COMPARABILITY OF POPULATION DEFINITIONS WITHIN & BETWEEN GLOBAL DATABASES – DEVELOPING TOOLS FOR OBSERVATIONAL RESEARCH (ACO Population Definitions)

First published: 15/07/2016

Last updated: 02/07/2024

Study Finalised

Administrative details

EU PAS number

EUPAS13959

Study ID

31039

DARWIN EU® study

No

Study countries

Korea, Democratic People's Republic of

Netherlands

Poland

Spain

United Kingdom

Study description

This initial phase—the focus of this study—intends to compare prevalence and agreement rates for the different ACO definitions between different national and international databases. As such, simple ACO definitions will be used to ensure they can be operationalized across a number of databases. As each database used will be specific to a patient population and (in most cases) to one country of origin, use of multiple databases affords a unique opportunity to examine the sensitivity of findings to how populations were included in different databases.Future phases of the REG ACO Working Group’s research programme will go on to characterize the different ACO populations from a clinical perspective (cross sectionally and historically) and to explore potential differential treatment outcomes associated with the different definitions.It is expected to be considerable variation in characterization approaches in the follow-on clinical characterisation and outcome evaluation phases (owing to differences in available variables and the requirement to use a range of proxy measures in order to optimise approaches within each database). As such, this work will be treated as a separate second study phase

Study status

Finalised

Research institutions and networks

Institutions

Observational & Pragmatic Research Institute Pte (OPRI)

United Kingdom

First published: 06/10/2015

Last updated: 20/08/2026

Institution | **Educational Institution** | **Laboratory/Research/Testing facility** | **ENCePP partner**

University of Groningen Netherlands, University Hospital Vall d'Hebron Spain, Adelphi Real World UK, Primary Care Majorca Department Spain, OPCRD UK

Networks

Respiratory Effectiveness Group (REG)

Belgium
Denmark
France
Germany
Greece
Hungary

Italy

Netherlands

Spain

Sweden

United Kingdom

First published: 07/07/2021

Last updated: 04/06/2024

Network ENCePP partner

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Jerry Krishnan

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 31/08/2016

Actual: 31/08/2016

Study start date
Planned: 31/10/2016

Actual: 31/10/2016

Date of final study report
Planned: 31/08/2017

Actual: 31/08/2018

Sources of funding

- Other

More details on funding

Respiratory Effectiveness Group

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 inform standardised methods for future ACO observational research, the study aims to: test various smoking-related ACO population definitions (based on previous evidence), evaluating their respective prevalence and agreement (i) within and (ii) between a number of national and international research quality databases

Study Design

Non-interventional study design

Other

Non-interventional study design, other

Observational, historical database study

Study drug and medical condition

Medical condition to be studied

Chronic obstructive pulmonary disease

Asthma

Asthma-chronic obstructive pulmonary disease overlap syndrome

Population studied

Short description of the study population

Chronic obstructive pulmonary disease, Asthma, and Asthma-chronic obstructive pulmonary disease overlap syndrome patients

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Age groups

- Children (2 to < 12 years)
- Adolescents (12 to < 18 years)
- 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)

Estimated number of subjects

50.000

Study design details

Outcomes

The primary outcomes of the study are the prevalence of subpopulations B and C, relative to A within each of the parent population series (COPD, ACOS,

Asthma, Control) and the agreement within each database between the most selective subpopulations' definitions within each parent series (i.e. subpopulation C) and between different databases

Data analysis plan

Evaluation of:1. Outcome 1 (total number of patients) will require absolute count of patient numbers.2. Outcome 2 (population prevalence) will require evaluation of the percent prevalence within different Parent Series.3. Outcomes 3 & 4 (agreement across different population definitions: 1C vs 2C vs 3C vs 4C) will use the kappa statistic (k) or suitable alternatives (e.g. Chi-squared)

Documents

Study publications

Krishnan JA, Nibber A, Chisholm A, Price D, Bateman ED, Bjermer L, van Boven JF…

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 source(s)

The Information System for Research in Primary Care (SIDIAP)

Optimum Patient Care Research Database

Data sources (types)

Administrative healthcare records (e.g., claims)

Electronic healthcare records (EHR)

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