Estimating prevalence and incidence of acute myocardial infarction in a set of heterogeneous sources of observational health data collaborating in the EMIF Platform

First published: 12/07/2016

Last updated: 22/02/2024

Study Ongoing

Administrative details

EU PAS number

EUPAS14060

Study ID

28093

DARWIN EU® study

No

Study countries

- [ ] Denmark
- [ ] Estonia

- [ ] Italy
- [ ] Netherlands
- [ ] Spain
- [ ] United Kingdom

Study description

The European Medical Information Framework (EMIF) project has the main objective of building an infrastructure for the efficient re-use of existing health care data for epidemiological research. Within the project, the EMIF-Platform represents a federation of heterogeneous sources of health data (e.g. administrative, hospital or primary care databases, disease registries, biobanks). One of the major challenges for the EMIF project is to deal with the different characteristics of the participating data sources in order to facilitate the execution of large multi-national, multi-data source observational studies and generate high quality evidence. For this purpose, a template data derivation procedure was specifically developed. In this proof-of-concept study, the standard procedure will be applied for the identification of patients with acute myocardial infarction (AMI) in a set of heterogeneous sources of observational health data. Validity indices (sensitivity, PPV) of the data source-tailored case-finding algorithms will be estimated from available evidence, and adjusted prevalence and incidence of AMI will be estimated from the participating data sources.

Study status

Ongoing

Research institutions and networks

Institutions

Agenzia regionale di sanità della Toscana (ARS)

Italy

First published: 01/02/2024

Last updated: 12/03/2024

Institution | EU Institution/Body/Agency | ENCePP partner

Epidemiology (Rotterdam Study), Erasmus Medical Center (ErasmusMC)

Netherlands

First published: 13/01/2015

Last updated: 29/10/2015

Institution | Educational Institution | ENCePP partner

Health Search, Italian College of General Practicioners

Italy

First published: 02/03/2010

Last updated: 20/08/2024

Institution | Educational Institution | Other

Fundació Institut Universitari per a la Recerca a l'Atenció Primària de Salut Jordi Gol i Gurina, IDIAPJGol

Spain

First published: 05/10/2012

Last updated: 23/05/2025

Institution | Educational Institution | Laboratory/Research/Testing facility | Not-for-profit | ENCePP partner

The PHARMO Institute for Drug Outcomes Research (PHARMO Institute)

Netherlands

First published: 07/01/2022

Last updated: 24/07/2024

Institution | Laboratory/Research/Testing facility | ENCePP partner

Cegedim Strategic Data Medical Research UK

United Kingdom

First published: 05/10/2011

Last updated: 14/01/2025

Institution | Other

University of Tartu

Estonia

First published: 01/02/2024

Last updated: 01/02/2024

Institution | Educational Institution

Aarhus University & Aarhus University Hospital DEPARTMENT OF CLINICAL EPIDEMIOLOGY

Denmark

First published: 20/07/2021

Last updated: 02/04/2024

Institution | Educational Institution | ENCePP partner

Aarhus University Hospital

First published: 01/02/2024

Last updated: 01/02/2024

Institution

IMIM-Hospital del Mar Medical Research Institute and Universitat Pompeu Fabra Barcelona, Spain, The Health Improvement Network, Cegedim Strategic Data Medical Research Ltd London, United Kingdom, Quretec, Software Technology and Applications Competence Center, University of Tartu Tartu, Estonia, Department of Clinical Epidemiology, Aarhus University Hosptial Aarhus, Denmark

Networks

European Medical Information Framework (EMIF)

European Union

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Network

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Roberto Giuseppe

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 01/01/2013

Actual: 01/01/2013

Study start date

Planned: 21/11/2016

Actual: 01/02/2017

Date of final study report

Planned: 31/07/2019

Sources of funding

- Other

More details on funding

EU/EFPIA

Study protocol

Protocol_AMI_v1.1.pdf(180.4 KB)

Protocol_AMI_v1.2.pdf(179.78 KB)

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 type:

Non-interventional study

Scope of the study:

Disease epidemiology

Other

If ‘other’, further details on the scope of the study

To test a data derivation procedure designed to identify any event of interest from data sources with heterogeneous characteristics

Main study objective:

Estimating prevalence and incidence of acute myocardial infarction in a setheterogeneous sources of observational health data collaborating in theEMIF Platform in order to test a standard data derivation procedure designed to facilitate the execution of multi-national, multi-data source studies

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Medical condition to be studied

Acute myocardial infarction

Population studied

Age groups

Adults (46 to < 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

Estimated number of subjects

1000000

Study design details

Data analysis plan

The study population in each participating data source will include all active subjects at 1st January 2013 (cohort entry) with at least 365 days of look-back. Prevalence and incidence of AMI observed between 1st January and 31st December 2013 will be calculated in each participating data sources according to different case definitions.

Data management

Data sources

Data source(s)

THIN® (The Health Improvement Network®)

Danish registries (access/analysis)

Health Search/IQVIA Health Longitudinal Patient Database

Integrated Primary Care Information (IPCI)

The Information System for Research in Primary Care (SIDIAP)

PHARMO Data Network

ARS Toscana

Data source(s), other

IMASIS Spain, EGCUT Estonia

Data sources (types)

Administrative healthcare records (e.g., claims)

Drug dispensing/prescription data

Electronic healthcare records (EHR)

Other

Data sources (types), other

Biobank collecting clinical information from donors of biological samples-

Hospital data source collecing information from inpatient care

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

No