

# The Cost of Cancer in Perspective

Cancer has been the leading cause of premature deaths for many years and will soon surpass cardiovascular disease as the leading cause of all deaths in Canada. The two diseases are familiar to all Canadian families.

In a special report for the CACC, Wyatt Health Management compared the hospitalization costs associated with cancer and cardiovascular disease. The intention is solely to initiate research about the burden these top two killers place on health budgets. It is hoped that as the research continues, some degree of clarity will emerge about an appropriate level of funding to support the treatment needs of cancer patients. Much more information is needed about the cost per person over several years, for example and the costs of a wide range of healthcare interventions.

Excerpts from the Wyatt report are reproduced below. The full report, including appendices with additional data, can be found on the CACC Website with the background materials relating to this Report Card.

Cancer patients often have their treatment as outpatients in Cancer Centres, without being admitted. Cardiovascular patients are more often hospitalized. The question to be answered is how do hospital costs compare between cancer and cardiovascular care?

## Hospitalizations Across Canada

Discharge data indicated for 2000/2001 there were a total of 2,889,586 discharges from Canadian hospitals. Of those 215,493 (7%) were for cancer diagnoses and 472,376 (16%) were for cardiovascular diagnoses. When looking at all diagnosis, the average stay was 7.2 days, more than it was in 2006. The average stay for cancer patients was 9.6 days and for cardiovascular patients was 8.7 days. From this, we can calculate the Hospital Resource Consumption Index (% diagnosis X length of stay) for cancer patients as 0.672 and for cardiovascular patients as 1.392. The ratio is 0.48 to 1, meaning cardiovascular patients consume more than twice the hospital resources that cancer patients do; a factor of 2.07.

## Top 50 Diagnoses on Hospital Admittance

Admittance for cancer stands at 9% whereas admittance for cardiovascular disease is 33%, with the top three of the 50 reasons all being cardiovascular disease. The data

was sorted by the Dx code. This accounts for only the top 50 admittances, which does not include all admittances to hospital. Other admittances would also include other cancers and other cardiovascular disease.

## Top 50 Surgeries in Hospital

Cardiovascular related surgeries account for 42% of the top 50 surgeries, accounting for 3 of the top 4 surgeries. Cancer related surgeries account for approximately 8% of the top 50 surgeries. This accounts for only the top 50 surgeries, which does not include all surgeries in hospital. Other surgeries would also include other cancers and other cardiovascular disease.

## Comparison of Cancer and Cardiac Care in Ontario

There are a number of factors to compare when looking at cancer and cardiac care in Ontario. An important factor is hospital stays and length of stay. For 2006, there were 30,127 hospital stays (total of 342,907 days in hospital) for cancer patients compared to 131,969 hospital days (total of 842,491 days in hospital) for cardiac patients that include cardiology and cardio thoracic care. In comparison, there are 4.4 times more hospitalizations for cardiac care than for cancer care.

## HOSPITAL STAYS FOR ONCOLOGY, CARDIOLOGY AND CARDIO/THORACIC PATIENTS IN ONTARIO

HOSPITAL STAYS FOR ONTARIO RESIDENTS FOR  
ONCOLOGY, CARDIOLOGY AND CARDIO\THORACIC PROGRAM CLUSTER CATEGORIES  
– 2005, 2006 FISCAL YEARS

HOSPITAL STAYS (REPORTED AS INPATIENT DISCHARGE)	2005		2006		2005		2006	
	# Dschg	Total LOS	# Dschg	Total LOS	ICU Stay	ICU Hrs	ICU Stay	ICU Hrs
<b>Program Cluster Category:</b>								
ONCOLOGY	33,307	370,461	30,127	342,907	1,456	142,734	1,437	156,969
CARDIOLOGY	99,162	558,462	95,009	547,166	27,113	1,779,385	25,394	1,742,753
CARDIO THORACIC	37,862	325,168	36,960	300,325	24,481	2,387,829	23,985	2,186,471

If we compare Intensive Care Unit (ICU) stays, there were 1,437 ICU stays (total of 156,969 days in ICU) for cancer patients compared to 49,379 ICU stays (total of 3,929,224 days in ICU) for cardiac patients.

This ratio is an astonishing 34.4 times more ICU stays for cardiac patients than for cancer patients. In ICU days, the difference is 25.0 times more for cardiac patients.

### COST OF ICU BED IN ONTARIO NOT INCLUDING REHABILITATION HOSPITALS

Size of Hospital	Average	Median	Range	Average	Median	Range
<50 Beds	\$1,995	\$1,977	\$438-3084	\$1,971	\$1,968	\$438-3084
51-200 Beds	\$2,253	\$2,148	\$1107-4452	\$2,238	\$2,148	\$1107-4452
201-350 Beds	\$2,436	\$2,460	\$1935-2901	\$2,436	\$2,460	\$1935-2901
>350 Beds	\$3,150	\$2,901	\$719-\$1,555	\$3,159	\$2,895	\$719-\$1,555

### INTENSIVE CARE UNIT STAYS FOR ONTARIO ONCOLOGY PATIENTS (PROGRAM CLUSTER)

FISCAL YEAR	2005		2006	
	# Special Care Stays	Spec. Care Hrs	# Special Care Stays	Spec. Care Hrs
<b>Special Care Unit</b>				
Cardiac Intensive Care Nursing Unit Surgery	17	935	23	1,831
Combined Medical/Surgical Intensive Care Nursing Unit	1,035	108,382	979	115,580
Coronary Intensive Care Nursing Unit Medical	134	9,942	156	13,369
Medical Intensive Care Nursing Unit	199	17,092	198	19,651
Surgical Intensive Care Nursing Unit	71	6,383	81	6,538
<b>Total ICU Stays And Hours For Oncology</b>	1,456	142,734	1,437	156,969

Note: patients may have multiple stays in intensive care per inpatient stay

**INTENSIVE CARE UNIT STAYS FOR ONTARIO  
CARDIOLOGY PATIENTS (PROGRAM CLUSTER)**

<b>FISCAL YEAR</b>	<b>2005</b>		<b>2006</b>	
<b>Special Care Unit</b>	<b># Special Care Stays</b>	<b>Spec. Care Hrs</b>	<b># Special Care Stays</b>	<b>Spec. Care Hrs</b>
Cardiac Intensive Care Nursing Unit Surgery	623	41,722	825	49,931
Combined Medical/Surgical Intensive Care Nursing Unit	13,286	830,326	12,078	804,009
Coronary Intensive Care Nursing Unit Medical	8,672	618,007	8,668	640,849
Medical Intensive Care Nursing Unit	4,450	283,269	3,744	242,590
Surgical Intensive Care Nursing Unit	82	6,061	79	5,374
<b>Total ICU Stays And Hours For Oncology</b>	<b>27,113</b>	<b>1,779,385</b>	<b>25,394</b>	<b>1,742,753</b>

Note: patients may have multiple stays in intensive care per inpatient stay

**INTENSIVE CARE UNIT STAYS FOR ONTARIO  
CARDIO/THORACIC PATIENTS (PROGRAM CLUSTER)**

<b>FISCAL YEAR</b>	<b>2005</b>		<b>2006</b>	
<b>Special Care Unit</b>	<b># Special Care Stays</b>	<b>Spec. Care Hrs</b>	<b># Special Care Stays</b>	<b>Spec. Care Hrs</b>
Cardiac Intensive Care Nursing Unit Surgery	7,510	439,720	7,516	457,182
Combined Medical/Surgical Intensive Care Nursing Unit	7,302	1,202,455	6,797	984,940
Coronary Intensive Care Nursing Unit Medical	8,079	531,571	8,227	552,972
Medical Intensive Care Nursing Unit	425	106,332	424	95,105
Surgical Intensive Care Nursing Unit	1,165	107,751	1,021	96,272
<b>Total ICU Stays And Hours For Oncology</b>	<b>24,481</b>	<b>2,387,829</b>	<b>23,985</b>	<b>2,186,471</b>

Note: patients may have multiple stays in intensive care per inpatient stay