

4.0 Health Service Utilization

4.1 Data Sources and Data Limitations

The data provided to the Local Health Integration Networks by the Ontario Ministry of Health and Long-Term Care (MOHLTC) does not include health events occurring to Northwest residents outside Ontario. This includes births, deaths, hospitalizations and use of other health services outside Ontario. This will cause some counts and rates of service utilization and health status to be underestimated. The Kenora District sub-area within the North West LHIN is most likely to be impacted by this data limitation because of its geographic proximity to Manitoba. In addition, under-estimation of the Aboriginal population in the census can lead to smaller population counts and overestimation of rates. Most of this data is available to the LHINs through IntelliHEALTH Ontario, a secure, web-based tool. These data sets include hospitalizations excluding adult mental health (inpatient discharges or separations), emergency department visits, medical services (OHIP data), adult mental health, chronic continuing care and rehab, long-term care, births and deaths. The quality of the data varies from database to database as does the time period for which the data is available, and the geographic level at which the data is available.

Since the first Integrated Health Services Plan was released in the fall of 2006, information on adult mental health hospitalizations is captured in a separate database called the Ontario Mental Health Reporting System (OMHRS). These separations used to be included with all other Inpatient data in the Discharge Abstract Database (DAD). If any comparisons are made with data in this environmental scan to hospitalization data for fiscal years prior to 2006, this change needs to be kept in mind. Information on clients serviced by problem gambling and substance abuse programs is obtained from DATIS, a program of the Centre for Addiction and Mental Health.

A number of reporting systems have been implemented to improve monitoring of the health care system and to help determine where issues need to be addressed. There is a set of Ministry-LHIN Accountability Agreement (MLAA) indicators that are provided on a quarterly basis to track how each LHIN is doing in relation to provincial targets.

Information on how a particular LHIN is doing compared to other LHINs or the province as a whole is available through a number of public websites including:

- For wait times:
http://www.health.gov.on.ca/transformation/wait_times/wait_mn.html
- For cancer related indicators (Cancer System Quality Index):
<http://csgq.cancercare.on.ca/>
- For indicators on different conditions and health services (ICES inTool):
<http://intool.ices.on.ca>

***LHIN indicators
available through
public websites***

4.2 Acute Care

4.2.1 Inpatient Separations

Exhibit 4.1 shows the volume of inpatient days (Total LOS) and inpatient discharges for acute care hospitals located in the Northwest for fiscal years 2006 to 2008. All of the hospital facilities in the Northwest except St. Joseph's Care Group provide inpatient acute care.

Exhibit 4.1 Inpatient Discharges (DIS) and Days Length of Stay (LOS)³¹

Fiscal Year Measure	2006		2007		2008	
	# DIS	Total LOS	# DIS	Total LOS	# DIS	Total LOS
Hospital						
DRYDEN REGIONAL HEALTH CENTRE	1,443	10,790	1,397	9,506	1,373	10,805
LAKE-OF-THE-WOODS DISTRICT HOSPITAL	2,643	14,462	2,622	16,183	2,457	16,847
RED LAKE MARG COCHENOUR MEM HOSP (THE)	860	2,635	871	3,187	909	3,284
ATIKOKAN GENERAL HOSPITAL	352	2,725	378	1,521	379	1,799
RIVERSIDE HEALTH CARE	2,144	9,760	1,982	9,352	1,944	10,611
GERALDTON DISTRICT HOSPITAL	594	4,058	629	3,938	502	4,063
MANITOUWADGE GENERAL HOSPITAL	156	1,739	118	1,798	142	1,528
WILSON MEMORIAL GENERAL HOSPITAL	418	2,554	412	1,938	398	2,116
NIPIGON DISTRICT MEMORIAL HOSPITAL	505	3,369	471	3,558	360	3,623
MC CAUSLAND HOSPITAL	188	1,586	210	3,022	215	2,181
THUNDER BAY REGIONAL HLTH SCIENCES CTR	17,618	116,867	17,502	116,596	17,796	119,205
SIoux LOOKOUT MENO-YA-WIN HLTH CTR-DISTR	2,048	9,788	1,910	9,924	1,820	9,271
Total Acute Care Inpatient Discharges	28,969	180,333	28,502	180,523	28,295	185,333

Although the total number of acute care inpatient discharges from the North West LHIN hospitals has decreased slightly over the three years (2.3%), the total length of stay (LOS) in days has increased (2.7%).

4.2.1.1 Patient Flow

Not all North West LHIN residents access acute care in a hospital located in their community and some of the smaller acute care hospitals do not have the full range of services that would be necessary to meet the community's needs.

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 in North West LHIN hospitals.

Not all NW LHIN residents hospitalized in NW LHIN hospitals

³¹ Inpatient Discharges Main Table, IntelliHEALTH; extracted fall 2009.

In 2007/08, there were 1,421 cases of Northwest residents hospitalized in inpatient acute care beds elsewhere in Ontario, particularly for tertiary care in Southern Ontario. 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).

Exhibit 4.2 shows the distribution of inpatient discharges from the North West LHIN hospitals by patient place of residence.

Exhibit 4.2 North West LHIN Hospital Discharges by Patient Residence³²

Patient Residence (Census Divisions (CDs))	# Discharges	% Discharges
THUNDER BAY DISTRICT	52436	61.1%
KENORA DISTRICT	23276	27.1%
RAINY RIVER DISTRICT	8219	9.6%
Out of province	893	1.0%
Northeast Ontario CDs	626	0.7%
Other Ontario CDs	316	0.4%
TOTAL	85766	100.0%

Almost all of the patients discharged from hospitals in the North West LHIN area live in Northwestern Ontario (97.9%). The remaining 2% come from out of province, Northeastern Ontario and the remainder of Ontario.

Exhibit 4.3 looks at the distribution of discharges by patient residence for each hospital in the Northwest. This is often referred to as market share. Values that have been bolded are those representing the largest proportion of discharges for a particular hospital.

³² Inpatient Discharges Main Table, IntelliHEALTH; extracted Nov. 12, 2009.

Exhibit 4.3 Inpatient Discharges by Hospital and Patient Residence³³

Inpatient Discharges Fiscal Years 2006-2008 North West LHIN Hospitals by Patient Residence								
PATIENT RESIDENCE		KENORA DISTRICT	RAINY RIVER DISTRICT	THUNDER BAY DISTRICT	Out of Province	North East Ontario	Other Ontario CDs	Hosp. Total
HOSPITAL	MEASURE							
DRYDEN REGIONAL HEALTH CENTRE	# DIS	3952	46	132	59	<5	20	4213
	%	93.8%	1.1%	3.1%	1.4%	0.1%	0.5%	100%
LAKE-OF-THE-WOODS DISTRICT HOSPITAL	# DIS	7339	40	26	280	7	30	7722
	%	95.0%	0.5%	0.3%	3.6%	0.1%	0.4%	100%
RED LAKE MARG COCHENOUR MEM HOSP	# DIS	2461	<5	40	109	13	13	2640
	%	93.2%	0.2%	1.5%	4.1%	0.5%	0.5%	100%
ATIKOKAN GENERAL HOSPITAL	# DIS	6	1070	15	13	<5	<5	1109
	%	0.5%	96.5%	1.4%	1.2%	0.2%	0.2%	100%
RIVERSIDE HEALTH CARE	# DIS	168	5845	59	41	6	10	6070
	%	2.8%	96.3%	1.0%	0.7%	0.1%	0.2%	100%
GERALDTON DISTRICT HOSPITAL	# DIS	15	0	1599	23	75	13	1725
	%	0.9%	.	92.7%	1.3%	4.3%	0.8%	100%
MANITOUWADGE GENERAL HOSPITAL	# DIS	0	0	400	6	<5	8	416
	%	.	.	96.2%	1.4%	0.5%	1.9%	100%
WILSON MEMORIAL GENERAL HOSPITAL	# DIS	<5	0	1180	16	19	12	1228
	%	0.1%	.	96.1%	1.3%	1.5%	1.0%	100%
NIPIGON DISTRICT MEMORIAL HOSPITAL	# DIS	12	0	1266	27	12	19	1336
	%	0.9%	.	94.8%	2.0%	0.9%	1.4%	100%
MC CAUSLAND HOSPITAL	# DIS	0	<5	592	15	<5	<5	613
	%	.	0.2%	96.6%	2.4%	0.3%	0.5%	100%
THUNDER BAY REGIONAL HLTH SCIENCES CTR	# DIS	3908	1268	46823	266	472	179	52916
	%	7.4%	2.4%	88.5%	0.5%	0.9%	0.3%	100%
SIOUX LOOKOUT MENO-YA-WIN HLTH CTR-DISTR	# DIS	5414	<5	304	38	12	6	5778
	%	93.7%	0.1%	5.3%	0.7%	0.2%	0.1%	100%
Total	# DIS	23276	8219	52436	893	626	316	85766
	%	27.1%	9.6%	61.1%	1.0%	0.7%	0.4%	100%

Every hospital in the North West LHIN except Thunder Bay Regional Health Sciences Centre (TBRHSC) receives over 90% of their patients from the District in which the hospital is located. TBRHSC receives 89% of its patients from the Thunder Bay District, 7% from Kenora District, 2% from Rainy River District and 2% from outside Northwestern Ontario. Both Lake-of-the-Woods District Hospital and Red Lake Margaret Cochenour Memorial Hospital in Kenora District receive 4% of their patients from out of province.

Utilization Rates

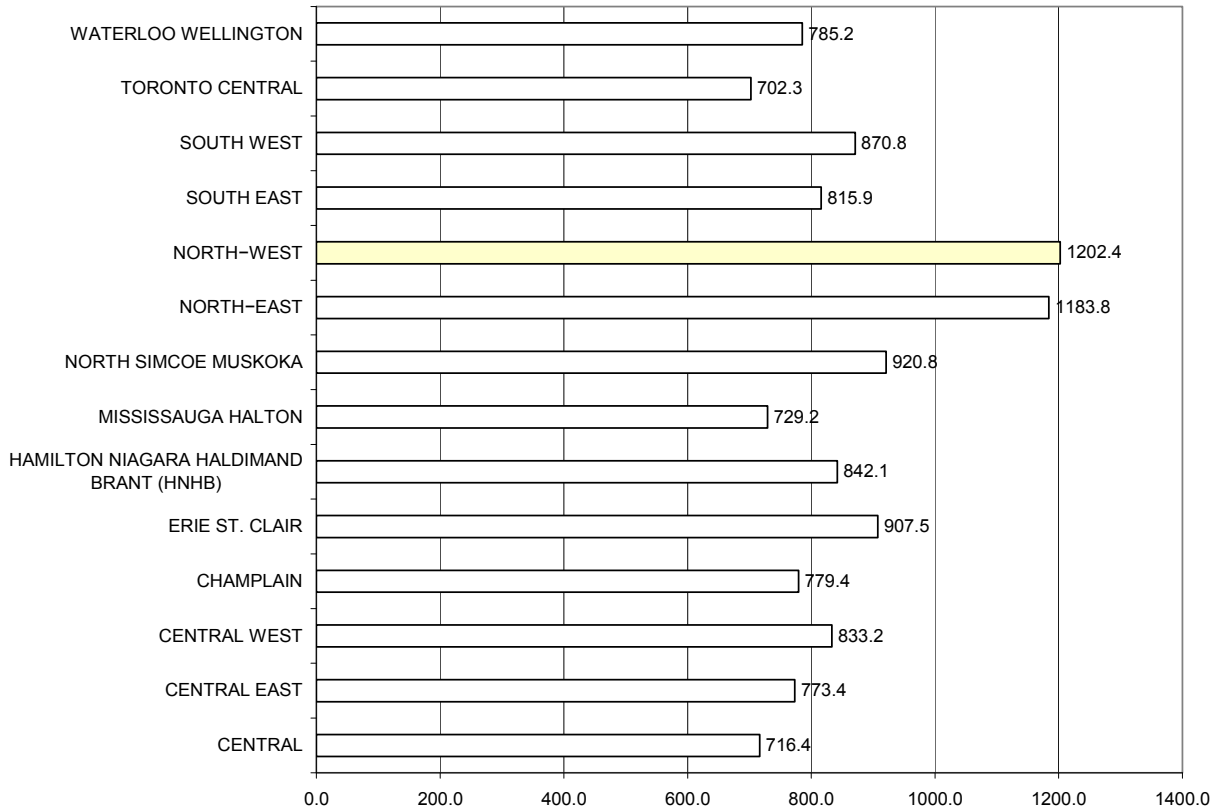
A basic measure of acute care utilization is the number of hospital separations (discharges) per 10,000 population, adjusting for the age and gender composition of the population. The process of adjusting utilization rates to take

³³ Inpatient Discharges Main Table, IntelliHEALTH; extracted fall 2009.

into account differences in underlying demographic composition of the population is referred to as “standardization”.

Exhibit 4.4 compares the overall acute care discharges per 10,000 population in 2007/08 for the residents of each LHIN (i.e. by patient LHIN). All acute care discharges of North West LHIN residents from a hospital anywhere in Ontario (but excluding discharges from hospitals outside of Ontario) are included in the calculation of the North West LHIN utilization rate.

Exhibit 4.4 Total 2007/08 Inpatient Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN³⁴



Northwest hospital utilization is highest in Ontario

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.

4.2.1.2 Hospitalization Rates Due to Chronic Conditions

Overall hospital separation rates (crude) for diabetes, hypertension, ischaemic heart disease, stroke, COPD, asthma and arthritis were notably higher than provincial rates for the latest year of data available (2007/08). North West

³⁴ CIHI Discharge Abstract Database, Ontario, 2007/08, 2006 Census Estimates.

LHIN residents had the highest rate of hospitalization for diabetes and stroke among LHIN areas³⁵. These rates are based on the most responsible diagnosis (MRDx) for all separations.

Exhibit 4.5 shows the age-specific rates of inpatient hospitalization of North West LHIN residents with a most responsible diagnosis of diabetes for fiscal year 2007.

Exhibit 4.5 Hospitalization Rates for North West LHIN residents with Most Responsible Diagnosis of Diabetes, fiscal year 2007³⁶

Age-specific and Sex-Specific Hospitalization Rates for Diabetes, Fiscal Year 2007			
		Crude Rate/100,000	
	Age Group	Patient Residence	
		NW residents	Ontario
Both Sexes	0-11	24.5	28.4
	12-44	145.9	54.9
	45-64	279.7	115.1
	65-74	549.3	267.4
	75+	752.5	390.4
	Ages 12+	270.2	114.5
	All Ages*	236.0	102.8
Males	Ages 12+	315.5	134.3
	All Ages	273.5	119.3
Females	Ages 12+	225.1	95.4
	All Ages*	198.5	86.8

* Rates are crude rates so not adjusted for difference in population distribution between Ontario and Northwestern Ontario

In fiscal year 2005 the crude rate for hospitalization due to diabetes was 183.5/100,000 for Northwest residents compared to only 97.0/100,000 for Ontario overall. Between fiscal year 2005 and fiscal year 2007, the rate in Northwestern Ontario has increased more than in Ontario as a whole to 236.0/100,000 compared to 102.8/100,000. Although these are crude rates, the age and sex specific crude rates for the Northwest are also substantially higher than Ontario for all age groups and genders except for the 0-11 age group.

TBRHSC develops angioplasty program

In September 2008, TBRHSC welcomed Dr. Mark Henderson as Medical Director, Interventional Cardiology. With his arrival, angioplasty activity level increased and the percentage of cases done in the Thunder Bay program went from 40% to 95%. TBRHSC surpassed the 300 cases originally predicted for 2008/09 and looks to grow those volumes and introduce a 24/7 service with the construction of a second cardiac catheterization laboratory.

³⁵ Health Analytics Branch, MOHLTC. Chronic Conditions Mortality and Utilization Rates Update (2009-08-26) Data Product. August 2009.

³⁶ Ibid.

The Cardiac Care Network (CCN) Statistical Report Package for Fiscal Year 2008-2009 shows notable procedure volume increases for the North West LHIN.³⁷ It is reported that at TBRHSC Diagnostic Cardiac Catheterization has increased by 14% over the last year (1,333 in 2007/08 versus 1,519 in 2008/09); the average change for all hospitals in the province was an increase of 4%.

The large volume increase for Percutaneous Coronary Intervention (PCI) procedures was due to a new program which commenced in September 2007 at TBRHSC. The program had 35 procedures in 2007/2008 when service volume was not at full capacity. This increased by 943% in 2008/09 with a volume of 365 procedures. Coronary Stent Utilization per PCI case also increased significantly from 1.17 in 2007/08 to 1.42, an increase of 22% while the provincial increase was 1% during the same period.

Patients requiring cardiac surgery continue to receive service outside of the North West LHIN.

4.2.1.3 Discharge Status

Information on where patients are discharged provides insight into the flow of patients through the health care system and helps to explain the Alternative Level of Care (ALC) issue facing the province and Northern Ontario in particular. ALC is discussed in the next section of the environmental scan.

Exhibit 4.6 provides a summary of the discharge status of all Inpatient Separations over the three most recent fiscal years.

³⁷ Cardiac Care Network. Statistical Report Package for Fiscal Year 2008-2009. 2009.

Exhibit 4.6 Inpatient Discharges from North West LHIN Hospitals by Discharge Status, Fiscal Years 2006-2008³⁸

Fiscal Year Measure	2006		2007		2008	
	# DIS	Share of Fyear DIS	# DIS	Share of Fyear DIS	# DIS	Share of Fyear DIS
Discharge Status						
DISCHARGED TO HOME WITH NO SUPPORT SERVICES	20,052	69.2%	19,572	68.7%	19,345	68.4%
DISCHARGED TO HOME WITH SUPPORT SERVICES (HOME CARE, SUPPORTIVE HOUSING, RETIREMENT HOMES)	3,465	12.0%	3,605	12.6%	3,609	12.8%
TRANSFERRED TO CONTINUING CARE FACILITY (INCL. MENTAL HEALTH, REHAB, NURSING HOME, CHRONIC CARE, ETC)	2,230	7.7%	2,146	7.5%	2,171	7.7%
TRANSFERRED TO AN ACUTE INPATIENT FACILITY (ACUTE CARE TREATMENT HOSPITAL ONLY)	1,779	6.1%	1,686	5.9%	1,711	6.0%
DECEASED	790	2.7%	785	2.8%	760	2.7%
LEFT AGAINST MEDICAL ADVICE (WITH/WITHOUT SIGNOUT, AWOL)	376	1.3%	374	1.3%	324	1.1%
TRANSFERRED TO OTHER TYPE OF FACILITY (INCL. AMBULATORY CARE, CORRECTIONAL CENTRE, CHILDREN'S AID SOC., ETC)	261	0.9%	314	1.1%	347	1.2%
STILLBIRTH	16	0.1%	20	0.1%	14	0.0%
DID NOT RETURN FROM A PASS	14	0.0%
Total	28,969	100%	28,502	100%	28,295	100%

During the three most recent fiscal years 27% of patients discharged from hospitals in the Northwest were transferred to another facility or required support services at home. If the appropriate space or services were not available when the patient was ready to be discharged, they remained in the hospital and were classified as an Alternate Level of Care (ALC) patient.

Exhibit 4.9 (page 34) provides further detail on the destination (facility type) of discharged patients along with ALC Days and Length of Stay (LOS) proportions for those going to different destinations.

4.2.2 Alternate Level of Care (ALC)

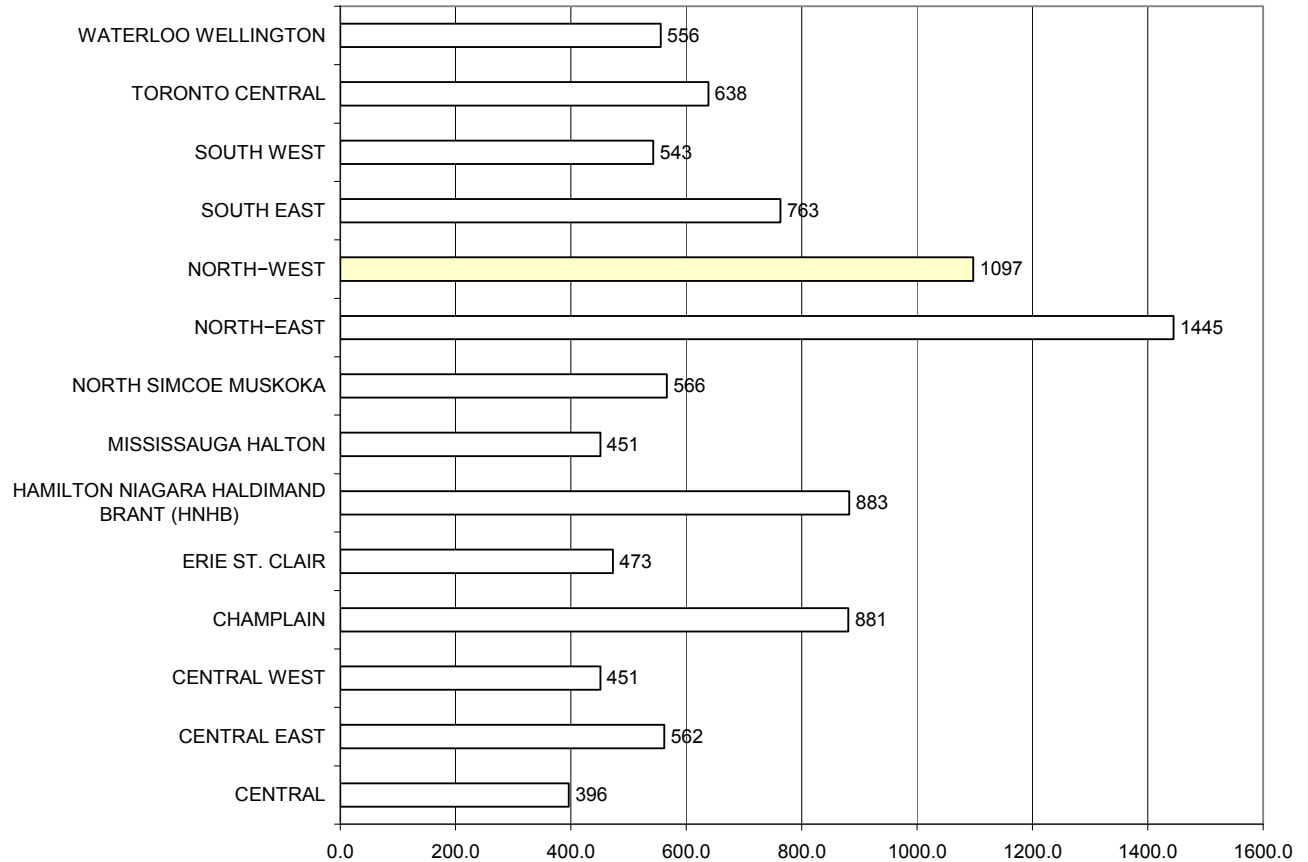
A challenge faced by many Ontario acute care hospitals is that their acute care beds are often occupied by patients who no longer require the type of care available only in an acute care hospital, but these patients cannot be discharged because there is no place for them in an alternative care setting

³⁸ Inpatient Discharge Main Table, intelliHEALTH; extracted fall 2009.

(e.g. LTC home bed or home with appropriate home care support services). The provincial target is 9.46% for ALC Days as a proportion of total inpatient days. For the first quarter of 2009, the North West LHIN's rate was 13.18%.

Exhibit 4.7 shows the age/gender standardized rate of ALC days per 10,000 population by LHIN.

Exhibit 4.7 2007/08 Age/Gender Standardized ALC Days per 10,000 Population by LHIN³⁹

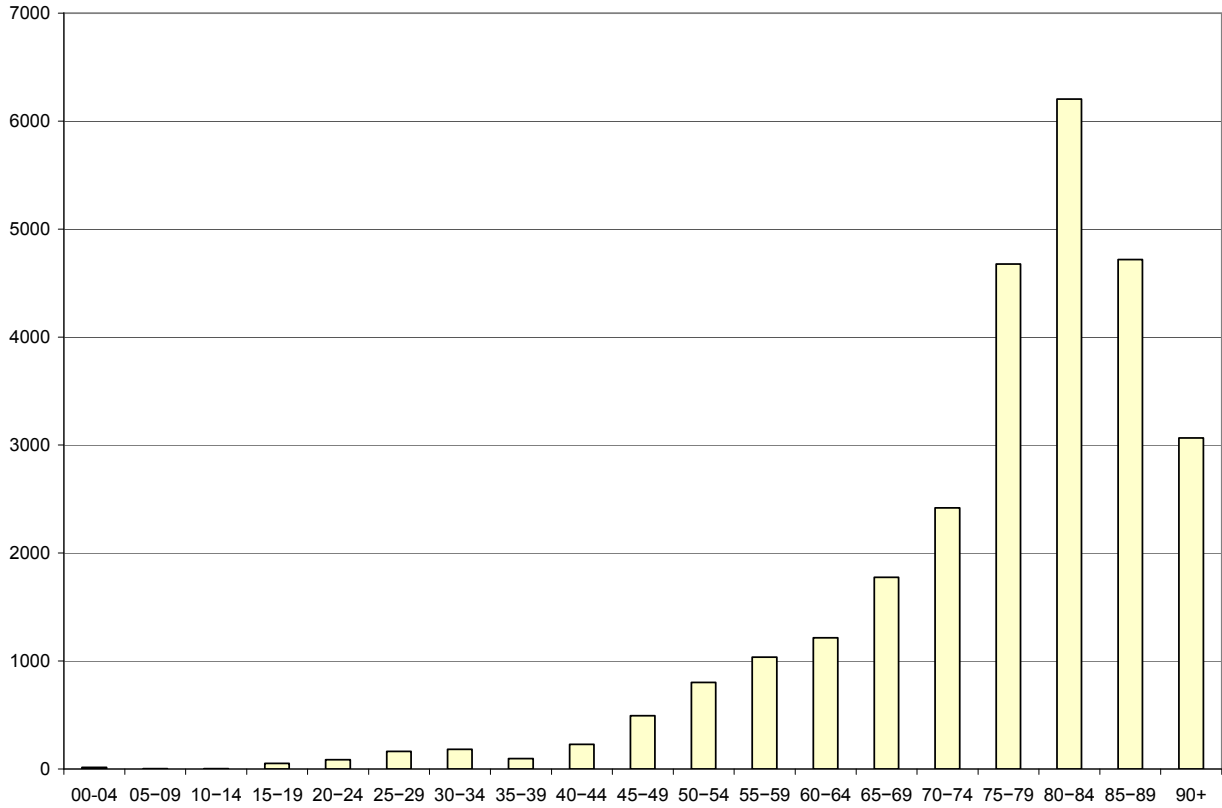


The rate for North West LHIN residents was the second highest of all LHINs. The 27,224 ALC days reported for North West LHIN residents in 2007/08 was equivalent to approximately 75 beds that were not available for patients requiring acute care.

³⁹ CIHI Discharge Abstract Database (DAD), Ontario, 2007/08.

Exhibit 4.8 shows the distribution of North West LHIN ALC days by patient age in fiscal year 2007.

Exhibit 4.8 2007/08 Distribution of North West LHIN Resident ALC Days by Patient Age⁴⁰



ALC days are concentrated in the older age groups, and are most often recorded for patients waiting for access to long-term care and complex continuing care services.

⁴⁰ CIHI Discharge Abstract Database (DAD), Ontario, 2007/08.

Exhibit 4.9 shows the distribution of inpatient discharges by discharge status showing number of discharges, Total Length of Stay (LOS) and ALC days by discharge status.

Exhibit 4.9 Inpatient Activity* for North West LHIN Patients by Discharge Status for fiscal years 2006 to 2008⁴¹

FYear	2006			2007			2008		
MeasuresLevel	# DIS	Total LOS	ALC LOS	# DIS	Total LOS	ALC LOS	# DIS	Total LOS	ALC LOS
Discharge Status									
TRANSFERRED TO CONTINUING CARE FACILITY (INCL. MENTAL HEALTH, REHAB, NURSING HOME, CHRONIC CARE, ETC)	2,230	34,424	13,182	2,146	36,902	16,994	2,171	42,269	21,499
DISCHARGED TO HOME WITH SUPPORT SERVICES (HOME CARE, SUPPORTIVE HOUSING, RETIREMENT HOMES)	3,463	33,671	2,116	3,600	36,131	4,026	3,607	34,391	3,561
DECEASED	786	11,905	1,443	781	10,722	3,129	758	10,004	2,179
TRANSFERRED TO OTHER TYPE OF FACILITY (INCL. AMBULATORY CARE, CORRECTIONAL CENTRE, CHILDREN'S AID SOC., ETC)	258	3,392	584	307	4,065	828	331	5,746	2,061
DISCHARGED TO HOME WITH NO SUPPORT SERVICES	17,661	75,211	1,491	17,087	71,375	1,597	16,918	71,271	2,022
TRANSFERRED TO AN ACUTE INPATIENT FACILITY (ACUTE CARE TREATMENT HOSPITAL WITHOUT PSYCH UNIT ONLY)	1,761	12,686	440	1,651	11,629	485	1,680	12,123	699
LEFT AGAINST MEDICAL ADVICE (WITH/WITHOUT SIGNOUT, AWOL)	372	1,273	94	373	1,339	116	323	1,177	190
DID NOT RETURN FROM A PASS							14	139	33
Total	26,531	172,562	19,350	25,945	172,163	27,175	25,802	177,120	32,244

* Calculations for ALC days exclude separations involving stillborns and newborns. The total number of discharges is therefore smaller than presented in earlier tables.

The discharge status categories are ordered according to 2008 ALC days. Patients discharged to either long-term care or chronic care facilities (first category) account for two-thirds of all ALC days for North West LHIN patients. A further 11% of ALC days are from patients discharged to home with support services versus expected LOS.

The North West LHIN has one of the highest rates of ALC days in the province. For fiscal year 2008 the percentage of ALC days (% of Total Length of Stay Days that were ALC days) in North West LHIN hospitals was 5th highest in the province.

⁴¹ Inpatient Discharges Main Table, IntelliHEALTH Ontario; extracted fall 2009.

Exhibit 4.10 shows the number of Inpatient Separations, Total Length of Stay (LOS) Days and ALC Days for the three most recent fiscal years by North West LHIN Hospital.

Exhibit 4.10 ALC Days and Total LOS for IP Discharges (excluding newborns and stillborns), Fiscal Years 2006 - 2008⁴²

Fiscal Year	2006			2007			2008		
	# DIS	Total LOS	ALC LOS	# DIS	Total LOS	ALC LOS	# DIS	Total LOS	ALC LOS
Hospital									
DRYDEN REGIONAL HEALTH CENTRE	1,324	10,504	818	1,263	9,131	1,207	1,257	10,480	1,904
LAKE-OF-THE-WOODS DISTRICT HOSPITAL	2,386	13,870	257	2,345	15,572	2,968	2,208	16,327	5,682
RED LAKE MARG COCHENOUR MEM HOSP (THE)	827	2,582	242	839	3,139	883	876	3,229	672
ATIKOKAN GENERAL HOSPITAL	343	2,704	1,216	368	1,501	141	375	1,792	351
RIVERSIDE HEALTH CARE FAC	1,953	9,365	1,727	1,774	8,960	1,794	1,767	10,256	2,237
GERALDTON DISTRICT HOSPITAL	583	4,044	388	606	3,910	79	486	4,037	811
MANITOUWADGE GENERAL HOSPITAL	155	1,738	820	116	1,796	765	142	1,528	465
WILSON MEMORIAL GENERAL HOSPITAL	389	2,505	646	387	1,894	157	360	2,052	568
(NIPIGON DISTRICT MEMORIAL HOSPITAL	503	3,367	836	468	3,555	1,070	359	3,622	1,522
MC CAUSLAND HOSPITAL	186	1,581	212	203	3,003	1,564	209	2,169	610
THUNDER BAY REGIONAL HLTH SCIENCES CTR	16,144	111,088	10,878	15,996	110,387	14,696	16,253	112,915	15,807
SIOUX LOOKOUT MENO-YA-WIN HLTH CTR-DISTR	1,738	9,214	1,310	1,580	9,315	1,851	1,510	8,713	1,615
Total	26,531	172,562	19,350	25,945	172,163	27,175	25,802	177,120	32,244

4.2.3 Critical Care Utilization

Critical Care Services in the North West LHIN are delivered in five of twelve acute care hospitals. The capabilities and resources of the hospitals that provide critical care services within the LHIN vary greatly. Although critical care services can be delivered outside of intensive care units such as emergency departments or post-anaesthetic recovery units, the majority are provided in Intensive Care Units (ICUs).⁴³

⁴² Inpatient Discharge Main Table, IntelliHEALTH; extracted fall 2009.

⁴³ Transfer and Repatriation of Critically Ill Patients Within the North West LHIN. Nov 2009.

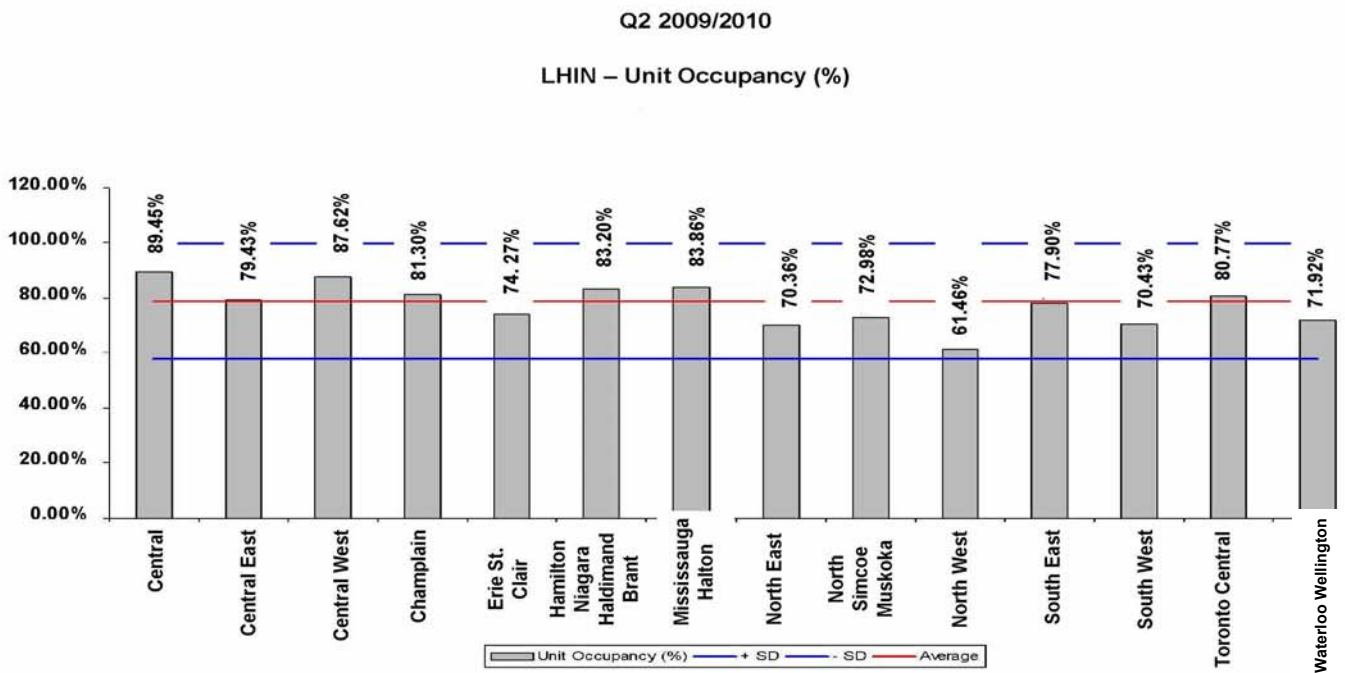
Critical care services are delivered within the LHIN at:

- Level 3** Thunder Bay Regional Health Sciences Centre Intensive Care Unit
- Level 2** Lake of the Woods District Hospital Intensive Care Unit (Kenora)
- Level 1** Dryden Regional Health Centre
Riverside Health Care Facilities Inc. (Fort Frances)
Sioux Lookout Meno-Ya-Win Health Centre

The three Level 1 facilities have limited physician support, limited capacity to manage critically ill patients and limited health human resources.

Exhibit 4.11a shows the occupancy rates of Critical Care Units (in Level 2 and 3) by LHIN for the most recent quarter.

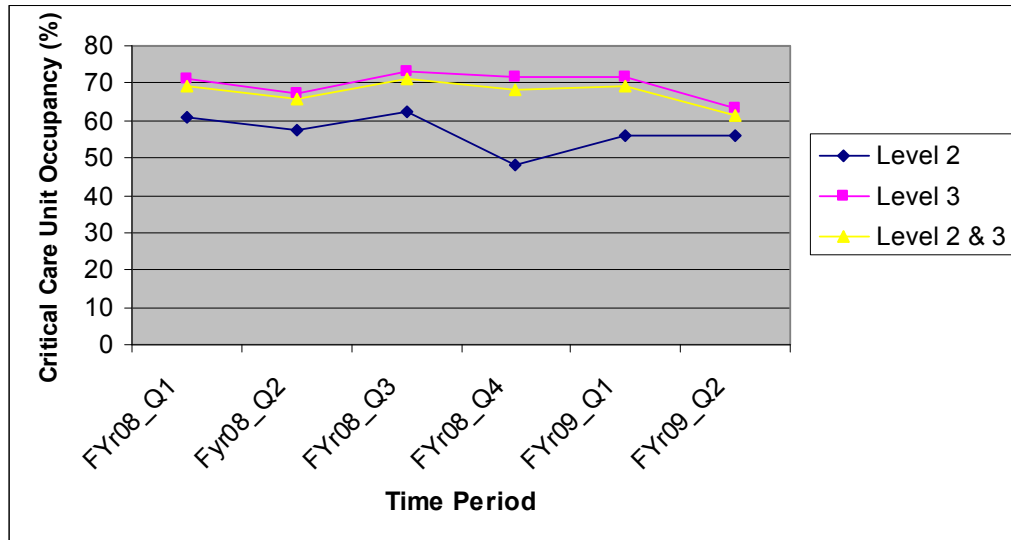
Exhibit 4.11a Critical Care Unit (Level 2 and 3) Occupancy Rate by LHIN⁴⁴



⁴⁴ Critical Care Network Statistical Report Package. 2009.

Exhibit 4.11b shows the quarterly critical care unit occupancy rate for Lake of the Woods (LOTW) District Hospital ICU (Level 2) and Thunder Bay Regional Health Sciences Centre (TBRHSC) ICU (Level 3) and both levels combined from fiscal year 2008, quarter 1 to fiscal year 2009, quarter 2.

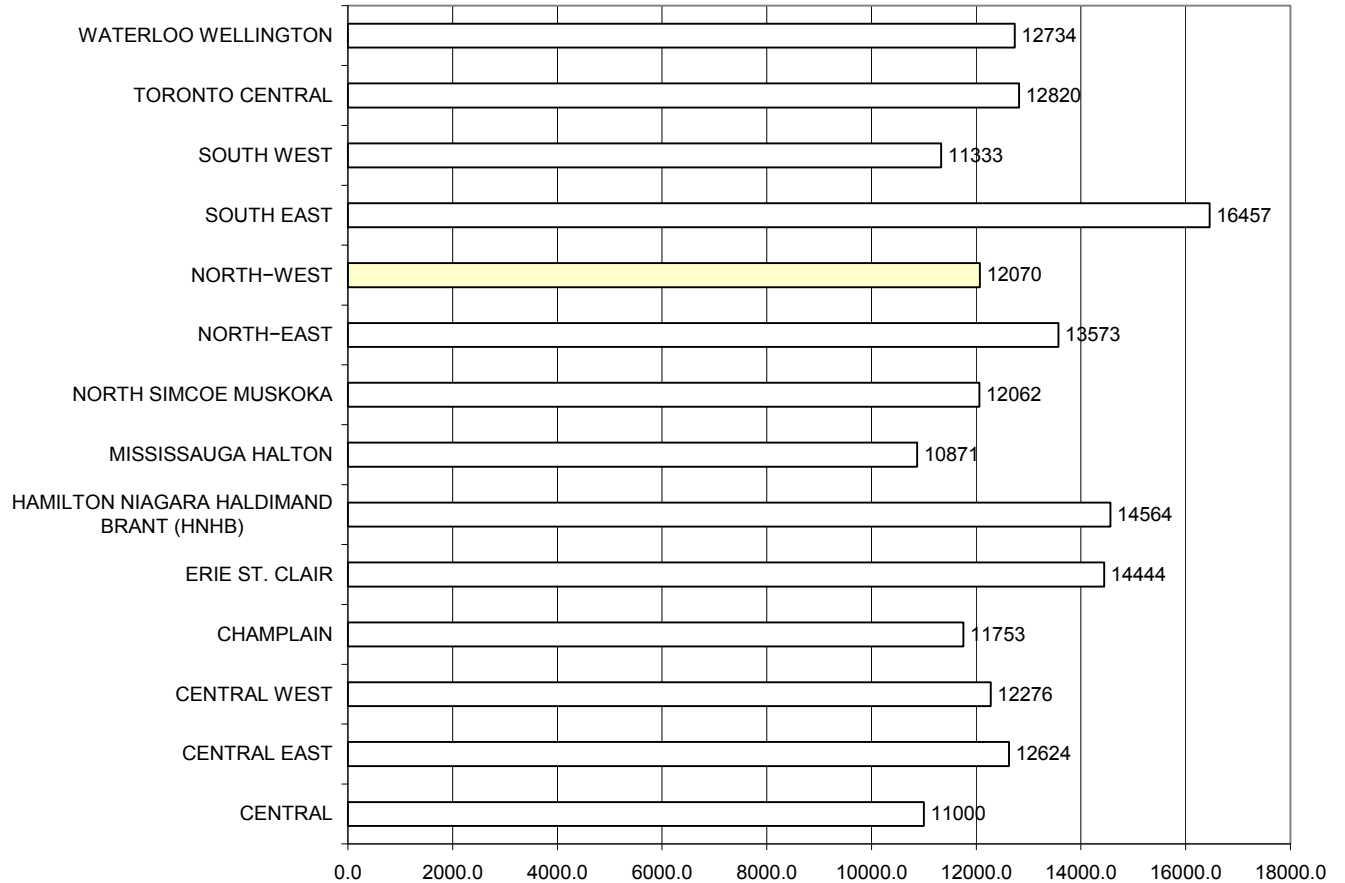
Exhibit 4.11b Quarterly Level 2 and 3 Unit Occupancy Rates, North West LHIN⁴⁵



⁴⁵ Web-enabled Reporting System (WERS), MOHLTC.

Exhibit 4.12 shows the age/gender standardized rate of use of intensive care beds by LHIN.

Exhibit 4.12 “Special Care Unit” Hours per 10,000 Age-Gender Standardized Population by LHIN, 2007/08⁴⁶



In 2007/08, the rate of use of intensive care beds per population by North West LHIN resident was below the provincial average.⁴⁷ However, the data used for this analysis does not include use of intensive care beds in Winnipeg hospitals by North West LHIN residents.

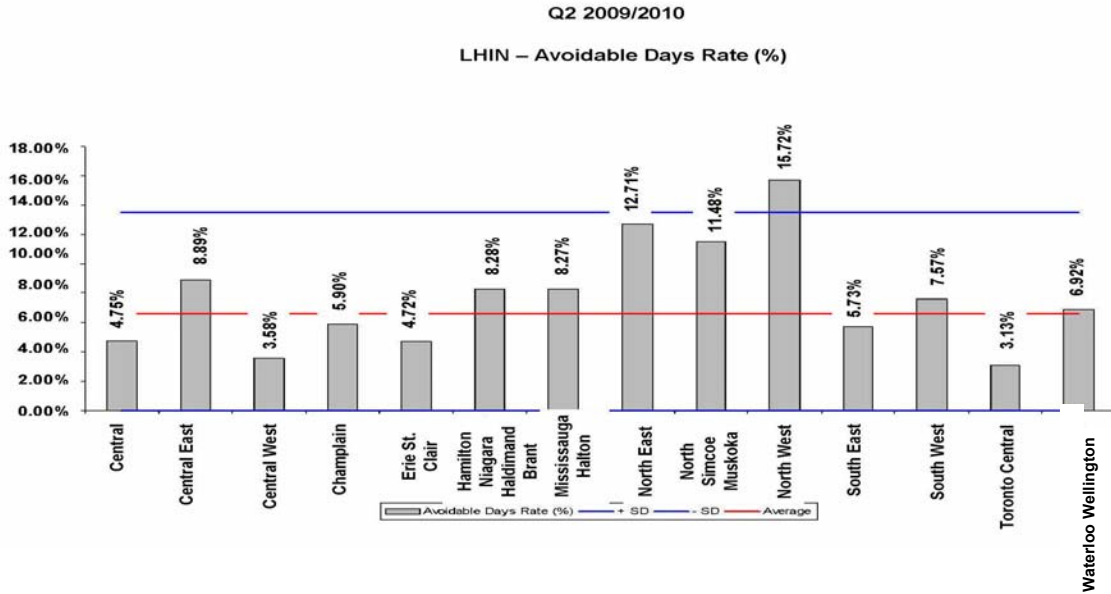
The analysis above is based on the designation by hospitals of their beds as “special care” beds. There may be very different criteria used by hospitals across the province to identify which patients are truly intensive or critical care patients, and differences in thresholds for determination of whether a patient requires admission to a critical care bed. These differences may account for some of the variation in utilization rates by LHIN.

⁴⁶ CIHI Discharge Abstract Database (DAD), Ontario, 2007/08.

⁴⁷ Intensive care utilization is measured using the designation of inpatient days as “special care unit” days in the CIHI DAD inpatient data.

Exhibit 4.13 shows the rate of avoidable days for critical care units by LHIN for the latest quarter.

Exhibit 4.13 Avoidable Days Rate by LHIN, Fiscal Year 2009, Quarter 2⁴⁸



The rate of avoidable days the North West LHIN for this period was the highest of all LHINs at 16%. Provincially during this quarter, the rate was under 7%. Avoidable days reflect the amount of time that patients spend occupying a critical care bed when they no longer require the intensity of care.⁴⁹

Planning for Critical Care Surge Capacity Management in Ontario began in March 2009. The expected outcome is the development at a moderate surge capacity plan for the North West LHIN. The plan ensures access to critical care services 24/7 while improving capacity to manage moderate surges in demand for critical care resources within the LHIN.

4.2.4 Acute Care Wait Times

An important part of the Wait Time Strategy (WTS) is the development of a single wait time information system for Ontario to collect accurate and timely data. In December 2006, this system was established and implemented in approximately 50 Ontario hospitals. In 2007, this system was rolled out to all hospitals receiving wait times funding for the five key areas (cataracts, hip and knee replacements, magnetic resonance imaging (MRI) and computerized axial tomography (CAT) scans). In early 2008, the system was expanded province-wide to capture wait times related to all ophthalmology, orthopaedic and

⁴⁸ Lawless. LHIN Critical Care Occupancy across Hospital Corporation

⁴⁹ CCIS Quarterly Report - Q2 (2009/10) Definitions and Exceptions July to September 2009. 2009.

general surgeries. This system now captures wait time data for virtually all common surgical procedures.

Exhibit 4.14 shows fiscal year 2008 results of Ministry LHIN Accountability Agreement (MLAA) performance indicators for the North West LHIN compared to the province.

Exhibit 4.14 MLAA Performance Indicators for fiscal year 2008⁵⁰

Performance Indicator	Prov Target	2008/09 Annual Provincial Performance	LHIN 08/09 Starting Point	LHIN 08/09 Performance Target	FY 2008/09 LHIN Annual Results	LHIN Met Target – YES/NO
90th Percentile Wait Times for Cancer Surgery	84 Days	62	47	45	46	YES
90th Percentile Wait Times for Cardiac By-Pass Procedures	182 Days	-	-	-	-	-
90th Percentile Wait Times for Cataract Surgery	182 Days	115	503	182	103	YES
90th Percentile Wait Times for Hip Replacement	182 Days	173	197	197	212	YES
90th Percentile Wait Times for Knee Replacement	182 Days	205	232	214	189	YES
90th Percentile Wait Times for Diagnostic MRI Scan	28 Days	97	64	28	71	NO
90th Percentile Wait Times for Diagnostic CT Scan	28 Days	39	85	28	29	YES
Hospitalization Rate for Ambulatory Care Sensitive Conditions (ACSC)	290.76 per 100,000	301.52	608.42	600.00	594.91	YES
Median Wait Time to Long-Term Care Home Placement -All Placements	50 Days	104	154.00	135.00	183.00	NO
Percentage of Alternate Level of Care (ALC) Days - By LHIN of Institution	9.46%	15.46	20.40	14.78	18.81	NO
Rate of Emergency Department Visits that could be Managed Elsewhere	11.79 per 1,000	5.98	69.35	60.00	62.56	YES
Readmission Rates for Acute Myocardial Infarction (AMI)	3.80%	3.89	6.50	6.50	6.34	YES

⁵⁰ Managed Information & Knowledge Exchange (MIKE), Ministry of Health and Long-Term Care, May 2009.

Northwestern Ontario Regional Joint Replacement Program

Dryden Regional Health Centre, Riverside Health Care Facilities Inc. in Fort Frances and Lake of the Woods Hospital in Kenora have participated in a regional tri-hospital joint replacement program since 2005 providing residents with surgery options closer to home. In 2009, the joint program will provide approximately 175 hip and knee replacement surgeries.

Exhibit 4.15 shows the volume of hip and knee replacement surgeries completed by the regional tri-hospital program and Thunder Bay Regional Health Sciences Centre (TBRHSC) from October 2006 to October 2009 along with the 90% percentile wait times for comparison to the provincial target of 182 days.

Exhibit 4.15 Hip and Knee Joint Replacement Surgery* Completed Cases Volume and 90% Percentile Wait Times⁵¹

HIP ¹								
Fiscal Yr	2006 (from Oct. 06)		2007		2008		2009(Apr 1 to Oct 31)	
	Completed Cases	90% Percentile Wait Time	Completed Cases	90% Percentile Wait Time	Completed Cases	90% Percentile Wait Time	Completed Cases	90% Percentile Wait Time
Tri-hospitals			23	133	21	75	10	147
TBRHSC	123	213	188	202	270	212	126	181
NW LHIN	123	213	211	196	291	211	136	177

¹Surgeries include Primary Total Joint Replacement, Revision Total and Partial Joint Replacement

KNEE ²								
	2006 (from Oct 06; 6 months)		2007		2008		2009(Apr 1 to Oct 31; 7 months)	
	Completed Cases	90% Percentile Wait Time	Completed Cases	90% Percentile Wait Time	Completed Cases	90% Percentile Wait Time	Completed Cases	90% Percentile Wait Time
Tri-hospitals			110	153	141	78	80	99
TBRHSC	163	260	245	256	301	225	167	257
NW LHIN	163	260	355	232	442	192	247	213

²Surgeries include Primary Total and Partial Joint Replacement, Revision Total and Partial Joint Replacement

⁵¹ Wait Time Information System, adapted DTB010 Target and Benchmark Report.

Cancer Care

Exhibit 4.16 shows the median wait times for services related to cancer care, from screening to surgery, to radiation treatment.

Exhibit 4.16 Median Wait Times (Weeks) for Cancer Care, 2008⁵²

Wait Time Indicator	North West	Ontario
From Abnormal Breast Screen to First Surgery (weeks)	30.6	20.0
From Abnormal Breast Screen to Benign Resolution (no Breast Cancer) (weeks)	18.9	7.1
From Referral to Consultation for Radiation Treatment (% within target)	72.3%	56.2%
From Referral to Start of Treatment for Radiation Treatment (% within target)	84.9%	51.9%
Cancer Surgery Waits (90th percentile in days) for new cancer patients (breast, GI, GU, Lung)	54	64
Systemic Treatment Waits (Median wait in days)	27.3	32.9

4.3 Ambulatory Care

The National Ambulatory Care Reporting System (NACRS) includes data for all hospital-based and community-based ambulatory care. Currently, data submission to NACRS has been mandated in Ontario for emergency department (ED), day surgery, dialysis, cardiac catheterization and oncology (including all regional cancer centres).

4.3.1 Day Surgery

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 4.17 on the following page shows the volume of day surgery procedures in Northwest hospitals over the three most recent fiscal years.

⁵² Cancer Care Ontario Cancer System Quality Index, 2008.

Exhibit 4.17 2007/08 Ambulatory Procedure (Day Surgery) Cases by Hospital and Fiscal Year⁵³

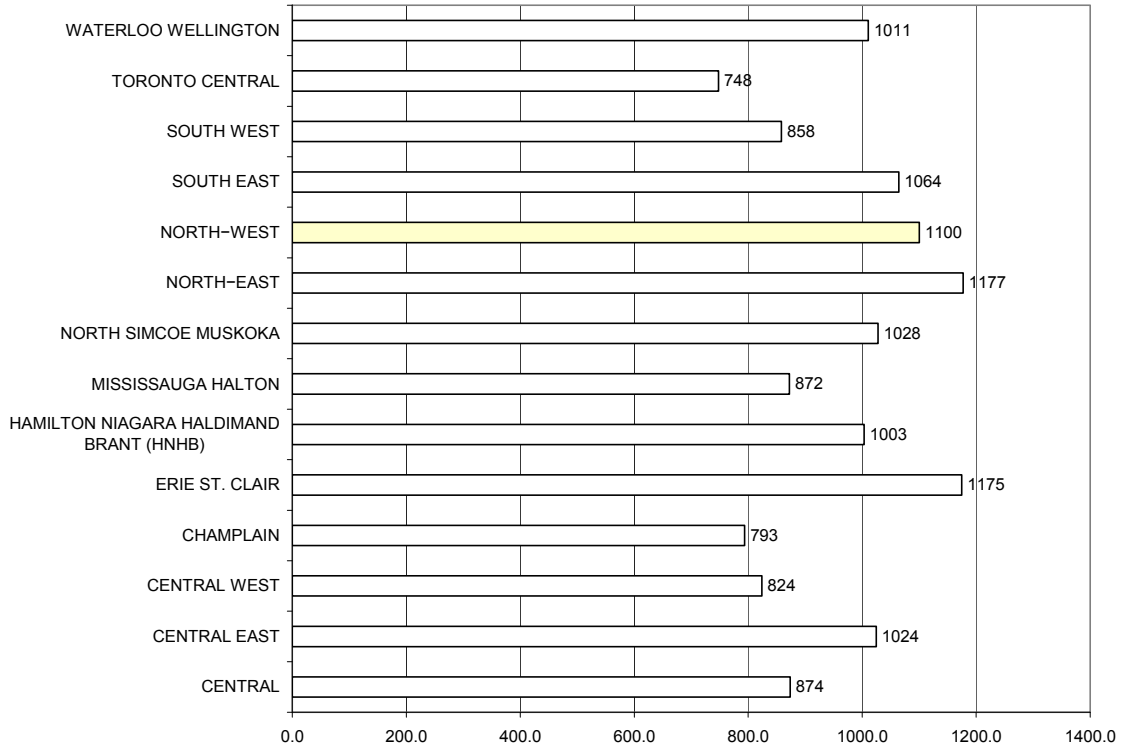
Facility	2006 Visits	2007 Visits	2008 Visits	Average Annual # Visits (3 yrs)	Annual Avg. % of Visits
LAKE- OF- THE- WOODS DISTRICT HOSPITAL	1731	1740	1851	1774	7.0%
RIVERSIDE HEALTH CARE FACILITIES INC	925	1165	1179	1090	4.3%
SIOUX LOOKOUT MENO-YA-WIN HEALTH CENTRE	836	803	948	862	3.4%
THUNDER BAY REGIONAL HEALTH SCIENCES CENTRE	19606	20354	20593	20184	79.2%
DRYDEN REGIONAL HEALTH CENTRE	1336	1497	1109	1314	5.2%
MC CAUSLAND HOSPITAL	41	24	24	30	0.1%
RED LAKE MARGARET COCHENOUR MEMORIAL HOSPITAL	198	214	229	214	0.8%
WILSON MEMORIAL GENERAL HOSPITAL	.	21	77	33	0.1%
TOTAL NW LHIN Day Surgery Visits	24673	25818	26010	25500	100.0%

All of the hospitals in the North West LHIN except for Dryden Regional Health Centre and McCausland Hospital have seen a gradual increase in the number of day surgery visits over the last three fiscal years.

⁵³ Ambulatory Care Main Table, intelliHEALTH; extracted fall 2009.

Exhibit 4.18 shows the age/gender standardized rate of use of day surgery for the residents of all 14 LHINs in Ontario.

Exhibit 4.18 2007/08 Day Surgery Discharges per 10,000 Age/Gender Standardized Population by Patient LHIN⁵⁴



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 (1100/10,000) is the third highest in the province. Day surgery utilization has increased in the past three years from 991/10,000 in 2004/05 when the North West LHIN had the sixth highest rate. It is expected that day surgery utilization rates increase as rates of unscheduled non-urgent ED visits decrease.

4.3.2 Unscheduled ER Visits

An unscheduled ER visit is what is normally referred to as an emergency visit to an Emergency Department (ED) of a hospital. Emergency care in the North West LHIN is supported by twelve emergency departments with varying levels of resourcing.⁵⁵

The North West LHIN commissioned a report on the sustainability of emergency care in Northwestern Ontario. The final report of the North West LHIN Regional ED Study is available with the other supporting documents for the IHSP on the North West LHIN’s website. The purpose of this study was to identify:

**Regional
Emergency
Department
Study**

⁵⁴ CIHI NACRS Ontario data, 2007/08, 2006 Census Estimates.

⁵⁵ KPMG. North West LHIN Regional Emergency Department Study: Final Report. 2009.

- Opportunities for the creative/innovative use of existing resources and enablers to improve ED services, reduce ED wait times and decrease ALC pressures in the Northwest.
- Strategies to address the HHR issues that impact emergency department services in the Northwest.
- Strategies to improve system integration and coordination of ED services in the Northwest for enhancement of system efficiencies and effectiveness.

Exhibit 4.19 shows the number of unscheduled ER visits to facilities with emergency departments in the North West LHIN for the three most recent fiscal years - 2006 to 2008.

Exhibit 4.19 Unscheduled ER Visits by Hospital and Fiscal Year⁵⁶

Facility	FYr 2006 # Visits	FYr 2007 # Visits	FYr 2008 # Visits	Average Annual # Visits (3 yrs)	Annual Avg. % Visits to NW LHIN facilities
LAKE- OF- THE- WOODS DISTRICT HOSPITAL	24,177	24,903	22,698	23,926	11.7%
RIVERSIDE HEALTH CARE FACILITIES INC	19,445	19,460	18,637	19,181	9.4%
SIOUX LOOKOUT MENO-YA- WIN HEALTH CENTRE	14,154	13,782	12,937	13,624	6.7%
THUNDER BAY REGIONAL HEALTH SCIENCES CENTRE	90,145	95,600	97,379	94,375	46.2%
ATIKOKAN GENERAL HOSPITAL	5,136	4,720	4,474	4,777	2.3%
DRYDEN REGIONAL HEALTH CENTRE	18,694	20,256	19,093	19,348	9.5%
GERALDTON DISTRICT HOSPITAL	11,181	11,103	10,714	10,999	5.4%
MANITOUWADGE GENERAL HOSPITAL	2,885	2,302	3,001	2,729	1.3%
MC CAUSLAND HOSPITAL	2,773	2,791	3,159	2,908	1.4%
NIPIGON DISTRICT MEMORIAL HOSPITAL	5,263	5,140	5,150	5,184	2.5%
RED LAKE MARGARET COCHENOUR MEMORIAL HOSPITAL	2,987	3,062	2,856	2,968	1.5%
WILSON MEMORIAL GENERAL HOSPITAL	4,635	4,431	3,646	4,237	2.1%
Total NW LHIN Facilities Unscheduled ER Visits	201,475	207,550	203,744	204,256	100.0%

⁵⁶ Ambulatory Care Main Table, IntelliHEALTH; extracted fall 2009.

Close to half of unscheduled ER visits in the Northwest occur in Thunder Bay Regional Health Sciences Centre (TBRHSC) which is not surprising given that 46% of the population of the North West LHIN lives in the city of Thunder Bay. The number of unscheduled ER visits to the TBRHSC emergency department increased by 8% between 2006 and 2008.

CTAS Levels

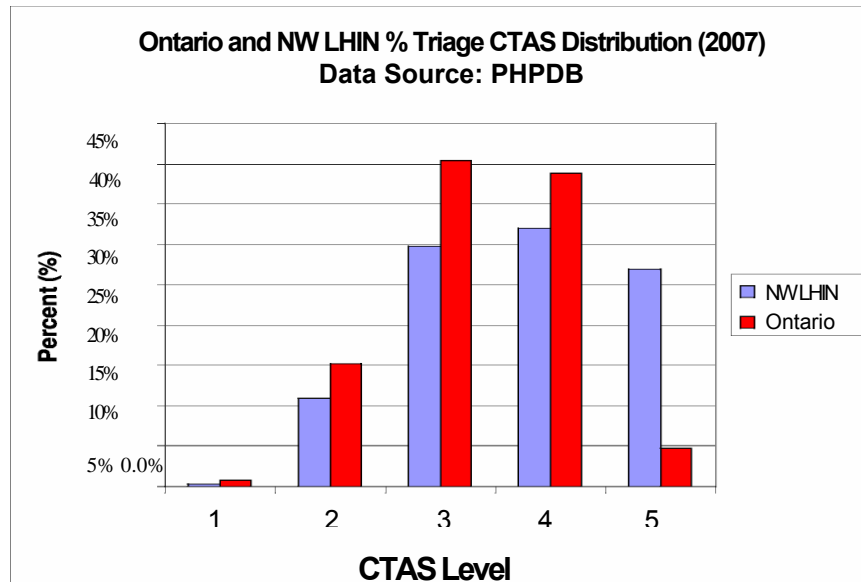
All Ontario hospitals are required to track their emergency department (ED) visits and to categorize each visit according to the Canadian Triage Acuity Scale (CTAS).

The five CTAS levels are:

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

Exhibit 4.20 shows the distribution of CTAS cases for Ontario and the North West LHIN hospitals for fiscal year 2007.

Exhibit 4.20 Distribution of Unscheduled ER Visits by CTAS level⁵⁷

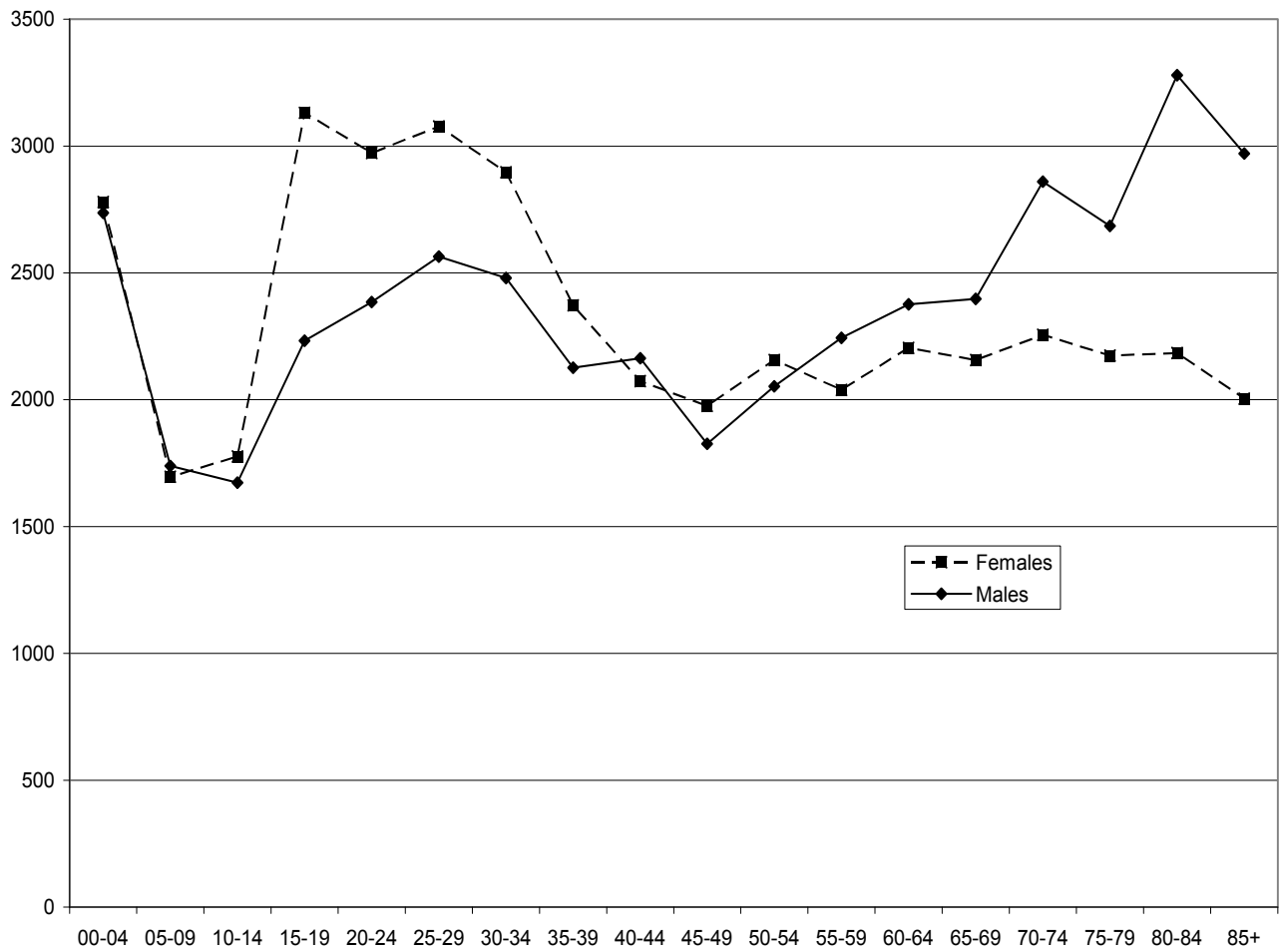


Compared to all Ontario hospitals, the North West LHIN hospitals have a high rate of CTAS Level 5 cases. This can be expected in rural hospitals, where the emergency departments often serve a broader role, including support for the primary care needs of the community.

ED visits per population are highest for the very young and the very old, with higher rates for women than men for ages 15 to 55 years old. Exhibit 4.21 shows the pattern of utilization of the ED by patient age and gender for non-urgent (CTAS Level 5) ED Visits.

⁵⁷ KPMG. North West LHIN Regional Emergency Department Study: Final Report. 2009.

Exhibit 4.21 Non-Urgent ED Visits per 10,000 Population for North West Residents by Age and Gender, 2007/08⁵⁸



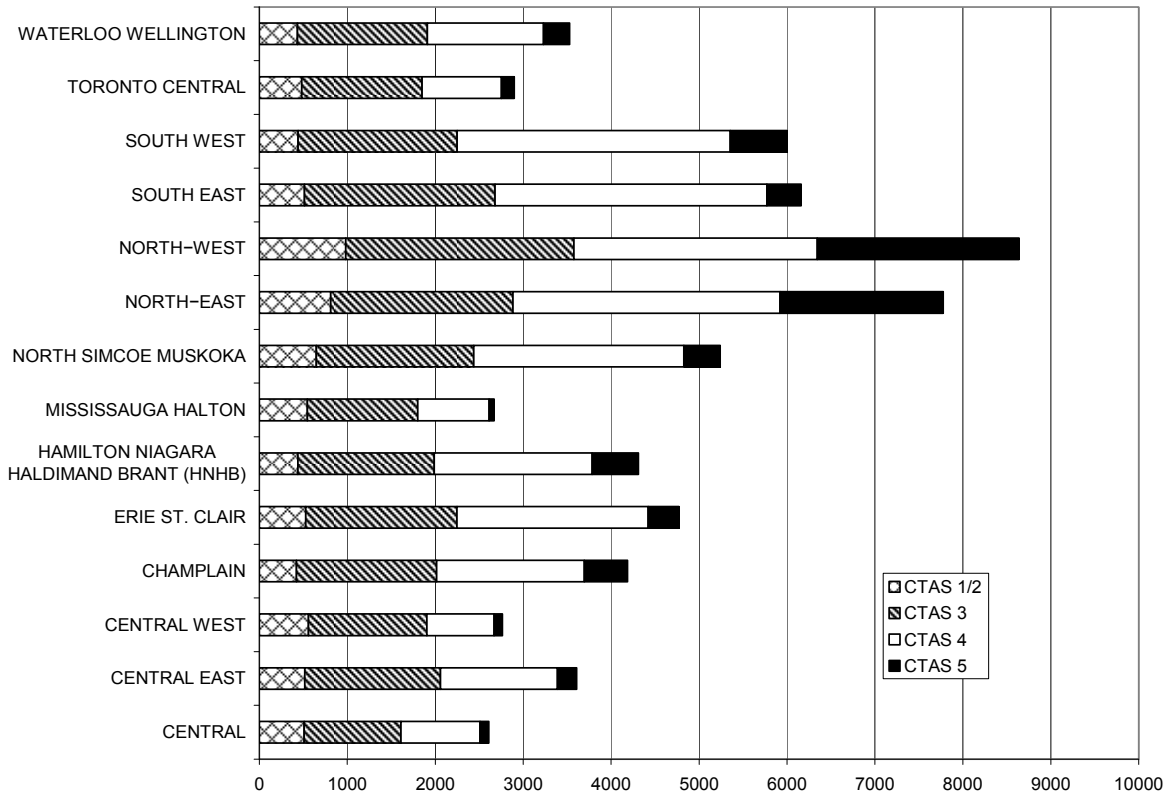
For Northwest patients, the pattern of rates of non-urgent ED visits rates is similar to that for all ED Visits except for elderly females where the rate does not increase as they get older.

⁵⁸ CIHI NACRS Ontario data, 2007/08.

Exhibit 4.22 shows the age/gender standardized ED utilization rate by patient LHIN by CTAS level.

Exhibit 4.22 2007/08 Age/Gender Standardized ED Visits per 10,000 Population by Patient LHIN⁵⁹

ED Utilization by LHIN



Residents of the Northwest have the highest overall rate of utilization of ED visits per population. The high ED utilization rates for both the North West and North East LHINs are significantly impacted by the greater use of the ED for non-urgent care. The current rate of ED visits in the Northwest is 208/1000 population compared to only 96/1000 provincially. The high rate of non-urgent ED visits in the North West suggests that there may be some opportunities to enhance availability and access to other community health services and thereby reduce the high reliance on the ED for care.

ED visits for Chronic Conditions

ED visit rates (crude) for diabetes, depression, hypertension, ischemic heart disease, stroke, chronic obstructive pulmonary disease, asthma and arthritis are notably higher than provincial rates. The ED visit rate for diabetes for fiscal year 2007 was 531/100,000 for North West LHIN residents compared to 232/100,000 provincially.⁶⁰

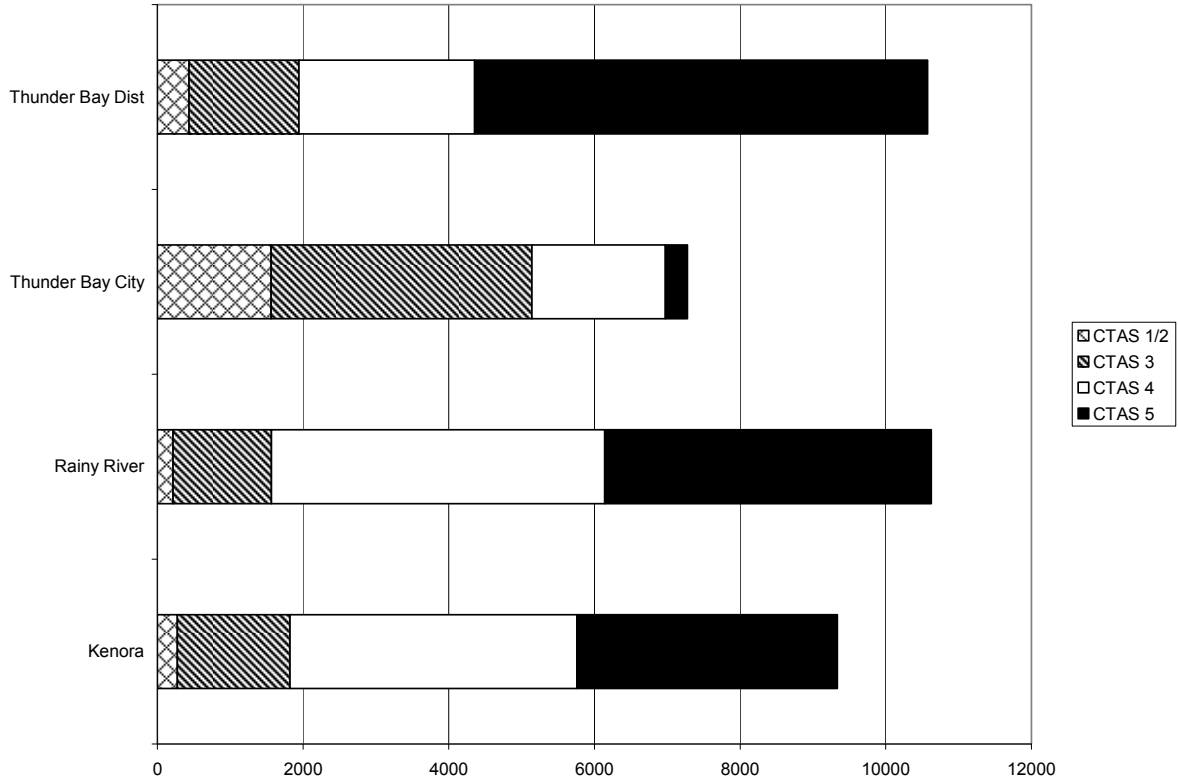
⁵⁹ CIHI NACRS Ontario data, 2007/08.

⁶⁰ Health Analytics Branch, MOHTLC. Chronic Conditions Mortality and Utilization Rates Update (2009-08-26). August 2009.

4.3.3 ED Utilization by North West LHIN Sub-Area

Exhibit 4.23 shows the analyses of ED utilization by the geographic sub-areas within the North West LHIN (patients are assigned to a sub-area on the basis of their residence).

Exhibit 4.23 2007-08 Age/Gender Standardized ED Visits per 10,000 Population by patient sub-LHIN area⁶¹



The lowest ED utilization rate is for residents of Thunder Bay City Area, particularly for CTAS 4 and 5 (semi- and non-urgent) visits. However, Thunder Bay City Area residents have the highest rates of ED utilization for CTAS 1, 2, and 3 (resuscitation, emergent, and urgent) visits. The rate of non-urgent ED Visits for Thunder Bay District residents is 20 times the rate for Thunder Bay City Area residents.

4.3.4 Emergency Hospital Transfers

There were approximately 1,441 Emergency Department inter-facility transfers from North West LHIN hospitals in 2007/08. These transfers were made to facilities in Manitoba, the United States, other LHIN regions and to Thunder Bay Regional Health Sciences Centre (TBRHSC). TBRHSC received 365 of these transfers.

⁶¹ CIHI NACRS Ontario data, 2007/08.

Exhibit 4.24 shows the distribution (proportion and volume) of emergency hospital transfers from hospitals in the North West LHIN by location of facility to which patient transferred. The graphs exclude transfers from inpatient units or patients transferred for diagnostic procedures.

Exhibit 4.24a Proportion of Emergency Transfers from North West LHIN Hospitals, fiscal year 2007⁶²

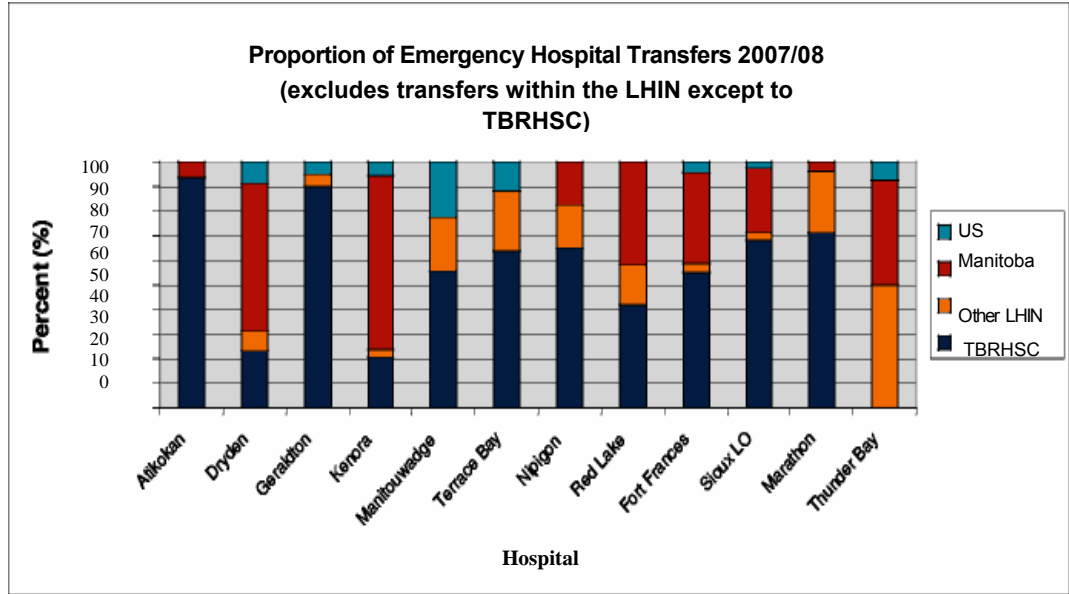
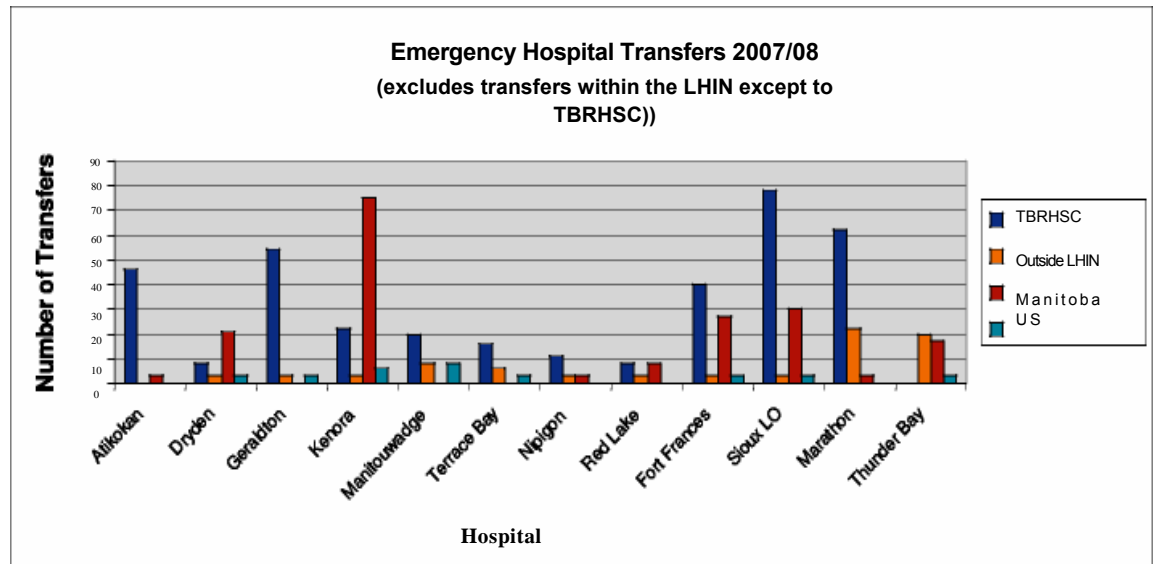


Exhibit 4.24b Emergency Transfers from North West LHIN Hospitals, fiscal year 2007⁶³



⁶² KPMG. North West LHIN Regional Emergency Department Study. 2009.

⁶³ Ibid.

The volume of ED transfers to TBRHSC is a small proportion of the volume (less than 1%) seen in the TBRHSC emergency department.

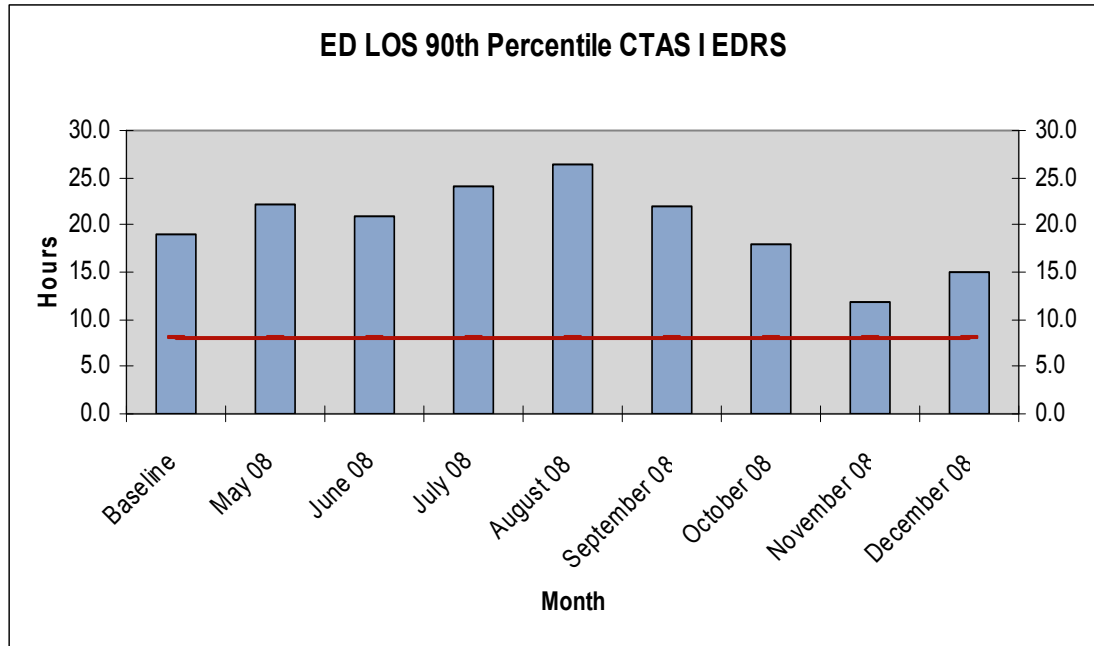
4.3.5 Emergency Department Length of Stay (LOS)

A provincial Emergency Department Reporting System (EDRS) was implemented in 2008 to gather data about Emergency Department wait times. The Emergency Department lengths of stay (ED LOS) are being reported by Thunder Bay Regional Health Sciences Centre, Dryden Regional Health Centre, and Lake of the Woods District Hospital (Kenora).

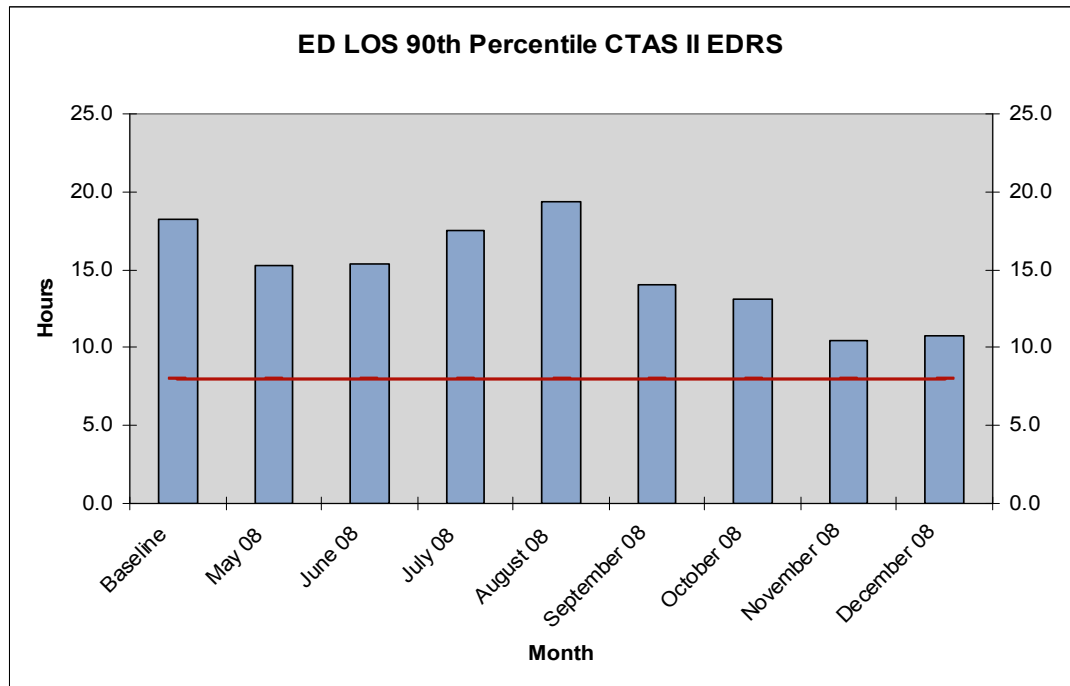
Exhibit 4.25 demonstrates how the North West LHIN is performing compared to provincial targets for each CTAS level in 2008.

Exhibit 4.25 ED Length of Stay (LOS) 90th Percentile by CTAS level⁶⁴

CTAS I (Target = 8 hours)

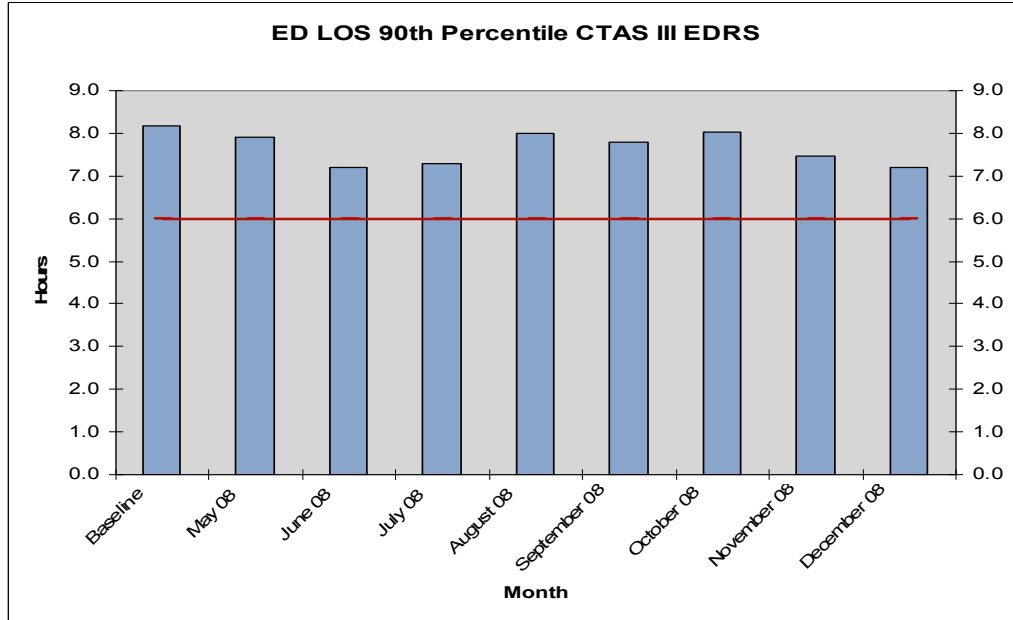


CTAS II (Target = 8 hours)

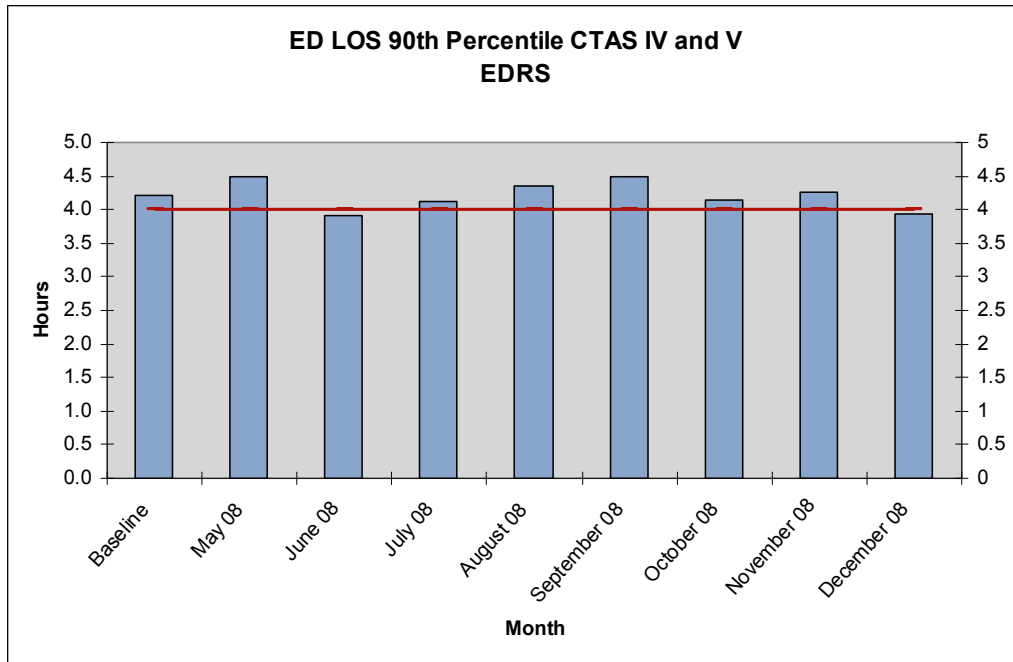


⁶⁴ KPMG. North West LHIN Regional Emergency Department Study. 2009.

Exhibit 4.25 (cont'd)
CTAS III (Target = 6 hours)



CTAS IV and V (Target = 4 hours)



Wait times at these institutions have been improving as they approach target levels. There are still improvements needed to address CTAS I and II levels.

4.4 Diagnostic Services

Exhibit 4.26 shows the 90th percentile targets and performance of wait times for fiscal year 2008.

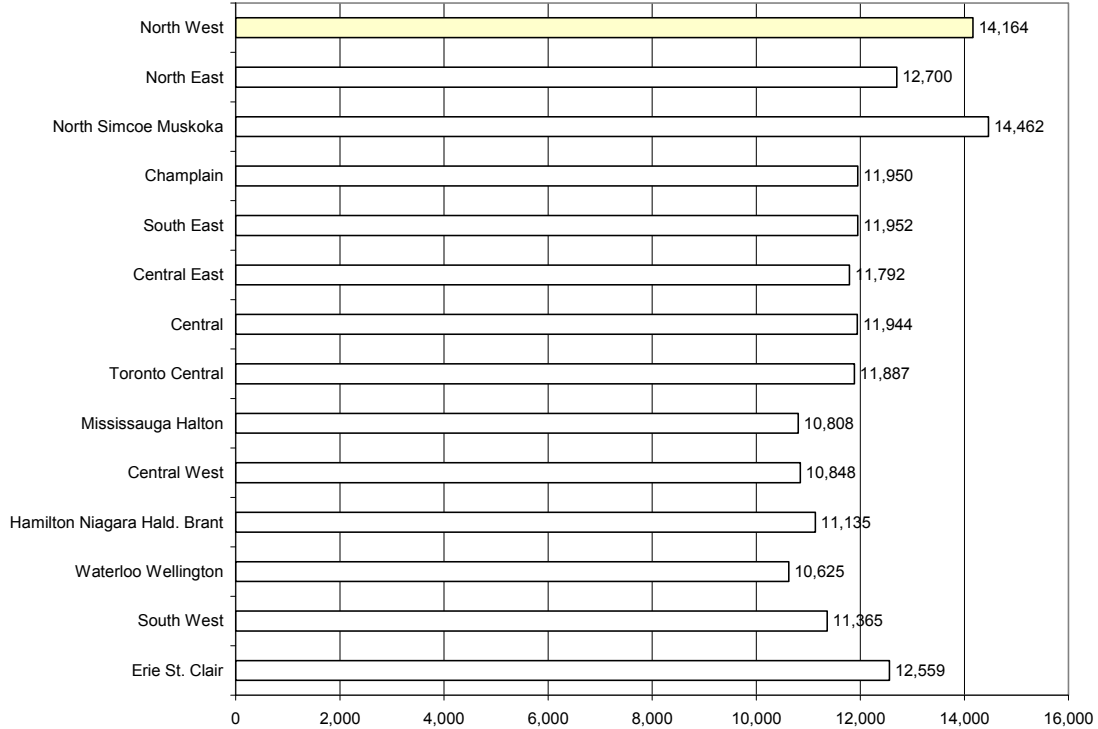
Exhibit 4.26 MLAA Performance Indicators for Diagnostic MRI and CT Scans⁶⁵

Year-end MLAA Performance Indicators (as of May 2009)							
Performance Indicator	Prov. Target	2008/09 Annual Provincial Performance	LHIN 08/09 Starting Point	LHIN 08/09 Performance Target	Most Recent Quarter 2008/09 LHIN Performance	FY 2008/09 LHIN Annual Results	LHIN Met Target – YES/NO
90th Percentile Wait Times for Diagnostic MRI Scan	28 Days	97	64	28	38	71	NO
90th Percentile Wait Times for Diagnostic CT Scan	28 Days	39	85	28	27	29	YES

CT Scans

Exhibit 4.27 compares the age-gender standardized rate of outpatient and inpatient CT scans by LHIN for 2007/08.

Exhibit 4.27 Age-Gender Standardized Rate of Outpatient and Inpatient CT Scans per 100,000 Population by LHIN, 2007/08⁶⁶



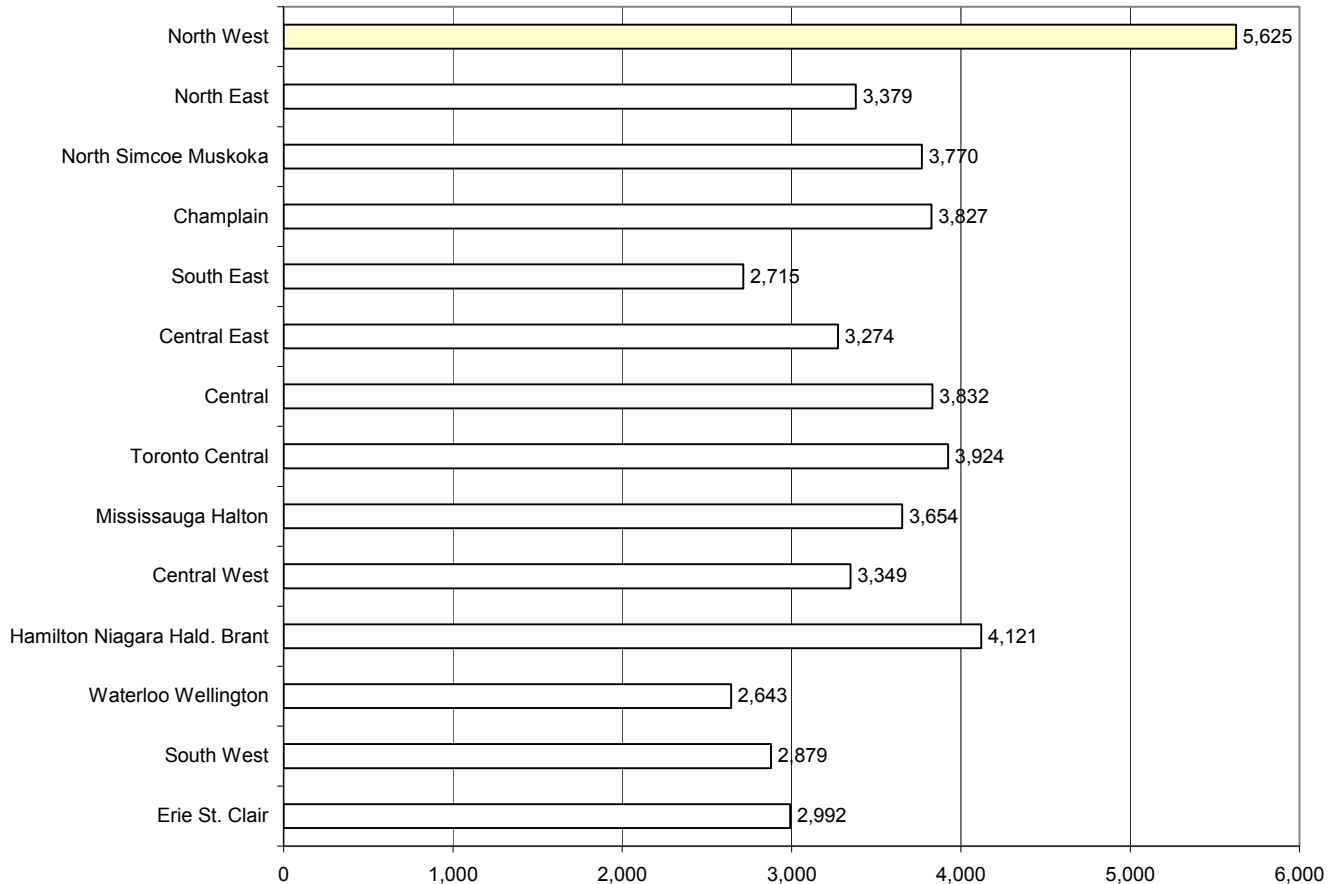
⁶⁵ Ministry of Health and Long-Term Care. May 2009.

⁶⁶ Health Analytics Branch, MOHLTC. CT-MRI Rates 07-08 MOH Request Feb 2009. 2009.

The rate of CT scans provided to North West LHIN residents is the second highest in the province at 14,164/100,000. This rate is significantly higher than the provincial rate of 11,726/100,000. An increase in capacity and hours of operation as well as a new standard of care account for the increase in the rate of CT scans in the North West LHIN and the decrease in wait times.

MRI Scans Exhibit 4.28 compares the age-gender standardized rate of outpatient (OP) MRI scans by LHIN for 2007/08.

Exhibit 4.28 Age-Gender Standardized Rate of Outpatient MRI Scans per 100,000 Population by LHIN, 2007/08⁶⁷



The rate of use of outpatient MRI scans per population for Northwest residents was the highest in the province in fiscal year 2007 (5,625/100,000 compared to 3,527/100,000 for Ontario). Although the rate of MRI scans has increased, the wait times in the Northwest are still above the provincial target of 28 days.

⁶⁷ Health Analytics Branch, MOHLTC. CT-MRI Rates 07-08 MOH Request Feb 2009. 2009.

4.5 Complex Continuing Care and Inpatient Rehabilitation

In addition to acute inpatient care, Ontario hospitals also provide inpatient care in complex continuing care (CCC) and rehabilitation beds.

Exhibit 4.29 shows the distribution of these non-acute beds in Northwest hospitals in 2008.

Exhibit 4.29 North West LHIN Non-Acute Hospital Beds by Hospital⁶⁸

Hospital	Beds (2008)	
	Complex Continuing Care	Rehabilitation
St. Joseph's Care Group	174	50
Kenora Lake of the Woods	10	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	5	0
Red Lake Margaret Cochenour Memorial Hospital	4	0
Grand Total	270	50

There are 270 Complex Continuing Care (CCC) beds in Northwest hospitals, 60% (174 beds) of which are located in Thunder Bay and managed by St. Joseph's Care Group. This is a decrease from 288 CCC beds in 2006 due to Lake of the Woods District Hospital closing a wing.

4.5.1 Complex Continuing Care (CCC) Beds

Patients in CCC 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 CCC patients and allows comparison among hospitals.

⁶⁸ Ontario MOHLTC FIM website, <http://www.mohltcfim.com/>.

Exhibit 4.30 shows the age-gender standardized CCC RUGS-weighted admissions per 10,000 population by LHIN.

Exhibit 4.30 2007/08 Age-Gender Standardized Admissions to Complex Continuing Care per 10,000 Population by LHIN⁶⁹

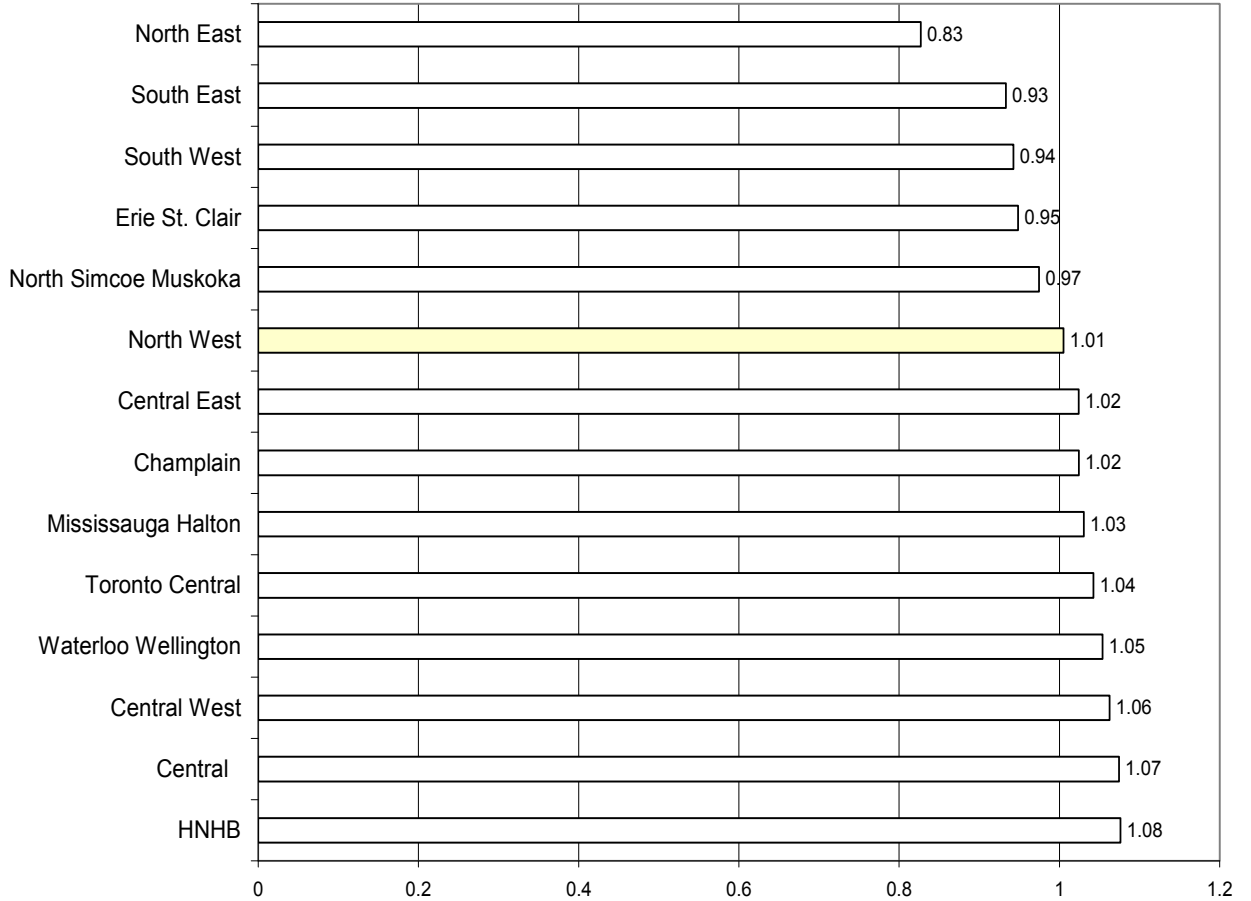
LHIN	Crude Count	Crude Rate per 10,000	Adjusted Count	Adjusted Rate per 10,000
CENTRAL	1894	11.6	2138.9	13.1
CENTRAL EAST	2044	13.6	2001.8	13.3
CENTRAL WEST	1021	12.8	1479.4	18.5
CHAMPLAIN	830	6.9	827.6	6.9
ERIE ST. CLAIR	1441	22.3	1343.8	20.8
HAMILTON NIAGARA HALDIMAND BRANT (HNHB)	2799	20.3	2384.4	17.3
MISSISSAUGA HALTON	985	8.8	1312.6	11.8
NORTH SIMCOE MUSKOKA	654	15.0	624.8	14.4
NORTH-EAST	450	8.0	400.3	7.1
NORTH-WEST	1048	44.6	996.3	42.4
SOUTH EAST	910	18.9	729.8	15.2
SOUTH WEST	1697	18.1	1494.3	16.0
TORONTO CENTRAL	1943	16.6	1839.0	15.7
WATERLOO WELLINGTON	1039	14.5	1127.9	15.8

The North West LHIN rate for fiscal year 2007 was more than double the next highest LHIN rate. Variation in definitions and change in bed designations may account for differences between LHINs. CCC is used to define complex continuing care and chronic care beds in the North West LHIN. This dual definition may contribute to one of the reasons for higher utilization of CCC beds in the North West LHIN.

⁶⁹ Ontario Continuing Care Reporting System (CCRS) via the Provincial Health Planning Database (PHPDB), 2007/08.

Exhibit 4.31 provides an indication of the average complexity of cases admitted to CCC beds by LHIN.

Exhibit 4.31 Average RUGS Weight per Case for Complex Continuing Care Residents⁷⁰



The average RUGS weight per case in the Northwest (1.01) has increased from fiscal year 2004 (data used in first IHSP) when it was 0.93.

4.5.2 Inpatient Rehabilitation Beds

There are 50 inpatient rehabilitation beds in the North West LHIN, all located in Thunder Bay and managed by St. Joseph’s Care Group; this has not changed since 2006.

⁷⁰ Ontario Continuing Care Reporting System (CCRS) via the Provincial Health Planning Database (PHPDB), 2007/08.

Exhibit 4.32 shows the distribution of the North West LHIN inpatient rehabilitation admissions by Rehabilitation Client Group, with a comparison of the overall distribution of rehabilitation patients by group across all Ontario rehabilitation providers.

Exhibit 4.32 North West LHIN and Ontario Inpatient Rehabilitation Admissions by Rehabilitation Client Group, Fiscal years 2006-2008⁷¹

Aggregated Rehab Client Group	North West LHIN		ONTARIO	
	# Episodes	% Episodes	# Episodes	% Episodes
STROKE	285	15.3%	12862	14.0%
BRAIN DYSFUNCTION	65	3.5%	3145	3.4%
NEUROLOGICAL CONDITIONS	38	2.0%	1885	2.0%
NON-TRAUMATIC SPINAL CORD DYSFUNCTION	15	0.8%	1603	1.7%
TRAUMATIC SPINAL CORD DYSFUNCTION	16	0.9%	825	0.9%
AMPUTATION	55	3.0%	2882	3.1%
ARTHRITIS	213	11.5%	500	0.5%
PAIN SYNDROMES	44	2.4%	801	0.9%
ORTHOPAEDIC CONDITIONS	1111	59.8%	47043	51.1%
CARDIAC	0	0.0%	3119	3.4%
PULMINARY	0	0.0%	2814	3.1%
BURNS	0	0.0%	100	0.1%
CONGENITAL ANOMALIES	0	0.0%	27	0.0%
OTHER DISABLING IMPAIRMENTS	<5	0.2%	438	0.5%
MAJOR MULTIPLE TRAUMA	8	0.4%	1167	1.3%
DEVELOPMENTAL DISABILITIES	<5	0.1%	13	0.0%
DEBILITY	<5	0.1%	3715	4.0%
MEDICALLY COMPLEX	<5	0.2%	9061	9.8%
TOTAL	1859	100.0%	92000	100.0%

Note: # Episodes >= # Patients since a patient can be admitted more than once for an episode.

The number of admissions to North West LHIN rehabilitation facilities has dropped from 731 in 2006/07 to 565 in 2007/08 and 563 in 2008/09. There has also been a drop in admissions provincially from 31,973 to 29,884.

The North West LHIN facilities have a higher proportion of admissions for orthopaedic rehabilitation (60%) over the past three years compared to all facilities in Ontario (51%). This proportion has decreased in the North West over this time period, however, with 64%, 57% and 58% of admissions in fiscal years 2006, 2007 and 2008 respectively.

As well, almost 12% of admissions are for arthritis rehabilitation compared to less than 1% provincially. This proportion has remained consistent over the three year period, although the actual number of admissions has decreased by 16%.

⁷¹ Inpatient Rehabilitation Main Table, IntelliHEALTH; extracted fall 2009.

The proportion of people admitted for stroke rehabilitation appears to be increasing, accounting for 11, 17 and 19% in fiscal year 2006, 2007 and 2008 respectively.

4.5.3 Cardiac Rehabilitation

Thunder Bay Regional Health Sciences Centre (TBRHSC) provides an innovative model of Cardiac Rehabilitation programming aimed at improving access for all clients within the region. In partnership with hospitals in Atikokan, Nipigon, Marathon, Manitouwadge, Dryden, Kenora, Sioux Lookout and Terrace Bay this program enables access to cardiac risk factor modification for all participants.

This unique delivery model facilitates participation by regional clients while they remain within programs delivered in their home community. Rehabilitation and nursing staff from the partner sites are trained to monitor and support clients during the exercise component of their programs. Ongoing education and risk factor counselling are provided through telemedicine also. This model ensures that clients feel well supported by both service providers and peers while participating in the program components.

Each location requires the Tandberg Interns (portable telemedicine equipment) to achieve the full benefit from the program. In addition, the Terrace Bay site has deferred participation in the exercise component of the program, pending site renovations. Interest has been expressed from two of the Riverside Health Care facilities of Fort Frances and Rainy River.

An evaluation has suggested that outcomes of regional telemedicine clients matched those of the TBRHSC host site. With the ultimate goal of self-management of cardiac risk factors by participants the program provides access to tools to lead to improved health outcomes and increased quality of life. The initiative is broadly applicable to other organizations and programs seeking to extend services to catchment areas challenged by sparse populations and limited professional resources while maintaining fiscal accountability

4.6 Long-Term Care

4.6.1 Long-Term Care Homes – Beds and Occupancy

Exhibit 4.33 shows the number of long-term care (LTC) home beds by type in homes located in the Northwest as of January 2009.

Exhibit 4.33 North West LHIN LTC Homes and Beds as of Jan. 31, 2009⁷²

Home Name	Long Stay Beds	Short Stay Beds	Convalescent Care Beds
ATIKOKAN GENERAL HOSPITAL (ELDCAP ⁷³)	22	0	0
BIRCHWOOD TERRACE	96	0	0
EMO HEALTH CENTRE (ELDCAP)	12	0	0
NORTHWOOD LODGE	32	0	0
PINECREST	115	1	0
PRINCESS COURT	95	2	0
RAINY RIVER HEALTH CENTRE (ELDCAP)	21	0	0
RAINYCREST	162	2	0
WILLIAM A. "BILL" GEORGE EXT.CARE F. (ELDCAP)	20	0	0
BETHAMMI NURSING HOME	105	5	0
DAWSON COURT	150	0	0
GERALDTON DISTRICT HOSPITAL (ELDCAP)	19	0	0
GRANDVIEW LODGE/THUNDER BAY	150	0	0
HOGARTH RIVERVIEW MANOR	96	0	0
MANITOUWADGE GENERAL HOSPITAL (ELDCAP)	9	0	0
NIPIGON DISTRICT MEMORIAL HOSPITAL (ELDCAP)	15	0	0
PINEWOOD COURT	128	0	0
PIONEER RIDGE	150	0	0
ROSEVIEW MANOR	157	0	0
THUNDER BAY INTERIM LONG-TERM CARE CENTRE	65	0	0
VERSA-CARE CENTRE, THUNDER BAY	122	0	9
TOTALS	1741	10	9

Short Stay Respite Beds are defined as short-stay beds (up to 60 days) in LTC Homes for individuals whose caregiver requires temporary relief from his/her care-giving duties. Convalescent Care Beds are defined as LTC short stay (up to 90 days) supportive care beds in LTC Homes for individuals who require time to recover strength, endurance or functioning.

⁷² MOHLTC Vacancy Report, North West CCAC.

⁷³ ELDCAP beds are LTC 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.

Exhibit 4.34 shows the overall occupancy of beds in LTC homes in all LHINs at January 2009 compared to January 2008.

Exhibit 4.34 Occupancy of LTC Beds by Home Location (LHIN) ⁷⁴

	January 2009	January 2008	Change	Average Length of Stay (years)	System Turnover
Ontario	98.8%	98.8%	0.0%	3.0	33.1%
Central	98.2%	98.2%	0.0%	3.1	31.8%
Central East	98.5%	98.8%	-0.3%	3.0	33.3%
Central West	98.3%	97.9%	0.4%	2.6	38.0%
Champlain	99.3%	99.2%	0.1%	3.0	33.2%
Erie St. Clair	98.8%	98.8%	0.0%	2.6	39.2%
HNHB	98.7%	98.6%	0.1%	3.7	26.9%
Mississauga Halton	99.0%	98.0%	1.0%	3.3	30.0%
North East	98.9%	99.3%	-0.4%	3.1	32.0%
North Simcoe Muskoka	98.4%	98.8%	-0.4%	2.7	37.3%
North West	98.0%	98.6%	-0.6%	2.4	41.6%
South East	99.9%	99.6%	0.3%	2.6	37.8%
South West	98.6%	99.3%	-0.7%	2.6	38.0%
Toronto Central	99.1%	99.2%	-0.1%	4.0	25.2%
Waterloo Wellington	98.9%	99.1%	-0.2%	2.8	36.3%

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 LTC home beds by January 2009 and that the City would work with the MOHLTC to develop a three-year transition plan. In response to this, on August 31st, 2007 the Minister announced the development of the Centre of Excellence for Integrated Seniors' Services (CEISS) in Thunder Bay. This initiative contemplates the establishment of 336 long-term care beds, including 64 specialized behavioural beds, as well as 132 new supportive housing units through St. Joseph's Care Group in 2011. Subsequently, the City of Thunder Bay and the Ministry of Health and Long-Term Care negotiated an extension to the City's planned closure of beds until the CEISS opens. It is expected that the CEISS will open in 2012/13.

Fort Frances

Riverside Health Care Facilities Inc. assumed control of Rainycrest Home for the Aged in March 2005 and as part of that agreement with the Ministry of Health and Long-Term Care, Rainycrest was approved to operate 19 additional LTC home beds. Rainycrest was authorized to open these beds on November 26th, 2008 and admissions to these beds began in early December 2008.

Terrace Bay

In July 2009, the Minister of Health and Long-Term Care announced the construction of a 22 Long-Term Care bed facility in Terrace Bay, owned and operated by the McCausland Hospital. It is expected that the first resident will be placed in the new facility in the fall of 2010.

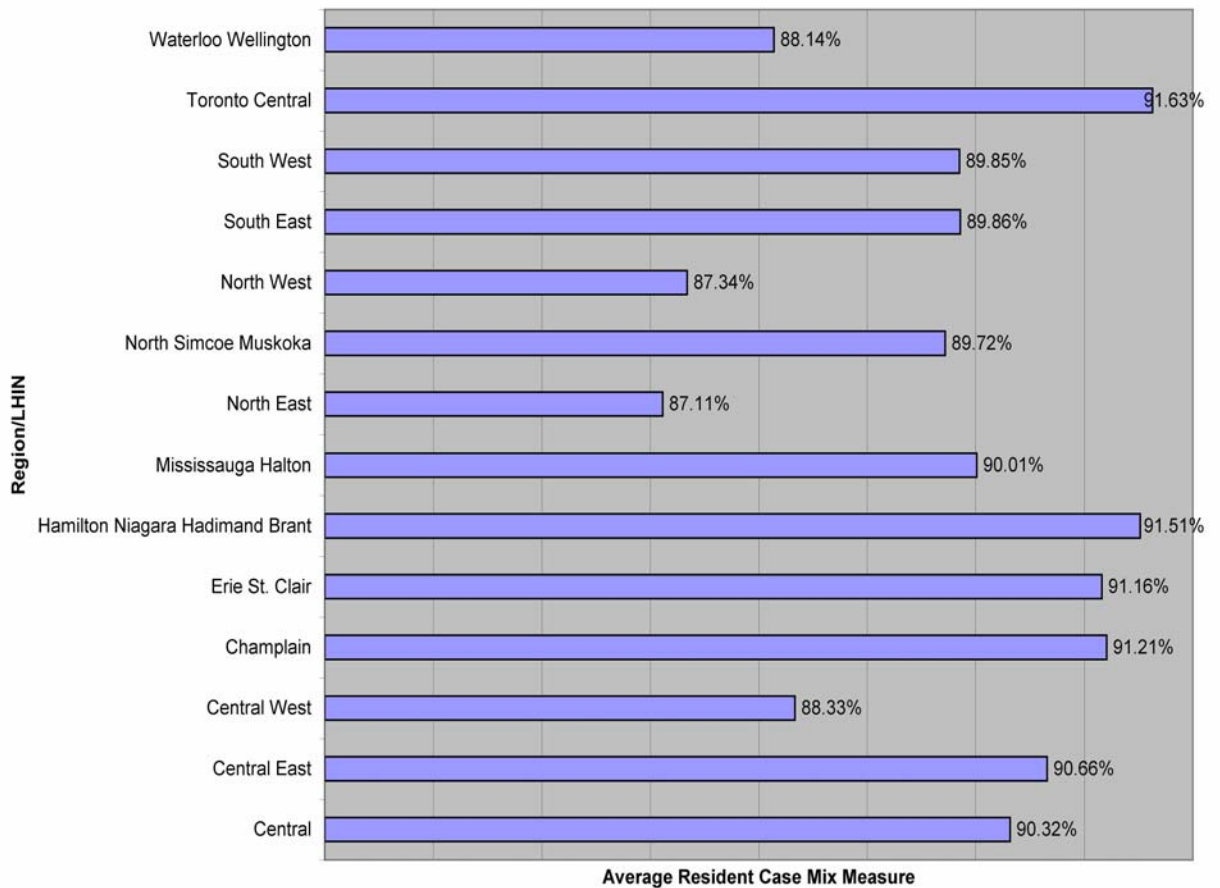
⁷⁴ MOHLTC. Long-Term Care Home System Report. 2009.

4.6.2 Case Mix Measure

All Ontario LTC 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 residents⁷⁵.

Exhibit 4.35 shows the average Case Mix Measure for the residents of North West LHIN LTC homes, and compares the result with the CMM of homes in the other LHINs.

Exhibit 4.35 Average Case Mix Measure for LTC Residents by LHIN of LTC home⁷⁶



⁷⁵ The Home Case Mix Measure (CMM) is the total of the proportion of the home’s residents in each classification category (A-G) multiplied by category weights, totalled, 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.

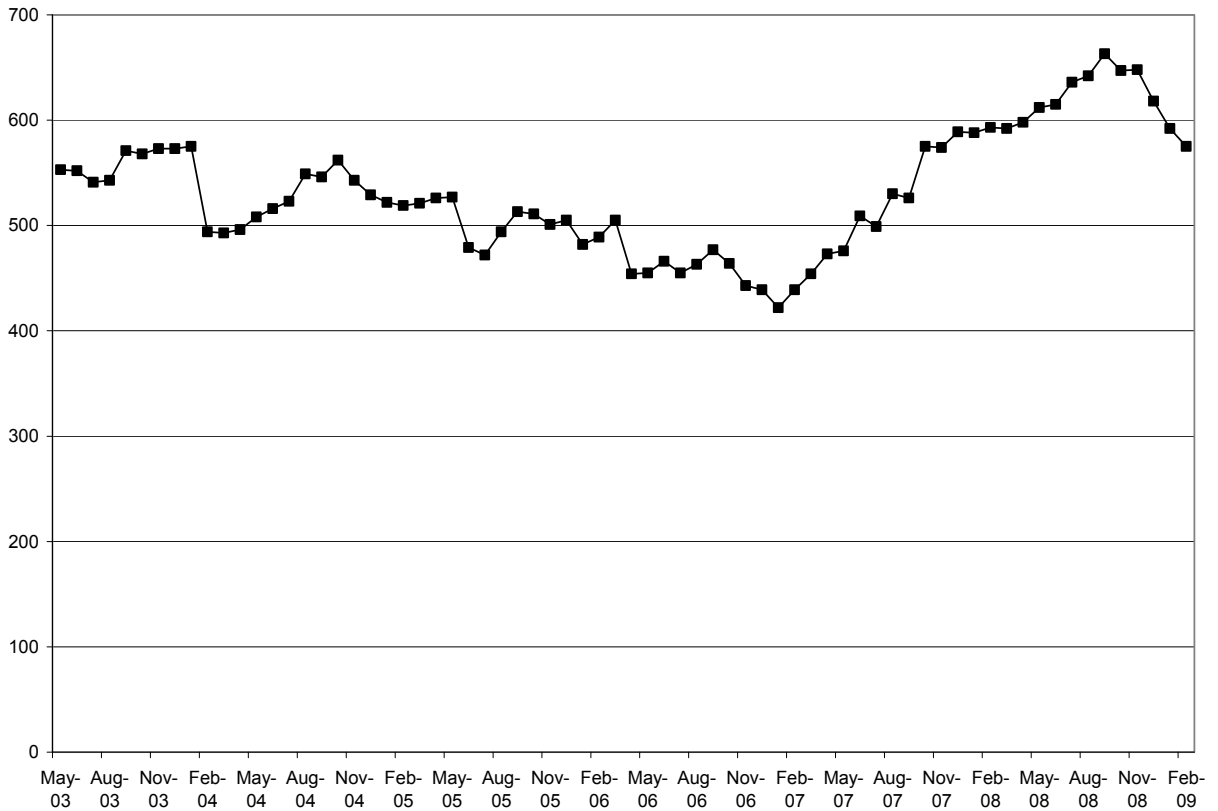
⁷⁶ Guinard, Sue. Data Development and Maintenance Unit, Health Data Branch, Health System Information Management and Investment Division. August 24, 2009.

The average CMM for LTC homes in the Northern Ontario is slightly lower than other areas of the province and has changed very little from 2005 when the average CMM in the Northern region was 88.6.

4.6.3 Wait Times for LTC beds

Exhibit 4.36 shows the trend in the number of people waiting in the community for admission to a North West LHIN LTC home bed.

Exhibit 4.36 Community Resident LTC Home Wait List Trend for North West LHIN⁷⁷



The number of people waiting for admission showed a spike in the fall of 2008, but appears to be returning to levels seen in 2003 (as of Feb. 2009).

⁷⁷ Ontario MOHLTC LTC System Report.

Exhibit 4.37 expresses the wait list in terms of total number of beds available for all LHINs as of January 2009.

Exhibit 4.37 Community Resident LTC Home Wait List and Ratio to Total LTC Home Beds by LHIN, January 2009⁷⁸

	Long Stay Waitlist	Total Beds	Wait List as % of Total Beds
Ontario	24596	76,096	32.3%
Central	2245	7,089	31.7%
Central East	3408	9,572	35.6%
Central West	304	3,440	8.8%
Champlain	2787	7,522	37.1%
Erie St. Clair	979	4,231	23.1%
HNHB	2971	10,426	28.5%
Miss Halton	1310	4,078	32.1%
North East	1318	4,827	27.3%
North Simcoe Muskoka	1325	2,869	46.2%
North West	592	1,760	33.6%
South East	1878	3,778	49.7%
South West	2072	6,818	30.4%
Toronto Central	1798	6,016	29.9%
Waterloo Wellington	1609	3,670	43.8%

Expressed as a percentage of the total number of LTC home beds, the January 2009 community wait list is equal to 33.6% of the total number of beds in the North West LHIN. This is slightly higher than the provincial rate of 32.3%.

Setting the Balance of Care in Northwestern Ontario

Findings from the “*Setting the Balance of Care in Northwestern Ontario*” study⁷⁹ suggest that up to 50% of the individuals currently on the wait list in the Kenora/Rainy River District could be managed safely in the community if appropriate community support services were available. Only 7% of the individuals on the LTC wait list in Thunder Bay could benefit from additional community support services. The findings also suggest that individuals on the LTC wait list in Thunder Bay have higher care needs than individuals in outlying communities.

⁷⁸ MOHLTC Long Term Care Home System Report

⁷⁹ K. Kuluski et al. *Setting the Balance of Care in Northwestern Ontario*. 2009.

4.7 Home Care

The recent Canadian Healthcare Association report *Home Care in Canada*⁸⁰ stated that all Canadians find themselves on either the giving or receiving of home care, for four reasons:

- People generally prefer to receive care at home;
- Canada is an aging nation with increasing rates of chronic disease;
- Current technology allows us to offer more care at home;
- Governments are trying to contain their health care budgets, and home care is generally perceived to be lower-cost care.

According to the last Statistic's Canada Census (2006), 21.8% of adults (age 15+) living in the Northwest reported giving hours of unpaid care/assistance to seniors.⁸¹

The Canadian Home Care Association found that the "health care delivery system in rural and remote areas is significantly less than that which is offered in urban settings"⁸² and is faced with a number of challenges: a lack of health human resources, lack of support systems and local resources, limited transportation, and the requirements to travel long distances and hours to see very few clients. In the study, the concept of "remote" was broadly defined to include connectedness to a social support network of any kind, and to the health care system both in terms of access and contact. Therefore it is possible to live in an urban setting and have the experience of being "remote". The study found that health care delivery in rural and remote settings is achieved through a mix of: client resiliency, provider creativity and initiative, and system flexibility.

4.7.1 CCAC Clients by LHIN

With the reorganization of the Community Care Access Centres (CCAC) from 42 separate organizations to 14 in January 2007 to align with the Local Health Integration Networks, there is now one CCAC in the Northwest.

Exhibit 4.38 on the following page shows the number of individuals served in the different Community Care Access Centres across the province. Clients of federally funded home care services in First Nation communities are not included.

⁸⁰ Canadian Healthcare Association. *Home Care in Canada: From the Margins to the Mainstream*. Ottawa 2009.

⁸¹ Health Analytics Branch, MOHLTC. Senior Demographic Profile_FINAL Data Product. Nov. 2008.

⁸² Canadian Home Care Association. *A Scan of Options for Delivering Home Care in Rural, Remote and Northern Regions of Canada*. Ottawa 2008.

Exhibit 4.38 CCAC Clients (2008//09) by LHIN⁸³

CCAC	Expenditures	Individuals Served	Expenditures on Client Services	Percentage of Expenditure on Client Services
Central	\$192,916,153	59,118	\$174,236,302	90.32%
Central East	\$208,330,021	65,994	\$188,866,393	90.66%
Central West	\$71,598,441	27,496	\$63,245,611	88.33%
Champlain	\$169,630,418	55,494	\$154,713,211	91.21%
Erie St. Clair	\$104,812,531	33,892	\$95,548,518	91.16%
Hamilton Niagara Haldimand Brant	\$218,420,137	70,430	\$199,886,766	91.51%
Mississauga Halton	\$109,090,401	39,953	\$98,191,096	90.01%
North East	\$95,828,806	39,550	\$83,480,583	87.11%
North Simcoe Muskoka	\$66,816,655	21,630	\$59,946,141	89.72%
North West	\$36,237,114	12,477	\$31,649,723	87.34%
South East	\$90,073,138	26,851	\$80,937,560	89.86%
South West	\$150,839,269	47,784	\$135,528,727	89.85%
Toronto Central	\$169,755,210	53,558	\$155,544,871	91.63%
Waterloo Wellington	\$89,357,383	31,196	\$78,758,475	88.14%

The North West CCAC provided community-based services to 12,477 clients in 2008/09, an increase from 12,184 in 2007/08. In fiscal year 2005/06 11,473 clients were served by the CCACs in the Northwest (Thunder Bay and Kenora-Rainy River) with a total expenditure of \$30,904,475.⁸⁴

4.7.2 Home-Based Care Utilization Rates by Sub-Area

Exhibit 4.39 presents the age-gender standardized rates of utilization of home care services for North West LHIN residents by sub-area of residence. Data for federally funded on-reserve home services is not reflected in this chart.

Exhibit 4.39 Age/Gender Standardized Rates of Utilization of Home Care Services (Service per 10,000 Population) by North West LHIN Sub-Area for 2007/08⁸⁵

Service Type	Kenora	Rainy River	Thunder Bay District (outside city)	Thunder Bay City
Case Management	1411	1283	142	558
Homemaking	7849	12225	2630	14478
Nursing	4637	3349	860	5011
Therapy	1389	1193	396	1551

The data in Exhibit 4.39 shows that there were large variations in rates of utilization of home care services across the geographic sub-areas in the Northwest. As would be expected, proximity to major centres, population

⁸³ Ontario MOHLTC FIM website, <http://www.mohltcfim.com/>.

⁸⁴ North West LHIN. Integrated Health Services Plan. October 2006.

⁸⁵ Home Care Database, MOHLTC.

density, and travel distances appear to have significant impacts on access to home care services.

4.8 Community Support Services

The Canadian Research Network for Care in the Community (CRNCC) described community support services (CSS) as encompassing a range of health and social services aimed at helping people who need assistance with activities of daily living to live as independently as possible in the community.⁸⁶

While most CSS clients are seniors, other needs groups include persons with disabilities and a growing number of medically-fragile children and their families. Community support services may include:

- Assistance with **personal activities of daily living (PADL)** or activities of daily living (ADL) (e.g. eating, bathing, grooming, walking, dressing, toileting and personal hygiene);
- Assistance with **instrumental activities of daily living (IADL)** (e.g. preparing meals, vacuuming, laundry, changing bed linens, bathroom and kitchen cleaning, managing finances, using the telephone and shopping, as well as transportation);
- Respite care/caregiver services that provide relief for family caregivers, and stimulation and support for care recipients;
- Assessment and care coordination/management services which identify need, monitor vulnerable clients, facilitate the client's entry into other parts of the health and social care system (e.g. hospitals, LTC facilities, and home care), and coordinate services on behalf of the client and family.

Community support services may also include professional home care services such as nursing, physical and occupational therapy, and social work.

International research suggests that when targeted, managed, and integrated into the continuum of care, CSS can:

- Play an important role in maintaining the health, well-being and autonomy of individuals; and
- Reduce demand for more costly emergency, hospital and residential care (e.g. nursing homes).⁸⁷

Exhibit 4.40 following shows the number of clients receiving different types of community support services provided by CSS agencies in the North West LHIN. Since some clients receive multiple services, the total number of individuals served is less than the number of clients served.

⁸⁶ Canadian Research Network for Care in the Community. *In Focus: Community Support Services*. Toronto 2006.

⁸⁷ Ibid.

Exhibit 4.40 Community Support Services, 2007/08⁸⁸

Community Support Service	Unit of Service	Clients
Acquired Brain Injury - Personal Support/ Independence Training	Hours of Care	179
Acquired Brain Injury - Assisted Living Services	Resident Day	180
Assisted Living Services	Resident Day	279
Caregiver Support	Visits	813
Case Management	Visits	634
Comm Sup. Init - Support Services Training	Visits	432
Crisis Intervention and Support	Visits	150
Day Services	Attendance Day	375
Emergency Response Support Services	Visits	65
Hearing Impaired Care Services	Visits	350
Home Maintenance	Hours of Care	1016
Homemaking	Hours of Care	716
In-Home Health Care - Nursing - Visiting	Visits	145
In-Home Health Care - Occupational Therapy	Visits	90
In-Home Health Care - Physiotherapy	Visits	30
In-Home Health Care - Social Work	Visits	21
Meals Delivery	Meals - combined	881
PS/HM/Respite Services	Hours of Care	28
Respite	Hours of Care	1382
Service Arrangement/Coordination	Visits	286
Social and Congregate Dining	Attendance Day	2399
Transportation - Client	Visits	1064
Vision Impaired Services	Visits	500
Visiting - Hospice Service	Visits	3878
Visiting - Social and Safety	Visits	1420

The North West LHIN has made additional investments in Community Support Services across the Northwest in 2008/09 and 2009/10 through the Aging at Home and Urgent Priorities Fund initiatives. Results of these investments will be reflected in subsequent years.

Aging At Home Strategy

The Aging At Home Strategy is a provincial approach, developed by the MOHLTC and launched in August 2007. The strategy is aimed at meeting the health and wellness needs of seniors who need some help to live at home independently. It also aimed at relieving the reliance on hospitals and long-term care homes.

The Aging At Home Strategy reflects a change from traditional health service delivery to a system approach. The strategy represents a \$700-million investment, over three years. The objectives of the strategy are:

⁸⁸ Ontario MOHLTC FIM website, <http://www.mohltcfim.com/>.

- Provide seniors with a continuum of supports that will enable them to stay and live with independence and dignity in their homes;
- Provide a comprehensive plan for an integrated continuum of care that includes: community support services; home care; supportive housing; long-term care home beds; and End-of-life care.
- Offering preventative supports to sustain the healthiest population of seniors possible.

For more details on the provincial Aging at Home Strategy please refer to the Seniors' Services section under the Integrated Health Services Plan area of the North West LHIN's website at :

<http://www.northwestlhin.com/Page.aspx?id=1064>

**End of Life
Care**

Palliative care is a key focus of the Provincial and Regional Cancer Programs in conjunction with the End-of-Life Care Strategy. Currently 49% of those who died of cancer in Northwestern Ontario died in hospital and would have preferred to die at home.⁸⁹

In 2007/08, the Centre for Education and Research on Aging and Health (CERAH) conducted a palliative care needs assessment for the Northwestern Ontario End-of-Life Care Network. The study found that:

- Cancer is the main cause of death across Northwestern Ontario;
- Most deaths occur in a hospital, followed by a nursing home or in the person's residence; and
- The number of deaths in hospital is decreasing while the number of deaths in a person's residence or nursing home is steadily increasing.

The CERAH study also found that in the sixteen communities surveyed, all the communities have counselling and spiritual services and CCAC services; and a hospice palliative care volunteer program is active in most communities.⁹⁰

4.9 Mental Health and Addiction Services

A detailed analysis of mental health and addictions at the LHIN level for all LHINs was released in the spring of 2008⁹¹. This report looked at all data sources (self-report, physician visits, community mental health services, addiction treatment services, emergency department visits, inpatient services and deaths) for the most recent year of data available. Where possible, updates with newer information are provided in this section.

⁸⁹ Cancer Care Ontario Cancer System Quality Index, 2006.

⁹⁰ Habjan, S., Diamond, L., & Kelley, M.L. *Northwestern Ontario Palliative Care Needs Assessment*. CERAH, Lakehead University, Thunder Bay, ON. November 2008. 2008, page 3.

⁹¹ Health System Intelligence Project. *Mental Health and Addictions in Ontario LHINs*. April 2008.

4.9.1 Mental Health Services

Exhibit 4.41 shows the breakdown by most responsible diagnosis (MRDx) for those unscheduled emergency department visits by North West LHIN residents with a mental health diagnosis for fiscal year 2007.

*Exhibit 4.41 Ambulatory Mental Health-Related ER Visits*⁹²

Unscheduled ED Visits by North West LHIN residents for fiscal year 2007 for ICD-10-CA Chapter V Diagnoses (F00-F99): Mental Health and Behavioural Disorders					
Most Responsible Diagnosis	NW LHIN Residents			Ontario	
	# ED Visits (#=7163)	% of ALL ED Visits (#=202,243)	% ED Visits for MRDx of F00-F99	% of ALL ED Visits	% ED Visits for MRDx of F00-F99
(F10-F19) Mental and Behavioural Disorders Due To Psychoactive Substance Use	3220	1.6%	45.0%	0.9%	27.5%
(F40-F48) Neurotic, Stress Related and Somatoform Disorders	2044	1.0%	28.5%	1.1%	33.1%
(F30-F39) Mood(affective) Disorders	1016	0.5%	14.2%	0.7%	21.0%
(F20-F29) Schizophrenia Schizotypal and Delusional Disorders	463	0.2%	6.5%	0.4%	11.1%
(F00-F09) Organic, including Symptomatic, Mental Disorders	140	0.1%	2.0%	0.1%	3.1%
(F60-F69) Disorders of Adult Personality and Behaviour	101	0.0%	1.4%	0.1%	1.7%
(F90-F98) Behavioural and Emotional Disorders with onset usually occurring in Childhood and Adolescence	87	0.0%	1.2%	0.0%	0.3%
(F50-F59) Behavioural Syndromes Associated with Physiological Disturbances & Physical Factors	45	0.0%	0.6%	0.0%	0.8%
(F99-F99) Unspecified Mental Disorder	33	0.0%	0.5%	0.0%	0.0%
(F70-F79) Mental Retardation	7	0.0%	0.1%	0.0%	0.2%
(F80-F89) Disorders of Psychological Development	7	0.0%	0.1%	0.0%	1.3%

Visits for mental health and behavioural disorders as defined above accounted for 3.5% of unscheduled ER visits by North West LHIN residents. This compares to 3.2% for all Ontarians. The largest proportion (45%) of visits for mental health and behavioural disorders by North West LHIN residents were for mental and behavioural disorders due to psychoactive substance use compared to only 27.5% for Ontarians.

⁹² Ambulatory Care Main Table, IntelliHEALTH; extracted June 2009.

Exhibit 4.42 presents the same type of information for inpatient hospital discharges from North West LHIN hospitals over the three most recent fiscal years 2006 to 2008.

Exhibit 4.42 Inpatient Discharges with Most Responsible Diagnosis (MRDx of Mental and Behavioural Disorders (ICD10 F00-F99) for North West LHIN hospitals and Ontario, Average over Fiscal Years 2006 to 2008⁹³

ICD10 Block MRDx for Chapter V (F00-F99)	North West		Ontario	
	3 Yr Avg # DIS	% DIS	3 Yr Avg # DIS	% DIS
(F10-F19) MENTAL and BEH DISRD Due To PSYACT SUBS USE	286	38.0%	3488	23.0%
(F30-F39) MOOD, AFFECTIVE DISORDERS (F40-F48) NEUROTIC, STRESS REL and SOMATOFORM DISRD	131	17.4%	3107	20.5%
((F40-F48) NEUROTIC, STRESS REL and SOMATOFORM DISRD	124	16.5%	1913	12.6%
(F00-F09) ORGANIC, INCL SYMPTOMATIC, MENTAL DISRD	98	13.1%	4016	26.5%
(F20-F29) SCHIZOPHRENIA SCHIZOTYPAL and DELUS DISRD	48	6.3%	966	6.4%
(F90-F98) BEH and EMOT DISRD WITH ONSET in CHILDHOOD and ADOL	45	6.0%	845	5.6%
(F60-F69) DISRD OF ADULT PERSONALITY and BEHAVIOUR	10	1.3%	227	1.5%
(F50-F59) BEH SYNDR ASSOC WITH PHYSL DISTURB	7	1.0%	432	2.9%
(F80-F89) DISORDERS OF PSYCHOLOGICAL DEVELOPMENT	<5	0.3%	133	0.9%
(F70-F79) MENTAL RETARDATION	<5	0.1%	24	0.2%
(F99-F99) UNSPECIFIED MENTAL DISORDER	0	0.0%	7	0.1%
TOTAL CHAPTER V (ICD-10 F00-F99) DISCHARGES	754	100.0%	15158	100.0%

As with the emergency room visits, the largest proportion of discharges involving mental health diagnoses is for mental and behavioural disorders due to psycho-active substance use (38% in North West LHIN hospitals compared to only 23% in Ontario).

Adult Mental Health Admissions

Data on patients occupying adult mental health beds is now maintained in a separate database called the Ontario Mental Health Records System (OMHRS). Although the beds are designated for adults (age 18+), it is possible for children to occupy these beds if other beds aren't available.

⁹³ Inpatient Discharges Main Table, IntelliHEALTH Ontario; extracted fall 2009.

Exhibit 4.43 shows the breakdown of the location and type of adult mental health beds in North West LHIN hospitals. Thunder Bay Regional Health Sciences Centre also has an eight bed child and adolescent mental health unit.

Exhibit 4.43 Number of Adult Designated Mental Beds by hospital and type

Hospital	Acute Psychiatry	Forensic	Long-Term	Total
Lake-of-the-Woods District Hospital	19	0	0	19
St. Joseph’s Care Group (SJCG) – Lakehead Site	0	0	71	71
Thunder Bay Regional Health Sciences Centre (TBRHSC)	30	20	0	50
Total	19	20	71	140

The 71 long-term mental health beds at SJCG are used for adult rehabilitation, older adult rehabilitation and dementia care. SJCG is designated as a specialty mental health facility. Both TBRHSC and Lake-of-the-Woods District Hospital are designated Schedule 1 facilities under the Mental Health Act. This means that the following five essential services must be included in the facility’s program:

- In - patient services
- Out - patient services
- Emergency services
- Day care services
- Consultative and educational services to local agencies.

The North West LHIN’s statistics for designated mental health beds run contrary to the rest of the province with regard to the split between specialty psychiatric and general hospitals. Forensic beds and Schedule 1 beds are located at Thunder Bay Regional Health Sciences Centre, not at the designated specialty psychiatric hospital as is the more common format provincially. The specialty psychiatric hospital (St. Joseph’s Care Group – Lakehead Site) is comprised exclusively of mental health rehabilitation and dementia care beds.

Exhibit 4.44 shows the number of admissions and number of unique patients admitted to North West LHIN adult mental health beds in fiscal year 2006.

Exhibit 4.44 Admissions to & unique patients treated in adult designated mental health beds in the North West LHIN, 2006/07⁹⁴

Hospital Name	Hospital Type	Admissions	Unique Individuals‡
Lake-of-the-Woods District	Acute	223	175
Thunder Bay Regional Health Sciences Centre	Acute	1,190	832
St. Joseph's Care Group - Lakehead Site	Specialty	199	157
North West LHIN Total	Total	1,612	1,112
Ontario Hospitals	Acute	39,673	27,776
	Specialty	13,584	10,748
	Total	53,257	35,815

‡Based on a count of encrypted health card numbers by hospital and excludes those without a valid health card number. Patients can have admissions to multiple hospitals and in more than one LHIN.

Patient Characteristics

The following table shows the age and gender distribution of North West LHIN residents (and Ontarians overall) admitted to adult mental health beds.

Exhibit 4.45 Demographics of patients (by LHIN of Residence) admitted to adult designated mental health, 2006/07⁹⁵

	All Ontario residents		NW LHIN (patient residence)	
	#	%	#	%
Gender				
Female	26,160	49.1	775	48.5
Male	27,085	50.2	824	51.5
Age group				
0-14	162	0.3	<5	0.2
15-24	8,525	16.0	363	22.7
25-44	23,281	43.7	661	41.3
45-64	15,984	30.0	377	23.6
65+	5,305	10.0	195	12.2
Aboriginal Status (for those with a full assessment)				
Yes	1,253	3.2	308	22.2% (or 27.5% of valid responses)
No	38,179	96.8	810	58.3% (or 72.5% of valid responses)
Not Recorded	7,961	20.2	271	19.5%

⁹⁴ Adapted from Utilization of Designated Adult Mental Health Beds-LHIN of Hospital; OHMRS LHIN Hospitals Tabulation_2008-09-29. HAB.

⁹⁵ Adapted from Utilization of Designated Adult Mental Health Beds-LHIN of Hospital; OHMRS LHIN Hospitals Tabulation_2008-09-29. HAB.

A much larger proportion of Northwest residents admitted to adult mental health beds are Aboriginal compared to all provincial admissions; this reflects the Northwest’s population demographics.

Exhibit 4.46 provides information on Adult Mental Health bed discharges.

Exhibit 4.46 Discharge information associated with stays in adult designated mental health units by patient residence & hospital type, 2006/07⁹⁶

	Hospital Type	Acute Days			Alternate Level of Care		
		Total DIS	Acute Days	Average Acute LOS	# DIS with ALC days	ALC Days	Average ALC Length of Stay
North West	Acute	1,316	15,473	11.8	<5	-	-
	Specialty	161	9,790	60.8	<5	-	-
	Total	1,477	25,263	17.1	6	42	7.0
Ontario	Acute	37,990	416,948	11.0	1,882	29,910	15.9
	Specialty	11,030	380,753	34.5	420	13,042	31.1
	Total	49,020	797,701	16.3	2,302	42,952	18.7

Source: Adult Mental Health Data, Ontario Ministry of Health & Long-Term Care, PHPDB.

As noted previously, the beds at the specialty hospital in the North West LHIN (St. Joseph’s Care Group – Lakehead Site) are used for long-term mental health patients. This accounts for the longer average length of stay for discharges from this site.

⁹⁶ Ibid.

Exhibit 4.47 shows the type of treatment received by those occupying adult mental health beds in North West LHIN facilities and Ontario overall.

Exhibit 4.47 Therapeutic Focus of Treatment Received by Patients Admitted to All Adult Designated Mental Health Beds – North West LHIN and Ontario, 2006/07⁹⁷

	Northwest	Ontario	Comments
Therapeutic treatment or focus	%	%	
Community Reintegration	20.1	45	2nd Lowest in Ontario
Social Functioning	18.9	38.2	Lowest in Ontario
Detoxification	9.2	9.4	
Alcohol/Drug	14.0	14.9	
Vocational Counselling	1.3	2.4	
Anger Management	4.1	10.0	2nd Lowest in Ontario
Eating Disorders	1.0	1.8	
Behaviour Management	11.0	21.5	4th Lowest in Ontario
Post Traumatic Stress Management	2.0	3.4	
Received one or more days of:			
Psychiatric	88.3	91.4	3rd Lowest in Ontario
Social Worker	44.3	48.6	
Psychologist/Psychometrist	22.7	7.6	2nd Highest in Ontario
Occupational Therapy	15.8	18.0	
Recreational Therapy	25.9	25.9	
Addiction Counselling	2.3	6.7	5th Lowest in Ontario
Dietitian	8.4	5.9	3rd Highest in Ontario
Medical	63.5	49.6	4th Highest in Ontario
Received one or more days of nursing:			
Medical Intervention	38.5	39.3	
One-to-One Counselling	46.6	79.4	Lowest in Ontario
Crisis Intervention	13.1	26.0	Lowest in Ontario
Family Support	23.2	26.6	

4.9.2 Substance Abuse and Problem Gambling Programs

DATIS⁹⁸, 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 the MOHLTC, nor does it include addiction services

⁹⁷ Adapted from Utilization of Designated Adult Mental Health Beds-LHIN of Hospital; OHMRS LHIN Hospitals Tabulation_2008-09-29. HAB.

⁹⁸ The North West IHSP Advisory Committee cautioned that reported DATIS data should be used with caution due to incomplete and inconsistent data entry. Some addiction services do not report data to DATIS as they do not have access to required resources (e.g. high speed internet) to support data entry requirements. Data entry procedures also vary significantly from one provider to another resulting in inaccurate or incomplete data entry.

provided by other federally or provincially-funded health care providers, private practitioners or for-profit providers.

Exhibit 4.48 summarizes the age and gender distribution of active clients (Open Admissions) of substance abuse and gambling programs in the North West LHIN for the fiscal year 2008.

Exhibit 4.48 Open Admissions* By Gender & Age Group, 2008/09

Open Admissions* By Gender & Age Group, fiscal year 2008				
North West LHIN Substance Abuse and Problem Gambling Programs				
	Problem Gambling⁹⁹		Substance Abuse¹⁰⁰	
	# Open Admissions	% Open	# Open Admissions	% Open
Gender Admissions				
Male	261	50.7%	8,762	72.4%
Female	254	49.3%	3,347	27.7%
Total	515	100%	12,103	100%
Gambling Programs				
Age	# Open Admissions	% Open	# Open Admissions	% Open
Under 16	96	18.6%	687	5.7%
16 - 24	138	26.8%	1,656	13.7%
25 - 34	66	12.8%	2,055	17.0%
35 - 44	71	13.8%	2,842	23.5%
45-54	95	18.4%	2,775	22.9%
55 - 64	42	8.2%	1,581	13.1%
65 or Over	7	1.4%	507	98.4%
Total	515	100%	12,103	100%
* Admissions refer to clients and families with at least one program registration				

The majority of clients in the substance abuse programs are males (76%) while there is more even distribution in the problem gambling programs (51% males).

Almost half (46%) of clients in the Problem Gambling programs are under the age of 25.

Supportive Housing Units for People with Problematic Substance Use

The Ministry of Health and Long-Term Care has committed to establishing 1,000 supportive housing units across the province for people with problematic substance use. The initiative will address the supportive housing needs of persons with problematic substance use, including people with concurrent disorders, and/or on methadone maintenance treatment. The North West LHIN will receive 48 units over 3 years.

The program is targeted at high users of the addictions system, e.g. frequent, repeat users of hospital emergency departments and withdrawal management

⁹⁹ DATIS. Gambling Programs: Ministry Report - Summary North West. May 2009.

¹⁰⁰ DATIS. Substance Abuse Programs: Ministry Report - Summary North West. May 2009.

services. There is a high correlation between and individual having no fixed address and the individual engaging in multiple treatment episodes.

4.9.3 Community Mental Health and Addiction Services

Exhibit 4.49 shows the number of service recipients for different service functions provided by Community Mental Health and Addiction Services agencies in the North West LHIN. Where possible, the breakdown of service recipients by gender and age group is provided.

Exhibit 4.49 Community Mental Health and Addictions Programs Service Recipients, 2007/08¹⁰¹

Service Function	Programs Submitted (#)	Service Recipients (#)	Females (adj. %) ¹	Age Groups (adjusted %s) ¹			
				<24 (%)	25- 34 (%)	35-54 (%)	55+ (%)
Abuse Services	2	1,131	87	- ²	-	-	-
Assertive Community Treatment	3	286	47	12	19	47	22
Clubhouses	1	348	34	5	16	58	21
Concurrent Disorders	1	23	48	9	17	48	26
Counselling & Treatment	11	5,407					
Crisis Support Beds	1	68	21	15	23	52	10
Diversion & Court Support	3	284	17	30	31	34	5
Early Intervention	2	58	24	91	9	0	0
Forensic	2	6	-	-	-	-	-
Mental Health Case Management	14	3,442	-	-	-	-	-
Mental Health Crisis Intervention	10	5,629	-	-	-	-	-
Psycho-geriatric	3	881	-	-	-	-	-
Social Rehabilitation/ Recreation	3	245	-	-	-	-	-
Supportive Housing	6	1,550	-	-	-	-	-
Total	60	19,358	-	-	-	-	-

Notes:

1. The %s presented have been adjusted for the unknown/declined to specify counts; the unknown demographic % range from 0 to 6% for displayed values.
2. A "-" indicates that the % unknown was deemed too high to reliably report on the other categories.

¹⁰¹ MOHLTC. Provincial and LHIN Summary – Client Demographics: Age and Gender. www.mohltcfim.com .

4.9.4 Ten-Year Strategy

In recent years, the Kenora/Rainy River Mental Health and Addictions Network and the Thunder Bay District Mental Health and Addictions Network have held joint meetings to facilitate region-wide planning. Collectively, the members of these planning tables represent all Northwest Mental Health and Addiction programs currently funded by the North West LHIN.

A broader, enhanced coordination and integration is still needed in the Northwest to improve access to services for individuals and family members and support coordinated care across the mental health and addictions continuum and across service sectors.

***Mental Health
and Addictions
Ten-Year
Strategy – North
West LHIN
consultation***

The North West Local Health Integration Network (LHIN) began consultations in May 2009 to help inform the Ministry of Health and Long-Term Care's 10-year Mental Health and Addictions Strategy. The North West LHIN's preliminary findings from written surveys were submitted to the Ministry on June 30, 2009. Additionally, community engagement sessions were held across the North West LHIN in September 2009. The purpose of these sessions was to validate the survey findings and obtain additional information to help inform the strategy.

The reports from these consultations can be found on the North West LHIN's website under Reports and Publications.

4.10 Primary Health Care

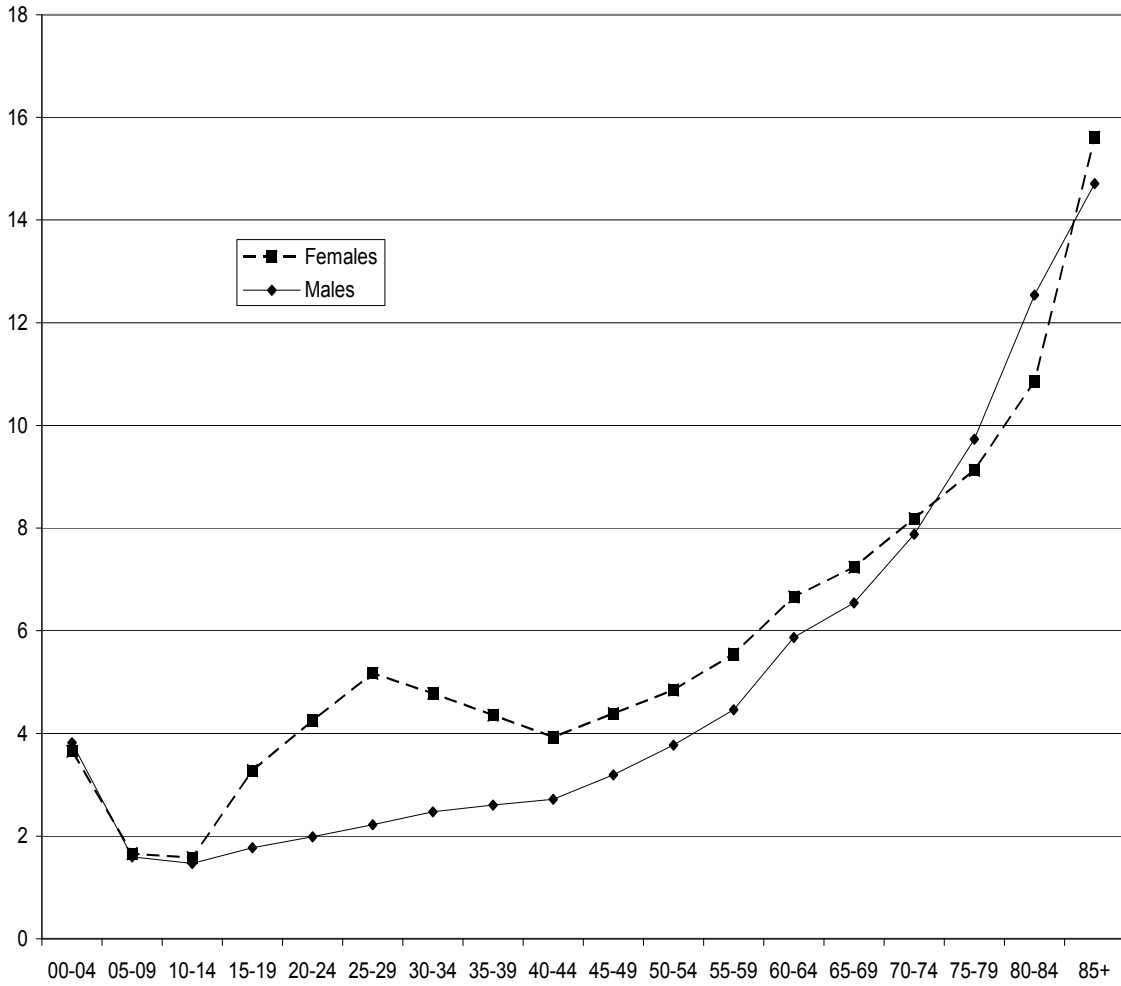
Primary health care (PHC) incorporates personal care with health promotion, the prevention of illness and community development. The philosophy of PHC includes the interconnecting principles of equity, access, empowerment, community self-determination and inter-sectoral collaboration. It encompasses an understanding of the social, economic, cultural and political determinants of health¹⁰².

4.10.1 OHIP Fee for Service Utilization

Exhibit 4.50 on the following page shows the rate of utilization of primary care (OHIP code 00, GP/FP) physician services (measured in terms of services per person) for North West LHIN residents by patient age and gender.

¹⁰² ICES. Primary Care in Ontario. November 2006.

Exhibit 4.50 Primary Care Visits per Person for Northwest Residents by Patient Age and Gender, 2007/08¹⁰³

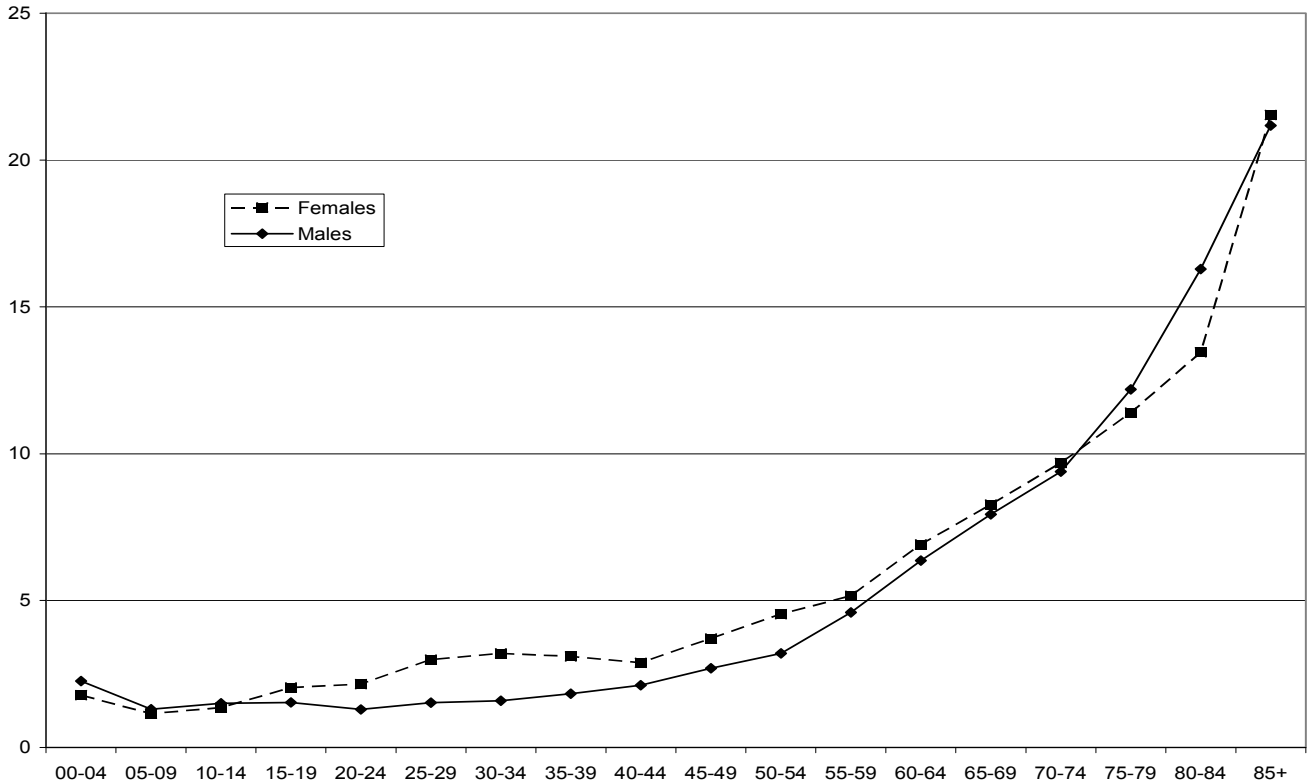


The pattern of primary care utilization is similar to the pattern of acute care utilization, with higher utilization for females during child bearing years, and increasing rates for both genders after age 50.

¹⁰³ Medical Services Data Table, IntelliHEALTH; extracted summer 2009,

Exhibit 4.51 shows similar data for North West LHIN residents' use of specialist physicians.

Exhibit 4.51 Specialist Physician Visits per Person for Northwest Residents by Patient Age and Gender, 2007/08¹⁰⁴

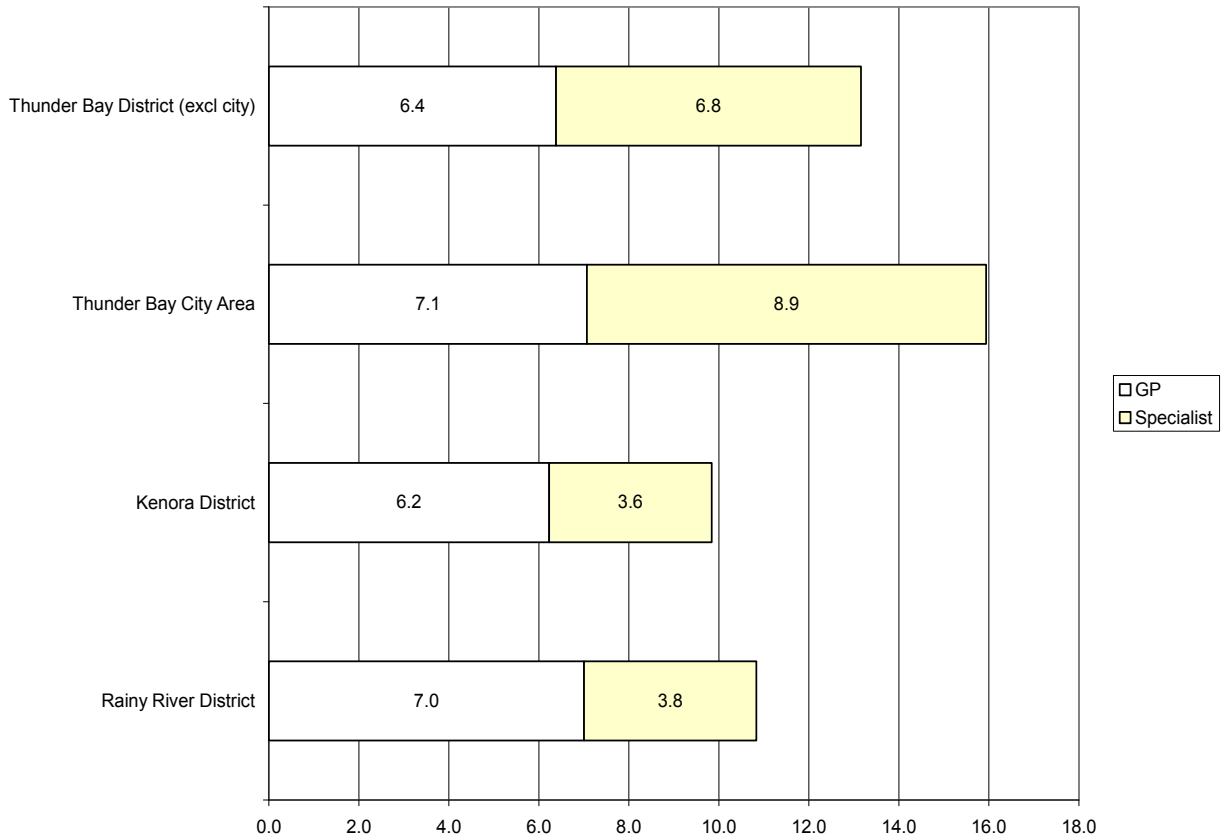


Use of specialist physicians is similar to the utilization of family physicians for most age groups, with a lower comparative use of specialists for females of childbearing years. Utilization is similar to 2004/05 with the exception of those 80+, where utilization is now higher for both males and females.

¹⁰⁴ Medical Services Data Table, IntelliHEALTH; extracted summer 2009.

Exhibit 4.52 provides a graphical representation of the age-gender standardized rates of use of physician services by residents of the North West LHIN by sub-area. Telemedicine services are not included in the OHIP physician service data.

Exhibit 4.52 Age Standardized Primary Care and Specialist Physician Services per Population by North West LHIN Sub-Area, 2007/08¹⁰⁵



Rates of use of primary care physician services are generally consistent throughout the LHIN. However, for specialist physician services, the highest rate of use is by residents of Thunder Bay City Area, more than double the rates for residents of Kenora District and Rainy River District.

¹⁰⁵ Medical Services Data Table, IntelliHEALTH; extracted summer 2009.

4.10.2 Location of Primary Care Physicians

Exhibit 4.53 shows the distribution of primary care physician visits by patient residence (sub-area) and provider location.

Exhibit 4.53 Percent of 2007/08 Primary Care Physician Visits for Residents of North West LHIN Sub-Areas Provided by Physician Location¹⁰⁶

Provider Location	Patient Residence			
	Kenora	Rainy River	Thunder Bay	Thunder Bay City
Kenora	84.1%	1.3%	1.6%	0.7%
Rainy River	1.0%	89.8%	0.1%	0.2%
Thunder Bay District	0.2%	0.8%	63.3%	0.3%
Thunder Bay City	2.7%	3.8%	24.4%	94.5%
Outside LHIN	12.1%	4.3%	10.6%	4.3%

The majority of North West LHIN residents access primary care providers located in the sub-area in which they live. However, almost one-quarter of visits by residents of the Thunder Bay District were to primary care providers outside their own sub-area.

In some cases, locum physicians doing a northern tour will be recorded as physicians from outside the North (based on their normal residence), but their services are provided in the North.

4.10.3 Other Primary Care Providers

New Models of Primary Care

In the North West LHIN, primary care is provided in a number of settings, including:

- Nursing Stations (funded by Health Canada)
- Family Health Teams
- Family Health Groups
- Family Health Networks
- Community Health Centres
- Aboriginal Health Access Centres
- Maternity Centre and midwifery practices
- Walk-in clinics
- Clinics

Given the high number of unattached patients in the North West LHIN, a number of provincial initiatives have recently been launched in the Northwest.

¹⁰⁶ OHIP Claims data.

These models are expected to increase access to primary care, decreasing the number of unattached patients, and improving the quality of care and health outcomes for those in the Northwest. These models are briefly described below.

***Nurse
Practitioner
Clinics***

Two nurse practitioner clinics have been announced for the City of Thunder Bay. Nurse practitioner-led clinics are an innovative approach to providing front-line care to patients. This local, team-based model consists of nurse practitioners working with other health care professionals, such as family doctors, to provide quality care closer to home. The two clinics are expected to open in 2010 and 2011.

***Nurse-Led
Outreach
Team for LTC***

The nurse-led outreach team to Long-Term Care (LTC) was implemented in 2009/10 in Thunder Bay. This initiative is focused on diverting transfers from LTC to the Emergency Department and preventing admission of the resident to acute care. The team is composed of nurses who respond to calls in the long-term care setting. The team provides quick assessment and treatment of the resident within his/her own setting.

***Health Care
Connect
Program***

Health Care Connect is a program launched in 08/09 by the Ministry of Health and Long-Term Care to help Ontarians without a family health care provider find one. The program, led by the North West CCAC, refers people without a regular family health care provider to physicians and nurse practitioners who are accepting new patients in their community. To enrol in this program, individuals dial a toll-free number and are linked with a nurse who will act as a "Care Connector". To date, there have been a number of difficulties (e.g. physician recruitment) in matching unattached patients to a primary care provider. As of November 2009, 8.3% of enrolled patients had been matched in the Northwest compared to rates ranging from 21.8% to 89.2% in other LHINs.