health and addiction services with other health care sectors (e.g. hospitals, home care, primary health care, etc.).

6.2 Availability of Long-Term Care Services

We will develop and implement a plan to realign current LTC capacity to best meet the needs of the population

The North West LHIN will develop a plan to realign and/or increase the current long-term care capacity to better meet the needs of the population. The objectives of these initiatives will be to:

1. Reduce the number of people requiring residential long-term care.
2. Reduce the length of time people wait in acute care hospitals for access to long-term care.
3. Reduce the length of time people wait in the community for access to long-term care.

The North West LHIN will work with providers to investigate the appropriateness of the current use and availability of different modalities of long-term care and to develop strategies for improvement. The North West LHIN will also work with the MOHLTC to determine the current and future need for each modality of long-term care, including:

- Home Support
- Home Care
- Supportive Housing
- Long-Term Care Homes
- Complex Continuing Care
- Respite Care.

An important consideration will be the importance of keeping people in their homes and in their home communities for as long as possible taking into account issues of quality of life, quality of care and efficiency of care.

6.3 Integration of Services Along the Continuum of Care

We will work with providers to identify and adopt best practice models for improving the flow of patients along the continuum of care

The North West LHIN will work with health service agencies to identify and adopt best practice models in Ontario and beyond for eliminating barriers and improving the flow of patients along the continuum of care. The objectives for these initiatives will be to:

1. Improve the timeliness of care.
2. Improve the effectiveness of care.
3. Improve the efficiency of care.

The focus of these initiatives will include:

- Improving information sharing among providers
- Facilitating the movement of patients between providers in different geographies within a sector (e.g. between different acute care hospitals)

- Facilitating the movement of patients between providers in different sectors within or across geographies.

Integration of services will be especially important for patients with chronic diseases who have ongoing rather than episodic interaction with multiple elements of the health system.

We will also continue to focus on improving movement of patients to and from tertiary care services in Thunder Bay and centres outside of the North West LHIN.

6.4 Engagement with Aboriginal People

The purpose of the engagement process is to establish a collaborative relationship with Aboriginal people to achieve improved health status.

We will work with leaders of Aboriginal communities to better understand and address issues of access to health care services

The North West LHIN will work with Aboriginal communities (and, as appropriate, the Federal Government and others) to better understand and address issues of access to health care services. The initial focus of our efforts will be to:

- Increase and improve local delivery of health services
- Improve the cultural sensitivity and linguistic accessibility of services provided in district and regional centres.

In addressing the health service needs of Aboriginal peoples in the Northwest, the LHIN will need to better understand non-MOHLTC services being provided to Aboriginal people within the North West LHIN.

The provincial Aboriginal Healing and Wellness Strategy may be useful in informing the development of a framework to involve Aboriginal people in the engagement process.

6.5 Ensuring French Language Services

We will work to increase the range of health services that are available in French

We will encourage and support initiatives designed to attract and retain French speaking service providers and facilitate access to French language health services. The focus of these initiatives will be to reduce language barriers to accessing health services for the Francophone population in the region.

The primary vehicle for addressing this issue will be the Regional Health Human Resources Plan. We will also work with French Language Health Services (MOHLTC), provider agencies, and other stakeholders to increase the availability

of services and supporting health education materials that are available in French.

6.6 Integration of e-Health

The objective of this initiative will be to improve the sharing and exchange of patient information among providers along the continuum of care with the goal of providing better, safer and more efficient care.

We will work with providers across all sectors to develop and implement an integrated strategy for acquiring and deploying e-Health technologies

Building on the 2005 *Northern Ontario Health Information and Communication Technology Blueprint*, we will work with providers across all sectors in the LHIN to first develop and then implement an integrated strategy for acquiring and deploying e-Health technologies (e.g. Electronic Health Record, PACS, telehealth, etc.) by the providers within the North West LHIN. The North West LHIN will then assist and monitor providers' performance in the implementation of the e-Health Strategy.

6.7 Regional Health Human Resources Plan

A foundational element of our work over the next three years and a prerequisite for our objectives related to improving access to care will be our efforts in the area of health human resources.

We will develop a model for the most effective and efficient recruitment, distribution and retention of health human resources in the different sub-areas of the LHIN

We will develop an understanding of current health human resource requirements across the LHIN and in each sub-area. We will initiate activities to develop a model, in alignment with HealthForceOntario, for the most effective and efficient recruitment, distribution and retention of health human resources in the different sub-areas of the North West LHIN.

A critical early focus of the health human resources plan will be developing a strategy that will improve the population's access to primary health care services.

Appendices

1. **Community Engagement Strategy**
2. **Community Engagement Report**
3. **Environmental Scan**
4. **New Directions, Emerging Opportunities: A Health Human Resources Forum in the North West LHIN--Summary Report**
5. **Information and Communication Technology--Background Paper**