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

First published: 19/03/2017

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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

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Study contact

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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

126.456

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