

Diabetes outcomes in Northeastern Italy: a population-based cohort study

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**AVAILABLE INFORMATION SOURCES IN THE VENETO REGION
(NORTHEASTERN ITALY, 4.9 MILLION INHABITANTS)**

Co-payment exemptions (selected chronic diseases certified by an hospitalist, ICD 9 CM or local code)

Hospital discharge records (diagnoses, procedures, ICD 9 CM)

Mortality records (underlying - multiple causes of death, ICD 10)

Drug dispensing data (out of hospital, ATC)

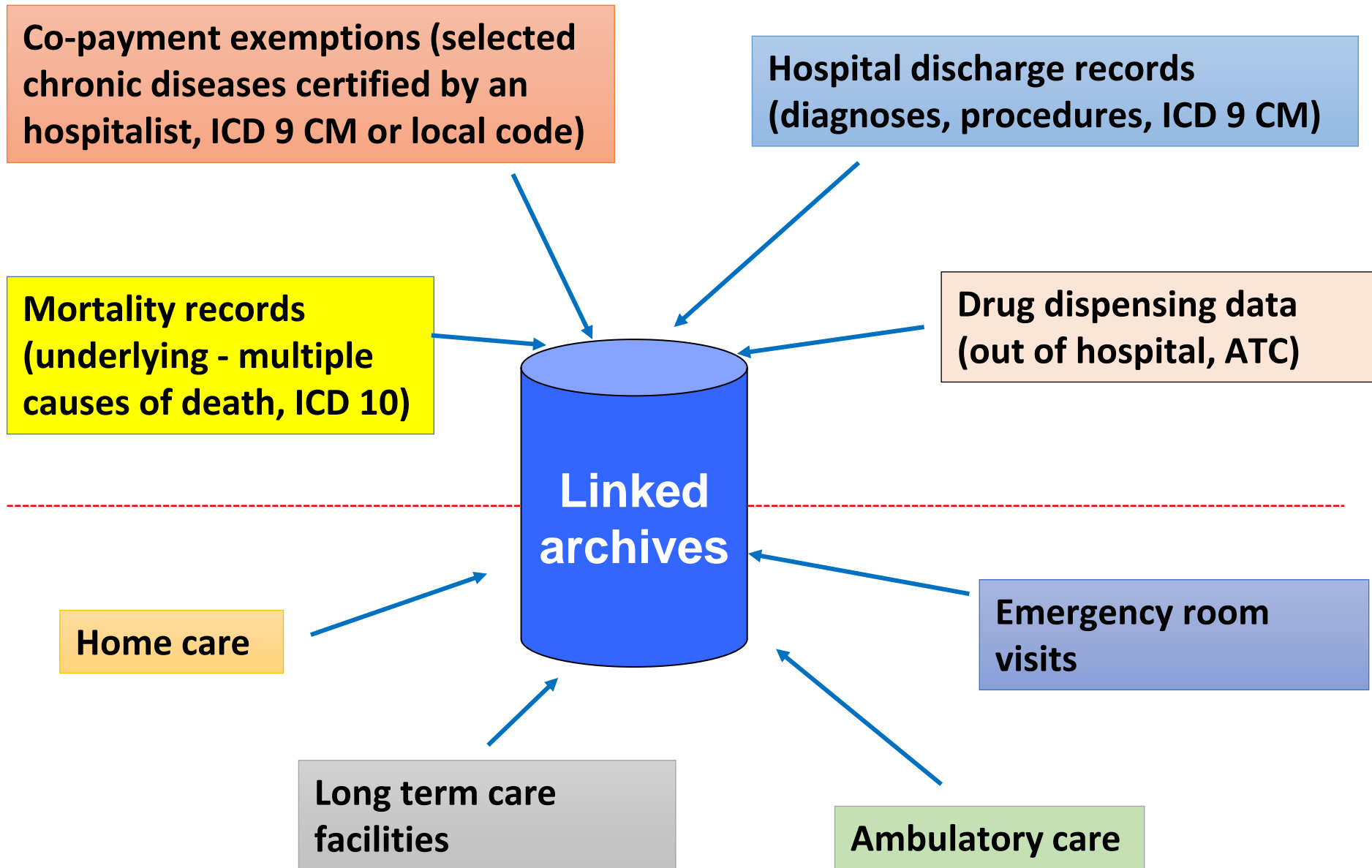
**Linked
archives**

Home care

**Emergency room
visits**

**Long term care
facilities**

Ambulatory care



NO PRIMARY CARE DATA

no anthropometric measure, e.g. BP, BMI

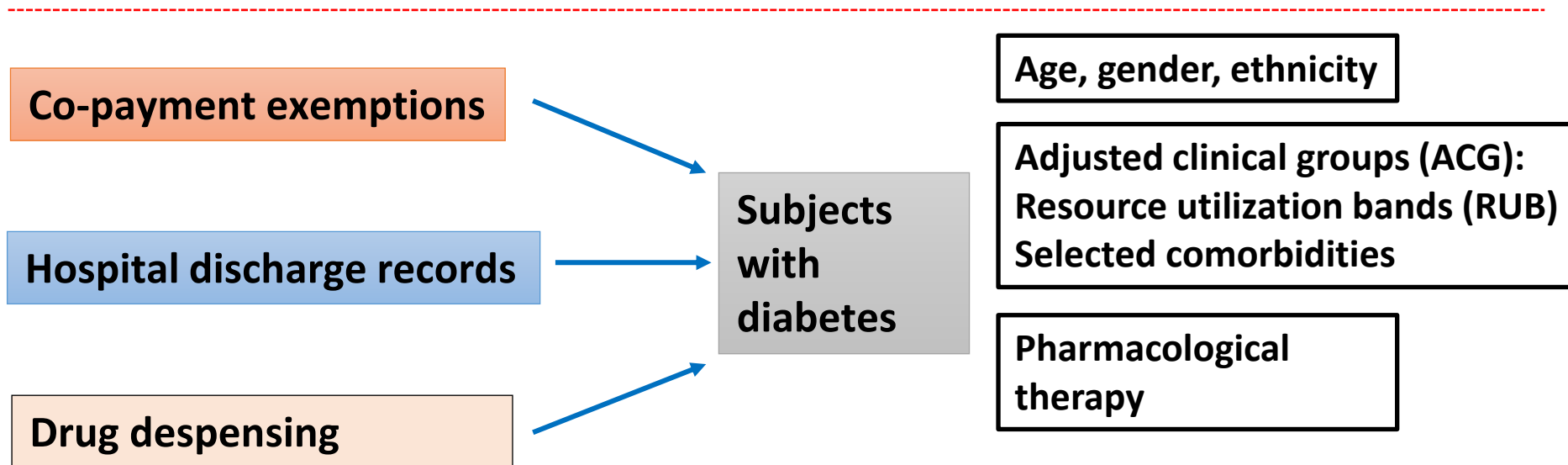
no lifestyle, e.g. smoking, diet

NO SOCIOECONOMIC STATUS

Education, income

ETHNICITY

(proxy = citizenship)



RESIDENTS IN THE VENETO REGION, 30-59 yrs, JAN 2014 (enrollment, about 2,2 millions open / closed cohort)

TYPE 2 DIABETES

Vs.

NO DIABETES

Type 1 diabetes?
Diabetes unspecified?

RATES OF CV EVENTS

RATES OF FIRST CV EVENT

Exclusion of subjects with prevalent CV diseases

STRATIFIED BY: GENDER, ETHNICITY

Type 2 diabetes and incidence of cardiovascular diseases: a cohort study in 1.9 million people. *Lancet Diabetes Endocrinol.* 2015 Feb;3(2):105-13

How Does Cardiovascular Disease First Present in Women and Men? Incidence of 12 Cardiovascular Diseases in a Contemporary Cohort of 1,937,360 People. *Circulation.* 2015 Oct 6;132(14):1320-8.

Ethnicity and the first diagnosis of a wide range of cardiovascular diseases: Associations in a linked electronic health record cohort of 1 million patients. *PLoS One.* 2017 Jun 9;12(6):e0178945.

CARDIOVASCULAR EVENTS (MOSTLY FROM HOSPITAL DISCHARGE RECORDS)

CORONARY HEART DISEASES (CHD)

Acute Myocardial Infarction (ST elevation / non-ST)

Unstable angina

Other CHD

CEREBROVASCULAR DISEASES (CD)

Sub-arachnoid hemorrhage

Intracerebral hemorrhage

Ischemic stroke

Other CD

HEART FAILURE

Hospitalized heart failure

PERIPHERAL ARTERIAL DISEASE

AORTIC ANEURISM (ruptured, surgery)

OUT OF HOSPITAL CARDIAC DEATH

OTHER EVENTS

Hospitalizations for infectious diseases (pneumonia, sepsis)

Progression towards CKD (dialysis and renal transplantation register)

Cancer incidence?

Mortality by cause