

Hospital Services Report 2006



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Executive Summary

The last report on health service utilization by residents of the Northwest Territories was published in 2001. The NWT Health Services Report 2000 took a broad look at the utilization of health services by residents of the Northwest Territories between 1994/95 and 1998/99. The two major findings of the report were: one, health service utilization is primarily determined by age; and two, that preventable conditions are responsible for a large proportion of health service utilization.

As a follow-up, a series of shorter, more focused reports is now being initiated. Each report will provide greater detail on a single health service area, examining the use of services by age group and by condition. This report, the first in the series, focuses on hospital services (inpatients and outpatients) between 2000/01 and 2003/04 provided to NWT residents (in and out of the NWT). Future reports will take in-depth looks at physician services and health centre services.

Highlights

Key findings of the report include:

Overview

- The cost of hospital services for the entire population averaged \$54.2 million between 2000/01 and 2003/04. Over three-quarters of the costs (\$42.3 million) were for 5,370 inpatient admissions by 3,537 people, with the remaining \$11.9 million for 84,328 outpatient visits initiated by 23,461 people.
- Infants under 1 were more than twice as likely to be hospitalized than the average for all ages (218 versus 86 patients per 1,000). They were also more likely to be an outpatient at 940 versus 569 patients per 1,000.
- Children, age 1 to 14 years, were the least likely to be hospitalized, at a rate of 42 patients per 1,000, which is less than half the average for all ages. They were also the least likely to require an outpatient service at 450 patients per 1,000.
- Overall, youth and adults had close to the same likelihood of hospitalization, at 91, 85 and 94 patients per 1,000, for those aged 15 to 24, 25 to 44, and 45 to 64, respectively. For outpatients, the rates showed greater variation between the age groups: 536 patients per 1,000 for 15 to 24, 583 patients per 1,000 for 25 to 44 and 714 patients per 1,000 for 45 to 64.
- Seniors, age 65 and over, had highest hospitalization rates at 249 patients per 1,000. The chance of a repeat hospitalization was also higher, as was the length of stay (7.6 days versus 4.8 on average). These three metrics in turn resulted in a per capita cost of care (\$6,437) that was over twice the next highest group under 1 year of age (\$2,898). The use of outpatient services by seniors was also high at 746 patients per 1,000, 5.8 visits per patient, and \$645 per capita.

Infants (Under 1)

 Hospital services for infants, excluding newborns, averaged approximately \$2.1 million per year between 2000/01 and 2003/04. The majority of the cost, \$1.9 million was for 214 inpatient admissions by 141 unique patients, with the remainder accounting for 1,519 outpatient visits by 605 unique patients.

- For inpatient services, the top five diagnosed conditions by cost were diseases of the respiratory system at \$628,000 (37%), conditions occurring in the perinatal period at \$514,000 (31%), congenital anomalies at \$182,000 (11%), infectious and parasitic diseases at \$98,000 (6%), and diseases of the digestive system at \$95,000 (6%).
- For outpatient services, the top five diagnosed conditions by cost were diseases of the respiratory system at \$42,000 (42%), diseases of the nervous system and sense organs at \$19,000 (19%), injuries and poisonings at \$10,000 (10%), infectious and parasitic diseases at \$9,000 (9%) and diseases of the skin and subcutaneous tissue at \$7,000 (7%).

Children (1 to 14)

- Hospital services for children averaged approximately \$4 million per year between 2000/01 and 2003/04. Approximately 63% of the cost (\$2.5 million) was for 546 inpatient admissions by 431 people, with the remaining \$1.5 million for 10,677 outpatient visits by 4,578 people.
- For inpatient services, the top five diagnosed conditions by cost were diseases of the respiratory system at \$821,000 (39%), diseases of the digestive system at \$300,000 (14%), injuries and poisonings at \$237,000 (11%), mental disorders at \$164,000 (8%), and infectious and parasitic diseases at \$127,000 (6%).
- For outpatient services, the top five diagnosed conditions by cost were diseases of the respiratory system at \$197,000 (25%), injuries and poisonings at \$181,000 (23%), diseases of the nervous system and sense organs at \$154,000 (19%), diseases of the digestive system at \$112,000 (14%), and infectious and parasitic diseases at \$47,000 (6%).

Youth (15 to 24)

- Hospital services for youth (age 15 to 24 years) averaged over \$6.3 million per year between 2000/01 and 2003/04. Just over three-quarters of the cost (\$5.0 million) was for 788 inpatient admissions by 588 people, with the remaining \$1.4 million for 10,183 outpatient visits by 3,458 people
- For inpatient services, the top five diagnosed conditions by cost were childbirth and pregnancy at \$1.6 million (35%), mental disorders at \$1.4 million (29%), injuries and poisonings at \$582,000 (12%), diseases of the digestive system at \$298,000 (6%), and diseases of the respiratory system at \$205,000 (4%).
- For outpatient services, the top five diagnosed conditions by cost were injuries and poisonings at \$133,000 (24%), childbirth and pregnancy \$125,000 (23%), diseases of the respiratory system at \$73,000 (13%), diseases of the digestive system at \$46,000 (8%), and diseases of the genitourinary system at \$32,000 (6%).

Adults (25 to 44)

- Hospital services for adults (age 25 to 44 years) averaged approximately \$15.2 million per year between 2000/01 and 2003/04. Over 70% of the cost (\$11.0 million) was for 1,745 inpatient admissions by 1,234 people, with the remaining \$4.2 million for 29,921 outpatient visits by 8,437 people
- For inpatient services, the top five diagnosed conditions by cost were childbirth and pregnancy at \$2.8 million (28%), mental disorders at \$2.4 million (23%), diseases of the digestive system at \$1.1 million (11%), injuries and poisonings at \$862,000 (8%), and diseases of the musculoskeletal system and connective tissue at \$476,000 (5%).
- For outpatient services, the top five diagnosed conditions by cost were injuries and

poisonings at \$233,000 (18%), childbirth and pregnancy at \$156,000 (12%), diseases of the digestive system at \$155,000 (12%), diseases of the respiratory system at \$151,000 (12%) and diseases of the genitourinary system at \$130,000 (10%).

Adults (45 to 64)

- Hospital services for adults (age 45 to 64 years) averaged approximately \$14.6 million per year between 2000/01 and 2003/04. Three-quarters of the cost (\$11.0 million) was for 1,224 inpatient admissions by 734 people, with the remaining \$3.6 million for 24,589 outpatient visits by 5,566 people.
- For inpatient services, the top five diagnosed conditions by cost were diseases of the digestive system at \$1.4 million (15%), mental disorders at \$1.3 million (14%), diseases of the circulatory system at \$1.2 million (13%), neoplasms (cancerous and non-cancerous growths) at \$1.1 million (12%), and injuries and poisonings at \$939,000 (10%).
- For outpatient services, the top five diagnosed conditions by cost were diseases of the digestive system at \$127,000 (16%), injuries and poisonings at \$103,000 (13%), diseases of the musculoskeletal system and connective tissue at \$91,000 (12%), diseases of the respiratory system at \$82,000 (10%), and diseases of genitourinary system at \$80,000 (10%).

Seniors (65 and over)

- Hospital services for seniors (age 65 and over) averaged approximately \$12.2 million per year between 2000/01 and 2003/04. Over 90% of the cost (\$11.1 million) was for 855 inpatient admissions by 427 people, with the remaining \$1.1 million for 7,440 outpatient visits by 1,282 people
- For inpatient services, the top five diagnosed conditions by cost were diseases of the circulatory system at \$2 million (22%), diseases of the respiratory system at \$1.8 million (19%), neoplasms at \$1.2 million (12%), diseases of the digestive system at \$1.1 million (11%) and injuries and poisonings at \$798,000 (8%).
- For outpatient services, the top five diagnosed conditions by cost were diseases of the digestive system at \$42,000 (16%), neoplasms at \$42,000 (16%), diseases of the nervous system and sense organs at \$33,000 (12%), diseases of genitourinary system at \$27,000 (10%) and diseases of the respiratory system at \$27,000 (10%).

Conclusion

• This report presents a detailed look at hospital service utilization by NWT residents at the beginning of the 21st Century. By examining utilization by age, this report shows not only that the intensity of hospital service use changes with age, but also many of the reasons for the use of hospital services change with age. Moreover, these reasons for the use of hospital services are to a great extent preventable by making healthy lifestyle choices and/or getting help before the condition requires hospitalization.

Highlights

Chapter 1: Introduction

1.1 Background

The last report on health service utilization by residents of the Northwest Territories was published in 2001. The NWT Health Services Report 2000 took a broad look at the utilization of health services by residents of the Northwest Territories between 1994/95 and 1998/99. The two major findings of the report were: one, health service utilization is primarily determined by age; and two, that preventable conditions are responsible for a large proportion of health service utilization.

It is now time to provide an updated analysis of the utilization of health services by Northwest Territories residents.

1.2 New Reporting Format

For this update, a series of shorter, more focused, reports are presented. Each report provides greater detail on a single health service area, examining the use of services by age group and by condition. This report, the first in the series, focuses on hospital services (inpatients and outpatients) provided to residents of the Northwest Territories. Future reports will focus on physician services and health centre services.

1.3 Hospital System

The NWT relies on a combination of four in-territory hospitals (Stanton Territorial, Inuvik Regional, H.H. Williams Memorial, and Fort Smith) as well as a series of hospitals in Edmonton, Alberta administered by the Capital Health Authority. Of the four in-territory hospitals, Stanton Territorial Hospital located in the City of Yellowknife provides the widest range of services to the entire NWT population. Stanton's territorial focus allows it to offer the services of specialists and specialized equipment, and thus provides not only basic services but also services more advanced than those that can be offered at the other three NWT hospitals.

Inuvik Regional Hospital located in the Town of Inuvik provides services primarily to the residents of the Inuvik and the population of the communities in the surrounding Beaufort Delta Region. H.H. Williams Memorial Hospital in the Town of Hay River provides services primarily to the residents of Hay River but also to residents from surrounding communities. Fort Smith Hospital primarily serves the Town of Fort Smith.

When patients require services or care that is more advanced or specialized than is offered locally, regionally or territorially in the NWT, they are treated in southern Canada. The hospital system of the Capital Health Authority in particular, and Alberta in general, provides the majority of services provided to NWT residents outside of the NWT.

1.4 Scope of the Report

This report aims to profile the reasons residents of the Northwest Territories use hospital inpatient and outpatient services from all four NWT Hospitals, as well as from hospitals outside of the NWT.

The NWT Health Services Report 2000 showed that hospital services utilized are influenced by a combination of age and reason for hospital care (morbidity). Because of these findings, utilization by each age group (under 1, 1 to 14, 15 to 24, 25 to 44, 45 to 64, 65 & up) is examined by the top five known or suspected reasons most responsible for their hospitalization or outpatient service. Reasons for hospital services are defined and categorized based on the International Classification of Diseases, 9th Revision (ICD-9), which takes numerous like conditions and groups them together into chapters, such as the diseases of the respiratory system.

The top five ICD-9 chapters, though differing across age groups, generally account for between 60 to 70% of the cost of hospital services where the condition is known and documented. Further detail is provided on some of the general conditions that account for the largest cost areas. For example, where hospitalizations for diseases of the respiratory system figure prominently, a breakdown of the proportion of costs for particular respiratory diseases is provided, e.g., asthma and pneumonia.

There are two other chapters, within the ICD-9, that categorize hospital services provided when 1) the underlying problem is unknown – referred to as symptoms, signs and ill-defined conditions; or 2) where the reason for service is to determine the diagnosis and/or is in support of care of the patient with a diagnosed condition, such as lab tests, x-rays, recovery from surgery or rehabilitative therapy – referred to as supplementary classifications of factors influencing health status and contact with health services. These two chapters will be examined separately for each age group for both hospitalizations and outpatient activities.

The time period examined is 2000/01 to 2003/04, with data presented in four-year averages. Four-year averages are used to allow for a greater degree of reliability when examining the particular reasons for hospitalization.

Cost will be the primary measure of hospital service use, though data on visits, and other measures, are presented as an overview. Some conditions require shorter hospital stays but result in more hospitalizations than another condition (e.g. dental diseases versus mental disorders). The cost per bed day varies across hospitals, as does the cost of a day surgery or an outpatient visit. Thus, cost provides a better measure of the intensity of use of hospital services than simply counting the numbers of people being admitted, procedures provided or bed days used.

This report examines all hospital service use – in and outside the Northwest Territories – in totality, regardless of hospital location. While hospital services provided to patients outside of the NWT are generally of greater intensity or complexity, than those services provided within, this is not a review of the appropriateness of services provided at one hospital system compared to the next. An Appendix to this report provides some general metrics on hospital use outside and inside the territory.

This report does not provide an analysis of hospital services by community type, ethnicity or gender. The location of a hospital in a community, and its proximity to other communities, does impact the utilization of the facility. However, community-type breakdowns of general utilization measures are presented in tables in the Appendix to this report. Similarly, the four NWT hospitals are located in communities that are either primarily non-aboriginal, or close to half non-aboriginal. However, breakdowns of general utilization measures by ethnicity are presented in tables in the Appendix to this report. Finally, gender is important, but it is generally secondary to age (other than childbirth and pregnancy for residents age 15 to 44). In order to keep the report focused on the more important factor of age in determining hospital use, some statistics by gender are presented in an Appendix to this report.

This report contains time-sensitive information. Such information is only accurate as of October 2006. The information in this report, may be updated, amended, supplemented or otherwise altered by subsequent reports and presentations.

All non-financial service information is from the NWT Department of Health and Social Services. Population estimates for all population based rates and per capita figures is from the NWT Bureau of Statistics. And, all financial information in this report is from both the NWT Department of Health and Social Services and the Government of the Northwest Territories, Main Estimates. (See Appendix C for more detail on data sources and methodology).

1.5 Organization of the Report

Chapter 2 presents an overview of hospitalization and outpatient activity.

Chapters 3 to 8 present an analysis of inpatient and outpatient activity by the top five conditions, according to cost, for each age group: Under 1, 1 to 14, 15 to 24, 25 to 44, 45 to 64, and 65 & up.

Chapter 9 provides some concluding remarks.

Appendix A presents a glossary of terms used in the report.

Appendix B includes several tables of basic measures of hospital utilization.

Appendix C provides an overview of the methodology and data used throughout the report.

Chapter 2: Overview

The annual cost of hospital services for the entire population averaged \$54.2 million between 2000/01 and 2003/04. Over three-quarters of the costs (\$42.3 million) were for 5,370 inpatient admissions by 3,537 people, with the remaining \$11.9 million for 84,328 outpatient visits by 23,461 people.

The majority of hospital services were provided in the Northwest Territories between 2000/01 and 2003/04. Approximately 84% of costs (\$45.5 million) were expended in versus 16% (\$8.8 million) outside of the territory. In terms of patient volume, approximately 80% of inpatient admissions (4,295) and 90% of outpatient visits (75,524) were provided in the Northwest Territories, compared to 1,075 inpatient admissions and 8,804 outpatient visits outside of the territory.

2.1 Inpatients

The utilization of inpatient services is associated with and generally rises with age, as can be seen in Table 2.1.

Table 2.1

Hospitalization by Age Group - Various Metrics 2000/01 to 2003/04 Average

	Patients per 1,000	Visits per 1,000	Average Stay (Bed Days)	Cost per Capita
Total	86	130	4.8	\$1,026
Under 1	218	332	5.5	\$2,898
1 to 14	42	54	2.9	\$244
15 to 24	91	122	3.9	\$772
25 to 44	85	121	3.8	\$759
45 to 64	94	157	5.4	\$1,408
65 & Up	249	497	7.6	\$6,437

Sources: NWT Health and Social Services, NWT Bureau of Statistics,

and NWT Financial Management Board Secretariat.

Infants are an exception, since when illness strikes they are more likely to require hospitalization than is the case for an older child. Children under 1 were more than twice as likely to be hospitalized than the average for all ages (218 versus 86 per 1,000).¹

Children, age 1 to 14 years, were the least likely to be hospitalized at less than half the overall rate for all ages. The length of hospital stay of children was also shorter, as was the frequency of hospitalization, with 54 visits per 1,000 – less than half the overall rate.

Utilization increases in the next age group – youth (age 15 to 24) – with the emergence of services related to pregnancy and mental disorders (see Chapter 5). These reasons for hospitalization continue to predominate into the adult years, age 25 to 44, with this age group utilizing hospital services at almost the same rate as youth.

By middle life, disease in association with increasing prevalence of the use of hospital services also rises. Adults, age 45 to 64, although not much more likely to be hospitalized than younger adults, were, when hospitalized, experiencing longer stays, and more repeat hospitalizations.

Seniors, age 65 and over, had the highest rate of the population hospitalized at 249 patients

Routine newborn care (bassinet inpatient costs) has been excluded from analysis in this report. See Appendix C: Methodology for further details. per 1,000. The chance of a repeat hospitalization was also higher, as was the length of stay (7.6 days versus 4.8 on average). These three metrics in turn resulted in a per capita cost of care (\$6,437) that was over two times the next highest group – under 1 year of age (\$2,898).

2.2 Outpatients

As with inpatients (hospitalization), the volume of outpatient activity was strongly associated with age (See Table 2.2). A large proportion of the population, however, across all age groups received at least one hospital service on an outpatient basis each year. One of the main reasons for such a level of utilization is that many tests (such as x-rays and ultrasounds), often ordered by family physicians, take place at the hospital and generally do not occur in the doctor's clinic. In addition to such tests, outpatient activity also includes day surgeries, rehabilitation (e.g., physiotherapy) and emergency visits.

Table 2.2

Outpatient Activity by Age Group - Various Metrics 2000/01 to 2003/04 Average

	Patients per 1,000	Visits per 1,000	Visits per Patient	Cost per Capita	
	1,000	1,000	Tatient	Capita	
Total	569	2,044	3.6	\$288	
Under 1	940	2,359	2.5	\$305	
1 to 14	450	1,049	2.3	\$144	
15 to 24	536	1,579	2.9	\$212	
25 to 44	583	2,068	3.5	\$288	
45 to 64	714	3,156	4.4	\$461	
65 & Up	746	4,329	5.8	\$645	

Sources: NWT Health and Social Services, NWT Bureau of Statistics, and NWT Financial Management Board Secretariat.

Infants were the most likely to require an outpatient service, with 94% per cent (940 per 1,000) visiting once a year. However, while they were the most likely to receive an outpatient service, they were less likely to require a repeat visit (2.5 times compared to the average of 3.6 times). Relative to older age groups, most outpatient visits were for urgent needs - where the infant is being seen because of a respiratory issue (common cold) or an ear infection.

As with inpatients, the use of outpatient services drops off as the child ages, but then rises into adulthood. But while children 1 to 14 were the least likely to require an outpatient service, approximately 45% (450 per 1,000) did receive a hospital service on an outpatient basis each year. Once again, these visits were generally more related to an emergent need, such as an injury, respiratory complaint, or ear infection.

Over half of the population age 15 to 24 and age 25 to 44 annually received some form of outpatient care, 54% and 58% respectively.

Upon entering one's mid-life the use of outpatient services climbs, along with the proportion of the population receiving a service. Over 70% of the population, age 45 to 64, received at least one outpatient service each year. The majority of these visits were for tests and examinations.

Approximately 75% of seniors, age 65 and up, received an outpatient service each year. On average, each senior patient made 5.8 outpatient visits per year, resulting in a per capita cost more than twice the average - (\$645 versus \$288). Similar to those age 45 to 64, senior outpatient visits were primarily for tests and examinations.

Chapter 3: Infants (Under 1 Year)

Hospital services for infants averaged approximately \$2.1 million per year between 2000/01 and 2003/04. The majority of the cost, \$1.9 million was for 214 inpatient admissions by 141 unique patients, with the remainder accounting for 1,519 outpatient visits by 605 unique patients.

3.1 Inpatients

On average, approximately 88% of unique patients (148), 89% of admissions (191), 89% of bed days (1,051) and 90% of costs (\$1,680,451) were for diagnosed conditions, compared to 12% (19), 10% (22), 10% (122) and 10% (\$183,235), respectively, for supplementary classifications and ill-defined conditions.²

Diagnosed Conditions

In terms of unique patient, admission, bed day and cost measures of inpatient activities, the top five conditions were respiratory system related, conditions occurring in the perinatal period, congenital anomalies, infectious and parasitic diseases and digestive system conditions (see Table 3.1).

Table 3.1

Hospitalization for Under 1 by Top 5 Conditions Average 2000/01 to 2003/04

		Ме	etric	
Rank	Unique Patients	Admissions	Bed Days	Costs
	(148)	(191)	(1,051)	(\$1,680,451)
1	Respiratory	Respiratory	Respiratory	Respiratory
	System	System	System	System
	49%	48%	34%	37%
2	Perinatal	Perinatal	Perinatal	Perinatal
	Period	Period	Period	Period
	17%	17%	31%	31%
3	Infectious	Congenital	Congenital	Congenital
	Diseases	Anomalies	Anomalies	Anomalies
	7%	8%	13%	11%
4	Digestive	Infectious	Digestive	Infectious
	System	Diseases	System	Diseases
	7%	7%	6%	6%
5	Congenital	Digestive	Infectious	Digestive
	Anomalies	System	Diseases	System
	6%	6%	5%	6%
Other	14%	13%	11%	10%

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Respiratory diseases were responsible for 37% of hospitalization costs, representing approximately \$628,000 per year. Bronchitis and bronchiolitis were responsible for over half of all hospitalization costs due to respiratory conditions. Various forms of pneumonia were the primary reason for a further 36% of costs, with the remaining costs spread across a number of respiratory issues, including throat infections, influenza, and asthma.

Conditions occurring during the perinatal period (20th week of gestation to 28 days after birth) were responsible for 31% of costs - \$514,000 per year. Approximately 60% of hospitalization costs under this category were due to issues with infants having either a low-birth weight and/or a short gestation period (premature). A further 16% were due to infants having respiratory issues during or after being born. The remaining conditions occurring during the

² Remainder of unique patients, visits, bed days, and costs were not classified (unknown). perinatal period included such things as jaundice and digestive disorders.

Congenital anomalies (conditions present at or before birth) were the primary reason for a further 11% of the cost of all hospitalizations – \$182,000 per year. Anomalies were primarily heart and other circulatory system related (73%), and digestive system related (17%). The remaining hospitalization costs were due to anomalies related to other systems in the body: nervous, urinary, musculoskeletal, etc.

Infectious diseases and digestive system conditions both were responsible for a further 6% each of hospitalization costs, \$98,000 and \$95,000, respectively. Infectious diseases primarily included intestinal infections, blood poisoning, whooping cough, and viral conditions with blister-like rashes (e.g., chickenpox). The digestive diseases requiring hospitalization primarily included gastroenteritis and colitis, esophagitis (acid reflux), hernias, and other intestinal conditions.

Supplementary Classifications and Ill-defined conditions

Supplementary classifications averaged \$111,000 per year, while symptoms, signs and illdefined conditions averaged \$72,000 per year. Under the broad category of supplementary classifications, most hospitalizations were due to recovery and care after surgery or a treatment. Hospitalizations due to ill-defined conditions primarily included developmental delays, respiratory problems, seizures and fevers.

3.2 Outpatients

Approximately 57% of unique patients (591), 51% of both the outpatient visits (776) and costs (\$99,153) were for diagnosed conditions, requiring immediate care (e.g., emergency), with the remainder being for ill-defined conditions, or for tests and exams -referred to as supplementary classifications.

Diagnosed Conditions

In terms of unique patients, visits and costs the top five diagnosed conditions were as follows: respiratory system related, nervous system and sense organs, infectious and parasitic diseases, digestive system diseases, injuries and poisonings (unique patients) and skin diseases (visits

Table 3.2

Outpatient Activity for Under 1 by Top 5 Conditions Average 2000/01 to 2003/04

	Metric				
Rank	Unique Patients	Visits	Costs		
	(591)	(766)	(\$99,153)		
1	Respiratory	Respiratory	Respiratory		
	System	System	System		
	38%	43%	42%		
2	Nervous	Nervous	Nervous		
	System	System	System		
	19%	19%	19%		
3	Infectious	Digestive	Digestive		
	Diseases	System	System		
	11%	10%	10%		
4	Digestive	Infectious	Infectious		
	System	Diseases	Diseases		
	11%	10%	9%		
5	Injury	Skin	Skin		
	& Poisoning	Diseases	Diseases		
	7%	7%	7%		
Other	14%	12%	12%		

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

and costs) (see Table 3.2).

Respiratory diseases were responsible for 42% of outpatient costs, at approximately \$42,000 per year. Upper respiratory infections (primarily the common cold) were responsible for 81% of outpatient respiratory related costs. The remainder of respiratory related costs was for visits for diseases such as asthma, pneumonia and influenza.

Diseases related to the nervous system and sense organs accounted for 19% of outpatient costs at approximately \$19,000 per year. Middle ear infections (otitis media) were responsible for almost three quarter of the costs. The remaining costs were primarily for the treatment of eye issues, such as pink eye (conjunctivitis).

Digestive system diseases, infectious diseases and skin diseases accounted 10%, 9% and 7% of costs, respectively (\$10,000, \$9,000 and \$7,000 per year).

Outpatient costs for digestive system conditions primarily included: gastroenteritis (e.g., diarrhea), constipation, and tooth and gum problems. For infectious and parasitic diseases, viral diseases with blister-like rashes (e.g., chickenpox), intestinal infections, and candidiasis (e.g., thrush and diaper rash) accounted for most costs. And for skin diseases, most costs were related to treating dermatitis (e.g., rashes and eczema).

Supplementary Classifications and III-defined conditions

The cost of outpatient visits categorized as supplementary classifications – reasons considered to be supplementary to health status – averaged approximately \$82,000 per year. Physical examinations, x-rays and lab exams (e.g., blood tests) were responsible for the majority of outpatient visits under the general category of supplementary classifications. While these visits cannot be connected to a particular diagnosis, the services the patient receives were in support of determining the cause or progression of a patient's ailment.

Outpatient visits for symptoms, signs and ill-defined conditions amounted to approximately \$14,000 per year. Such visits are usually due to undiagnosed conditions related to the respiratory system (e.g., breathing problems), digestive system (e.g., diarrhea), skin issues (e.g., rashes) and fevers.

Chapter 4: Children (Age 1 to 14 Years)

Hospital services for children averaged approximately \$4 million per year between 2000/01 and 2003/04. Approximately 63% of the cost (\$2.5 million) was for 546 inpatient admissions by 431 people, with the remaining \$1.5 million for 10,677 outpatient visits by 4,578 people.

4.1 Inpatients

On average, approximately 90% of unique patients (421), 89% of admissions (484), 84% of bed days (1,321) and 85% of costs (\$2,113,081) were for diagnosed conditions, compared with 10% (45), 11% (59), 15% (240) and 15% (\$362,905), respectively, for supplementary classifications and ill-defined conditions.

Diagnosed Conditions

In terms of the unique patient, admission, bed day and cost measures of inpatient activities, the top five conditions were diseases of the respiratory system, diseases of the digestive system, injuries and poisonings, mental disorders (bed days and costs), and diseases of the nervous system (unique patients and admissions) or infectious and parasitic diseases (see Table 4.1).

Respiratory diseases were responsible for 39% of hospitalization costs, approximately \$821,000 per year. Pneumonia related hospitalizations were responsible for about 39% of

Table 4.1

Hospitalization for Age 1 to 14 by Top 5 Conditions Average 2000/01 to 2003/04

	Metric			
Rank	Unique Patients	Admissions	Bed Days	Costs
	(421)	(484)	(1,321)	(\$2,113,081)
1	Respiratory	Respiratory	Respiratory	Respiratory
	System	System	System	System
	34%	35%	37%	39%
2	Digestive	Digestive	Digestive	Digestive
	System	System	System	System
	26%	23%	14%	14%
3	Injury &	Injury &	Injury &	Injury &
	Poisoning	Poisoning	Poisoning	Poisoning
	14%	14%	12%	11%
4	Infectious	Nervous	Mental	Mental
	Diseases	System	Disorders	Disorders
	5%	5%	8%	8%
5	Nervous	Infectious	Infectious	Infectious
	System	Diseases	Diseases	Diseases
	5%	4%	6%	6%
Other	17%	19%	24%	22%

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

these costs. Bronchitis and bronchiolitis were responsible for a further 21% of costs. Tonsil and adenoid extractions and issues, along with the treatment of asthma, accounted for 10% of costs each. The remaining costs were spread across a variety of respiratory conditions.

Digestive diseases were responsible for 14% of hospitalization costs – approximately \$300,000 per year. Dental and gum issues were responsible for 38% of costs, while appendicitis were responsible for 35% of digestive hospitalization costs. The remaining digestive disease costs were primarily made up by hospitalizations for gastro-enteritis, colitis, and gall bladder conditions (gallstones).

Injury and poisoning were responsible for 11% of hospitalization costs - approximately

\$237,000 per year. Fractures (primarily arms and legs) were responsible for almost half of injury hospitalization costs, followed by 11% for surgical and medical complications, and 9% for poisonings and the toxic effects of substances. The remaining injuries were spread across a large number of different injury types, primarily including wounds, internal injuries, burns and concussions.

Mental health issues were responsible for 8% of hospitalization costs – approximately \$164,000 per year.³ Approximately 75% of the cost of mental health related hospitalizations were due to neurotic and personality disorders (primarily including anxiety and depression). The remaining mental health costs primarily were due to alcohol and drug related hospitalizations.

A wide variety of conditions under the category of infectious and parasitic diseases made up approximately 6% of hospitalization costs (\$127,000). Some of the more significant conditions were intestinal infections, strep-throat/scarlet fever, blood poisoning and chicken pox.

Supplementary Classifications and III-defined conditions

The annual average cost for hospitalizations due to reasons classified as supplementary classifications was approximately \$231,000. Within this category approximately 37% of the hospitalization costs were for after care (e.g., post-surgery). Rehabilitation and orthopedic care were responsible for another 32% of costs. Approximately 13% of hospitalizations were for respite care – where the regular caregiver was unable to care for the child. The remaining hospitalization costs under supplementary classifications were for a number of services, including extended examinations or observations of the patient.

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$132,000. Abdominal pain and digestive system related issues were responsible for 32% of the costs, with respiratory issues and seizures/convulsions representing 14% and 13%, respectively, of costs. The remaining conditions, under this category, were predominated by children with a high fever, or having had fainted/collapsed.

4.2 Outpatients

Approximately half of outpatient activity - 60% of patients, 51% of visits, and 54% of costs - was associated with conditions that were diagnosed, generally requiring immediate care (e.g., emergency) with the remainder being for conditions that were ill-defined, or involved tests and exams - referred to as supplementary classifications.

Diagnosed Conditions

In terms of unique patients, visits and costs the top five diagnosed conditions were as follows: injuries and poisonings, respiratory system related, nervous system and sense organs, digestive system, and infectious and parasitic diseases (see Table 4.2).

Children suffering from respiratory conditions made up 25% of outpatient costs – \$197,000 per year. Over two-thirds of these costs were for treating acute respiratory infections, which generally included: sore throats, tonsillitis, common colds, and infections in more than one area, e.g. sore throat combined with sinus issues. A further 11% of costs were for the treatment of asthma, with the remaining costs spread across a number of respiratory conditions, predominated by influenza and pneumonia.

Children treated for injuries and poisonings accounted for 23% (\$181,000) of the cost of outpatient care. Approximately 39% of injury care costs were for open wounds (cuts and punctures) and bruises. Another 24% of the costs were for sprains and minor fractures, primarily to arms and legs. The remaining costs were spread across a large number of types of injuries and poisonings.

Children suffering from diseases of the nervous system and sense organ made up 19% of outpatient costs – \$154,000 per year. Under this disease category, 87% of costs were for the

³ Over three-quarters of hospitalizations for mental disorders were for teenagers in this age group.

Table 4.2

Outpatient Activity for Age 1 to 14 by Top 5 Conditions Average 2000/01 to 2003/04

	Metric			
Rank	Unique Patients	Visits	Costs	
	(4,411)	(5,406)	(\$790,717)	
1	Injury	Respiratory	Respiratory	
	& Poisoning	System	System	
	26%	28%	25%	
2	Respiratory	Injury	Injury	
	System	& Poisoning	& Poisoning	
	25%	26%	23%	
3	Nervous	Nervous	Nervous	
	System	System	System	
	18%	19%	19%	
4	Digestive	Digestive	Digestive	
	System	System	System	
	9%	8%	14%	
5	Infectious	Infectious	Infectious	
	Diseases	Diseases	Diseases	
	7%	7%	6%	
Other	14%	13%	13%	

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

treatment of ear conditions – primarily infections. The remaining conditions under this disease category were primarily for eye-related problems, such as non-viral conjunctivitis (pink eye).

Digestive system conditions were responsible for a further 14% of outpatient costs – \$112,000. Over three-quarters of such conditions were related to dental caries (cavities) and gum diseases, with the remaining conditions generally being intestinal issues (colitis and gastroenteritis).

The treatment of infectious and parasitic diseases was responsible for 6% of outpatient costs – \$47,000 per year. The costs were spread across a large number of conditions under this disease category, primarily including strep throat and scarlet fever, and intestinal infections.

Supplementary Classifications and III-defined conditions

The cost of outpatient visits categorized as supplementary classifications – reasons considered to be supplementary to health status – averaged approximately \$621,000 per year.

Physical examinations, x-rays and lab exams (e.g., blood tests) were responsible for over threequarters of the outpatient visits under the general category of supplementary classifications. Many of these visits are scheduled and did not require emergent care. While these visits cannot be connected to a particular diagnosis, the services the patient receives were in support of determining the cause or progression of the patient's ailment.

Rehabilitation and orthopedic care were responsible for a further 11% of costs under this category, with a number of other classifications (including such things as filling prescriptions, administering paperwork around medical certificates) making up the remainder of the outpatient costs associated with this category.

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$55,000. This category was spread out across a large number of symptoms and conditions, with digestive system and respiratory issues being predominate among a large number of concerns.

Chapter 4

Chapter 5: Youth (Age 15 to 24 Years)

Hospital services for youth (age 15 to 24 years) averaged over \$6.3 million per year between 2000/01 and 2003/04. Just over three-quarters of the cost (\$5.0 million) was for 788 inpatient admissions by 588 people, with the remaining \$1.4 million for 10,183 outpatient visits by 3,458 people.

5.1 Inpatients

On average, most inpatient activity – 93% of unique patients, 94% of admissions, 95% of bed days and 95% of costs – were for diagnosed conditions, with the remainder for supplementary classifications and ill-defined conditions.

Diagnosed Conditions

In terms of the volume (unique patients, admissions and bed days) and cost measures of inpatient activities, the top five conditions were childbirth and pregnancy, mental disorders, injuries and poisonings, diseases of the digestive system, and diseases of the respiratory system (see Table 5.1).

Table 5.1

Hospitalization for Age 15 to 24 by Top 5 Conditions Average 2000/01 to 2003/04

	Metric			
Rank	Unique Patients	Admissions	Bed Days	Costs
	(607)	(743)	(2,888)	(\$4,733,588)
1	Childbirth	Childbirth	Childbirth	Childbirth
	& Pregnancy	& Pregnancy	& Pregnancy	& Pregnancy
	35%	43%	34%	35%
2	Injury &	Injury &	Mental	Mental
	Poisoning	Poisoning	Disorders	Disorders
	12%	14%	25%	29%
3	Digestive	Mental	Injury &	Injury &
	System	Disorders	Poisoning	Poisoning
	11%	14%	14%	12%
4	Mental	Digestive	Digestive	Digestive
	Disorders	System	System	System
	10%	12%	9%	6%
5	Respiratory	Respiratory	Respiratory	Respiratory
	System	System	System	System
	5%	5%	4%	4%
Other	9%	12%	13%	22%

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Hospitalizations related to childbirth and pregnancy were responsible for 35% of the inpatient costs – \$1.6 million per year. The vast majority of the hospitalizations were for labour and delivery, as well as the aftercare of the mother. Complications with pregnancy were also responsible for a small amount of the costs, including hypertension or threatened labour.

Youth admitted to hospitals due to mental health conditions, accounted for 29% of costs – nearly \$1.4 million per year. Mental health conditions requiring hospitalization are often complex, and are often characterized by multiple afflictions, such as alcohol and drug abuse along with the primary diagnoses of depression or neuroses. Schizophrenia was responsible for 31% of the costs for hospitalization, followed by 20% for affective psychoses (e.g., manic depression). The remaining costs for hospitalizations were primarily for depression, neurotic disorders, and alcohol and/or drug abuse.

Injury and poisoning were responsible for 12% of hospitalization costs – approximately \$582,000 per year. Fractures, primarily to the arms and legs, were responsible for 28% of costs, followed by 15% for poisonings and toxic effects of substances, and 13% for internal injuries – such as injuries to organs. The remaining injury costs were spread across a number of types, primarily including open wounds and surgical or medical complications.

Digestive diseases were responsible for 6% of hospitalization costs – approximately \$298,000 per year. Appendicitis was responsible for 24% of digestive hospitalization costs, while dental and gum issues were responsible for 19% of costs. Various intestinal issues, such as colitis and intestinal blockages, were responsible for another 17% of costs. Gallstones and other gall bladder conditions were responsible for 16% of costs, with of ulcers and conditions of the stomach, esophagus and duodenum responsible for 14% of costs. The remaining digestive disease costs were for problems with the pancreas and for hernias.

Respiratory diseases were responsible for 4% of hospitalization costs – approximately \$205,000 per year. Tonsillitis and adenoids (infections and removals) accounted for 28% of hospitalizations costs. Pneumonias accounted for another 25% of costs. Respiratory tract infections such as laryngitis and bronchitis were responsible for 19% of costs, and asthma admissions accounted for a further 12% of costs. The remaining respiratory disease hospitalizations included a number of different conditions.

Supplementary Classifications and III-defined conditions

The annual average cost for hospitalizations due to reasons classified as supplementary classifications was approximately \$138,000. Within this category approximately 42% of the hospitalization costs were for rehabilitation and orthopedic care. Approximately 27% of hospitalizations were for care where other medical facilities were not available (e.g., waiting for treatment in another facility) and respite care – where the regular caregiver was unable to care for the patient. Aftercare and convalescence accounted for 17% of the hospital costs. The remaining hospitalizations under supplementary classifications were primarily for extended examinations or observations of the patient.

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$98,000. Abdominal pains were responsible for 44% of the costs. The remaining conditions, under this category, were spread across a number of categories including seizure/convulsions, high fevers, and persons having had fainted or collapsed.

5.2 Outpatients

Less than half of outpatient activity – 49% of patients, 35% of visits, and 40% of costs - was associated with conditions that were diagnosed, generally requiring immediate care (e.g., emergency) with the majority being for conditions that were ill-defined, or involved tests and exams -referred to as supplementary classifications.

Diagnosed Conditions

In terms of unique patients, visits and costs the top five diagnosed conditions were as follows: injuries and poisonings, childbirth and pregnancy, diseases of the respiratory system, diseases of the digestive system, diseases of the genitourinary system (unique patients and costs) and diseases of the nervous system and sense organ – visits only (see Table 5.2).

Injuries and poisonings accounted for almost one-quarter of diagnosed outpatient visit costs – approximately \$133,000 per year. Of these costs, 36% were for open wounds (cuts and punctures) and bruises. Another 31% of the costs were for sprains and minor fractures, primarily to arms and legs. The remaining costs were spread across a large number of injury types.

Table 5.2

Outpatient Activity for Age 15 to 24 by Top 5 Conditions Average 2000/01 to 2003/04

		Metric	
Rank	Unique Patients	Visits	Costs
	(2,749)	(3,611)	(\$545,636)
1	Injury	Injury	Injury
	& Poisoning	& Poisoning	& Poisoning
	30%	28%	24%
2	Respiratory	Childbirth &	Childbirth &
	System	Pregnancy	Pregnancy
	16%	17%	23%
3	Childbirth &	Respiratory	Respiratory
	Pregnancy	System	System
	12%	15%	13%
4	Digestive	Digestive	Digestive
	System	System	System
	8%	7%	8%
5	Genitourinary	Nervous	Genitourinary
	System	System	System
	6%	6%	6%
Other	29%	27%	25%

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Young women who required services related to childbirth and pregnancy accounted for 23% outpatient costs – approximately \$125,000 per year. Over half of these costs were for abortions and the treatment of miscarriages. Another third of costs were for services related to a normal pregnancy, such as ultrasounds. The remaining costs were spread across a number of conditions related to pregnancy.

Annually, respiratory diseases (colds, tonsil infections, and asthma), digestive diseases (dental problems, stomach and intestinal problems) and diseases of the genitourinary system (primarily infections of the urinary tract and genital organs) accounted for 13% (\$73,000), 8% (\$46,000), and 6% (\$32,000) of costs, respectively.

Supplementary Classifications and III-defined conditions

The cost of outpatient visits categorized as supplementary classifications – reasons considered to be supplementary to health status – averaged approximately \$779,000 per year.

Physical examinations, x-rays and lab exams (e.g., blood tests) were responsible for over three-quarters of the outpatient visits under the general category of supplementary classifications. Many of these visits are scheduled and did not require emergent care. While these visits cannot be connected to a particular diagnosis, the services the patient receives were in support of determining the cause of the patient's ailment.

Rehabilitation and orthopedic care were responsible for a further 10% of costs under this category, with a number of other classifications (primarily aftercare) making up the remainder of the outpatient costs associated with this category.

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$42,000. This category was spread out across a large number of symptoms and conditions, with digestive system and respiratory issues being predominate among a large number of concerns.

Chapter 6: Adults (Age 25 to 44 Years)

Hospital services for adults (age 25 to 44 years) averaged approximately \$15.2 million per year between 2000/01 and 2003/04. Over 70% of the cost (\$11.0 million) was for 1,745 inpatient admissions by 1,234 people, with the remaining \$4.2 million for 29,921 outpatient visits by 8,437 people.

6.1 Inpatients

On average, most inpatient activity – 91% of unique patients and admissions, 92% of bed days and costs – was for diagnosed conditions, with the remainder for supplementary classifications and ill-defined conditions.

Diagnosed Conditions

In terms of unique patient, admission, bed day and cost measures of inpatient activities, the top five conditions were childbirth and pregnancy, mental disorders, diseases of the digestive system, injuries and poisonings, and genitourinary diseases (unique patients and admission) or musculoskeletal system related (bed days and costs) (see Table 6.1).

Table 6.1

Hospitalization for Age 25 to 44 by Top 5 Conditions Average 2000/01 to 2003/04

		M	Aetric		
Rank	Unique Patients	Admissions	Bed Days	Costs	
	(1,277)	(1,595)	(6,113)	(\$10,160,610)	
1	Childbirth	Childbirth	Childbirth	Childbirth	
	& Pregnancy	& Pregnancy	& Pregnancy	& Pregnancy	
	35%	33%	26%	28%	
2	Digestive	Mental	Mental	Mental	
	System	Disorders	Disorders	Disorders	
	12%	15%	21%	23%	
3	Mental	Digestive	Digestive	Digestive	
	Disorders	System	System	System	
	12%	12%	11%	11%	
4	Injury &	Injury &	Injury &	Injury &	
	Poisoning	Poisoning	Poisoning	Poisoning	
	12%	11%	11%	8%	
5	Genitourinary	Genitourinary	Musculoskeletal	Musculoskeletal	
	System	System	System	System	
	5%	5%	5%	5%	
Other	23%	23%	26%	25%	

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Hospitalizations related to childbirth and pregnancy were responsible for 28% of the inpatient costs – \$2.8 million per year. The vast majority of the hospitalizations were for labour and delivery, as well as the aftercare of the mother. Complications with pregnancy were also responsible for a small amount of the costs, including hypertension and threatened labour.

Adults admitted to hospitals due to mental health conditions, accounted for 23% of costs – nearly \$2.4 million per year. Mental health conditions requiring hospitalization are often complex, and are often characterized by multiple afflictions, such as alcohol and drug abuse along with the primary diagnoses of depression or neuroses.

Hospitalizations for affective psychoses were responsible for 29% of mental health hospitalization costs. Affective psychotic conditions are complex but generally involve any

number of mood disorders with associated psychotic symptoms such as delusions (false or irrational beliefs) and hallucinations (seeing or hearing things that do not exist). Such affective psychotic mood disorders resulting in hospitalization were predominated by depressive or manic-depressive disorders, but also included bipolar disorders and manic disorders.⁴

Alcohol and drug conditions (psychoses, dependency and abuse) were the primary reason for 20% of mental health hospitalization costs.

Schizophrenia was the reason for a further 11% of mental health costs followed by non-psychotic depression at approximately 10%.

The remaining mental health hospitalizations were for a large number of conditions but primarily included issues related to stress or dramatic life events (such as a reaction to the death of a loved one, martial separation, etcetera), as well as neurotic and personality disorders.

Digestive diseases were responsible for 11% of hospitalization costs – approximately \$1.1 million per year. Various intestinal issues such as colitis and enteritis (Crohn's disease) were responsible for 31% of costs. Gall bladder issues (primarily gallstones) were responsible for another 22% of digestive system related hospitalization costs. Stomach issues (ulcers, gastritis, acid reflux) amounted to approximately 17% of costs. Hospitalization for appendicitis represented a further 10% of costs, with the remaining conditions being spread across a number of conditions, including: pancreatic and liver diseases, hernias and dental and gum diseases.

Injury and poisoning were responsible for 8% of hospitalization costs - \$862,000 per year. Fractures, primarily to the arms and legs, were responsible for 38% of costs, followed by 16% for poisonings and toxic effects of substance, and 16% for surgical or medical complications. The remaining injury costs were spread across a number of types, primarily including internal injuries and open wounds.

Musculoskeletal system and connective tissue diseases were responsible for 5% of costs – around \$476,000 per year. Almost two-thirds of these costs were related to hospitalizations for severe arthritis (rheumatoid and osteoarthritis) and arthritis related joint conditions. Another 21% of costs were for various spinal issues (problems with disc displacement). Rheumatism, and various bone and cartilage conditions were responsible for the remaining musculoskeletal system costs.

Supplementary Classifications and III-defined conditions

The annual average cost for hospitalizations due to reasons classified as supplementary classifications was approximately \$403,000. Within this category approximately 44% of the hospitalization costs were for aftercare and convalescence. Rehabilitation and orthopedic care accounted for 31% of the hospital costs. The remaining hospitalizations under supplementary classifications were primarily for extended examinations or observations of the patient.

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$405,000. Abdominal pains were responsible for 31% of the costs. A further 21% were for chest pains and abnormalities. The remaining conditions, under this category, were spread across a number of categories including seizure/convulsions, high fevers, and persons having had fainted/collapsed.

⁴ See Glossary for further explanation on these conditions.

6.2 Outpatients

Around a third of outpatient activity – 45% of patients, 28% of visits, and 31% of costs – was associated with conditions that were diagnosed, generally requiring immediate care (e.g., emergency) or involved day surgery or other scheduled procedures. The majority outpatient activity was for conditions that were ill-defined, or involved tests and exams -referred to as supplementary classifications.

Diagnosed Conditions

The top five diagnosed conditions varied depending on the measure (metric), but overall included: injuries and poisonings, diseases of the respiratory system, diseases of the digestive system, childbirth and pregnancy (visits and costs), diseases of the musculoskeletal system and connective tissue (unique patients and visits) and diseases of the genitourinary system (unique patients and costs) (see Table 6.2).

Table 6.2

Outpatient Activity for Age 25 to 44 by Top 5 Conditions Average 2000/01 to 2003/04

		Metric			
Rank	Unique Patients	Visits	Costs		
	(6,166)	(8,369)	(\$1,289,355)		
1	Injury	Injury	Injury		
	& Poisoning	& Poisoning	& Poisoning		
	23%	21%	18%		
2	Respiratory	Respiratory	Childbirth &		
	System	System	Pregnancy		
	14%	14%	12%		
3	Digestive	Childbirth &	Digestive		
	System	Pregnancy	System		
	10%	11%	12%		
4	Musculoskeletal	Digestive	Respiratory		
	System	System	System		
	9%	9%	12%		
5	Genitourinary	Musculoskeletal	Genitourinary		
	System	System	System		
	9%	9%	10%		
Other	35%	36%	36%		

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Injuries and poisonings accounted for 18% of diagnosed outpatient visit costs – approximately \$233,000 per year. Of these costs, 35% were for open wounds (cuts and punctures) and bruises. Another 27% of the costs were for sprains and minor fractures, primarily to arms and legs. The remaining costs were spread across a large number of injury types.

Young women who required services related to childbirth and pregnancy accounted for 12% outpatient costs – approximately \$156,000 per year. Approximately 45% of costs were for services related to a normal pregnancy, such as ultrasounds. Another 37% of these costs were for abortions and the treatment of miscarriages. The remaining costs were spread across a number of conditions related to pregnancy.

Digestive diseases accounted for 12% of costs or \$155,000 per year. Of these costs, stomach disorders (such as acid reflux, ulcers and gastritis) were responsible for over a third of costs. Intestinal conditions (such as gastroenteritis and colitis) were responsible for a further 30% of costs. Dental issues, gallstones and hernias were prominent among a host of other digestive system conditions, making up the rest of the costs.

Respiratory diseases accounted for another 12% of costs - \$151,000 per year. Colds, minor

sinus problems, sore throats and tonsillitis accounted for approximately 60% of these costs. Asthma and bronchitis (acute and chronic) accounted for another 12% and 11%, respectively. A number of other conditions, including the flu and pneumonia, made up the remaining costs.

Diseases of the genitourinary system made up 10% of outpatient costs - \$130,000 per year. Conditions falling under this chapter, including a number of conditions related to the urinary system and genitals, primarily of women. Urinary tract and vaginal infections, along with menstruation irregularities were the main reasons for outpatient costs.

Supplementary Classifications and III-defined conditions

The cost of outpatient visits categorized as supplementary classifications – reasons considered to be supplementary to health status – averaged approximately \$2.7 million per year.

Physical examinations, x-rays and lab exams (e.g., blood tests) were responsible for over three-quarters of the outpatient visits under the general category of supplementary classifications. Many of these visits are scheduled and did not require emergent care. While these visits cannot be connected to a particular diagnosis, the services the patient receives were in support of determining the cause of the patient's ailment.

Rehabilitation and orthopedic care were responsible for a further 12% of costs under this category, with a number of other classifications making up the remainder of the outpatient costs associated with this category (including such things as dialysis and contraceptive management).

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$131,000. This category was spread out across a large number of symptoms and conditions, with digestive system and respiratory issues predominating.

Chapter 7: Adults (Age 45 to 64 Years)

Hospital services for adults (age 45 to 64 years) averaged approximately \$14.6 million per year between 2000/01 and 2003/04. Three-quarters of the cost (\$11.0 million) was for 1,224 inpatient admissions by 734 people, with the remaining \$3.6 million for 24,589 outpatient visits by 5,566 people.

7.1 Inpatients

On average, most inpatient activity – 82% of unique patients, 83% of admissions, 85% of bed days and 84% of costs – was for diagnosed conditions, with the remainder for supplementary classifications and ill-defined conditions.

Diagnosed Conditions

The top five conditions varied somewhat in terms of how are they measured. In terms of the unique patients and admissions the top five were: diseases of the digestive system, circulatory diseases, mental disorders, injuries and poisonings and respiratory diseases. Neoplasms (cancerous and non-cancerous growths) joined the top five for bed days and costs (see Table 7.1).

Table 7.1

Hospitalization for Age 45 to 64 by Top 5 Conditions Average 2000/01 to 2003/04

	Metric				
Rank	Unique Patients	Admissions	Bed Days	Costs	
	(766)	(1,017)	(5,664)	(\$9,264,473)	
1	Digestive	Circulatory	Digestive	Digestive	
	System	System	System	System	
	17%	18%	14%	15%	
2	Circulatory System 14%	Digestive System 17%	Neoplasms 14%	Mental Disorders 14%	
3	Injury &	Injury &	Mental	Circulatory	
	Poisoning	Poisoning	Disorders	System	
	13%	12%	13%	13%	
4	Mental Disorders 10%	Mental Disorders 11%	Circulatory System 13%	Neoplasms 12%	
5	Respiratory	Respiratory	Injury &	Respiratory	
	System	System	Poisoning	System	
	10%	9%	10%	10%	
Other	36%	33%	36%	35%	

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Hospitalizations related to diseases of the digestive system were responsible for 15% of the inpatient costs - \$1.4 million per year. Intestinal issues were responsible for over a quarter of these costs, and included such conditions as diverticula of the intestine (inflammation of sac like bulges on the wall of the intestine). Gallbladder issues (primarily gallstones) were responsible for 18% of costs, followed by liver diseases at 16% and stomach conditions, such as gastritis (inflammation of the stomach) at 14%. The remaining costs were spread out across a number of conditions, primarily including: hernias, pancreatic diseases, and appendicitis.

Adults admitted to hospitals due to mental health conditions, accounted for 14% of costs -

\$1.3 million per year. Mental health conditions requiring hospitalization are often complex, and are often characterized by multiple afflictions, such as alcohol and drug abuse along with the primary diagnoses of depression or neuroses.

Alcohol and drug conditions (psychoses, dependency and abuse) were the primary reason for 32% of mental health hospitalization costs.

Hospitalizations for affective psychoses were responsible for 29% of mental health hospitalization costs. Affective psychotic conditions are complex but generally involve any number of mood disorders with associated psychotic symptoms such as delusions (false or irrational beliefs) and hallucinations (seeing or hearing things that do not exist). Such affective psychotic mood disorders resulting in hospitalization were predominated by depressive or manic-depressive disorders, but also included bipolar disorders and manic disorders.⁵

Schizophrenia was the reason for a further 9% of mental health costs followed by non-psychotic depression at over 7%.

The remaining mental health hospitalizations were for a large number of conditions but primarily included transient (temporary) psychotic conditions and neurotic disorders.

Circulatory system diseases accounted for 13% of costs - \$1.2 million per year. Approximately two-thirds of these costs were for the treatment of heart diseases and conditions, including such things as heart attacks and irregular heartbeats. A further 15% of costs were due to the treatment of strokes. A number of other conditions made up the rest of circulatory disease hospitalizations, but primarily included diseases of veins (such things as severe hemorrhoids and varicose veins) and hypertension (high blood pressure).

Neoplasms (cancerous and non-cancerous growths) accounted for 12% of costs - \$1.1 million per year. Over 81% of these costs were for cancerous growths, with the remaining 19% for growths that were either benign (non-cancerous), or of an uncertain nature. Costs for cancerous growths were spread across a number of single and multiple sites (types), with cancers of the digestive system being the most prominent at over a third of cancer costs – the majority of which were for colo-rectal cancer. Breast cancer was second at approximately 13%, followed by lung and leukemia at 9% each. Cancer of the small intestine, stomach and throat each accounted for 4% of costs. The remaining costs for cancer hospitalizations were spread across other and multiple sites of the body, as were the costs for non-cancerous growths.

Respiratory diseases were responsible for 10% of hospitalization costs - \$939,000 per year. Various forms of pneumonia accounted for 40% of these costs, followed by bronchitis at 24%. The remaining costs were spread across a number of respiratory issues, including such things as pleurisy and asthma.

Supplementary Classifications and III-defined conditions

The annual average cost for hospitalizations due to reasons classified as supplementary classifications was approximately \$1.1 million. Within this category approximately 42% of the hospitalization costs were for aftercare and convalescence. Rehabilitation and orthopedic care accounted for 37% of the hospital costs. The remaining hospitalizations under supplementary classifications were primarily for relief care (where the regular caregiver was unavailable) extended examinations or observations of the patient, and other miscellaneous procedures.

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$580,000. Chest pains and breathing issues were responsible for 40% of these costs, followed by abdominal pains at 17% of the costs. The remaining conditions, under this category, were spread across a number of categories including seizure/convulsions, high fevers, and persons having had fainted or collapsed.

7.2 Outpatients

Around a third of outpatient activity – 38% of patients, 19% of visits, and 22% of costs – was associated with conditions that were diagnosed, generally requiring immediate care (e.g.,

⁵ See Glossary for further explanation on these conditions. emergency) or involved day surgery or other scheduled procedures. The majority of outpatient activity was for conditions that were ill-defined, or involved tests and exams -referred to as supplementary classifications.

Diagnosed Conditions

In terms of unique patients and visits the top five diagnosed conditions were as follows: injuries and poisonings, diseases of the respiratory system, diseases of the musculoskeletal system, diseases of the digestive system, and diseases of the nervous system and sense organs (Table 7.2). Genitourinary diseases, replaced diseases of the nervous system and sense organs, when measured by costs.

Digestive diseases accounted for 16% of costs or \$127,000 per year. Of these costs, stomach disorders (such as acid reflux, ulcers and gastritis) were responsible for 41% of costs. Intestinal conditions (including such problems as diverticula of the colon or small intestine, intestinal

Table 7.2

Outpatient Activity for Age 45 to 64 by Top 5 Conditions Average 2000/01 to 2003/04

		Metric	
Rank	Unique Patients	Visits	Costs
	(3,446)	(4,644)	(\$781,144)
1	Injury	Injury	Digestive
	& Poisoning	& Poisoning	System
	18%	17%	16%
2	Respiratory	Respiratory	Injury
	System	System	& Poisoning
	13%	13%	13%
3	Musculoskeletal	Musculoskeletal	Musculoskeletal
	System	System	System
	12%	13%	12%
4	Digestive	Digestive	Respiratory
	System	System	System
	12%	11%	10%
5	Nervous	Nervous	Genitourinary
	System	System	System
	9%	9%	10%
Other	36%	37%	38%

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

bleeding, and constipation and colitis) were responsible for a further 32% of costs. Hernias, dental issues, and gallstones were prominent among a host of other digestive system conditions, making up the rest of the costs.

Injuries and poisonings accounted for 13% of diagnosed outpatient visit costs – approximately \$103,000 per year. Of these costs, 32% were for open wounds (cuts and punctures) and bruises. Another 28% of the costs were for sprains and minor fractures, primarily to arms and legs. The remaining costs were spread across a large number of injury types.

Diseases of the musculoskeletal system and connective tissue made up 12% of outpatient costs - \$91,000 per year. Of these costs, 30% were for rheumatism related conditions, 24% of back conditions (such as disc disorders), and a further 22% for rheumatoid and osteo-arthritis related conditions. The remaining costs were spread across a number of conditions related to joints and connective tissue.

Respiratory diseases accounted for another 10% of costs - \$82,000 per year. Colds, minor sinus problems, sore throats and tonsillitis accounted for approximately half of these costs. Bronchitis (acute and chronic) and asthma accounted for another 16% and 13%, respectively. A number of other conditions, including the flu and pneumonia, made up the remaining costs.

Diseases of the genitourinary made up 10% of outpatient costs – \$80,000 per year. Conditions falling under this chapter, including a number of conditions related to the urinary system and genitals. Urinary tract infections, along with menstruation irregularities and menopause issues were the main reasons for outpatient costs.

Supplementary Classifications and III-defined conditions

The cost of outpatient visits categorized as supplementary classifications – reasons considered to be supplementary to health status – averaged approximately \$2.7 million per year.

Physical examinations, x-rays and lab exams (e.g., blood tests) were responsible for threequarters of the outpatient visits under the general category of supplementary classifications. Many of these visits are scheduled and did not require emergent care. While these visits cannot be connected to a particular diagnosis, the services the patient receives were in support of determining the cause of the patient's ailment.

Rehabilitation and orthopedic care were responsible for a further 13% of costs under this category, with a number of other classifications making up the remainder of the outpatient costs associated with this category (including such things as dialysis and post-surgical care).

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$103,000. This category was spread out across a large number of symptoms and conditions, with digestive system and respiratory issues being predominate among a large number of concerns.

Chapter 8: Seniors (Age 65 and Over)

Hospital services for seniors (age 65 and over) averaged approximately \$12.2 million per year between 2000/01 and 2003/04. Over 90% of the cost (\$11.1 million) was for 855 inpatient admissions by 427 people, with the remaining \$1.1 million for 7,440 outpatient visits by 1,282 people.

8.1 Inpatients

On average, most inpatient activity – 82% of unique patients, 85% of admissions, 86% of bed days and 85% of costs – was for diagnosed conditions, with the remainder for supplementary classifications and ill-defined conditions.

Diagnosed Conditions

In terms of the unique patient, admission, bed day and cost measures of inpatient activities, the top five conditions were diseases of the circulatory system, diseases of the respiratory system, neoplasms, diseases of the digestive system and injuries and poisonings (see Table 8.1).

Table 8.1

Hospitalization for Age 65 & Up by Top 5 Conditions Average 2000/01 to 2003/04

		Ме	etric	
Rank	Unique Patients	Admissions	Bed Days	Costs
	(512)	(725)	(5,547)	(\$9,420,796)
1	Circulatory	Circulatory	Circulatory	Circulatory
	System	System	System	System
	22%	25%	22%	22%
2	Respiratory	Respiratory	Respiratory	Respiratory
	System	System	System	System
	18%	19%	18%	19%
3	Digestive System 13%	Digestive System 13%	Neoplasms 13%	Neoplasms 12%
4	Injury &	Injury &	Digestive	Digestive
	Poisoning	Poisoning	System	System
	11%	10%	12%	11%
5	Neoplasms 9%	Neoplasms 9%	Injury & Poisoning 9%	Injury & Poisoning 8%
Other	28%	25%	26%	27%

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Hospitalizations related to diseases of the circulatory system were responsible for 22% of the inpatient costs – \$2 million per year. Various heart conditions were responsible for 54% of these costs, including such things as heart attacks, heart failure and irregular heartbeats. A further 26% of these costs were for the treatment of strokes. A number of other conditions made up the remaining costs, including high blood pressure and diseases of the arteries.

Diseases of the respiratory system were responsible for 19% of inpatient costs – \$1.8 million per year. Various forms of pneumonia were responsible for 53% of these costs. Bronchitis related conditions (primarily chronic) were responsible for a further 24% of costs. The remaining respiratory conditions included a number of diseases including such things pleurisy and other chronic airway obstructions.

Neoplasms were responsible for 12% of hospitalization costs – \$1.2 million per year. Almost all, of the costs (94%) were for the treatment of growths diagnosed as cancerous. Such growths were spread out across numerous sites on the body. The majority of costs for cancerous growths were for those occurring in the digestive system (primarily colorectal) at 30%, followed by the respiratory system (primarily lung) at 18%. The treatment of breast cancer and leukemia each accounted for 10% of costs. The remaining costs were spread out over a large number of sites.

Diseases of the digestive system were responsible for 11% of costs - \$1.1 million per year. Intestinal conditions were responsible for nearly half of these costs, including such things as intestinal bleeding and diverticula of the intestine. Stomach conditions were responsible for a further 20% of costs, including ulcers and issues with the esophagus (such as extreme acid reflux). Other digestive system hospitalization costs included treatment for gallbladder issues (primarily gallstone removal) and repairing hernias.

Injuries and poisonings were responsible for 8% of hospitalization costs - \$798,000 per year. Fractures, primarily of the lower limbs, were responsible for 59% of injury hospitalization costs. Complications of surgical and medical procedures accounted for a further 24% of costs. Remaining injury hospitalization costs were spread across a large number of injury types.

Supplementary Classifications and III-defined conditions

The annual average cost for hospitalizations due to reasons classified as supplementary classifications was approximately \$1.1 million. Within this category approximately 43% of the hospitalization costs were for aftercare and convalescence. Rehabilitation and orthopedic care accounted for 39% of the hospital costs. The remaining hospitalizations under supplementary classifications were primarily for relief care (where regular caregiver was unavailable) extended examinations or observations of the patient, and other miscellaneous procedures.

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$438,000. Chest pains and breathing issues were responsible for 27% of these costs, followed by abdominal pains and complaints at 12% of the costs. The remaining conditions, under this category, were spread across a number of categories including head and neck pains, seizure/convulsions, high fevers, and persons having had fainted or collapsed.

8.2 Outpatients

Around a third of outpatient activity – 41% of patients, 18% of visits, and 24% of costs - was associated with conditions that were diagnosed, generally requiring immediate care (e.g., emergency) or involved day surgery or other scheduled procedures. The majority of outpatient activity was for conditions that were ill-defined, or involved tests and exams -referred to as supplementary classifications.

Diagnosed Conditions

In terms of unique patient and visit measures of outpatient activity, the top five diagnosed conditions were as follows: diseases of the digestive system, injuries and poisonings, diseases of the musculoskeletal system, diseases of the respiratory system, and diseases of the circulatory system (see Table 8.2). When costs are considered, neoplasms, diseases of the nervous system and sense organs, and genitourinary diseases were added in place of diseases of the musculoskeletal system, diseases of the circulatory system and poisonings.

Digestive diseases accounted for 16% of costs or \$42,000 per year. Stomach disorders (such as acid reflux, ulcers and gastritis) were responsible for 48% of these costs. Intestinal conditions (including such problems as diverticula of the colon or small intestine, intestinal bleeding, and constipation and colitis) were responsible for a further 42% of costs. The remaining costs were spread across a number of digestive system disorders.

Table 8.2

Outpatient Activity for Age 65 & Up by Top 5 Conditions Average 2000/01 to 2003/04

		Metric											
Rank	Unique Patients	Visits	Costs										
	(932)	(1,357)	(\$264,974)										
1	Digestive	Respiratory	Digestive										
	System	System	System										
	13%	15%	16%										
2	Injury & Poisoning 13%	Digestive System 13%	Neoplasms 16%										
3	Respiratory	Musculoskeletal	Nervous										
	System	System	System										
	13%	13%	12%										
4	Circulatory	Circulatory	Genitourinary										
	System	System	System										
	11%	12%	10%										
5	Musculoskeletal	Injury	Respiratory										
	System	& Poisoning	System										
	11%	12%	10%										
Other	38%	35%	36%										

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Neoplasms accounted for a further 16% of costs – 42,000 per year. Over three-quarters of these costs were for the treatment of cancerous growths, primarily colo-rectal cancers.

Diseases of the nervous system, genitourinary diseases and respiratory diseases were responsible for 12%, 10% and 10% of costs, respectively (\$33,000, \$27,000, and \$27,000 per year).

Outpatient costs for diseases of the nervous system and sense organs primarily involved treatment of eye-related issues, such as cataracts.

Outpatient costs for genitourinary diseases primarily involved the treatment of urinary tract infections, chronic renal (kidney) failure and enlarged prostrates.

Outpatient costs for respiratory conditions primarily involved the treatment of colds, bronchitis, pneumonias, and asthma.

Supplementary Classifications and III-defined conditions

The cost of outpatient visits categorized as supplementary classifications – reasons considered to be supplementary to health status – averaged approximately \$800,000 per year.

Physical examinations, x-rays and lab exams (e.g., blood tests) were responsible for over 80% of the outpatient visits under the general category of supplementary classifications. Many of these visits are scheduled and did not require emergent care. While these visits cannot be connected to a particular diagnosis, the services the patient receives are in support of determining the cause of the patient's ailment.

Rehabilitation and orthopedic care were responsible for a further 12% of costs under this category, with a number of other classifications making up the remainder of the outpatient costs associated with this category (including such things as dialysis and post-surgical care).

The annual average cost of symptoms, signs and ill-defined conditions was approximately \$36,000. This category was spread out across a large number of symptoms and conditions, with respiratory system and digestive issues predominating among a large number of concerns.

Chapter 9: Concluding Remarks

Chapter 8

This report presents a detailed look at hospital service utilization at the beginning of the 21st Century. By examining utilization by age, this report shows not only that the intensity of hospital service use changes with age, but also many of the reasons for the use of hospital services change with age. Moreover, these reasons for the use of hospital services are to a great extent preventable by making healthy lifestyle choices and/or getting help before a condition requires hospitalization.

For infants, acute respiratory conditions, ranging from major issues such as bronchitis and pneumonia to lesser concerns such as colds, were a major driver of hospital use. To some extent respiratory problems in infants are caused and/or exacerbated by environmental effects, such as exposure to second-tobacco smoke and poor ventilation in houses.⁶ These conditions, especially pneumonias, can also be brought on by complications to common viral infections (e.g., cold or flu). Furthermore, infants and children having contracted pneumonia are at a greater risk of developing chronic lung problems later in life.⁷

The hospital treatment of premature/low birth weight babies and infants with congenital anomalies were also significant cost drivers. Tobacco use, and/or exposure to second-hand smoke, while pregnant can result in a premature/low birth weight delivery.⁸ Such infants are at an increased risk of other health problems, including asthma, high blood pressure and heart disease, in the first year of life but also later in life.⁹ Congenital anomalies (such as heart defects) also were prominent – which may be an indication of insufficient nutrient (e.g., folic acid) intake while pregnant.¹⁰

The main reasons children required hospital services were somewhat different from infants. Respiratory conditions remained prominent, with pneumonias and upper respiratory infections being the most common for hospitalizations and outpatient services, respectively. However, hospital services to treat digestive system conditions increased in prominence for children, and were a large part dental related (e.g., tooth extractions). Such dental issues are largely preventable through better dental hygiene and diet.

The prominent reasons youth (15 to 24) and young adults (25 to 44) required hospital services changed quite dramatically from those for children. Outside of services related to reproduction, mental health issues become prominent for both age groups – with a significant proportion of services for the treatment of alcohol and drug abuse. While addiction is often interwoven with other mental health conditions, such as depression, it is a condition that generally can be dealt with outside of a hospital setting.

The treatment of injuries and poisonings – especially for youth – rose in prominence for 15 to 44 year olds. Injuries are in theory 100% preventable. The combination of the lack of use of

- ⁶ Meirion Evans and Alan Bennett, "Housing – adverse effects" in Health Evidence Bulletins, February 1998, No. 10.
- ⁷ Harvey Simon et al, "Pneumonia" in Well Connected (Reuters Health), June 2001, Document 64, p. 7.
- ⁸ Alberta Alcohol and Drug Abuse Commission, The Truth About Smoking and Pregnancy, 2002.
- ⁹ City of Berkeley, Department of Health and Human Services, Health Status Report, 2002 – Low Birth Weight

¹⁰ Folic acid is found in some foods such as dark green vegetables, beans, lentils corn and oranges, among others, as well as is added to flour (required by the Canadian government). Generally, a supplement of folic acid is recommended before and after becoming pregnant. See Lynn B Bailey and Robert J. Berry, "Folic acid supplementation and the occurrence of congenital heart defects, orofacial clefts, multiple births, and miscarriage" in American Journal of Clinical Nutrition. May 2005, Vol. 81, No. 5, pp. 1213S to 1217S, and Alana Kronstal, "Folic Acid: The Healthy Baby Vitamin" in Epi North, Summer 2002, pp 4 to 5.

safety devices, with the high-risk behaviour of youth in general, as well as the prominence of alcohol abuse, not only can result in death, but also in a greater demand for hospital services to treat and rehabilitate those injured.¹¹

For older adults (45 to 64), mental health issues such as alcohol and drug abuse remain prominent but were joined by digestive diseases and circulatory diseases.

Some of the digestive diseases affecting older adults are preventable. Two such conditions are gastritis and diverticular disease. Alcohol abuse and smoking are linked to gastritis, and a low-fibre diet is believed to the main cause of diverticulosis.¹²

Circulatory diseases are often the result of a lifetime of poor choices. A diet high in saturated and trans fats, a sedentary lifestyle, smoking tobacco, and/or heavy alcohol use are all factors contributing to cardiovascular disease which can lead to a hospitalization for a heart attack or a stroke.

With seniors, the treatment of respiratory diseases rises in prominence as the body becomes more susceptible to infections resulting in pneumonias. Seniors are also at a greater risk of pneumonia if they are or have been smokers, and/or chronic users of alcohol or drugs.¹³ Other prominent respiratory conditions in the senior population, such as chronic bronchitis are also often the direct result of smoking and/or exposure to second-hand tobacco smoke.¹⁴

This report, the NWT Health Status Report 2005, along with other reports, continue to show the need to encourage the population to make the right lifestyle choices to improve health status. A result of improved health status is a reduction in the use of resources for preventable conditions. While hospital services will always be required, as not all diseases and afflictions can be prevented, there is plenty of room to reduce service demand.

- NWT Department of Health and Social Services, Injury in the Northwest Territories: A Summary Report (September 2004), pp. 33 to 40.
- ¹² University Hospital of Columbia and Cornell, Digestive Diseases (Gastritis, Diverticular Disease).
- ¹³ Ibid, "Pneumonia" in Well Connected (Reuters Health), June 2001, Document 64, p. 10.
- ¹⁴ Ibid, pp. 10-11, and Canadian Lung Association, COPD – What is COPD?

Appendix A: Glossary¹

Alcohol and Drug Psychoses: Psychoses associated with alcohol and/or drug use, generally resulting from chronic use (especially alcohol).

Angina: Severe chest pain associated with heart attacks (or myocardial infarction).

Arthritis: Inflammation of a joint characterized by stiffness, swelling and pain. There are many types of arthritis, including osteoarthritis and rheumatoid arthritis.

Asthma: Asthma is a chronic inflammation of the airways (bronchial tubes) that causes swelling and narrowing (constriction) of the airways, and results in the difficulty of breathing.

Bed Day: One overnight or same day stay in one hospital bed.

Bipolar Disorder: A manic-depressive psychosis, where manic and depressive symptoms are alternated or separated by periods of relative normality.

Bronchitis: Inflammation and swelling of the bronchi – large air tubes leading from the trachea (wind pipe) to the lungs that convey air to and from the lungs.

Cardiovascular: Refers to the heart and the blood vessels.

Circulatory Diseases: Diseases of the circulatory system, including heart disease and stroke.

Circulatory System: A general term referring to those parts of the body involved in the circulation of blood – heart, arteries, veins and other blood vessels.

Colitis: Inflammation of the colon (large intestine).

Demographics: The characteristics of a population described in terms of size, distribution, composition (e.g. age, gender, ethnicity) and vital statistics.

Depressive Disorder: A mood disorder characterized by feelings of sadness and despair. Symptoms can include: feelings of hopelessness, changes in eating patterns, disturbed sleep, constant tiredness and thoughts of death or suicide.

Digestive System: A general term referring to those parts of the body involved in digesting food – mouth, throat, stomach, and intestines.

Diverticula of the Intestine: Small pouch-like projection in the wall of the intestine that may become infected.

Genitourinary System: A general term referring to the genitals and those parts of the body involved in urination.

Gastritis: Inflammation of the stomach.

Gastroenteritis: Inflammation of the stomach and intestine.

Hernia: A hernia is an opening or weakness in the muscular structure of the wall of the abdomen. This defect causes a bulging of the abdominal wall. The most common location for hernias is the groin (or inguinal) area.

Hypertension: High blood pressure.

Inflammation: The general way in which the body reacts to infection, irritation or other injury, the key feature being redness, warmth, swelling and pain.

Lower Limb: A general term used in describing the location of an injury and includes the area of the body from the hip to the toes.

¹ The definitions in this glossary are meant to be general and simple. The definitions come from the following sources: www.MedicineNet.com; Dorland's Illustrated Medical Dictionary, 26th Edition (1981); and the National Bureau of Economic Research www.nber.org/mortality/ 1995/docs/ch05.txt **Manic Disorder:** A mood disorder characterized by periods of elation or feeling unusually 'high', restlessness, agitation, aggression and anger, grandiose ideas (delusions of greatness), and mixed-up thoughts.

Mental Disorders: A general term for a wide range of mental illnesses, including affective psychoses, alcohol and drug dependency and psychoses, bi-polar disorders, depressive disorder, manic disorder, neurotic disorders, psychoses, schizophrenia, and senile-related conditions.

Neoplasms: Are growths which can be cancerous, non-cancerous or of an undetermined nature.

Osteoarthritis: A type of arthritis caused by inflammation, breakdown, and eventual loss of cartilage in the joints. Cartilage is a protein substance that serves as a "cushion" between the bones of the joints.

Palliative Care: Care for a person who is terminally ill. They have little chance of recovery and are made comfortable until they die.

Pleurisy: The inflammation of the lining around the lungs (the pleura). There are two layers of pleura: one covering the lung (termed the visceral pleura) and the other covering the inner wall of the chest (the parietal pleura). These two layers are lubricated by pleural fluid.

Psychoses: A general term for a large number of mental disorders, including affective psychoses, organic psychoses (e.g., alcoholic psychoses and senile-related conditions) and schizophrenic disorders. Generally, impairment of mental function has developed to a degree that it interferes grossly with one's ability to meet some ordinary demands of life or to maintain contact with reality. Symptoms can include: delusions (false or irrational beliefs), hallucinations (seeing or hearing things that do not exist), markedly incoherent speech, or disorganized and agitated behaviour.

Respiratory System: A general term referring to the parts of the body involved in the process of breathing – nose, throat, and lungs.

Respite Care: Care for a person who is normally cared for in a non-hospital based setting. The care is intended to provide a rest (respite) for the patient's regular caregiver(s).

Rheumatism: Rheumatism is used to describe any of a number of painful conditions of muscles, tendons, joints, and bones.

Rheumatoid Arthritis: Rheumatoid arthritis is an autoimmune disease that causes chronic inflammation of the joints. Rheumatoid arthritis can also cause inflammation of the tissue around the joints, as well as other organs in the body. Autoimmune diseases are illnesses that occur when the body tissues are mistakenly attacked by the body's own immune system.

Schizophrenia: A group of psychoses in which there is a fundamental disturbance of personality, characterized by a distortion in thinking, a sense of being controlled by alien forces, bizarre delusions (false or irrational beliefs) and hallucinations (seeing, or especially hearing, things that do not exist).

Unique Patient: When a patient is only counted once in a fiscal year by variable (e.g., age group, diagnosis), regardless of how many times they may have been hospitalized or visited outpatient services.

Upper Limb: A general term used in describing the location of an injury and includes the area of the body from the shoulder to the fingers.

Visit: A general term used to describe a hospitalization or an outpatient encounter.

Appendix B: Tables

Table 1.1

Hospitalizations - Various Indicators (Part 1) Annual Average, 2000/01 to 2003/04

	Tol	tal Patie	nts	To	tal Visits	;	To	tal Bed I	Days		Expenditu	re
Variables	Both	Female	Male	Both	Female	Male	Both	Female	Male	Both	Female	Male
Total	3,537	2,123	1,414	5,370	3,105	2,265	25,531	13,670	11.861	\$42,345,928	\$22,733,801	\$19,612,127
	5,557	2,120	1,-11-	5,570	5,105	2,205	23,331	15,070	11,001	972,575,520	922,733,001	\$15,012,127
Age								= - /		*****	****	+
Under 1	141	64	77	214	95	119	1,175	534	642	\$1,865,898	\$866,780	\$999,118
1 to 14	431	204	228	546	258	287	1,565	688	878	\$2,483,548	\$1,111,311	\$1,372,236
15 to 24	588	435	153	788	583	204	3,039	2,125	914	\$4,977,708	\$3,403,577	\$1,574,131
25 to 44	1,234	863	371	1,745	1,188	557	6,619	4,294	2,326	\$10,986,675	\$7,274,794	\$3,711,881
45 to 64	734	357	377	1,224	560	664	6,663	2,902	3,761	\$10,970,750	\$4,659,698	\$6,311,053
65 & Up	427	210	217	855	422	433	6,470	3,129	3,341	\$11,061,350	\$5,417,641	\$5,643,708
Community Type												
Yellowknife	1,303	786	517	1,933	1,110	823	9,269	4,837	4,431	\$16,580,071	\$8,588,613	\$7,991,458
Regional Centres	1,226	747	479	1,704	954	750	8,811	4,943	3,867	\$11,271,819	\$5,983,041	\$5,288,778
Smaller Communities	1,020	597	424	1,734	1,042	692	7,452	3,890	3,562	\$14,494,038	\$8,162,147	\$6,331,891
Ethnicity												
Dene	1,403	867	536	2,126	1,282	844	10,110	5,863	4,247	\$17,076,508	\$9,951,598	\$7,124,909
Inuit	496	313	183	774	480	295	3,588	2,117	1,472	\$5,920,387	\$3,504,252	\$2,416,135
Non-Aboriginal/Metis	1,638	943	695	2,470	1,344	1,127	11,833	5,691	6,142	\$19,349,034	\$9,277,951	\$10,071,083
Location of Service												
	2 100	1,883	1,225	4,295	2,557	1720	18,772	10,238	0 5 2 4	\$35,256,698	¢10.241.012	\$16,014,785
In Territory	3,108					1,739	6,759		8,534		\$19,241,913	
Out of Territory	731	393	338	1,075	548	527	6,759	3,432	3,327	\$7,089,231	\$3,491,888	\$3,597,342
H&SS Authorities												
Beaufort Delta	686	426	259	1,042	625	418	4,747	2,693	2,054	\$7,350,841	\$4,249,028	\$3,101,813
Deh Cho	285	159	125	403	217	185	2,072	1,041	1,030	\$3,181,242	\$1,561,180	\$1,620,062
Fort Smith	239	137	102	429	229	200	1,902	1,046	856	\$3,285,100	\$1,811,273	\$1,473,827
Hay River	430	245	185	717	399	318	3,181	1,566	1,616	\$4,373,140	\$2,176,177	\$2,196,963
Sahtu	200	127	73	284	182	102	1,570	884	687	\$2,631,598	\$1,472,452	\$1,159,146
Tlicho	287	179	108	396	244	153	1,880	1,115	765	\$3,475,620	\$2,079,110	\$1,396,510
Yellowknife	1,420	856	564	2,099	1,210	889	10,180	5,326	4,854	\$18,048,388	\$9,384,582	\$8,663,806
Disease and Conditions												
Infectious & Parasitic	77	39	38	87	44	43	458	218	241	\$806,627	\$392,398	\$414,229
Neoplasms	160	99	61	227	137	90	1,813	1,024	789	\$2,771,215	\$1,607,487	\$1,163,728
Endocrine, Nutritional, & Metabolic	76	36	41	107	48	59	595	207	388	\$988,098	\$339,913	\$648,184
Blood & Blood Forming Organs	27	17	10	37	25	12	160	110	50	\$267,024	\$185,965	\$81,059
Mental Disorders	343	173	170	505	252	253	3,085	1,497	1,588	\$5,627,582	\$2,714,522	\$2,913,060
Nervous System & Sense Organs	98	44	54	124	54	70	668	213	455	\$1,092,428	\$333,130	\$759,298
Circulatory System	270	104	167	437	153	283	2,214	803	1,411	\$3,718,791	\$1,344,640	\$2,374,151
Respiratory System	478	221	257	602	281	321	2,821	1,324	1,497	\$4,871,154	\$2,296,324	\$2,574,830
Digestive System	553	300	253	671	361	311	2,637	1,369	1,269	\$4,244,895	\$2,101,867	\$2,143,028
Genitourinary System	176	131	46	207	144	63	901	512	389	\$1,482,755	\$871,889	\$610,866
Childbirth & Pregnancy	721	721	na	856	856	na	2,622	2,622	na	\$4,519,798	\$4,519,798	na
Skin & Subcutaneous Tissue	62	24	38	71	28	43	462	234	228	\$734,734	\$363,375	\$371,359
Musculoskeletal\Connective Tissue	160	83	77	189	101	89	1,066	627	439	\$1,753,083	\$1,040,289	\$712,794
Congential Anomalies	27	16	11	37	23	14	223	140	84	\$289,971	\$198,996	\$90,975
Perinatal Period	41	27	14	53	35	19	544	341	203	\$803,056	\$483,716	\$319,340
Injury & Poisoning	451	200	251	544	236	308	2,313	927	1,386	\$3,396,245	\$1,397,979	\$1,998,266
Total Diagnosed	3,282	1,992	1,290	4,752	2,776	1,976	22,580	12,164	10,416	\$37,367,456	\$20,192,289	\$17,175,167
Symptoms, Signs & III-Defined	314	1,352	150	352	185	167	1,049	598	451	\$1,763,379	\$1,009,294	\$754,085
Supplementary Classifications	188	95	93	248	135	113	1,825	859	967	\$3,062,570	\$1,432,244	\$1,630,325
Unknown	17	8	9	18	9	10	77	50	28	\$152,524	\$99,974	\$52,550
Notes: Newborns excluded from abo			5	1 10	5	10		50	20	÷.52,527	ç55,57 T	Ç52,550

Notes: Newborns excluded from above numbers.

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Hospitalizations - Various Indicators (Part 2) Annual Average, 2000/01 to 2003/04

Variables	Visi	its Per Patier	nt	Bed I	Days Per Pa	tient	Bed Days Per Visit			
	Both	Female	Male	Both	Female	Male	Both	Female	Male	
Total	1.5	1.5	1.6	7.2	6.4	8.4	4.8	4.4	5.2	
Age										
Under 1	1.5	1.5	1.6	8.4	8.3	8.4	5.5	5.6	5.4	
1 to 14	1.3	1.3	1.3	3.6	3.4	3.9	2.9	2.7	3.1	
15 to 24	1.3	1.3	1.3	5.2	4.9	6.0	3.9	3.6	4.5	
25 to 44	1.4	1.4	1.5	5.4	5.0	6.3	3.8	3.6	4.2	
45 to 64	1.7	1.6	1.8	9.1	8.1	10.0	5.4	5.2	5.7	
65 & Up	2.0	2.0	2.0	15.1	14.9	15.4	7.6	7.4	7.7	
Community Type										
Yellowknife	1.5	1.4	1.6	7.1	6.2	8.6	4.8	4.4	5.4	
Regional Centres	1.4	1.3	1.6	7.2	6.6	8.1	5.2	5.2	5.2	
Smaller Communities	1.7	1.7	1.6	7.3	6.5	8.4	4.3	3.7	5.1	
Ethnicity										
Dene	1.5	1.5	1.6	7.2	6.8	7.9	4.8	4.6	5.0	
Inuit	1.6	1.5	1.6	7.2	6.8	8.1	4.6	4.4	5.0	
Non-Aboriginal/Metis	1.5	1.4	1.6	7.2	6.0	8.8	4.8	4.2	5.5	
	1.5	1.1	1.0	1.2	0.0	0.0	1.0	1.2		
Location of Service In Territory	1.4	1.4	1.4	6.0	5.4	7.0	4.4	4.0	4.9	
Out of Territory	1.4	1.4	1.4	9.2	8.7	9.8	6.3	6.3	6.3	
	1.5	1.4	1.0	9.2	0.7	9.0	0.5	0.5	0.5	
H&SS Authorities	1.5	4.5	1.0			7.0				
Beaufort Delta	1.5	1.5	1.6	6.9	6.3	7.9	4.6	4.3	4.9	
Deh Cho	1.4	1.4	1.5	7.3	6.5	8.2	5.1	4.8	5.6	
Fort Smith	1.8	1.7	2.0	8.0	7.6	8.4 8.7	4.4	4.6	4.3	
Hay River	1.7	1.6	1.7	7.4	6.4 7.0	9.4	4.4	4.9	5.1 6.7	
Sahtu Tlicho	1.4	1.4	1.4	6.6	6.2	7.1	4.7	4.9	5.0	
Yellowknife	1.4	1.4	1.4	7.2	6.2	8.6	4.7	4.0	5.5	
	1.5	1.4	1.0	1.2	0.2	0.0	4.0	4.4	5.5	
Disease and Conditions										
Infectious & Parasitic	1.1	1.1	1.1	6.0	5.6	6.3	5.3	5.0	5.6	
Neoplasms	1.4	1.4	1.5	11.4	10.3	13.0	8.0	7.5	8.8	
Endocrine, Nutritional, & Metabolic	1.4	1.3	1.4	7.8	5.8	9.6	5.6	4.3	6.6	
Blood & Blood Forming Organs	1.4	1.4	1.2	6.0	6.4	5.3	4.3	4.4	4.3	
Mental Disorders	1.5	1.5	1.5	9.0	8.7	9.4	6.1	5.9	6.3	
Nervous System & Sense Organs	1.3	1.2	1.3	6.8	4.9	8.4	5.4	3.9	6.5	
Circulatory System	1.6	1.5	1.7	8.2	7.8	8.5	5.1	5.2	5.0	
Respiratory System	1.3	1.3	1.3	5.9	6.0	5.8	4.7	4.7	4.7	
Digestive System	1.2		1.2	4.8	4.6		4.4		4.1 6.2	
Childbirth & Pregnancy		1.1			3.9	8.5	-	3.6		
Skin & Subcutaneous Tissue	na 1.1	1.2	na 1.1	na 7.4	9.6	na 6.0	na 6.5	8.3	na 5.3	
Musculoskeletal\Connective Tissue	1.1	1.2	1.1	6.7	7.6	5.7	5.6	6.2	4.9	
Congential Anomalies	1.4	1.2	1.2	8.3	8.6	7.8	6.0	6.1	5.9	
Perinatal Period	1.4	1.4	1.5	13.4	12.6	14.8	10.2	9.9	10.8	
Injury & Poisoning	1.5	1.5	1.4	5.1	4.6	5.5	4.3	3.9	4.5	
Total Diagnosed	1.4	1.2	1.2	6.9	6.1	8.1	4.8	4.4	5.3	
Symptoms, Signs & III-Defined	1.4	1.4	1.5	3.3	3.6	3.0	3.0	3.2	2.7	
Supplementary Classifications	1.1	1.1	1.1	9.7	9.1	10.4	7.4	6.3	8.6	
Unknown	1.1	1.1	1.2	4.6	6.2	3.2	4.2	5.8	2.8	
Notes: Newborns evoluded from above numbers	[1.1	1.1	1.1	4.0	0.2	J.Z	4.2	5.0	2.0	

Notes: Newborns excluded from above numbers.

Source: NWT Health and Social Services.

Hospitalizations - Various Indicators (Part 3) Annual Average, 2000/01 to 2003/04

Variables	Patie	nts Per	1,000	Visit	s Per 1,	000	Bed	Days Per	1,000	Cost Per Capita			
	Both	Female	Male	Both F	emale	Male	Both	Female	Male	Both	Female	Male	
Total	86	107	66	130	156	106	619	686	556	\$1,026	\$1,140	\$920	
Age													
Under 1	218	196	242	332	289	376	1,825	1,631	2,025	\$2,898	\$2,651	\$3,154	
1 to 14	42	41	44	54	52	56	154	137	170	\$244	\$222	\$266	
15 to 24	91	142	45	122	190	60	471	693	270	\$772	\$1,109	\$466	
25 to 44	85	121	50	121	167	76	457	603	316	\$759	\$1,023	\$505	
45 to 64	94	100	90	157	156	158	855	810	894	\$1,408	\$1,301	\$1,500	
65 & Up	249	254	244	497	509	486	3,765	3,779	3,752	\$6,437	\$6,543	\$6,338	
Community Type								0,0	0,000	70,000	10,0.0	7 0,000	
Yellowknife	71	85	58	106	119	92	508	520	495	\$908	\$924	\$892	
Regional Centres	124	146	99	172	187	156	889	969	804	\$1,137	\$1,172	\$1,100	
Smaller Communities	78	86	69	133	151	112	570	562	578	\$1,108	\$1,180	\$1,027	
		00	00				0.0	002	0.0	\$ 1,100	<i></i>	<i>Q</i> 1,027	
Ethnicity Dene	112	139	85	169	205	133	804	938	671	\$1,358	\$1,593	\$1,126	
Inuit	109	136	82	170	208	132	789	916	658	\$1,302	\$1,516	\$1,080	
Other	67	82	54	101	117	87	485	495	477	\$793	\$806	\$781	
		02			,	0.				<i></i>		<i></i>	
Location of Service In Territory	75	94	57	104	128	82	455	514	400	\$855	\$965	\$751	
Out of Territory	18	20	16	26	28	25	164	172	156	\$172	\$905	\$169	
	10	20	10	20	20	23	104	172	100	\$172	Ş175	2109	
H&SS Authorities													
Beaufort Delta	98	119	76	149	175	122	680	754	602	\$1,052	\$1,190	\$909	
Deh Cho	92	95	88	130	130	130	668	623	721	\$1,026	\$934	\$1,134	
Fort Smith	99	110	87	178	184	171	787	839	732	\$1,360	\$1,454	\$1,260	
Hay River	106	117	94	176	191	161	782	749	818	\$1,075	\$1,041	\$1,112	
Sahtu	79	94	61	112	135	86	619	656	578	\$1,038	\$1,093	\$976	
Tlicho	105	122	85	145	167	120	687	763	600	\$1,270	\$1,423	\$1,096	
Yellowknife	74	87	60	109	123	95	530	543	517	\$940	\$956	\$923	
Disease and Conditions													
Infectious & Parasitic	2	2	2	2	2	2	11	11	11	\$20	\$20	\$19	
Neoplasms	4	5	3	5	7	4	44	51	37	\$67	\$81	\$55	
Endocrine, Nutritional, & Metabolic	2	2	2	3	2	3	14	10	18	\$24	\$17	\$30	
Blood & Blood Forming Organs	1	1	0	1	1	1	4	6	2	\$6	\$9	\$4	
Mental Disorders	8	9	8	12	13	12	75	75	74	\$136	\$136	\$137	
Nervous System & Sense Organs	2	2	3	3	3	3	16	11	21	\$26	\$17	\$36	
Circulatory System	7	5	8	11	8	13	54	40	66	\$90	\$67	\$111	
Respiratory System	12	11	12	15	14	15	68	66	70	\$118	\$115	\$121	
Digestive System	13	15	12	16	18	15	64	69	59	\$103	\$105	\$101	
Genitourinary System	4	7	2	5	7	3	22	26	18	\$36	\$44	\$29	
Childbirth & Pregnancy	na	36	na	na	43	na	na	132	na	na	\$227	na	
Skin & Subcutaneous Tissue	2	1	2	2	1	2	11	12	11	\$18	\$18	\$17	
Musculoskeletal\Connective Tissue	4	4	4	5	5	4	26	31	21	\$42	\$52	\$33	
Congential Anomalies	1	1	1	1	1	1	5	7	4	\$7	\$10	\$4	
Perinatal Period	1	1	1	1	2	1	13	17	10	\$19	\$24	\$15	
Injury & Poisoning	11	10	12	13	12	14	56	46	65	\$82	\$70	\$94	
Total Diagnosed	80	100	61	115	139	93	547	610	489	\$906	\$1,013	\$806	
Symptoms, Signs & III-Defined	8	8	7	9	9	8	25	30	21	\$43	\$51	\$35	
Supplementary Classifications	5	5	4	6	7	5	44	43	45	\$74	\$72	\$76	
Unknown Notes: Newborns excluded from above	0	0	0	0	0	0	2	2	1	\$4	\$5	\$2	

Notes: Newborns excluded from above numbers.

Sources: NWT Health and Social Services, NWT Bureau of Statistics and NWT Financial Management Board Secretariat.

Hospitalizations - Various Indicators (Part 4) Annual Average, 2000/01 to 2003/04

Variables	С	ost Per Pa	itient	(Cost Per Vis	sit	Cost Per Bed Day			
	Both	Female	Male	Both	Female	Male	Both	Female	Male	
Total	\$11,973	\$10,707	\$13,875	\$7,886	\$7,322	\$8,659	\$1,659	\$1,663	\$1,654	
Age										
Under 1	\$13,280	\$13,543	\$13,060	\$8,740	\$9,172	\$8,396	\$1,588	\$1,625	\$1,557	
1 to 14	\$5,759	\$5,454	\$6,032	\$4,553	\$4,303	\$4,777	\$1,587	\$1,616	\$1,564	
15 to 24	\$8,469	\$7,833	\$10,272	\$6,321	\$5,836	\$7,707	\$1,638	\$1,602	\$1,723	
25 to 44	\$8,903	\$8,430	\$10,005	\$6,296	\$6,125	\$6,661	\$1,660	\$1,694	\$1,596	
45 to 64	\$14,952	\$13,062	\$16,740	\$8,963	\$8,325	\$9,501	\$1,646	\$1,606	\$1,678	
65 & Up	\$25,890	\$25,798	\$25,978	\$12,945	\$12,853	\$13,034	\$1,710	\$1,732	\$1,689	
Community Type										
Yellowknife	\$12,727	\$10,927	\$15,465	\$8,578	\$7,737	\$9,713	\$1,789	\$1,776	\$1,803	
Regional Centres	\$9,196	\$8,007	\$11,053	\$6,616	\$6,275	\$7,049	\$1,279	\$1,210	\$1,368	
Smaller Communities	\$14,206	\$13,683	\$14,943	\$8,361	\$7,837	\$9,150	\$1,945	\$2,098	\$1,777	
Ethnicity										
Dene	\$12,176	\$11,478	\$13,305	\$8,033	\$7,764	\$8,442	\$1,689	\$1,698	\$1,678	
Inuit	\$11,936	\$11,187	\$13,221	\$7,647	\$7,304	\$8,204	\$1,650	\$1,655	\$1,642	
Other	\$11,811	\$9,839	\$14,486	\$7,834	\$6,906	\$8,940	\$1,635	\$1,630	\$1,640	
Location of Service										
In Territory	\$11,344	\$10,220	\$13,071	\$8,208	\$7,526	\$9,212	\$1,878	\$1,879	\$1,877	
Out of Territory	\$9,695	\$8,885	\$10,635	\$6,596	\$6,369	\$6,833	\$1,049	\$1,017	\$1,081	
		101000	+	7 0,000	+ 0,0 0 0	10,000	1.10.0	4 .,	4 .,	
H&SS Authorities	¢10.700	\$9.968	¢11.005	670F2	ĊC 001	Č7/20	Ċ1 E 4 0	Ċ1 F70	Ċ1 E 10	
Beaufort Delta	\$10,723	1 - 7	\$11,965	\$7,053	\$6,801	\$7,429	\$1,548	\$1,578	\$1,510	
Deh Cho	\$11,182	\$9,803	\$12,935	\$7,904	\$7,186	\$8,745	\$1,536	\$1,499	\$1,572	
Fort Smith Hay River	\$13,774 \$10,170	\$13,245 \$8,891	\$14,485 \$11,859	\$7,658 \$6,099	\$7,918 \$5,457	\$7,360 \$6,903	\$1,728 \$1,375	\$1,732 \$1,390	\$1,722 \$1,360	
Sahtu	\$13,174	\$11,617	\$15,879	\$9,258	\$8,090	\$11,336	\$1,575	\$1,590	\$1,500	
Tlicho	\$13,174	\$11,631	\$12,901	\$9,230	\$8,538	\$9,157	\$1,849	\$1,864	\$1,000	
Yellowknife	\$12,710	\$10,966	\$15,355	\$8,599	\$7,756	\$9,746	\$1,773	\$1,804	\$1,785	
	Ş12,710	Ş10,900	JIJ,JJJ	J0,J99	Ş7,750	<i>,,,,,,,,,,,,,</i>	Ş1,775	Ş1,70∠	J1,70J	
Disease and Conditions	¢10 F10	¢10.100	610.000	60.225	ćo 021	<u> </u>	61701	ć1.00/	61700	
Infectious & Parasitic	\$10,510	\$10,192	\$10,830	\$9,325	\$9,021	\$9,633	\$1,761	\$1,804	\$1,722	
Neoplasms	\$17,374	\$16,237	\$19,235	\$12,235	\$11,733	\$13,003	\$1,529	\$1,570	\$1,476	
Endocrine, Nutritional, & Metabolic	\$12,959	\$9,508	\$16,005	\$9,278	\$7,082	\$11,080	\$1,661	\$1,644	\$1,671	
Blood & Blood Forming Organs	\$9,982	\$10,781	\$8,533	\$7,266	\$7,439	\$6,899	\$1,672	\$1,694	\$1,621	
Mental Disorders	\$16,419 \$11,176	\$15,691 \$7,614	\$17,161	\$11,144 \$8,828	\$10,772 \$6,141	\$11,514	\$1,824 \$1,635	\$1,813 \$1,564	\$1,835	
Nervous System & Sense Organs	\$13,761	\$12,992	\$14,061 \$14,238	\$8,520	\$8,774	\$10,925 \$8,382	\$1,655	\$1,564	\$1,669	
Circulatory System	\$10,191					\$8,015			\$1,683 \$1,720	
Respiratory System Digestive System	\$7,676	\$10,379 \$7,006	\$10,029 \$8,470	\$8,088 \$6,324	\$8,172 \$5,830	\$6,896	\$1,727 \$1,610	\$1,735 \$1,536	\$1,720	
	\$8,413	\$6,668	\$13,426	\$7,163	\$6,065	\$9,658	\$1,646	\$1,703	\$1,009	
Genitourinary System Childbirth & Pregnancy					\$5,282					
Skin & Subcutaneous Tissue	na \$11,803	\$6,269 \$14,985	na \$9,773	na \$10,348	\$12,978	na \$8,636	na \$1,591	\$1,724 \$1,556	na \$1,627	
	\$10,974		\$9,775	\$9,263				\$1,550		
Musculoskeletal\Connective Tissue	\$10,974	\$12,534 \$12,246	\$9,287	\$9,263	\$10,351 \$8,747	\$8,031 \$6,384	\$1,645 \$1,299	\$1,660	\$1,624 \$1,086	
Perinatal Period	\$10,740	\$12,246	\$23,225	\$15,081	\$14,021	\$17,031	\$1,299	\$1,420	\$1,000	
Injury & Poisoning	\$19,707	\$7,007	\$7,961	\$15,081	\$5,917	\$6,498	\$1,476	\$1,419	\$1,371	
	\$11,386			\$7,864						
Total Diagnosed Symptoms, Signs & III-Defined	\$11,386	\$10,138 \$6,154	\$13,312 \$5,036	\$7,864	\$7,274 \$5,448	\$8,692 \$4,529	\$1,655 \$1,681	\$1,660 \$1,687	\$1,649 \$1,672	
	\$16,334			\$5,013				\$1,687		
Supplementary Classifications	\$16,334 \$9,106	\$15,116 \$12,497	\$17,578		\$10,590	\$14,460	\$1,678		\$1,687	
Unknown Notes: Newborns excluded from above number		Ş1Z,497	\$6,006	\$8,357	\$11,762	\$5,390	\$1,974	\$2,020	\$1,894	

Notes: Newborns excluded from above numbers.

Sources: NWT Health and Social Services and NWT Financial Management Board Secretariat.

Outpatient Activity - Various Indicators (Part 1) Annual Average, 2000/01 to 2003/04

Variables	Tot	al Patier		Т	otal Visits		E	xpenditure			s Per Pa	
	Both	Female	Male	Both	Female	Male	Both	Female	Male	Both	Female	Male
 Total	23,461	12,789	10,673	84,328	50,480	33.848	\$11,901,606	6700000	\$4,881,513	3.6	3.9	3.2
Total	25,401	12,769	10,075	04,520	50,460	55,646	\$11,901,000	\$7,020,093	\$4,001,313	5.0	5.9	J.Z
Age				1 = 10			+ 10 0 0 0 0	****	****			
Under 1	605	295	311	1,519	699	820	\$196,066	\$88,963	\$107,102	2.5	2.4	2.6
1 to 14	4,578	2,227	2,351	10,677	5,177	5,501	\$1,467,373	\$708,014	\$759,359	2.3	2.3	2.3
15 to 24	3,458	2,030	1,428	10,183	6,807	3,376	\$1,367,285	\$916,502	\$450,784	2.9	3.4	2.4
25 to 44	8,437	4,972	3,465	29,921	19,882	10,039	\$4,168,303	\$2,727,145	\$1,441,158	3.5	4.0	2.9
45 to 64	5,566	2,902 642	2,663	24,589	14,278	10,312	\$3,594,112	\$2,062,322	\$1,531,790	4.4 5.8	4.9	3.9
65 & Up	1,282	642	640	7,440	3,640	3,801	\$1,108,467	\$517,147	\$591,320	5.8	5.7	5.9
Community Type												
Yellowknife	11,608	6,307	5,301	39,174	23,122	16,052	\$5,708,877	\$3,308,639	\$2,400,238	3.4	3.7	3.0
Regional Centres	7,048	3,763	3,285	31,190	18,714	12,476	\$4,221,358	\$2,510,580	\$1,710,778	4.4	5.0	3.8
Smaller Communities	5,006	2,843	2,163	13,965	8,645	5,319	\$1,971,371	\$1,200,874	\$770,497	2.8	3.0	2.5
Ethnicity												
Dene	6,554	3,780	2,774	23,025	14,713	8,312	\$3,247,724	\$2,067,785	\$1,179,939	3.5	3.9	3.0
Inuit	2,449	1,418	1,031	8,925	5,662	3,263	\$1,221,609	\$766,710	\$454,898	3.6	4.0	3.2
Other	14,459	7,591	6,868	52,378	30,105	22,273	\$7,432,273	\$4,185,598	\$3,246,676	3.6	4.0	3.2
Location of Service												
In Territory	22,156	12,136	10,020	75,524	45,452	30,072	\$10,205,192	\$6,096,166	\$4,109,026	3.4	3.7	3.0
Out of Territory	3,542	1,955	1,586	8,804	5,029	3,776	\$1,696,414	\$923,927	\$772,487	2.5	2.6	2.4
H&SS Authorities												
Beaufort Delta	3,828	2,123	1,705	14,369	8,776	5,593	\$1,983,761	\$1,190,333	\$793,428	3.8	4.1	3.3
Deh Cho	996	557	439	2,624	1,555	1,069	\$387,493	\$216,701	\$170,792	2.6	2.8	2.4
Fort Smith	1,813	977	836	8,562	5,289	3,273	\$1,184,550	\$728,175	\$456,374	4.7	5.4	3.9
Hay River	2,877	1,532	1,345	12,647	7,483	5,164	\$1,647,485	\$962,166	\$685,319	4.4	4.9	3.8
Sahtu	949	547	402	2,552	1,624	928	\$376,284	\$245,070	\$131,214	2.7	3.0	2.3
Tlicho	1,045	586	459	2,691	1,604	1,087	\$410,708	\$247,889	\$162,819	2.6	2.7	2.4
Yellowknife	12,122	6,571	5,551	40,885	24,149	16,736	\$5,911,325	\$3,429,759	\$2,481,566	3.4	3.7	3.0
Disease and Conditions												
Infectious & Parasitic	796	450	346	913	520	393	\$121,879	\$68,098	\$53,781	1.1	1.2	1.1
Neoplasms	277	151	126	335	174	161	\$132,646	\$55,906	\$76,739	1.2	1.2	1.3
Endocrine, Nutritional, & Metabolic	216	98	118	293	134	159	\$37,650	\$17,126	\$20,524	1.4	1.4	1.3
Blood & Blood Forming Organs	54	33	21	69	41	28	\$12,597	\$7,162	\$5,435	1.3	1.2	1.3
Mental Disorders	762	434	329	1,193	669	524	\$151,192	\$84,771	\$66,421	1.6	1.5	1.6
Nervous System & Sense Organs	1,926	1,049	877	2,536	1,410	1,126	\$404,302	\$220,078	\$184,225	1.3	1.3	1.3
Circulatory System	541	256	285	813	375	438	\$120,169	\$55,781	\$64,387	1.5	1.5	1.5
Respiratory System	3,202	1,798	1,404	4,351	2,430	1,921	\$570,990	\$317,785	\$253,205	1.4	1.4	1.4
Digestive System	1,823	988	835	2,243	1,229	1,014	\$491,570	\$264,020	\$227,549	1.2	1.2	1.2
Genitourinary System	1,202	966	236	1,559	1,281	278	\$295,478	\$229,237	\$66,242	1.3	1.3	1.2
Childbirth & Pregnancy	800	800	na	1,501	1,501	na	\$284,791	\$284,791	na	na	1.9	na
Skin & Subcutaneous Tissue	1,012	524	489	1,276	652	624	\$179,186	\$91,538	\$87,647	1.3	1.2	1.3
Musculoskeletal\Connective Tissue	1,348	728	620	1,796	980	816	\$274,855	\$148,031	\$126,824	1.3	1.3	1.3
Congential Anomalies	49	24	26	60	28	32	\$13,194	\$6,239	\$6,955	1.2	1.2	1.3
Perinatal Period	21	10	11	27	13	14	\$3,607	\$1,667	\$1,940	1.3	1.3	1.3
Injury & Poisoning	4,169	1,798	2,371	5,202	2,205	2,996	\$676,907	\$288,613	\$388,294	1.2	1.2	1.3
Total Diagnosed	12,955	6,938	6,017	24,163	13,642	10,521	\$3,771,012	\$2,140,844	\$1,630,168	1.9	2.0	1.7
Symptoms, Signs & III-Defined	2,261	1,254	1,008	2,815	1,578	1,237	\$381,259	\$215,412	\$165,848	1.2	1.3	1.2
Supplementary Classifications	18,268	10,492	7,776	57,300	35,233	22,067	\$7,734,027	\$4,655,067	\$3,078,960	3.1	3.4	2.8
Unknown Sources: NWT Health and Social Service	49	27	22	51	29	23	\$15,307	\$8,770	\$6,537	1.1	1.1	1.0

Outpatient Activity - Various Indicators (Part 2) Annual Average, 2000/01 to 2003/04

	Pat	ients Per	1,000	Vi	sits Per	1,000	Co	st Per Ca	apita	Cos	t Per pa	itient	Co	sts Per	Visit
Variables	Both	Female	Male	Both	Female	Male	Both	Female	Male	Both	Female	Male	Both	Female	Male
Total	569	642	501	2,044	2,532	1,588	\$288	\$352	\$229	\$507	\$549	\$457	\$141	\$139	\$144
Age															
Under 1	940	901	980	2,359	2,136	2,590	\$305	\$272	\$338	\$324	\$302	\$345	\$129	\$127	\$131
1 to 14	450	444	455	1,049	1,032	1,064	\$144	\$141	\$147	\$321	\$318	\$323	\$137	\$137	\$138
15 to 24	536	662	423	1,579	2,219	999	\$212	\$299	\$133	\$395	\$452	\$316	\$134	\$135	\$134
25 to 44	583	699	471	2,068	2,795	1,365	\$288	\$383	\$196	\$494	\$548	\$416	\$139	\$137	\$144
45 to 64	714	810	633	3,156	3,985	2,450	\$461	\$576	\$364	\$646	\$711	\$575	\$146	\$144	\$149
65 & Up	746	776	718	4,329	4,396	4,268	\$645	\$625	\$664	\$865	\$805	\$924	\$149	\$142	\$156
Community Type															
Yellowknife	636	678	592	2,145	2,487	1,792	\$313	\$356	\$268	\$492	\$525	\$453	\$146	\$143	\$150
Regional Centres	711	737	683	3,146	3,667	2,594	\$426	\$492	\$356	\$599	\$667	\$521	\$135	\$134	\$137
Smaller Communities	383	411	351	1,067	1,250	863	\$151	\$174	\$125	\$394	\$422	\$356	\$141	\$139	\$145
Ethnicity															
Dene	521	605	438	1,831	2,355	1,314	\$258	\$331	\$186	\$496	\$547	\$425	\$141	\$141	\$142
Inuit	538	613	461	1,962	2,355	1,458	\$269	\$332	\$203	\$499	\$541	\$441	\$137	\$135	\$139
Other	593	660	533	2,147	2,617	1,728	\$305	\$364	\$252	\$514	\$551	\$473	\$142	\$139	\$146
					_,	., 0		400.	+		100.	1			
Location of Service	E 27	C00	470	1.021	2 200	1 / 11	62/7	¢200	Ċ100	Ċ4C1	ĊE O O	Ċ / 10	Ć12E	Ċ10.4	Ċ107
In Territory	537	609	470	1,831	2,280	1,411	\$247	\$306	\$193	\$461	\$502	\$410	\$135	\$134	\$137
Out of Territory	86	98	74	213	252	177	\$41	\$46	\$36	\$479	\$473	\$487	\$193	\$184	\$205
H&SS Authorities															
Beaufort Delta	548	594	499	2,057	2,457	1,639	\$284	\$333	\$232	\$518	\$561	\$465	\$138	\$136	\$142
Deh Cho	321	333	307	846	930	748	\$125	\$130	\$120	\$389	\$389	\$389	\$148	\$139	\$160
Fort Smith	751	784	715	3,545	4,246	2,798	\$490	\$585	\$390	\$653	\$745	\$546	\$138	\$138	\$139
Hay River	707	733	681	3,110	3,579	2,613	\$405	\$460	\$347	\$573	\$628	\$509	\$130	\$129	\$133
Sahtu	374	406	338	1,007	1,206	781	\$148	\$182	\$110	\$397	\$448	\$327	\$147	\$151	\$141
Tlicho	382	401	360	983	1,098	852	\$150	\$170	\$128	\$393	\$423	\$355	\$153	\$155	\$150
Yellowknife	631	669	591	2,129	2,460	1,783	\$308	\$349	\$264	\$488	\$522	\$447	\$145	\$142	\$148
Disease and Conditions															
Infectious & Parasitic	19	23	16	22	26	18	\$3	\$3	\$3	\$153	\$151	\$155	\$134	\$131	\$137
Neoplasms	7	8	6	8	9	8	\$3	\$3	\$4	\$479	\$371	\$609	\$396	\$321	\$478
Endocrine, Nutritional,	1														
& Metabolic	5	5	6	7	7	7	\$1	\$1	\$1	\$175	\$175	\$174	\$129	\$128	\$129
Blood & Blood															
Forming Organs	1	2	1	2	2	1	\$0	\$0	\$0	\$232	\$215	\$259	\$184	\$176	\$196
Mental Disorders	18	22	15	29	34	25	\$4	\$4	\$3	\$198	\$195	\$202	\$127	\$127	\$127
Nervous System &															
Sense Organs	47	53	41	61	71	53	\$10	\$11	\$9	\$210	\$210	\$210	\$159	\$156	\$164
Circulatory System	13	13	13	20	19	21	\$3	\$3	\$3	\$222	\$218	\$226	\$148	\$149	\$147
Respiratory System	78	90	66	105	122	90	\$14	\$16	\$12	\$178	\$177	\$180	\$131	\$131	\$132
Digestive System	44	50	39	54	62	48	\$12	\$13	\$11	\$270	\$267	\$273	\$219	\$215	\$224
Genitourinary System	29	48	11	38	64	13	\$7	\$11	\$3	\$246	\$237	\$281	\$190	\$179	\$238
Childbirth & Pregnancy	na	40	na	na	75	na	na	\$14	na	na	\$356	na	na	\$190	na
Skin & Subcutaneous Tissue	25	26	23	31	33	29	\$4	\$5	\$4	\$177	\$175	\$179	\$140	\$140	\$141
Musculoskeletal \															
Connective Tissue	33	37	29	44	49	38	\$7	\$7	\$6	\$204	\$203	\$204	\$153	\$151	\$155
Congential Anomalies	1	1	1	1	1	2	\$0	\$0	\$0	\$269	\$265	\$273	\$220	\$223	\$217
Perinatal Period	1	1	1	1	1	1	\$0	\$0	\$0	\$172	\$167	\$176	\$134	\$126	\$141
Injury & Poisoning	101	90	111	126	111	141	\$16	\$14	\$18	\$162	\$160	\$164	\$130	\$131	\$130
Total Diagnosed	314	348	282	586	684	493	\$91	\$107	\$76	\$291	\$309	\$271	\$156	\$157	\$155
Symptoms, Signs & III-Defined	55	63	47	68	79	58	\$9	\$11	\$8	\$169	\$172	\$165	\$135	\$137	\$134
Supplementary Classifications	443	526	365	1,389	1,767	1,035	\$187	\$234	\$144	\$423	\$444	\$396	\$135	\$132	\$140
Unknown	1	1	1	1	1	1	\$0	\$0	\$0	\$314	\$322	\$304	\$299	\$305	\$291
Sources: NWT Health and Social S	Services,	NWT Bure	au of Stal	tistics and	NWT Fina	ncial Mana	agement	Board Sec	retariat.						

Appendix C: Data and Methodology

1.0 Data

The health information: unique patients, visits, and bed days came from a data warehouse fed by the claims system called the Northern Health Information Management (NHIM) system. The data going into NHIM came from several sources. For in-territory hospital services, outpatient (e.g., emergency and diagnostic) data came from the hospitals directly, while inpatient data and day surgery data came from the NWT hospitals via the Canadian Institute for Health Information. For out of territory hospital services, all data came directly from the province/territory/state where the service took place.

Financial data came from a combination of sources: NHIM, the Finance Division in the Department of Health and Social Services, and the GNWT Main Estimates (the 'actuals' for 2000/01 to 2003/04). See section 2.4 for more detail on the methodology behind the estimation of hospital service costs.

Population data used for rates came from the NWT Bureau of Statistics.

This report contains time-sensitive information. The information in this report, may be updated, amended, supplemented or otherwise altered by subsequent reports and presentations. There are three main reasons why the data may change: 1) data entry delays in administrative data; 2) system changes to how the claims (data) are processed; and 3) for rates, future revisions of population estimates. All changes are expected to be minor and of no significance to the conclusions reached in this report.

2.0 Methodology

2.1 Age Groups

The age groups have been chosen for one or two reasons: one they provide natural cut-offs for different time periods in a person's life, and/or two, they are indicative of varying consumption levels of health services, especially hospitalizations (see Hospitalization Metrics by Single Year of Age on the next page).

Children under the age of 1 are vulnerable and often require regular health services (check ups/assessments and treatment), and sometimes hospitalization for a number of conditions, including common ailments as ear infections, respiratory infections and gastrointestinal infections. As a child moves beyond its first year of life its immune system becomes more resilient and is better able to fight infections without as much health system intervention, especially without hospitalization.

Children age 1 to 14, tend to require the least intensive health interventions relative to all other age groups at less than \$250 per capita – less than one-tenth of infants.

Youth, age 15 to 24, start to use the health system more for such things as childbirth and pregnancy related issues, as well as mental health issues, both of which become prominent in terms of hospital services. The cost per capita jumps by over three times to under \$800 per year.

Adults age 25 to 44 average just over \$750 per capita. Childbirth and mental health issues are still prominent, though somewhat less so than it is for youth. Now, issues such as digestive diseases begin to rise in prominence.

Hospitalization Metrics by Single Year of Age

2000/01 to 2003/04 Average

Age	Patients	Visits	Per Capita	Age	Patients	Visits	Per
	per 1,000	per 1,000			per 1,000	per 1,000	Capita
0	218	332	\$2,898	45	79	109	\$739
1	117	147	\$905	46	79	111	\$836
2	76	94	\$393	47	87	120	\$900
3	61	72	\$290	48	82	122	\$1,025
4	49	61	\$184	49	93	140	\$1,026
5	43	49	\$137	50	94	157	\$1,231
6	39	45	\$154	51	82	128	\$1,101
7	32	35	\$133	52	93	144	\$1,220
8	29	35	\$121	53	90	145	\$1,466
9	30	34	\$136	54	108	166	\$1,720
10	24	31	\$199	55	104	175	\$1,635
11	27	38	\$185	56	111	164	\$1,912
12	31	38	\$176	57	109	176	\$1,900
13	36	44	\$250	58	126	198	\$1,789
14	39	47	\$267	59	121	193	\$1,703
15	54	64	\$372	60	138	249	\$2,404
16	66	77	\$450	61	152	237	\$2,049
17	82	102	\$660	62	178	279	\$2,872
18	97	127	\$889	63	160	262	\$2,973
19	97	134	\$1,006	64	186	292	\$2,790
20	108	141	\$1,058	65	171	295	\$2,882
21	111	150	\$1,014	66	209	383	\$4,253
22	107	140	\$762	67	218	372	\$4,108
23	110	141	\$824	68	233	436	\$5,777
24	118	149	\$705	69	252	414	\$5,034
25	103	120	\$677	70	237	412	\$4,128
26	109	133	\$712	71	283	530	\$5,850
27	109	144	\$791	72	319	612	\$7,787
28	110	148	\$825	73	294	530	\$5,334
29	110	146	\$872	74	355	684	\$8,216
30	105	146	\$922	75	314	584	\$8,378
31	107	132	\$868	76	296	552	\$6,993
32	105	135	\$806	77	263	522	\$10,553
33	92	122	\$868	78	335	550	\$8,292
34	74	104	\$623	79	325	660	\$9,593
35	91	126	\$739	80	386	753	\$10,775
36	77	103	\$653	81	311	530	\$7,997
37	76	95	\$533	82	296	533	\$8,399
38	77	106	\$604	83	342	514	\$7,183
39	69	95	\$598	84	336	629	\$9,847
40	76	109	\$725	85	438	787	\$10,880
41	78	109	\$698	86	358	556	\$9,161
42	81	119	\$892	87	435	696	\$9,680
43	77	112	\$930	88	355	597	\$7,183
44	83	114	\$915	89	517	672	\$8,515
				90 & up	317	548	\$9,159

Sources: NWT Health & Social Services, NWT Bureau of Statistics, & NWT Financial Management Board Secretariat

Adults age 45 to 64, average \$1,400 per capita. While health does deteriorate as one ages, life style choices start to catch up with people in the middle age years. Here, hospital services consumed were dominated by conditions related to the digestive, circulatory and respiratory systems, as well as cancers. Though not completely preventable, many of these conditions are brought on, and/or exacerbated, by a lifetime of poor diets, alcohol abuse, and/or smoking, coupled with a lack of regular physical activity.

Seniors age 65 and up average around \$6,400, with costs moving steadily up from \$2,900 for 65 year olds to \$8,400 for 75 year olds, to \$10,900 for 85 year olds. Here, the same conditions, which rose to prominence in the middle age years, grow in further significance in one's senior years. As the body breaks down naturally, circulatory and respiratory conditions are responsible for 40% of hospital costs.

2.2 Reasons for Hospitalization

When reasons or causes of hospitalization or outpatient costs are provided, the categories used come from the International Classification of Diseases, 9th Revision (ICD-9). There are 16 Classification (or Chapters) for 'known' or 'suspected' medical conditions that are relevant to this report (see below). Each one of these chapters contains several hundred codes, each of which provides a particular identification of the medical condition in question. Codes that make up the chapter are presented in sub-groupings, e.g., intestinal conditions, gallstones, gastritis, hernias and ulcers as sub-groupings of digestive diseases.

The following is a list of the ICD-9 chapters that are often in the top five, for most age groups, as reasons for hospital service utilization in the Northwest Territories:

- 1. Diseases of the Respiratory System (Bronchitis, Asthma, Pneumonia, Influenza and Common Cold).
- 2. Diseases of the Digestive System (Intestinal Conditions, Gallstones, Gastritis, Hernias and Ulcers).
- 3. Injury and Poisoning (Fractures, Sprains, Bruises, Cuts, Overdoses)
- 4. Mental Disorders

The following is a list of the ICD-9 chapters that occur in the top five on occasion:

- 1. Complications of Pregnancy, Childbirth, Pregnancy and the Puerperium (Delivery of babies and care of mother, abortions).
- 2. Diseases of the Circulatory System (Heart Attacks, Strokes)
- 3. Neoplasms (Cancerous and non-cancerous growths)
- 4. Infectious and Parasitic Diseases (Intestinal infections and whooping cough)

The following is a list of the remaining ICD-9 chapters that rarely, or do not, occur in the top five:

- 1. Diseases of the Nervous System and Sense Organs
- 2. Certain Conditions Originating in the Perinatal Period
- 3. Congenital Anomalies
- 4. Diseases of the Skin and Subcutaneous Tissue
- 5. Diseases of the Genitourinary System
- 6. Diseases of the Musculoskeletal System and Connective Tissue
- 7. Diseases of the Blood and Blood-Forming Organs
- 8. Endocrine, Nutritional, and Metabolic Diseases

Two other ICD-9 chapters are examined in each chapter:

- 1. Supplementary Classifications of Factors Influencing Health Status and Contact with Health Services.
- 2 Symptoms, Signs and III-Defined Conditions

Appendix C

2.3 Metrics

The main body of the report focuses on proportions. Numbers are presented to provide an indication of the magnitude of patient volume and cost. Because age groups are not compared to one another, nor are regions contrasted, rates are generally not used. However, rates are provided in the tables in Appendix B.

2.4 Expenditures

The cost of hospitalization and outpatient activity has been estimated. Unlike the previous NWT Health Services Report 2000, this report uses actual NWT Hospital expenditures (minus long-term care and recoveries for third party services) gathered from the GNWT Main Estimates (actuals) to estimate the costs of providing services to NWT residents in the NWT. As was the case with the 2000 report, expenditures for out-of-territory hospital services for NWT residents are gathered from the NHIM – as they are a record of the direct charges from other jurisdictions to provide hospital care to NWT residents.

In order to allocate in-NWT costs to each age group and disease chapter, the costs recorded in NHIM are used as a proxy for the proportion of costs. These costs in NHIM appear for purposes of inter-jurisdictional billings for services that the NWT provides to residents of other provinces. For example, an average bed day charge was \$1,828 in 2003 when hospitalized at an NWT Hospital, and the \$118 for the average outpatient visit (includes day surgeries). These amounts are fixed in stone but do not reflect the actual cost of the hospitalization or outpatient visit. Depending on hospital occupancy the bed day cost used for inter-jurisdictional billings may be too high or too low. The same can be said about outpatient visits, depending on the duration of the visit.

A simplified formula to pro-rate cost is as follows:



2.5 Hospitalizations

Not only can people be hospitalized more than once in a year, they can also be counted as being hospitalized several times if they have been transferred from one hospital to the next.

2.6 Exclusions

Newborns have been excluded from the analysis of this report. The focus of this report is primarily on the morbidity determining the use of hospital services, and as such one's birth is not a disease. Between 2000/01 and 2003/04, almost all babies were born in a hospital and the cost associated with their care was approximately \$425,000 per annum.

WCB patients (those injured on the job), Department of National Defence staff and some RCMP staff have their health care paid for by third-parties (WCB and the Federal Government). Administrative data on their hospital utilization are not included in NHIM, and thus, they are not included in this report.

Patients residing in the long-term care wards of NWT hospitals have been excluded – except when they required hospital services outside of the long-term care ward.

Non-resident hospital service utilization has also been excluded.