A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011
Our Vision

Our Mandate
To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

Our Values
Respect, Integrity, Collaboration, Excellence, Innovation
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Quiz Yourself

Which body part are you most likely to fracture?

a. Neck  
b. Foot  
c. Wrist and hand  
d. Lower leg/ankle

Find the answer by turning to page 32.

Which inpatient group is the most expensive?

a. Lung transplant  
b. Newborn weighing less than 750 grams  
c. Extensive burn with skin graft  
d. Liver/pancreas/duodenum transplant

Find the answer by turning to page 39.

What is most out-of-pocket health spending for?

a. Prescription drugs  
b. Dental care  
c. Vision care  
d. Hospital accommodation

Find the answer by turning to page 38.
What is the main problem people visit an emergency department for?

- a. Diarrhea/gastroenteritis
- b. Chest/throat pain
- c. Back pain
- d. Abdominal/pelvic pain

Find the answer by turning to page 26.
Introduction

Health data has great value: it helps make the system more accountable, guides best practices for delivering better and safer care and, ultimately, can help improve the health of Canadians. Health data is important to a variety of stakeholders ranging from policy-makers to users of health care systems—the general public. The purpose of this publication is to provide an overview of health care use and resource demands. As questions rise about the sustainability of our health care systems in Canada, it is important to identify what our uses and needs are. By analyzing current health care data, we can ensure resources are being used in the best way possible.

Please note that the data used in this publication comes from various CIHI data holdings, the Fichier des hospitalisations MED-ÉCHO, 2010–2011, ministère de la Santé et des Services sociaux du Québec and the Canadian Survey of Experiences With Primary Health Care. Each graph sources a specific database and year. In most cases, the year presented is the fiscal year (for example, 2010–2011); in some instances, it is the calendar year (for example, 2010). Effort was made to present the most recent data available, whenever possible.
Most Responsible Diagnosis for Inpatient Hospitalization, by Case Volume (Excluding Maternal and Newborn Cases)

- COPD
- Heart Attack
- Pneumonia
- Heart Failure
- Other Medical Care
- Arthrosis of Knee
- Convalescence
- Fracture of Femur
- Appendicitis
- Chronic Ischemic Heart Disease

Notes
COPD: chronic obstructive pulmonary disease.
Examples of “other medical care” include palliative care, chemotherapy and desensitization to allergens.
Examples of “convalescence” include recovery following surgery, recovery from radiotherapy and recovery from chemotherapy.

Sources
Most Responsible Diagnosis for Inpatient Hospitalization, by Case Volume: Age 0 to 18

Newborn
Disorder Related to Short Gestation/Low Weight
Neonatal Jaundice
Respiratory Distress of Newborn
Pneumonia
Bronchiolitis
Disorder Related to Long Gestation/High Weight
Appendicitis
Asthma
Perinatal Condition

Sources
Most Responsible Diagnosis for Inpatient Hospitalization, by Case Volume: Age 19 to 44 (Excluding Maternal Cases)

- Appendicitis
- Gallstones
- Fracture of Lower Leg, Including Ankle
- Abdominal/Pelvic Pain
- Schizophrenia
- Excessive and Irregular Menstruation
- Convalescence
- Mental/Behavioural Disorder Due to Alcohol
- Complications of Procedures
- Pancreatitis

Notes
Examples of “convalescence” include recovery following surgery, recovery from radiotherapy and recovery from chemotherapy.
“Complications of procedures” include hemorrhage and hematoma, shock, accidental puncture and infection following or resulting from a procedure.

Sources
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Most Responsible Diagnosis for Inpatient Hospitalization, by Case Volume: Age 45 to 64

Heart Attack
Arthrosis of Knee
COPD
Other Medical Care
Chronic Ischemic Heart Disease
Chest/Throat Pain
Gallstones
Convalescence
Arthrosis of Hip
Pneumonia

Notes
COPD: chronic obstructive pulmonary disease.
Examples of “other medical care” include palliative care, chemotherapy and desensitization to allergens.
Examples of “convalescence” include recovery following surgery, recovery from radiotherapy and recovery from chemotherapy.

Sources
Most Responsible Diagnosis for Inpatient Hospitalization, by Case Volume: Age 65+

- COPD
- Heart Failure
- Heart Attack
- Pneumonia
- Fracture of Femur
- Arthrosis of Knee
- Other Medical Care
- Atrial Fibrillation and Flutter
- Urinary Tract Infection
- Chronic Ischemic Heart Disease

Notes
COPD: chronic obstructive pulmonary disease.
Examples of “other medical care” include palliative care, chemotherapy and desensitization to allergens.
The category “urinary tract infection” also includes other/unspecified disorders of the urinary tract, though these accounted only for a small proportion of the total cases in this category.
Examples of “convalescence” include recovery following surgery, recovery from radiotherapy and recovery from chemotherapy.

Sources
**Inpatient Procedures, by Case Volume**

- Vaginal Delivery
- Obstetric Lacerations Repair
- Induction of Labour
- Ventilation
- Augmentation of Labour
- Caesarean Section Delivery
- Implantation of Internal Device, Vena Cava
- Knee Replacement
- Coronary Angioplasty
- Hip Replacement

**Notes**
Diagnostic and other non-therapeutic interventions were excluded.
Blood transfusions and pharmacotherapy interventions were excluded due to differences in reporting across jurisdictions.
Examples of "implantation of internal device, vena cava" include the insertion of lines such as central venous catheters and PICC lines.

**Sources**
Inpatient Procedures, by Case Volume: Age 0 to 18

- Therapy, Skin
- Ventilation
- Circumcision
- Appendix Removal
- Implantation of Internal Device, Vena Cava
- Removal of Tonsils and Adenoids
- Vaginal Delivery
- Obstetric Lacerations Repair
- Augmentation of Labour
- Tongue Release

Notes
Diagnostic and other non-therapeutic interventions were excluded. Blood transfusions and pharmacotherapy interventions were excluded due to differences in reporting across jurisdictions. Examples of “therapy, skin” include phototherapy, which is used to treat conditions such as jaundice, and leech therapy. Examples of “implantation of internal device, vena cava” include the insertion of lines such as central venous catheters and PICC lines.

Sources
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Inpatient Procedures, by Case Volume: Age 19 to 44

- Vaginal Delivery
- Obstetric Lacerations Repair
- Induction of Labour
- Augmentation of Labour
- Caesarean Section Delivery
- Vacuum Traction Delivery
- Fetal Heart Monitoring During Active Labour
- Appendix Removal
- Interventions to Uterus (Following Delivery)
- Total Hysterectomy

Notes
Diagnostic and other non-therapeutic interventions were excluded. Blood transfusions and pharmacotherapy interventions were excluded due to differences in reporting across jurisdictions.

Sources
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Inpatient Procedures, by Case Volume: Age 19 to 44 (Excluding Obstetric Cases)

- Appendix Removal
- Total Hysterectomy
- Occlusion, Fallopian Tube
- Ventilation
- Implantation of Internal Device, Vena Cava
- Gallbladder Removal
- Muscle Repair, Chest/Abdomen
- Total Removal, Ovary With Fallopian Tube
- Fixation, Ankle Joint
- Release, Abdominal Cavity

Notes
Diagnostic and other non-therapeutic interventions were excluded. Blood transfusions and pharmacotherapy interventions were excluded due to differences in reporting across jurisdictions. Examples of “implantation of internal device, vena cava” include the insertion of lines such as central venous catheters and PICC lines. Examples of “muscle repair, chest/abdomen” include hernia repair, abdominoplasty and temporary abdominal wall closure. Examples of “release, abdominal cavity” include pelvic cavity lysis, peritoneal lysis and abdominal adhesiolysis.

Sources
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Inpatient Procedures, by Case Volume: Age 45 to 64

- Ventilation
- Implantation of Internal Device, Vena Cava
- Coronary Angioplasty
- Total Hysterectomy
- Knee Replacement
- Muscle Repair, Chest/Abdomen
- Total Removal, Ovary With Fallopian Tube
- Installation of External Appliance, Circulatory System NEC
- Hip Replacement
- Abdominal Cavity Drainage

Notes
NEC: not elsewhere classified. NEC is used when the medical record documents a condition to a level of specificity not identified by a specific ICD-10-CA code.
Diagnostic and other non-therapeutic interventions were excluded.
Blood transfusions and pharmacotherapy interventions were excluded due to differences in reporting across jurisdictions.
Examples of “installation of external appliance, circulatory system NEC” include cardiopulmonary bypass, extracorporeal blood salvage device and extracorporeal membrane oxygenator.
Examples of “implantation of internal device, vena cava” include the insertion of lines such as central venous catheters and PICC lines.
Examples of “muscle repair, chest/abdomen” include hernia repair, abdominoplasty and temporary abdominal wall closure.
Examples of “abdominal cavity drainage” include abdominal taps, abdominocentesis and celiocentesis.

Sources
Inpatient Procedures, by Case Volume: Age 65+

- Ventilation
- Implantation of Internal Device, Vena Cava
- Knee Replacement
- Hip Replacement
- Coronary Angioplasty
- Drainage, Pleura
- Installation of External Appliance, Circulatory System NEC
- Dialysis, Urinary System NEC
- Large Bowel Removal, Partial
- Implantation of Internal Device, Heart NEC

Notes
NEC: not elsewhere classified. NEC is used when the medical record documents a condition to a level of specificity not identified by a specific ICD-10-CA code.
Diagnostic and other non-therapeutic interventions were excluded.
Blood transfusions and pharmacotherapy interventions were excluded due to differences in reporting across jurisdictions.
“Installation of external appliance, circulatory system NEC” refers to appliances of the circulatory system, NEC, such as cardiopulmonary bypass, extracorporeal blood salvage device and extracorporeal membrane oxygenator.
Examples of “drainage, pleura” include pleural cavity aspiration, pleural cavity evacuation of air and insertion of a chest tube for intrapleural drainage.
Examples of “implantation of internal device, vena cava” include the insertion of lines such as central venous catheters and PICC lines.
Examples of “implantation of internal device, heart NEC” include temporary pacemakers, fixed-rate pacemakers and cardioverters/defibrillators.
Sources
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Day Surgery Procedures, by Case Volume

- Cataract Removal
- Partial Removal, Large Intestine
- Muscle Repair, Chest/Abdomen
- Partial Hysterectomy
- Partial Removal, Rectum
- Restoration, Tooth
- Gallbladder Removal
- Repair, Knee Joint
- Implantation of Internal Device, Tympanic Membrane
- Release, Nerve(s) of Forearm and Wrist

Cases (Thousands)

Notes
Diagnostic and other non-therapeutic interventions were excluded. Examples of “implantation of internal device, tympanic membrane” include ventilation tube insertion, myringotomy and intubation, and tympanostomy. Examples of “release, nerve(s) of forearm and wrist” include decompression of a nerve of the wrist, neurolysis of a nerve of the wrist and carpal tunnel release. The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used.

Sources
External Causes of Injury for Inpatient Hospitalization, by Case Volume

Notes
External causes of injury that resulted in death in the emergency department were excluded. Both “assault” and “intentional self-harm” exclude poisonings. “Exposure to inanimate mechanical forces” includes but is not limited to being struck by a falling/thrown object, exposure to explosions/firearms and contact with machinery/tools. “Exposure to animate mechanical forces” includes but is not limited to being struck/colliding with another person and being bitten/stung by an animal.

Sources
Inpatient Hospitalizations With a Most Responsible Diagnosis of Infectious and Parasitic Disease, by Case Volume

- Diarrhea and Gastroenteritis
- Sepsis Due to Other Causes
- Intestinal Viral Infection
- Intestinal Bacterial Infection
- Unspecified Viral Infection
- Unspecified Bacterial Infection
- Sepsis Due to Streptococcal
- HIV
- Meningitis
- Shingles

**Notes**
HIV: human immunodeficiency virus.
“Sepsis due to other causes” can include causes such as Staphylococcus and E. coli.

**Sources**
Inpatient Hospitalizations With a Most Responsible Diagnosis of Cancer, by Case Volume

Notes
Refers to malignant neoplasms only.
Common “other (secondary)” cases were bones and bone marrow and brain cerebral meninges.

Sources
Inpatient Hospitalizations With a Most Responsible Diagnosis of Cancer, by Case Volume: Men

- Prostate
- Bronchus and Lung
- Colon
- Bladder
- Respiratory/Digestive Organs (Secondary)
- Other (Secondary)
- Rectum
- Kidney
- Brain
- Stomach

**Notes**
- Refers to malignant neoplasms only.
- Common "other (secondary)" cases were bones and bone marrow and brain cerebral meninges.
- Cancers of the kidney exclude the renal pelvis.

**Sources**
Inpatient Hospitalizations With a Most Responsible Diagnosis of Cancer, by Case Volume: Women

Breast
Bronchus and Lung
Colon
Respiratory/Digestive Organs (Secondary)
Thyroid Gland
Uterus
Other (Secondary)
Ovary (Malignant)
Bladder
Rectum

Cases (Thousands)

Notes
Refers to malignant neoplasms only.
Common “other (secondary)” cases were bones and bone marrow and brain cerebral meninges.

Sources
Pediatric Inpatient Hospitalizations With a Most Responsible Diagnosis of Cancer, by Case Volume: Age 0 to 18

- Lymphoid Leukemia: 400 cases
- Brain: 300 cases
- Adrenal Gland: 200 cases
- Myeloid Leukemia: 150 cases
- Kidney: 100 cases
- Bone and Articular Cartilage of Limbs: 50 cases
- Connective/Soft Tissue: 50 cases
- Hodgkin's Disease: 50 cases
- Non-Hodgkin's Lymphoma: 50 cases
- Thyroid Gland: 50 cases

Notes
Refers to malignant neoplasms only.
Kidney excludes the renal pelvis.

Sources
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

**Inpatient Rehabilitation Client Type, by Volume**

- Orthopedic Conditions
- Stroke
- Medically Complex
- Debility
- Brain Dysfunction
- Amputation of Limb
- Spinal Cord Dysfunction
- Cardiac
- Neurological Conditions
- Pulmonary Disorders

**Notes**
Based on data from 101 participating sites in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia and Newfoundland and Labrador.
For information on inpatient rehabilitation client groups, see the Quick Stats file Demographic Characteristics of Inpatient Rehabilitation Clients.
**Source**
National Rehabilitation Reporting System, 2009–2010, Canadian Institute for Health Information.
Number of Transplants, by Organ

- Kidney (Deceased Donor)
- Kidney (Living Donor)
- Liver
- Heart
- Lung, Bilateral
- Kidney/Pancreas
- Lung, Single
- Pancreas
- Intestine
- Heart and Lung

Notes
Value for intestine: 3.
Value for heart and lung: 2.

Source
Canadian Organ Replacement Register, 2010, Canadian Institute for Health Information.
Main Problem for Emergency Department Visit

Abdominal/Pelvic Pain
Chest/Throat Pain
Other Medical Care
Upper Respiratory Infection
Urinary Tract Infection
Back Pain
Open Wound, Wrist/Hand
Open Wound, Head
Diarrhea and Gastroenteritis
Sore Throat

Cases (Thousands)

Notes
The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used.

“Other medical care” most commonly refers to chemotherapy (79% of cases). Urinary tract infections accounted for 99% of cases in the “urinary tract infection” category; however, this category also included other unspecified disorders of the urinary tract.

Source
National Ambulatory Care Reporting System, 2010–2011, Canadian Institute for Health Information.
Main Problem for Emergency Department Visit: Age 0 to 18

- Upper Respiratory Infection
- Ear Infection
- Open Wound, Head
- Abdominal/Pelvic Pain
- Sore Throat
- Diarrhea and Gastroenteritis
- Viral Infection
- Fever
- Other Head Injury
- Asthma

Notes
The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used.

Unspecified viral infections accounted for 97% of cases in the “viral infection” category. “Other head injury” refers to other unspecified injuries of the head and can include traumatic rupture of the ear drum or multiple head injuries.

Source
National Ambulatory Care Reporting System, 2010–2011, Canadian Institute for Health Information.
Main Problem for Emergency Department Visit: Age 19 to 44

- Abdominal/Pelvic Pain
- Chest/Throat Pain
- Open Wound, Wrist/Hand
- Back Pain
- Other Medical Care
- Urinary Tract Infection
- Sore Throat
- Upper Respiratory Infection
- Diarrhea and Gastroenteritis
- Sprain/Strain of Ankle/Foot

Notes
The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used.
“Other medical care” most commonly refers to chemotherapy (81% of cases).
The category “urinary tract infection” can also include other and unspecified disorders of the urinary tract system, though 99% of cases in this category were for urinary tract infection.

Source
National Ambulatory Care Reporting System, 2010–2011, Canadian Institute for Health Information.
Main Problem for Emergency Department Visit: Age 45 to 64

- Chest/Throat Pain
- Other Medical Care
- Abdominal/Pelvic Pain
- Back Pain
- Cellulitis
- Open Wound, Wrist/Hand
- Urinary Tract Infection
- Other Surgical Follow-Up Care
- Other Soft Tissue Disorders
- Upper Respiratory Infection

Notes
The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used.

“Other medical care” most commonly refers to chemotherapy (81% of cases).
The category “urinary tract infection” can also include other and unspecified disorders of the urinary tract system, though 99% of cases in this category were for urinary tract infection.
“Other surgical follow-up care” refers to attention to wound dressings and sutures.
“Other soft tissue disorders” most commonly refer to pain in a lower or upper limb (71% of cases).

Source
National Ambulatory Care Reporting System, 2010–2011, Canadian Institute for Health Information.
Main Problem for Emergency Department Visit: Age 65+

- Chest/Throat Pain: 50,000
- Other Medical Care: 45,000
- Urinary Tract Infection: 40,000
- Abdominal/Pelvic Pain: 40,000
- COPD: 35,000
- Pneumonia: 30,000
- Cellulitis: 30,000
- Heart Failure: 30,000
- Back Pain: 25,000
- Dizziness/Giddiness: 20,000

Notes
COPD: chronic obstructive pulmonary disease.
The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used.
“Other medical care” most commonly refers to chemotherapy (75% of cases).
The category “urinary tract infection” can also include other and unspecified disorders of the urinary tract system, though 99% of cases in this category were for urinary tract infection.

Source
National Ambulatory Care Reporting System, 2010–2011, Canadian Institute for Health Information.
Mental Health Disorders Resulting in Emergency Department Visit, by Case Volume

Other Anxiety Disorders 60
Mental/Behavioural Disorder Due to Alcohol 50
Depressive Episode 40
Severe Stress and Adjustment Disorder 30
Schizophrenia 20
Mental/Behavioural Disorder Due to Drug/Substance Use 10
Bipolar Affective Disorder 10
Unspecified Nonorganic Psychosis 5
Mental/Behavioural Disorder Due to Opioids 5
Unspecified Dementia 5

Notes
The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used.
Based on the Main Problem captured in the emergency department record.
Examples of “other anxiety disorders” include panic disorder and mixed anxiety and depressive disorder.
Source
National Ambulatory Care Reporting System, 2010–2011, Canadian Institute for Health Information.
Most Common Fracture Sites Resulting in Emergency Department Visit, by Case Volume

- Wrist and Hand: 60,000
- Forearm: 52,000
- Lower Leg, Including Ankle: 45,000
- Foot, Except Ankle: 37,000
- Shoulder and Upper Arm: 28,000
- Femur: 24,000
- Skull and Facial Bones: 22,000
- Lumbar Spine and Pelvis: 16,000
- Neck: 5,000
- Spine, Level Unspecified: 4,000

Notes
The National Ambulatory Care Reporting System (NACRS) does not have pan-Canadian coverage. For jurisdictions reporting to NACRS in 2010–2011, see the section CIHI Data Sources Used. Based on the Main Problem captured in the emergency department record. Does not include pathological, stress, birth or surgical fractures. Refers to fractures of a single body region only; therefore, cases involving multiple body regions were excluded.

Source
National Ambulatory Care Reporting System, 2010–2011, Canadian Institute for Health Information.
Prevalence of Chronic Conditions Managed by Primary Health Care Practitioners

- Hypertension: 20%
- Arthritis: 15%
- Chronic Pain: 10%
- Depression: 10%
- Asthma: 8%
- Diabetes: 7%
- Heart Disease: 7%
- Cancer: 5%
- Mood Disorder: 3%
- Emphysema, COPD: 1%

**Notes**
COPD: chronic obstructive pulmonary disease.
The Canadian Survey of Experiences With Primary Health Care was conducted by Statistics Canada and co-funded by CIHI and the Health Council of Canada. It surveyed Canadians age 18 and older who lived in private dwellings in all provinces and territories. Respondents were asked whether they had 1 or more of 11 chronic conditions (above stroke). Respondents who had multiple chronic conditions were counted for each condition.

**Source**
Factors Associated With Having a Distressed Caregiver Among Home Care Clients

- Cognitive Impairment (Moderate/Severe vs. None)
- Hours of Informal Care (21+ vs. 10 or Fewer)
- Possible Depression
- Any Difficulty With IADLs
- Resisting Care
- Conflict With Family/Friends
- Spousal Relationship to Primary Caregiver
- Any Medical Instability
- Verbal/Physical Abuse
- Poor Self-Rated Health

Notes
* Odds ratio is a measure of association between a predictor variable (such as hours of informal care) and an outcome (such as caregiver distress). For example, the odds of having a distressed caregiver were three times greater for home care clients with moderate to severe cognitive impairment than for those with no cognitive impairment. All factors listed refer to the difference between having the characteristic and not having the characteristic unless otherwise specified.

IADLs: instrumental activities of daily living (for example, managing medications and meal preparation).

This model controls for the 10 variables listed and other variables, including demographics, health status and service utilization. For more information, see CIHI’s report Supporting Informal Caregivers—The Heart of Home Care.

Source
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Drug Types Accounting for Greatest Portion of Total Expenditure for Seniors on Public Drug Programs in Selected Provinces

- **HMG COA Reductase Inhibitors**: High Cholesterol
- **Proton Pump Inhibitors**: Gastro-Esophageal Reflux Disease, Peptic Ulcer Disease
- **Angiotensin II Antagonists, Plain**: High Blood Pressure, Heart Failure
- **ACE Inhibitors, Plain**: Heart Failure, High Blood Pressure
- **Anti-Neovascularization Agents**: Age-Related Macular Degeneration
- **Dihydropyridine Derivatives**: High Blood Pressure
- **Anticholinesterases**: Alzheimer's Disease
- **Adrenergics and Other Drugs for Obstructive Airway Diseases**: Asthma, Emphysema, Chronic Bronchitis
- **Platelet Aggregation Inhibitors, Excluding Heparin**: Heart Attack and Stroke Prevention
- **Bisphosphonates**: Osteoporosis

Notes
Includes claims for drugs dispensed to claimants age 65 and older accepted by publicly financed drug benefit programs in Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia and Prince Edward Island.
Drugs were grouped using the World Health Organization Anatomical Therapeutic Chemical classification system.

Source
Drugs by Rate of Use Among Seniors on Public Drug Programs in Selected Provinces

- **HMG COA Reductase Inhibitors**: High Cholesterol
- **ACE Inhibitors, Plain**: Heart Failure, High Blood Pressure
- **Proton Pump Inhibitors**: Gastro-Esophageal Reflux Disease, Peptic Ulcer Disease
- **Beta-Blocking Agents, Selective**: High Blood Pressure, Heart Failure, Angina (Chest Pain)
- **Dihydropyridine Derivatives**: High Blood Pressure, Angina (Chest Pain)
- **Angiotensin II Antagonists, Plain**: High Blood Pressure, Heart Failure
- **Thiazides, Plain**: High Blood Pressure, Angina (Chest Pain)
- **Thyroid Hormones**: Hypothyroidism
- **Natural Opium Alkaloids**: Pain Killers
- **Biguanides**: Diabetes Mellitus

**Notes**
Includes claims for drugs dispensed to claimants age 65 and older accepted by publicly financed drug benefit programs in Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia and Prince Edward Island.

Drugs were grouped using the World Health Organization Anatomical Therapeutic Chemical classification system.

**Source**
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Total per Capita Health Expenditure, by Use of Funds (Dollars)

- Hospitals
- Drugs
- Physicians
- Other Professionals
- Other Institutions
- Public Health
- Capital
- Other Health
- Administration
- Health Research

Notes
- f: forecast.
“Other health” can include home care, medical transportation, hearing aids, and other appliances and prostheses. See Definitions.

Source
Out-of-Pocket per Capita Payments by Individuals (Dollars)

Notes
“Other professionals” excludes dental care and vision care. Estimated for “other institutions.” Refers only to out-of-pocket expenditures; insurance firm payments were not included. See Definitions.

Source
Canadian Institute for Health Information, National Health Expenditure Trends, 1975 to 2011 (Ottawa, Ont.: CIHI, 2011).
A Snapshot of Health Care in Canada as Demonstrated by Top 10 Lists, 2011

Highest-Cost Inpatient Groups, Canada, 2009–2010

- Newborn/Neonate <750 Grams
- Extensive Burn With Skin Graft
- Newborn/Neonate 750–999 Grams, Gestational Age <29 Weeks
- Newborn/Neonate 1,000–1,499 Grams, Gestational Age <29 Weeks
- Heart or Lung Transplant
- Lung Transplant
- Newborn/Neonate 750–999 Grams, Gestational Age 29+ Weeks
- Organ Transplant With Trauma/Complication of Treatment
- Liver/Pancreas/Duodenum Transplant
- Newborn/Neonate 1,500+ Grams With Major Cardiovascular Intervention

Notes
2009–2010 estimates for Quebec, Nunavut and the Northwest Territories were unavailable.
Physician costs were not included.
Only acute typical inpatient cases (with and without factors) were included.
The 2011 CMG+ grouping methodology was used.
Patients in the Case Mix Group (CMG) Heart or Lung Transplant have a most responsible diagnosis pertaining to the circulatory system. This differs from the CMG Lung Transplant, as these patients have a most responsible diagnosis pertaining to the respiratory system.

Sources
Canadian MIS Database and Discharge Abstract Database, 2009–2010, Canadian Institute for Health Information.
Highest-Cost Inpatient Groups, Excluding Newborns, Canada, 2009–2010

- Extensive Burn With Skin Graft
- Heart or Lung Transplant
- Lung Transplant
- Organ Transplant With Trauma/Complication of Treatment
- Liver/Pancreas/Duodenum Transplant
- Major Intervention on Esophagus
- Bone Marrow/Stem Cell Transplant
- Drainage/Biopsy of Pancreas
- Coronary Artery Bypass Graft With Coronary Angiogram With Myocardial Infarction/Shock/Arrest With Pump
- Intervention With Leukemia

Notes
2009–2010 estimates for Quebec, Nunavut and the Northwest Territories were unavailable. Physician costs were not included. Only acute typical inpatient cases (with and without factors) were included. The 2011 CMG+ grouping methodology was used. Patients in the Case Mix Group (CMG) Heart or Lung Transplant have a most responsible diagnosis pertaining to the circulatory system. This differs from the CMG Lung Transplant, as these patients have a most responsible diagnosis pertaining to the respiratory system.

Sources
Canadian MIS Database and Discharge Abstract Database, 2009–2010, Canadian Institute for Health Information.
Gross Annual Compensation per Physician (Fee-for-Service Payments Only)

- Ophthalmology
- Thoracic/Cardiovascular Surgery
- Urology
- Obstetrics/Gynecology
- Otolaryngology
- Dermatology
- General Surgery
- Neurosurgery
- Orthopedic Surgery
- Internal Medicine

Average Compensation (Thousands of Dollars)

Notes
Excludes radiology and laboratory specialists.
Excludes physicians who received less than $60,000 in fee-for-service payments.
Excludes monies received from alternative payment programs, such as salary, capitation and sessional.

Source
National Physician Database, 2009–2010, Canadian Institute for Health Information.
Number of Health Care Providers, by Selected Occupation

- Registered Nurses
- Licensed Practical Nurses
- Physicians
- Social Workers
- Pharmacists
- Dental Hygienists
- Dentists
- Medical Laboratory Technologists
- Physiotherapists
- Medical Radiation Technologists

Notes
Registered nurses, licensed practical nurses, pharmacists (with the exception of Quebec and Nunavut), physiotherapists, medical laboratory technologists and medical radiation technologists: data reflects health professionals who are registered with active-practising status and who are employed in these health occupations. Other health professionals: data reflects personnel regardless of employment status and includes the number of active registered dentists, active registered physicians (excluding residents), registered dental hygienists and registered social workers (please note that social workers are not regulated in the territories). See Methodological Notes in Canada's Health Care Providers, 2000 to 2009: A Reference Guide for comprehensive occupation-specific information.

Source
Health Personnel Database, 2009, Canadian Institute for Health Information.
Concluding Remarks

The information contained in this publication merely skims the surface of the potential depth of health data available for analysis at CIHI. The top 10 format is useful in providing a concise high-level overview, and it can also identify particular areas for further investigation. CIHI produces many analytical reports covering a broad range of health-related topics. For more in-depth information on Canada’s health system and the health of Canadians, please refer to CIHI’s website at www.cihi.ca.

Definitions

**Anatomical Therapeutic Chemical (ATC) classification system**: a classification system developed by the World Health Organization whereby drugs are divided into different groups according to the organ or system on which they act and their chemical, pharmacological and therapeutic properties.

**Canadian Classification of Health Interventions (CCI)**: a classification of health and health-related interventions provided to, for or on behalf of a patient/client. It is provider- and venue-neutral.
**capital expenditures:** include construction, machinery, equipment and some software costs of hospitals, clinics, first-aid stations and residential care facilities. Based on full-cost or cash-basis accounting principles.

**caregiver distress:** the overall impact of physical, psychological, social and financial demands of caregiving.

**Case Mix Group (CMG):** the group to which a hospital inpatient is assigned using the CMG+ grouping methodology. CMG+ categorizes acute care inpatients into groups by similar diagnoses and/or interventions, length of stay and resource use.

**convalescence:** refers to the gradual recovery of health following a surgical procedure or illness.

**dental services expenditures:** professional fees of dentists (including dental assistants and hygienists) and denturists, as well as the cost of dental prostheses, including false teeth, and laboratory charges for crowns and other dental appliances.

**drug expenditures:** at the aggregate level, includes prescribed drugs and non-prescribed products purchased in retail stores. Estimates represent the final costs to consumers including dispensing fees, markups and appropriate taxes.
hospitals: institutions where patients are accommodated on the basis of medical need and are provided with continuing medical care and supporting diagnostic and therapeutic services. Hospitals are licensed or approved as hospitals by a provincial/territorial government or are operated by the government of Canada and include those providing acute care, extended and chronic care, rehabilitation and convalescent care, and psychiatric care, as well as nursing stations or outpost hospitals.

International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA): an international classification for capturing diagnoses, health-related problems and causes of health problems and injuries.

Main Problem: data element used in the National Ambulatory Care Reporting System (NACRS). The problem that is deemed to be the clinically significant reason for the patient’s visit, which requires evaluation and/or treatment or management. This diagnosis is identified by the health practitioner seen as opposed to being self-described (Presenting Complaint data element).
**Most Responsible Diagnosis:** data element used in the Discharge Abstract Database (DAD). The one diagnosis or condition that can be described as being most responsible for the patient’s stay in a facility. If there is more than one such condition, the one held most responsible for the greatest portion of the length of stay in the acute care hospital or greatest use of resources (operating room time, investigative technology, etc.) is used.

**other health spending:** at the aggregate level includes items such as home care, medical transportation (ambulances), hearing aids, and other appliances and prostheses.

**other institutions:** include residential care types of facilities (for the chronically ill or disabled, who reside at the institution more or less permanently) and which are approved, funded or licensed by provincial or territorial departments of health and/or social services.

**other professionals expenditures:** include services of privately practising health care professionals such as dentists, denturists and optometrists.

**over-the-counter drugs:** therapeutic drug products not requiring a prescription.
personal health supplies: include items used primarily to promote or maintain health (such as oral hygiene products), diagnostic items (such as diabetic test strips) and medical items (such as incontinence products).

physicians expenditures: primarily professional fees paid by provincial/territorial medical care insurance plans to physicians in private practice. Fees for services rendered in hospitals are included when paid directly to physicians by the plans.

prescribed drugs: substances considered to be drugs under the Food and Drugs Act and that are sold for human use as the result of a prescription from a health professional.

rate of use: the proportion of people for whom a publicly financed drug program accepted at least one claim for any drug, with an accepted claim for a specific drug or drug class.

total cost accepted: the total dollar amount of a prescription accepted by a publicly financed drug program as eligible for reimbursement.

vision care services expenditures: professional services of optometrists and dispensing opticians, as well as expenditures for eyeglasses and contact lenses.
CIHI Data Sources Used

**Canadian MIS Database (CMDB):** the national data source for financial and statistical information about hospitals and health regions. CIHI collects day-to-day health service operations data according to a standardized framework known as the *Standards for Management Information Systems in Canadian Health Service Organizations* (MIS Standards).

**Canadian Organ Replacement Register (CORR):** collects data from hospital dialysis programs, regional transplant programs, organ procurement organizations and independent health facilities that offer kidney dialysis services. CORR’s mandate is to record and analyze the level of activity and outcomes of vital organ transplantation and renal dialysis activities.

**Discharge Abstract Database (DAD):** contains demographic, administrative and clinical data on inpatient hospital discharges. Facilities in all provinces and territories except Quebec are required to report to the DAD. (An annual data file is received from Quebec; see Other Sources below.)
Health Personnel Database (HPDB): the only national database containing a broad variety of Canadian health workforce data. It enables time-series comparisons of health human resources at national and provincial/territorial levels. The type of information maintained for each occupation varies, depending on the availability of data from more than 300 different data providers, including regulatory associations and colleges, educational institutions and national associations.

Home Care Reporting System (HCRS): contains demographic, clinical, functional and resource utilization information on clients served by publicly funded home care programs in Canada.

National Ambulatory Care Reporting System (NACRS): contains data for all hospital-based and community-based ambulatory care: day surgery, outpatient clinics and emergency departments. Data includes clinical, administrative and demographic information. In 2010–2011, NACRS was populated by ambulatory care events from all facilities in Ontario and Alberta and from some facilities in the following provinces and territory: Prince Edward Island, Nova Scotia, Manitoba, Saskatchewan and Yukon.
National Health Expenditure Database (NHEX): contains a historical series of macro-level health expenditure statistics by province and territory. CIHI assumed responsibility from Health Canada for the national health accounts, including NHEX, in 1995.

National Physician Database (NPDB): contains data on fee-for-service physician payments in Canada from provincial and territorial medical health care insurance plans.

National Prescription Drug Utilization Information System (NPDUIS) Database: contains information on the use and costs of prescribed drugs paid for by Canadian public drug programs. It also contains supporting information that is important when analyzing trends in drug use that help establish sound pharmaceutical policies and manage Canada’s public drug benefit programs.

National Rehabilitation Reporting System (NRS): contains client data collected from participating adult inpatient rehabilitation facilities and programs across Canada, including specialized facilities or hospital rehabilitation units, programs and designated rehabilitation beds.
Other Sources

**Canadian Survey of Experiences With Primary Health Care:** a survey conducted in 2008 by Statistics Canada that was co-sponsored by CIHI and the Health Council of Canada. It asked questions of Canadians age 18 and older regarding their experiences with primary health care.

**Fichier des hospitalisations MED-ÉCHO, 2010–2011, ministère de la Santé et des Services sociaux du Québec:** contains demographic, administrative and clinical data on acute inpatient hospital discharges and day surgery procedures submitted by acute care facilities in the province of Quebec.
## Our Strategic Plan

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<tr>
<td><strong>Our Mandate</strong></td>
<td>To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.</td>
</tr>
<tr>
<td><strong>Our Values</strong></td>
<td>Respect, Integrity, Collaboration, Excellence, Innovation</td>
</tr>
</tbody>
</table>

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<tr>
<th>Strategic Goals</th>
<th>Priorities</th>
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| Improve the comprehensiveness, quality and availability of **data** | ➢ Provide timely and accessible data connected across health sectors  
➢ Support new and emerging sources of data, including electronic records  
➢ Provide more complete data in priority areas |
| Support population health and health system **decision-making** | ➢ Produce relevant, appropriate and actionable analysis  
➢ Offer leading-edge performance management products, services and tools  
➢ Respond to emerging needs while considering local context |
| Deliver **organizational excellence** | ➢ Promote continuous learning and development  
➢ Champion a culture of innovation  
➢ Strengthen transparency and accountability |

| Foundation | Privacy and Security, Data Standards and Quality, Information Technology, Partnerships |
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