

5.0 Health Human Resources

5.1 Supply of Physicians in the North West LHIN

The Ontario Physician Human Resource Data Centre (OPHRDC) collects provincial data on physician supply by age and gender, geographic location, and specialty. As of 2008, the Annual Report on Physicians in Ontario no longer provides a breakdown of physicians by detailed specialty and Ministry regions. Therefore, some of the exhibits in this section use data from 2007.

Family Physicians

The North West LHIN has had issues with retention of physicians in recent years. Between 2007 and 2008, the number of active physicians dropped from 431 to 417 and for family medicine physicians specifically, from 265 to 253. The LHIN lost 11 general practitioners, or 4.5% of that workforce, between 2003 and 2004. This was the highest rate of general practitioner loss of all Ontario LHINs. However, from 2004 to 2007, the number of general practitioners in the North West LHIN has increased by 13.

Exhibit 5.1a following shows the distribution of active physicians (2007) in the North West LHIN by District (Census Division) – Kenora, Rainy River and Thunder Bay – and by detailed specialty of practice.

Exhibit 5.1a North West LHIN Physicians (2007) by District and Detailed Specialty¹⁰⁷

Specialty		Kenora	Rainy River	Thunder Bay	North West
Family Medicine	Family Medicine	82	22	148	252
	F.M./Emergency	4	0	9	13
	Total:	86	22	157	265
Other Specialty	Anesthesiology	1	0	11	12
	Community Medicine	1	0	1	2
	Diagnostic Radiology	2	0	8	10
	Emergency Medicine	2	0	4	6
	Physical Medicine and Rehab	0	0	2	2
	Psychiatry	2	0	21	23
	Radiation Oncology	0	0	5	5
Total:	8	0	52	60	
Internal Medicine	Internal Medicine	1	0	13	14
	Cardiology	0	0	4	4
	Dermatology	0	0	1	1
	Endocrinology and Metabolism	0	0	1	1
	Gastroenterology	0	0	1	1
	Geriatric Medicine	0	0	1	1
	Hematology	0	0	2	2
	Infectious Diseases	0	0	1	1
	Medical Oncology	0	0	4	4
	Nephrology	0	0	2	2
	Neurology	0	0	3	3
	Occupational Medicine	0	0	1	1
	Respirology	0	0	3	3
	Rheumatology	0	0	1	1
Total:	1	0	38	39	
Pediatrics	Total:	1	0	4	5
Surgery	General Surgery	5	3	10	18
	Cardiac Surgery	0	0	1	1
	Neurosurgery	0	0	3	3
	Obstetrics and Gynecology	0	0	7	7
	Ophthalmology	0	0	5	5
	Orthopedic Surgery	0	0	12	12
	Otolaryngology	0	0	2	2
	Plastic Surgery	0	0	1	1
	Thoracic Surgery	0	0	1	1
	Urology	0	0	3	3
	Total:	5	3	45	53
Laboratory Medicine	General Pathology	1	0	5	6
	Anatomical Pathology	1	0	2	3
	Total:	2	0	7	9
Total		103	25	303	431

¹⁰⁷ OPHRDC, "Physicians in Ontario".

The number of physicians that were active in 2008 are shown below, by District, in Exhibit 5.1b.

Exhibit 5.1b North West LHIN Physicians (2008) by District¹⁰⁸

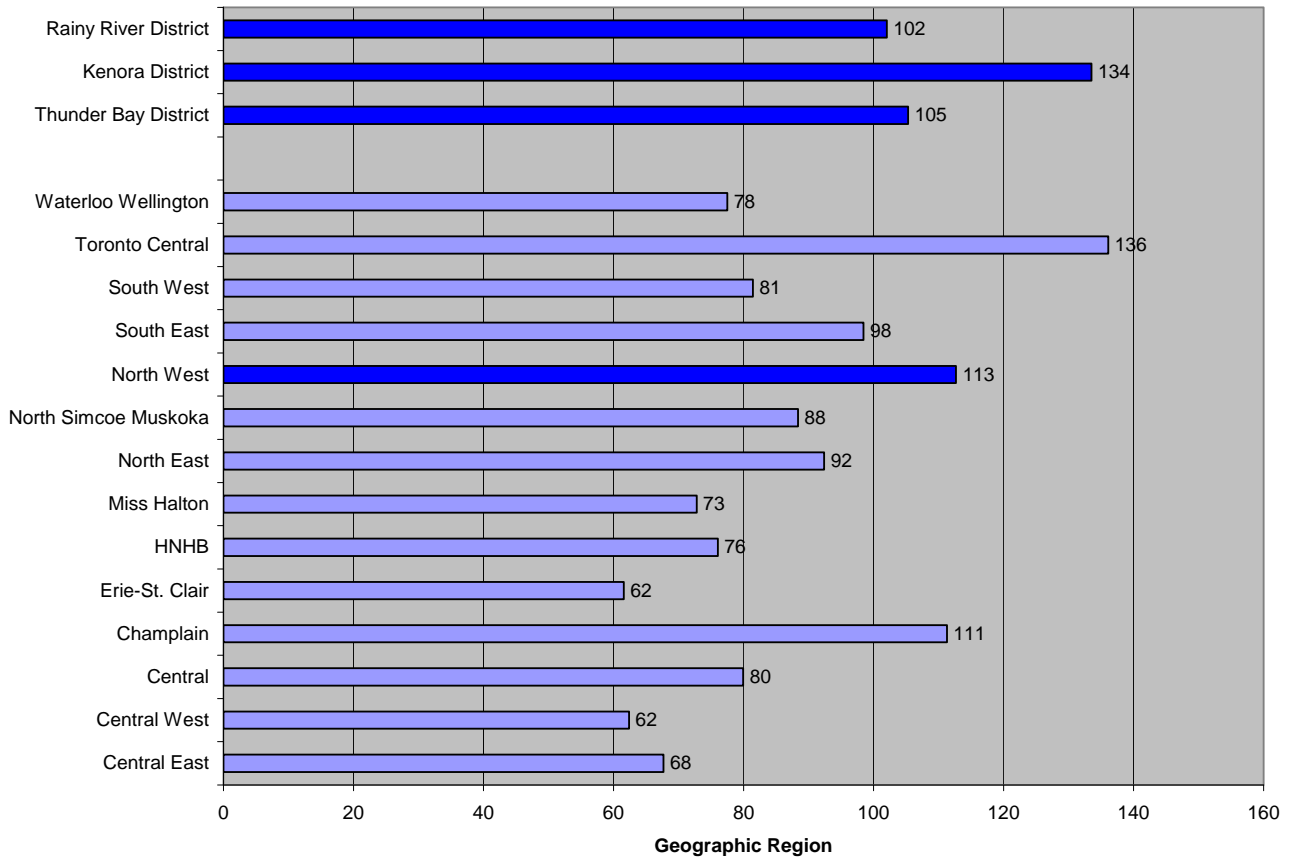
2008 Active Physicians in ONTARIO by Family Medicine & Specialists by County & Census Subdivision				
	Kenora District	Rainy River District	Thunder Bay District	NW LHIN Total
Family Medicine	79	24	150	253
Specialist	14	2	148	164
Grand Total	93	26	298	417

The rate of available physicians per population provides better information, particularly when comparing the supply of services between areas within the province.

¹⁰⁸ Ontario Physician Human Resources Data Centre website, *Active Physician Registry December 31, 2008 Report*, October 20, 2009.

Exhibit 5.2 shows the 2007 number of non-specialist physicians per 100,000 population for the districts in the North West LHIN and for the LHIN regions.

Exhibit 5.2 Non-Specialist Physicians per 100,000 Population by North West LHIN District and LHINs, 2007¹⁰⁹



In 2007, there were 113 non-specialist physicians per 100,000 population in the North West LHIN, higher than most other LHINs. This rate has increased from 101/100,000 population in 2004. Each of the three Districts in the Northwest has a ratio of non-specialist physicians to population higher than the provincial average.

¹⁰⁹ Physicians in Ontario 2004, OPHRDC.

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

- The calculations of physicians per population are based on crude rates, and do not take into account the older population in some communities in the North West LHIN
- Analysis of physician supply by ICES, based on 2001/02 data, found that Northern general and family physicians were more likely to be involved in emergency, obstetrics, inpatient care, anaesthesia and minor surgery¹¹⁰
- Physicians serving small, isolated communities will often have patient populations below the ideal practice size, leading to a higher than average ratio of physicians per population
- Data quality related to population data for Kenora District sub-area and North West LHIN overall are underestimated, thus over-representing the ratio of physicians to population.

***Specialist
Physicians***

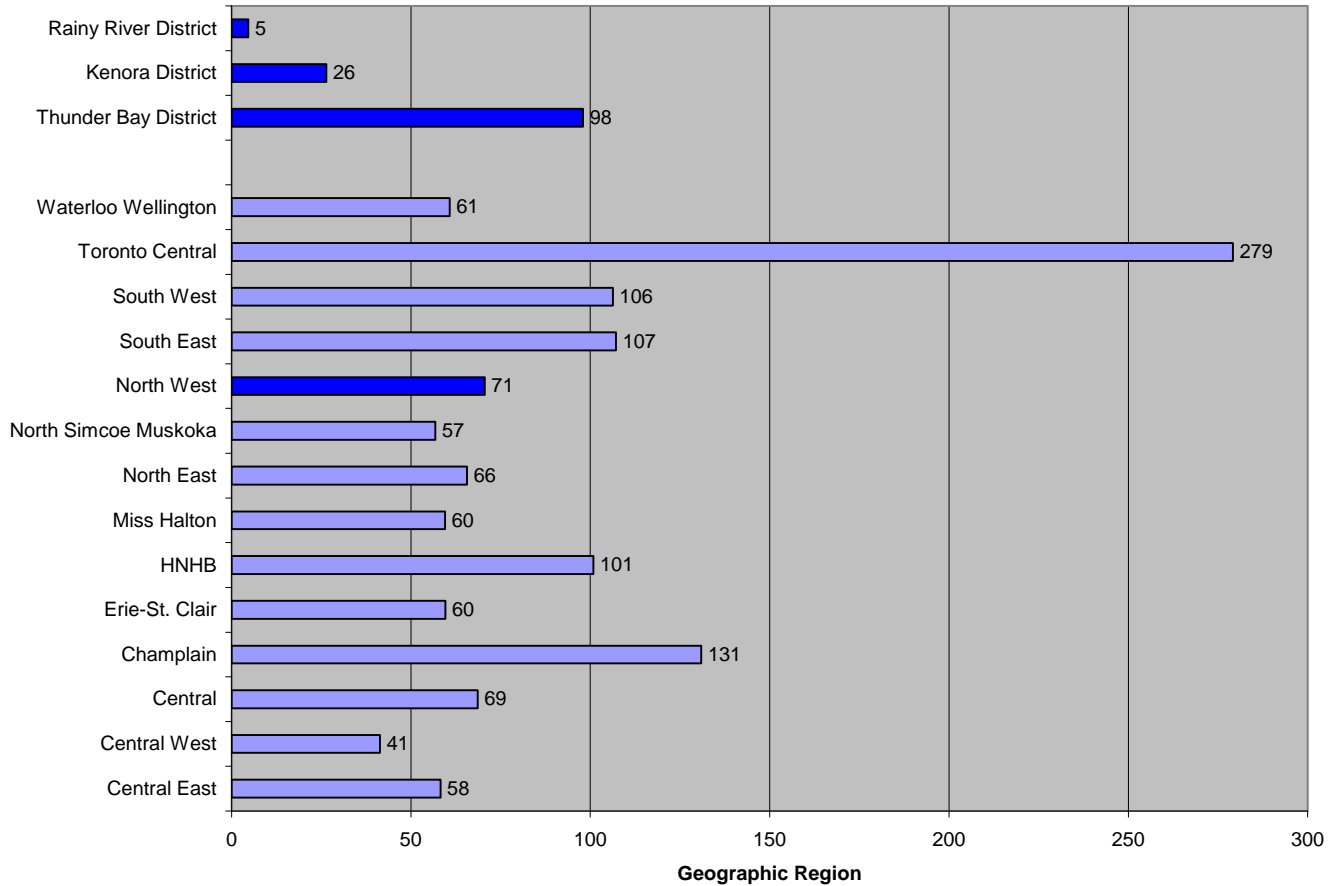
In 2007, 53% of all physicians in Ontario were specialists.¹¹¹ This is higher than in the North West LHIN, where only 38.5% were specialists in 2007. However, this is an increase from 2004 when 36.8% of physicians in the Northwest were specialists.

Exhibit 5.3 on the next page shows the number of specialists (crude rate) per 100,000 population for all LHINs in Ontario, 2007.

¹¹⁰ ICES Investigative Report, "Supply and Utilization of General Practitioner and Family Physician Services in Ontario", August 2005.

¹¹¹ Ontario Physician Human Resource Data Base, "Physicians in Ontario 2007".

Exhibit 5.3 Specialist Physicians per 100,000 Population by Region, 2007¹¹²



The North West LHIN's rate of 71 specialists per 100,000 population in 2007 was lower than the provincial average of 101 per 100,000 population, but again, higher than in 2004 (59 specialists/100,000 population).

Physician shortages have often been cited as a challenge in the Northwest. Quarterly reports on vacancies of family physicians, specialist physicians and allied health professionals are produced by the Northern Ontario School of Medicine and are available at the following website:

http://www.normed.ca/communities/general.aspx?id=5758&ekmensen=c580fa7b_40_0_5758_7

Emergency Department Physicians

The shortage of health human resources in the North West LHIN is likely the single most important issue affecting the sustainability of the Emergency

¹¹² Ibid.

Department system in the North West LHIN. All but two of the twelve hospitals with emergency departments in the North West LHIN (Thunder Bay Regional Health Sciences Centre and Lake-of-the-Woods District Hospital) are staffed with one primary care physician on duty during the day and only have one physician on-call at night. These sites are also highly reliant on locum physician coverage to remain open.¹¹³

Detailed information specific to physician coverage, including vacancies, locum coverage, and plans for upcoming retirement/out-migration are discussed in the *North West LHIN Regional Emergency Department Study, Final Report*¹¹⁴, another supporting document for the IHSP, available at <http://www.northwestlhin.on.ca> under “Integrated Health Services Plan”.

5.2 Supply of Nurses in the North West LHIN

Exhibit 5.4 provides a summary of work status, sector, or employment and age of registered nurses (RNs), registered nurses – extended class (RN ECs) and registered practical nurses (RPNs) employed in the Northwestern Ontario region and the province as a whole in 2008.

Exhibit 5.4 Supply, Working Status, Sector and Age Range of RNs, RPNs, and RN(Extended Class) in the North West LHIN and Ontario,

Working Status, Sector and Age	North West LHIN				Ontario			
	RN, General Class	RPN	RN (EC)	Total	RN, General Class	RPN	RN (EC)	Total
Employed in Nursing	2,343	1,055	56	3,454	91,965	27,432	868	120,265
Full Time	63.5%	54.4%	80.4%	61.0%	64.7%	56.3%	80.8%	62.9%
Part Time	28.3%	34.5%	17.9%	30.0%	27.2%	35.1%	17.4%	29.0%
Casual	8.2%	11.1%	1.8%	9.0%	8.1%	8.6%	1.8%	8.2%
Sector								
Hospital	65.7%	47.7%	17.9%	59.4%	64.8%	45.1%	20.0%	60.0%
Long Term Care	6.1%	35.8%	3.6%	15.1%	8.2%	35.2%	3.0%	14.3%
Community	20.2%	12.0%	66.1%	18.4%	18.6%	14.3%	66.9%	18.0%
Other	6.6%	1.3%	12.5%	5.1%	6.9%	2.6%	8.0%	6.0%
Not Specified	1.4%	3.1%	0.0%	1.9%	1.5%	2.9%	2.1%	1.8%
Age								
<45	43.4%	48.2%	28.6%	44.6%	43.5%	46.4%	41.9%	44.1%
>=45	56.6%	51.8%	71.4%	55.4%	56.5%	53.6%	58.3%	55.9%

2008¹¹⁵

¹¹³ KPMG LLP . North West LHIN Regional Emergency Department Study Final Report. 2009.

¹¹⁴ Ibid.

¹¹⁵ The College of Nurses of Ontario. Membership Statistics Report 2008. 2008.

Registered Nurses

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

Registered Practical Nurses

There is more than twice the number of RNs in the Northwest region than there are RPNs. In Ontario, this ratio is approximately 3.4 to 1. It also shows the difference in employment distribution by sectors. Just under one half (47.7%) of RPNs work in hospitals, which is consistent with the provincial average, compared to two-thirds of RNs. Just over a third (35.8%) work in LTC and only 12.0% work in community settings.

Exhibit 5.5 shows the number of registered practical nurses (RPNs) employed in the various regions of Ontario from 2005 to 2008.

Exhibit 5.5 Registered Practical Nurses by Ontario Region, 2005 to 2008¹¹⁶

LHIN Region	2005	2006	2007	2008	% Change 2005-2008
Erie St. Clair	1,385	1,437	1,480	1,518	9.6
South East	1,592	1,630	1,661	1,722	8.2
Champlain	2,617	2,713	2,771	2,961	13.1
North Simcoe Muskoka	1,125	1,139	1,191	1,229	9.2
North East	1,942	2,004	2,046	2,147	10.6
North West	949	991	1,013	1,055	11.2
South West	2,699	2,746	2,702	2,804	3.9
Waterloo Wellington	1,350	1,425	1,465	1,559	15.5
HNHB	3,097	3,172	3,285	3,317	7.1
Central West	610	645	669	711	16.6
Mississauga Halton	851	896	990	1,111	30.6
Toronto Central	2,081	2,201	2,336	2,562	23.1
Central	1,483	1,496	1,650	1,863	25.6
Central East	2,419	2,411	2,553	2,685	11.0
Not Specified	282	209	323	188	-33.3
Total:	24,482	25,115	26,135	27,432	12.0

Extended Practice RNs and Primary Health Care NPs

Aggregate data for the province is available, but there is very little region-specific data pertaining to Extended Class RNs (RN(EC)s). Exhibit 5.6 shows the change in numbers of extended practice registered nurses between 2005 and 2008 by LHIN.

¹¹⁶ Data provided The College of Nurses of Ontario.

Exhibit 5.6 Extended Practice Registered Nurses by Ontario Region, 2005 to 2008¹¹⁷

LHIN Region	2005	2006	2007	2008	% Change 2005-2008
Erie St. Clair	46	48	51	64	39.1
South East	29	34	46	57	96.6
Champlain	76	85	98	120	57.9
North Simcoe Muskoka	22	23	29	37	68.2
North East	79	82	100	117	48.1
North West	44	45	45	56	27.3
South West	40	50	61	75	87.5
Waterloo Wellington	36	37	44	59	63.9
HNHB	68	80	86	93	36.8
Central West	10	9	8	10	0.0
Mississauga Halton	7	8	8	17	142.9
Toronto Central	75	77	82	80	6.7
Central	14	12	17	21	50.0
Central East	39	43	45	59	51.3
Total:	594	639	729	868	46.1

Of the 868 RN(EC)s employed in Ontario in 2008, 56 of them, or approximately 6.4%, worked in the Northwest. There has been an increase of almost 28% from 2005 to 2008 in the numbers of RN(EC)s in the Northwest. However, this is the third lowest growth rate of any LHIN.

An earlier figure showed that the majority (69%) of RN(EC)s in the Northwest worked full-time, and that most (66.1%) work in community settings.

5.3 Supply of Other Health Care Professionals

There is minimal current information available about the supply of other health care providers at the regional or district levels at this time. Nineteen health regulatory Colleges are expanding their collection of personal information about their members, including basic demographic, geographic, education and employment information, and providing this information to the Ministry of Health and Long-Term Care in anonymized form, for health human resources planning.¹¹⁸

These Colleges began to submit the data they collected in January 2009. Aggregate data and analytical reports from the database will be available on the HealthForce Ontario website in 2010 at <http://www.healthforceontario.ca>.

The data presented in the following exhibit, Exhibit 5.7, was released in 2007, after the first IHSP was completed; it provides counts of different types of service providers primarily for the year 2005.

¹¹⁷ Data provided by The College of Nurses of Ontario.

¹¹⁸ Extracted from HFO's website at www.healthforceontario.ca, Nov. 2009.

Exhibit 5.7 Count of Health Care Providers by LHIN, End of 2005¹¹⁹

LHIN	Count of Health Care Professionals by LHIN								
	Pharmacists	Occupational Therapists	Dietitians	Physiotherapists	Midwives	Registered Nurses	Registered Nurses - Extended	Registered Practical Nurses	Dentists
Central	1,184	748	250	842	16	6,596	14	1,483	1,051
Central East	918	299	163	618	29	7,704	39	2,419	371
Central West	360	106	80	226	0	2,506	10	610	612
Champlain	822	452	273	943	29	9,637	76	2,617	624
Erie St. Clair	437	138	85	239	8	4,252	46	1,385	329
Ham. Niag. Hald. Brant	936	575	257	856	39	10,330	68	3,097	852
Mississauga Halton	805	261	172	489	20	5,104	7	851	773
North Simcoe Muskoka	254	139	73	236	15	4,968	79	1,942	203
North East	373	168	114	262	17	2,971	22	1,125	296
North West	168	87	61	127	11	2,344	44	949	116
South East	312	164	107	277	7	4,379	9	1,592	206
South West	573	414	190	602	24	8,361	29	2,699	471
Toronto Central	1,398	768	482	1,216	48	14,840	40	2,081	1,775
Waterloo Wellington	412	220	137	391	34	3,884	75	1,350	370
Unknown	1,399	230	613	645	0	1,178	36	282	20

¹¹⁹ Adapted from Data in Health Human Resources Toolkit. April 2007. Health System Intelligence Project and Health Human Resources Strategy Division, MOHLTC. April 2007.

Exhibit 5.8 presents the same information expressed in terms of the number of health care professionals per 100,000 population for each LHIN. This allows some comparison between LHINs as to the number of different types of health care professionals relative to population size.

Exhibit 5.8 Health Care Professionals (2005) per 100,000 Population by LHIN¹²⁰

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

5.4 Health Care Provider Education

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

Education in health care is available in Northwestern Ontario primarily through:

- Confederation College (www.confederationc.on.ca)
- Lakehead University (www.lakeheadu.ca)
- Northern Ontario School of Medicine (www.normed.ca)

With the increasing use of new technologies to support distance education, residents of the Northwest can access educational programs offered by a number of universities and colleges in southern Ontario (and elsewhere in the world). Many residents of the Northwest complete their education or

¹²⁰ Adapted from Data in Health Human Resources Toolkit. April 2007. Health System Intelligence Project and Health Human Resources Strategy Division, MOHLTC.

professional development via distance education or by travelling or relocating to a community with a post-secondary institution.