### Metadata - Diabetes

#### Description

*Diabetes prevalence*: Number of insured people with delivery of antidiabetics (ATC code A10) or with diabetes referring nomenclature code (diabetes convention, diabetes pass, diabetes care trajectory) per 1000, by age group, by sex, by region and by socio-economic status (SES).

The SES is a proxy indicator defined as “insured people having right to an increased compensation.”

#### Rationale

Diabetes is one of the four main non-communicable diseases (NCDs), with cardiovascular diseases, cancer, and chronic respiratory diseases. The global prevalence of diabetes has nearly doubled since 1980, rising from 4.7% to 8.5% among adults aged 18 years and older in 2014 [1]. Between 2000 and 2016, there was a 5% increase in premature mortality from diabetes [1].

Diabetes type 2 can be partially prevented by adopting a healthy lifestyle, and complications of diabetes can be prevented or delayed by an early diagnosis and an adapted treatment.

Reduce premature mortality from NCDs, including diabetes, by one third by 2030 with respect to 2015 is one of the United Nations Sustainable Development Goals [2].

#### Primary Data source

3 different databases were used:

- The *InterMutualistic Agency (IMA)* [3] Population database contains some socio-economic and demographic indicators of the population covered by the compulsory health care insurance (i.e. almost the entire population residing in Belgium) . Those data are registered from 2002 onwards.

- The *Pharmanet database* includes all drugs dispensed and reimbursed in public pharmacies at individual level

- The *IMA “Gezondheidszorg - Soins de santé” (GZSS)*: For all insured persons within the mandatory health insurance, this dataset contains details of their reimbursed healthcare provisions using nomenclature codes, which is a coded list of the healthcare provisions partially or totally reimbursed by the healthcare insurance. Information on reimbursed prescription drugs in hospitals pharmacies is also available.

#### Indicator source

The InterMutualistic Agency Atlas (IMA) [3].

Age-adjusted rates were computed by the Sciensano Health Status Report authors.

#### Periodicity

Each year, in September, statistics for calendar year -2 are added.

#### Calculation, technical definitions and limitations

**NUMERATOR** = Number of beneficiaries from the denominator with deliveries of antidiabetic drugs (ATC code A10) or with nomenclature referring to the diabetes (diabetes convention, diabetes passport, diabetes care trajectory)

**DENOMINATOR** = number of beneficiaries by age category, gender and increased compensation / 1 000

- Age categories are: 0-24 years, 25-44 years, 45-64 years, 65-74 years, 75 years and more

- Women who gave birth during the year under review are excluded in order to exclude gestational diabetes.
Several limitations can be pointed out:

- Assessing the prevalence of diabetes using a proxy on the use of antidiabetics or on diabetes referring nomenclature codes can lead to an underestimation of the “true prevalence”. According to the Belgian Health Examination Survey (BELHES) [4], 5% of the population is suffering from diabetes either without being aware of it or without proper diabetes control. Moreover, 10%-12% of diabetics patients are not taking any medication [5].
- People without a health care insurance are not taken into account.

| International comparability | a. Availability: There is no indicator of diabetes prevalence using the Health insurance data available. Other indicators have been used for international comparisons: the self-reported diabetes prevalence is an indicator of the Belgian Health Interview Survey [6] and of the European Health Interview Survey (EHIS) [7]. Indicators on diabetes using objectives measures are available in the BELHES study [4].
|                            | b. Comparability: limited. |
References list


3. InterMutualistic Agency Atlas.
   http://atlas.aim-ima.be/base-de-donnees

   https://his.wiv-isp.be

5. Van der Heyden et al. (2011). Diagnosis-specific Morbidity Statistics Belgium,

   https://his.wiv-isp.be

7. Eurostat. European Health Interview Survey. Available from
   https://ec.europa.eu/eurostat/cache/metadata/fr/hlth_det_esms.htm