



Health Profile – Rainy River Integrated District Network

May 2012

Health Profile for Rainy River Integrated District Network (IDN)

Introduction

This profile is one of a series of five profiles for each of the proposed Integrated District Networks (IDN)s. Three of the five IDN areas correspond to three of four current sub-LHIN planning areas – Rainy River District, City of Thunder Bay (and surrounding area) and Thunder Bay District (excluding city of Thunder Bay and surrounding area). The fourth and fifth proposed IDNs are formed from the current Kenora District sub-LHIN planning area. The Northern IDN is proposed to encompass Sioux Lookout and all First Nations communities north of Sioux Lookout. The remaining part of Kenora District (including Red Lake, Kenora and Dryden) will be referred to as Kenora District IDN.

The map illustrates the North West LHIN's current sub-LHIN planning areas showing communities that have acute care hospitals.

Figure 1: Map of the North West LHIN



The Rainy River District sub-LHIN planning area of the North West LHIN corresponds exactly to the Rainy River District Census Division (CD). Moving forward, it is proposed that the area will be referred to as the Rainy River Integrated District Network.

The following table presents some of the demographic characteristics of the IDN compared to the total North West LHIN population.

Table 1: Population Characteristics, 2006 Census

Indicator	Rainy River District	North West LHIN
Total Population	21,565	235,090
% Age 65+	16.1%	14.1%
% Age 75+	8.2%	6.8%
% Aboriginal Identity	21.7%	19.2%
% Francophone	1.7%	3.5%
% Immigrant Population	7.4%	8.7%
% Age 25+ completed post-secondary educ.	46.8%	50.8%

Data Source: Statistics Canada. 2006 Census.

Population Estimates and Projections

The following table lists the census subdivisions (municipalities/communities) contained within Rainy River District and their respective population estimates for 2009. The list is in decreasing order of population size.

Table 2: Population Estimates for Census Subdivisions (CSDs) in Rainy River IDN

CSD/Community	2009 Population Estimate	CSD/Community	2009 Population Estimate
FORT FRANCES	8227	NEGUAGUON LAKE 25D	263
ATIKOKAN	3297	MANITOU RAPIDS 11	234
RAINY RIVER DIST	1423	BIG GRASSY RIVER 35G	211
EMO	1311	RAINY LAKE 17A	180
LA VALLEE	1062	RAINY LAKE 26A	132
ALBERTON	979	SAUG-A-GAW-SING 1	102
RAINY RIVER	932	RAINY LAKE 18C	96
CHAPPLE	867	LONG SAULT 12	33
COUCHICHING 16A	692	BIG ISLAND MAINLD 93	10
DAWSON	610	RAINY LAKE 17B	5
MORLEY	489	AGENCY 1	0
LAKE OF THE WOODS	338	SEINE RIVER 23B	0
SEINE RIVER 23A	274		
		Rainy River IDN	21,767

Data Source: Population Estimates PHU County Municipality table, IntelliHEALTH Ontario.

There are no communities within Rainy River IDN designated under the French Language Health Services Act.

Rainy River District accounts for 9 percent of the North West LHIN's population and is expected to shrink by 3 percent over the next 10 years. Expected growth rates vary by age group. For example, the population aged 0 to 19 is expected to decrease by 11 percent over the next 10 years while the population of 65 to 79 year olds expected to increase by 34 percent.

Table 3: 10-Year Population Growth Forecast

Age Group	2009	2019	10-year Growth
00-19	5,681	5,031	-11%
20-44	6,226	6,043	-3%
45-64	6,351	5,743	-10%
65-79	2,392	3,195	34%
80+	1,117	1,163	4%
Rainy River IDN Total	21,767	21,175	-3%
NW LHIN Total	239,579	238,464	0%

Source: PwC. Draft North West LHIN Blueprint Project Report. Oct 2011.

Health Status and Health Outcomes

Data from the Canadian Community Health Survey (CCHS) is only available at the Public Health Unit (PHU) or Local Health Integration Network (LHIN) level in Ontario. The Northwestern Health Unit (NWHU) area is the health region that best represents the Rainy River District. The NWHU area corresponds to the Rainy River District Census Division and that part of the Kenora District Census Division contained in the North West LHIN area.

Table 4: Self-Reported Health Status, CCHS 2009/2010, age 12+

Indicator	Northwestern Health Unit (NWHU)	North West LHIN	ON
Perceived health as excellent or very good (%)	56.1	57.4	61.0
Perceived mental health as excellent or very good (%)	69.2	68.2	74.3
Perceived life stress, quite a lot (age 15+) (%)	22.5	21.8	24.0
Sense of community belonging, somewhat strong or very strong (%)	74.8	76.2	67.4
Life satisfaction – satisfied or very satisfied (%)	91.6	90.7	91.5

Source: Statistics Canada. 2011. Health Profile. Statistics Canada Catalogue no. 82-228-XWE. Ottawa. Released June 28 2011. <http://www12.statcan.gc.ca/health-sante/82-228/index.cfm?Lang=E>

The perceived health status of NWHU area residents is very similar to that of the North West LHIN residents as a whole.

Table 5: Self-Reported Health Behaviours/Practices, CCHS 2009/2010, age 12+

<i>Indicator</i>	<i>Northwestern Health Unit (NWHU)</i>	<i>North West LHIN</i>	<i>ON</i>
Overweight or obese, age 18+ (%)	65.5	61.7	52.0
Pain or discomfort that prevents activities (%)	19.6	19.0	13.5
Current smoker; daily or occasional (%)	22.4	23.9	18.9
Heavy drinking (%)	22.2	20.9	15.9
Leisure-time physical activity; moderately active or active (%)	59.7	58.0	50.5
Regular medical doctor (%)	81.3	83.5	91.1
Contact with a medical doctor in the past 12 months (%)	77.4	79.3	82.2

Source: Statistics Canada. 2011. Health Profile. Statistics Canada Catalogue no. 82-228-XWE. Ottawa. Released June 28 2011. <http://www12.statcan.gc.ca/health-sante/82-228/index.cfm?Lang=E>

The rates of heavy drinking, smoking and being overweight are similar between the NWHU area and the North West LHIN residents overall, but higher than provincial rates.

The following table provides age-standardized rates of hospitalization and death for various diseases or conditions from the Statistics Canada Health Profiles. The hospitalization data is for fiscal year 2009/10 and the mortality data is for the calendar years 2005 to 2007 (average annual rate).

Table 6: Hospitalization and Mortality Indicators – Health Profile, Statistics Canada

<i>Indicator (age-standardized rate per 100,000 population)</i>	<i>Northwestern Health Unit (NWHU)</i>	<i>North West LHIN</i>	<i>ON</i>
Injury hospitalization	1084.0	861.0	406.0
Self-injury hospitalizations	184.0	156.0	58.0
Mental illness hospitalization rate	866.0	933.0	392.0
Ambulatory care sensitive conditions	579.0	538.0	280.0
Coronary artery bypass graft (CABG)	101.0	133.0	72.0
Percutaneous coronary intervention (PCI)	241.0	277.0	170.0
Total; all causes of death	699.0	629.1	521.8
All cancers; deaths	195.5	171.7	159.1
Circulatory diseases; deaths	182.7	182.4	155.6
Respiratory diseases; deaths	50.7	41.8	41.3
Unintentional injuries; deaths	51.2	39.4	23.4
Suicides and self-inflicted injuries; deaths	26.6	20.6	7.7

Source: Statistics Canada. 2011. Health Profile. Statistics Canada Catalogue no. 82-228-XWE. Ottawa. Released June 28 2011. <http://www12.statcan.gc.ca/health-sante/82-228/index.cfm?Lang=E>

Hospitalization rates due to injury and mortality rates due to injuries and suicides are significantly higher in the NWHU area compared to the province and higher than in the North West LHIN as a whole.

Health Service Access and Utilization

Atikokan General Hospital and three sites of the Riverside Health Care Facilities Inc. (located in Emo, Fort Frances and Rainy River) are the acute care hospitals located in the Rainy River IDN. No hospitals in Rainy River District have been identified for provision of French language services.

The table below summarizes the 2009/10 admissions and inpatient days at Rainy River District's hospitals. The table includes acute care admissions for mental health diagnoses, but excludes admissions to designated mental health beds.

Table 7: Distribution of Acute Care Services in the Rainy River IDN

Facility/Hospital Site	Admissions	Days	Share of District's Admissions	Share of LHIN's Admissions
Atikokan General Hospital	343	2,146	14%	1%
Riverside Health Care Facility – Emo	76	560	3%	0%
Riverside Health Care Facility – La Verendrye Hospital (Fort Frances)	1,888	7,862	78%	6%
Riverside Health Care Facility – Rainy River	120	797	5%	0%
Rainy River District Facilities Total	2,427	11,365	100%	8%

Source: PwC. Draft North West LHIN Blueprint Project Report. Dec. 2011.

The majority of inpatient acute care service in the Rainy River IDN is provided by the La Verendrye site of Riverside Health Care Facilities Inc. in Fort Frances (78%).

In addition to acute care beds, there are a number of other inpatient bed types located in the acute care facilities in the Rainy River District.

Table 8: Bed Types (as of Sept. 30, 2010)

Hospital	Acute	Inpatient Rehab	CCC	Mental Health	Newborn Bassinets	ELDCAP
ATIKOKAN General Hospital	11		8		2	22
Riverside Health Care Facility – La Verendrye Hospital (Fort Frances)	40		20		6	
Riverside Health Care Facility – Emo	3					12
Riverside Health Care Facility – Rainy River	3					21
Rainy River District Total	57		28		8	55

Source: Web Enabled Reporting System (WERS); extracted Jan. 2012.

There are no designated Inpatient Mental Health beds in the Rainy River IDN.

The following table contains the location of these beds in the North West LHIN.

Table 9: Designated (Adult) Mental Health Beds in North West LHIN

Provider Name	Sub-LHIN area	Type	Mental Health Beds
Lake Of The Woods District Hospital	Kenora District	Acute Psych	19
Thunder Bay Regional Health Sciences Centre	Thunder Bay City	Acute Psych	30
Thunder Bay Regional Health Sciences Centre	Thunder Bay City	Forensic	20
St Joseph's Care Group – Lakehead site	Thunder Bay City	Long Term	71
North West LHIN Total			140

Of the 1,750 weighted days of inpatient mental health care for Rainy River District residents, 51% were at the Lakehead site of St. Joseph's Care Group in Thunder Bay, and 36% at Lake of the Woods District Hospital in Kenora. Almost 10% were outside of the North West LHIN (7.1% at Homewood Health Centre Inc. in Guelph, Waterloo Wellington LHIN and 2.2% at Centre for Addiction and Mental Health, Toronto, Toronto Central LHIN).

Inpatient Rehabilitation

The residents of the North West LHIN received 16 percent less inpatient rehabilitation services than expected given their clinical and socio-demographic characteristics. Within the North West LHIN, residents of Rainy River District and Kenora District had particularly low access to inpatient rehabilitation; Rainy River had 70 percent less inpatient rehabilitation services than expected and Kenora had 30 percent less than expected.

St. Joseph's Care Group located in the city of Thunder Bay has 50 Inpatient Rehabilitation beds which service all residents of the North West LHIN.

Long-Term Care (LTC)

There was only one LTC home in Rainy River District in 2009/10. This Long-term care home has not been identified for French Language Services (FLS).

Table 10: Long-Term Care Homes

Long-Term Care Home	# of LTC Beds
Rainycrest LTC Home, Fort Frances	164

Market Share of Acute Inpatient Days

The following table shows where residents of the Rainy River IDN (sub-LHIN area) went for acute care in Ontario in fiscal year 2009/10.

Table 11: Market share of acute inpatient days in Ontario hospitals by sub-LHIN 2009/10

Sub-LHIN of Patient	Sub-LHIN/LHIN of Hospital					Total Days
	Kenora District	Rainy River District	Thunder Bay City	Thunder Bay District	Other LHIN	
Kenora District	76%	0%	22%	0%	2%	45,312
Rainy River District	4%	71%	22%	0%	3%	14,255
Thunder Bay City	0%	0%	93%	0%	7%	94,928
Thunder Bay District	1%	0%	42%	50%	6%	23,732
Total Days	35,407	10,531	111,248	12,057	8,984	178,227

Source: PwC. Draft North West LHIN Blueprint Project Report. Oct 2011.

Almost three-quarters (71%) of the total inpatient days among Rainy River IDN residents in Ontario hospitals were provided by hospitals in Rainy River District, while 22 percent of days were provided at Thunder Bay Regional Health Sciences Centre.

The table below shows the percentage of admissions by residents of North West LHIN that occurred at Manitoba hospitals. For fiscal year 2009/10 there were 2,847 admissions of Rainy River IDN residents to Ontario facilities and 317 to Manitoba facilities for a total of 3,164 admissions in both Ontario and Manitoba facilities.

Table 12: Percentage of Patients Hospitalized in Manitoba by Clinical Program (ICD-10 Chapter), 2009/10

Clinical Program	Total Admissions – Ontario and Manitoba		% Admitted to MB hospitals	
	Rainy River District	North West LHIN	Rainy River District	North West LHIN
01 Infectious/Parasitic Diseases	41	376	5%	8%
02 Neoplasms	149	1,578	21%	10%
03 Blood and Immune	27	330	0%	2%
04 Endocrine, Nutrition, Metabolic	95	1,199	11%	5%
05 Mental and Behavioural	139	998	0%	1%
06 Nervous System	67	543	3%	7%
07 Eye and Adnexa	14	90	71%	62%
08 Ear and Mastoid	25	184	0%	1%
09 Circulatory	470	4,851	14%	7%
10 Respiratory	270	2,877	4%	3%
11 Digestive	317	3,559	9%	4%
12 Skin and Subcutaneous Tissue	35	384	6%	4%
13 Musculoskeletal & Connective	162	1,465	9%	6%
14 Genitourinary	142	1,666	18%	8%
15 Pregnancy and Childbirth	447	4,932	5%	7%
16 Perinatal Period	40	1,019	28%	11%
17 Congenital and Chromosomal	14	186	43%	18%
19 Injury and Poisoning	264	2,904	10%	7%
20 External Causes	444	2,818	7%	6%
Total	3,164	31,964	10%	6%

Source: PwC. Draft North West LHIN Blueprint Project Report. Oct 2011.

Overall, 10 percent of all acute care admissions among Rainy River District's population in fiscal year 2009/10 were to hospitals in Manitoba. This percentage varied by clinical program. Of note is the fact that 71% of admissions (10 admissions) to area residents for most responsible diagnoses in the Eye and Adnexa chapter were to Manitoba facilities.

The table below shows the number of hospital admissions for ambulatory care sensitive conditions (ACSC) that would have been avoided if the Rainy River District had the provincial average standardized admission rate.

Table 13: Potentially Avoidable 2009/10 Hospital Admissions at Provincial Average Standardized Admission Rate (Top 10 for Rainy River District)

Ambulatory Care Sensitive Condition	Rainy River District	North West LHIN Total
Influenza / pneumonia	57	729
Chronic Obstructive Pulmonary Disease (COPD)	38	411
Atrial fibrillation	28	178
Diabetes with complications	27	203
Angina	24	192
Alcohol related conditions	24	246
Congestive Heart Failure (CHF)	19	216
Schizophrenia	18	25
Fractured proximal femur	17	62
Senility dementia	14	30
Rainy River District IDN Top 10	266	2,292
All ACSC	324	2,867

Source: PwC. Draft North West LHIN Blueprint Project Report. Oct 2011.

Emergency Visits

North West LHIN residents have high rates of emergency visits use, particularly for less-urgent and non-urgent visits (CTAS levels IV and V). The standardized rate of ED visits per capita among North West LHIN residents was 2.1 times the provincial average in 2009/10. Across the sub-LHINs this ranged from a low of 1.8 times the provincial average in Thunder Bay City to 3.1 in Thunder Bay District.

Table 14 shows the volume 2009/10 volume of unscheduled emergency department visits by residents of the Rainy River IDN by CTAS level and hospital of visit.

Table 14: Emergency Visits by North West LHIN Hospital and CTAS Level for Rainy River IDN Residents, 2009/10

CTAS Level	I & II - Resuscitation & Emergent	III - Urgent	IV - Less- urgent	V - Non- urgent	Rainy River District Total
Atikokan General Hospital	43	510	2,057	1,441	4,051
Dryden Regional Health Centre	<5	12	24	6	43
Geraldton District Hospital	0	<5	<5	<5	9
Lake of the Woods District Hospital	6	35	63	17	121
Manitouwadge General Hospital	0	<5	<5	<5	7
The McCausland Hospital	0	0	<5	<5	<5
Nipigon District Memorial Hospital	0	0	0	6	6
Red Lake Margaret Cochenour Memorial Hospital	<5	<5	<5	8	13
Riverside Health Care Facility – Emo	<5	29	169	574	775
Riverside Health Care Facility – La Verendrye Hospital	287	2,113	7,269	5,455	15,124
Riverside Health Care Facility – Rainy River	50	239	797	1,279	2,365
Sioux Lookout Meno Ya Win Health Centre	<5	<5	9	<5	15
Thunder Bay Regional Health Sciences Centre	133	223	105	12	473
Wilson Memorial General Hospital	0	0	<5	<5	<5
Total	525	3,166	10,504	8,814	23,009

Source: PwC. Draft North West LHIN Blueprint Project Report. Oct 2011.

The majority of unscheduled emergency visits by Rainy River IDN residents were CTAS level IV and V – 84%. The La Verendrye Hospital site of Riverside Health Care Facilities Inc. in Fort Frances saw two-thirds of these types of cases as well as two-thirds of all visits. Thunder Bay Regional Health Sciences Centre saw one-quarter of the most complex cases (CTAS I and II) while within the Rainy River District, the La Verendrye Hospital site saw just over half (54.7%) of the CTAS I and II patients.

The following table shows the distribution of all emergency visits by Rainy River IDN residents to any Ontario hospital by main reason for the visit.

Table 15: Emergency Visits for Rainy River IDN Residents by ICD-10 Chapter of Main Problem Diagnosis, 2009/10

<i>ICD10 Chapter</i>	<i>Visits</i>	<i>% ER Visits</i>	<i>Avg. Visits per Person *</i>
19 Injury and Poisoning	4,579	18.8	2.2
10 Respiratory	3,945	16.2	2.2
20 External Causes	2,961	12.1	3.1
13 Musculoskeletal and Connective	1,805	7.4	2.7
12 Skin and Subcutaneous Tissue	1,743	7.1	3
11 Digestive	1,571	6.4	2.5
09 Circulatory	1,530	6.3	2.9
14 Genitourinary	1,236	5.1	2.6
08 Ear and Mastoid	1,183	4.9	2.3
01 Infectious/Parasitic Diseases	884	3.6	2.3
06 Nervous System	684	2.8	3
02 Neoplasms	614	2.5	5.5
05 Mental and Behavioural	565	2.3	3.1
07 Eye and Adnexa	472	1.9	2.2
04 Endocrine, Nutrition, Metabolic	293	1.2	2.5
15 Pregnancy and Childbirth	237	1.0	2.8
16 Perinatal Period	60	0.2	4
03 Blood and Immune	20	0.1	2.5
17 Congenital and Chromosomal	7	0.0	7
Total	24,389	100.0	2.6

Source: PwC. Draft North West LHIN Blueprint Project Report. Oct 2011.

Note:* Average is based on those people with at least one emergency visit.

Non-Acute Care LHIN Funded services

The table below lists the health service providers (HSP) in other sectors that provide service to Rainy River IDN residents and receive some or all of their funding from the North West LHIN.

Table 16: North West LHIN Funded Health Service Providers for Rainy River IDN Residents, fiscal year 2010/11

Community Social Services (CSS) Sector			
Organization Name	Head Office Location	Area Served¹	%Total Revenue funded by NW LHIN²
Alzheimer Society of Kenora & Rainy River	Kenora	Kenora District and Rainy River District including Northern Communities	45.3%
Brain Injury Services of Northern Ontario (BISNO)	Thunder Bay	Northern Ontario with services primarily in Thunder Bay.	62.8%
Fort Frances Tribal Area Health Services Inc.	Fort Frances	First Nations in Rainy River District.	†
Northwestern Independent Living Services Inc.	Keewatin	Kenora District and Rainy River District	84.9%
Riverside Health Care Facilites Inc.	Fort Frances	Rainy River District	81.4%
St. Joseph's Care Group	Thunder Bay	North West LHIN	81.9%
Wesway Inc.	Thunder Bay	Thunder Bay City, Thunder Bay District, Kenora District and Rainy River District	42.9%
Home Care Sector - Community Care Access Centre (CCAC)			
Organization Name	Head Office Location	Area Served¹	%Total Revenue funded by NW LHIN²
North West CCAC	Thunder Bay	North West LHIN	98.7%

† Do not report on all programs

1 Source: Schedule A1 and A2 of SAAs from each health service provider

2 Source: Web Enabled Reporting System (WERS) 2010/11.

Substance Abuse Programs			
Organization Name	Head Office Location	Area Served¹	%Total Revenue funded by NW LHIN²
Atikokan General Hospital	Atikokan	Atikokan and surrounding area	80.4%
Changes Recovery Homes	Keewatin	Ontario with priority given to residents of Kenora District, Rainy River District and Northern Communities	82.6%
Canadian Mental Health Association, Fort Frances	Fort Frances	Fort Frances and surrounding area	98.6%
Riverside Health Care Facilities Inc.	Fort Frances	Rainy River District	81.4%
St. Joseph's Care Group	Thunder Bay	North West LHIN	81.9%
Weechi-it-te-win Family Services. Inc.	Fort Frances	Rainy River District	13.0%
Mental Health (MH) Sector			
Organization Name	Head Office Location	Area Served¹	%Total Revenue funded by NW LHIN²
Atikokan General Hospital	Atikokan	Atikokan and surrounding area	80.4%
Brain Injury Services of Northern Ontario (BISNO)	Thunder Bay	Northern Ontario with services primarily in Thunder Bay	62.8%
Canadian Mental Health Association, Fort Frances	Fort Frances	Rainy River District with Consumer Survivor Initiatives and Psycho-geriatric programs also offered in Kenora District	98.6%
Canadian Mental Health Association, Thunder Bay	Thunder Bay	Early Psychosis Intervention in city of Thunder Bay, Thunder Bay District, Kenora District and Rainy River District.	84.0%
Canadian Mental Health Association, Kenora	Kenora	Kenora District, Rainy River District and MH Diversion and Court Support in Northern Communities	97.6%
Fort Frances Tribal Area Health Services Inc.	Fort Frances	First Nations in Rainy River District	†
Gizhewaadziwin Health Access Centre	Fort Frances	Aboriginal people in Rainy River District	†
Riverside Health Care Facilities Inc.	Fort Frances	Rainy River District	81.4%
St. Joseph's Care Group	Thunder Bay	North West LHIN	81.9%

† Do no report on all programs

1 Source: Schedule A1 and A2 of SAAs from each health service provider

2 Source: Web Enabled Reporting System (WERS) 2010/11.

MH Sector (cont'd)			
Organization Name	Head Office Location	Area Served¹	%Total Revenue funded by NW LHIN²
Sunset Country Psychiatric Survivors	Kenora	Dryden, Kenora and Red Lake in Kenora District and Fort Frances in Rainy River District	100%
Thunder Bay Regional Health Sciences Centre	Thunder Bay	North West LHIN	71.7%

1 Source: Schedule A1 and A2 of SAAs from each health service provider

2 Source: Web Enabled Reporting System (WERS) 2010/11.