

# Excess Economic Burden of Comorbidities in COPD: a 15-year population-based study (COPD comorbidity costs)

**First published:** 19/03/2017

**Last updated:** 30/03/2024

Study

Finalised

## Administrative details

### EU PAS number

EUPAS18242

---

### Study ID

18243

---

### DARWIN EU® study

No

---

### Study countries

 Canada

---

### Study description

This study utilized 16-year of health administrative data in British Columbia, Canada, to investigate the excess direct medical costs of COPD patients, over and beyond the costs incurred by the general non-COPD population, as well as the proportion and distribution of comorbidity-attributable medical costs in such excess economic burden.

---

### **Study status**

Finalised

## Research institutions and networks

### Institutions

Not applicable - administrative data-analysis

## Contact details

### **Study institution contact**

Don Sin [Don.Sin@hli.ubc.ca](mailto:Don.Sin@hli.ubc.ca)

Study contact

[Don.Sin@hli.ubc.ca](mailto:Don.Sin@hli.ubc.ca)

### **Primary lead investigator**

Don Sin

Primary lead investigator

## Study timelines

**Date when funding contract was signed**

Actual: 04/03/2014

---

**Study start date**

Actual: 04/10/2016

---

**Data analysis start date**

Actual: 08/11/2016

---

**Date of final study report**

Actual: 03/01/2017

## Sources of funding

- Other

## More details on funding

Genome Canada, Canadian Respiratory Research Network

## Regulatory

**Was the study required by a regulatory body?**

No

---

**Is the study required by a Risk Management Plan (RMP)?**

Not applicable

## Methodological aspects

### Study type

### Study type list

**Study topic:**

Disease /health condition

---

**Study type:**

Non-interventional study

---

**Scope of the study:**

Disease epidemiology

**Data collection methods:**

Secondary use of data

---

**Main study objective:**

To investigate the proportion and distribution of comorbidity costs in patients with chronic obstructive pulmonary disease

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

**Medical condition to be studied**

Chronic obstructive pulmonary disease

## Population studied

## **Short description of the study population**

Chronic obstructive pulmonary disease (COPD) patients.

---

### **Age groups**

- Adults (18 to < 46 years)
  - Adults (46 to < 65 years)
  - Adults (65 to < 75 years)
  - Adults (75 to < 85 years)
  - Adults (85 years and over)
- 

### **Special population of interest**

Other

---

### **Special population of interest, other**

Chronic obstructive pulmonary disease (COPD) patients

---

### **Estimated number of subjects**

126456

## **Study design details**

### **Outcomes**

Excess medical costs of COPD patients

---

### **Data analysis plan**

This study used a matched cohort design to select patients with COPD and a comparable population who did not have COPD but had similar demographics and clinical features. Following this, we separately calculated their medical costs, including overall costs, and costs of hospitalizations, outpatient visits,

medications and community care services. Based on the diagnostic code, these costs were attributed to COPD and sixteen major comorbidity areas. Finally, we used a generalized linear model to estimate the excess costs of COPD, defined as the differences in estimated costs between a COPD person and a non-COPD control.

## Data management

### ENCePP Seal

The use of the ENCePP Seal has been discontinued since February 2025. The ENCePP Seal fields are retained in the display mode for transparency but are no longer maintained.

## Data sources

### Data sources (types)

[Administrative healthcare records \(e.g., claims\)](#)

## Use of a Common Data Model (CDM)

### CDM mapping

No

## Data quality specifications

**Check conformance**

Unknown

---

**Check completeness**

Unknown

---

**Check stability**

Unknown

---

**Check logical consistency**

Unknown

## Data characterisation

**Data characterisation conducted**

Unknown