PERMANENT SAMPLE OF SOCIALLY INSURED PERSONS
Echantillon Permanent(e) Steekproef EPS (AR/KB 09/05/2007)

Intermutualistisch Agentschap - Agence Intermutualiste, IMA – AIM, Brussels, Belgium
eps@intermut.be

Version : 2010 – R6

INTRODUCTION

The permanent sample (EPS) is an instrument designed by IMA-AIM and the governmental partners to study and monitor health care consumption and expenditure in Belgium.

PARTNERS

IMA-AIM RIZIV-INAMI KCE FPB-BFP FODSZ-SPFSS FODVG-SPFSP WIV-ISP

The EPS managing committee consists of Partners and Privacy Protection Commission representatives.

EPS data collection, data management, maintenance and control, flag derivation… are performed by IMA-AIM.

EPS IN NUMBERS
sample (S) + oversample (OS)

• Individuals: ca. 275.000 (S) – ca. 50.000 (OS)
• Data collection years: 2002 – 2010 (feb 2012)
• Records: 30 to 40 million records per year
• Variables/flags: 72 Health care / 56 Pharmacologic / 67 Socio-demographic
• Data volume: 7 GB incoming data and 9 GB flag data per year
• Covers : € 650.000.000 of the 2010 health care budget

DATA COLLECTION

All health care reimbursement invoice data are routinely collected by the seven Belgian Health Insurance Organizations through the management of their member's health insurance. The Social Security Number is hashed before sending (C1) and again by a TTP (C2).

IMA – AIM

• Joint venture of the 7 Health Insurance Organizations
• Founded in 2002
• Expertise in health insurance data
• Expertise in data analyses
• About 20 projects a year
• Partner for projects of KCE, INAMI-RIZIV, cancer registry and other governmental organizations, universities …

SAMPLING

Creation of a list of all theoretically possible Social Security Numbers in Belgium from 1890-2018.
Stratified sampling by gender and month/year of birth
1/40 : one in forty random sample
1/20 : oversampling > 65 years old population
Actual EPS population obtained by extracting the ID's of the theoretical list sample from the seven Health Insurance Organizations member populations.

ADVANTAGES

• Natural inflow of newborns / immigrants
• Natural outflow of deceased /emigrants
• Information on individual level
• Permanent availability on line
• Representativeness
• Manageable size
• High level of detail
• Longitudinal design: 10 years follow up

DATA ATTRIBUTES

EPS contains data on:
• Specific reimbursement codes by procedure, service, admission, drug delivery, etc… incl. date, provider, institution, cost …

• Socio-demographic patient characteristics: age, gender, social status…
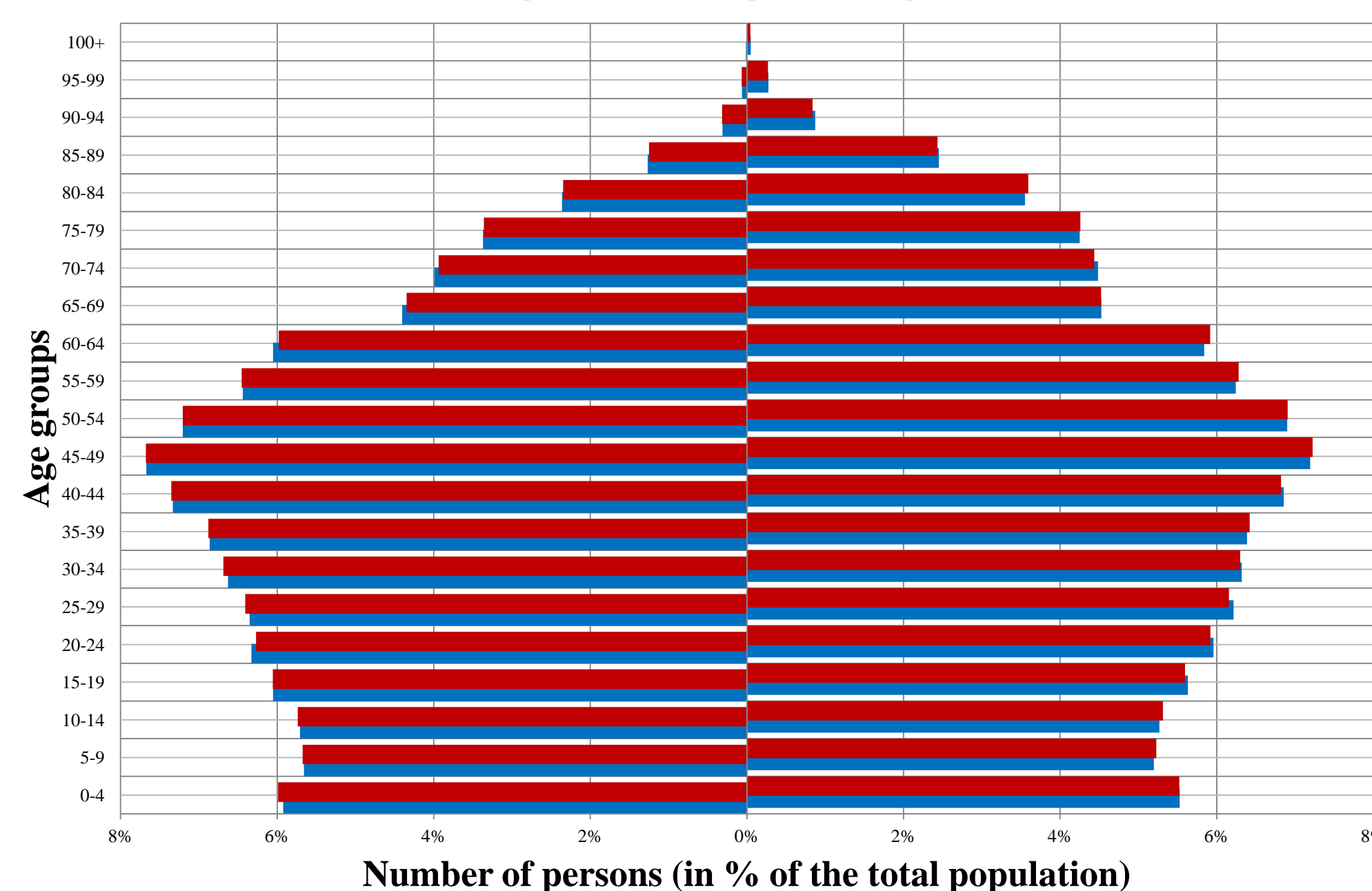
Number of persons per health insurance category
Comparison between the total number of persons (POP) and the extrapolation based on the permanent sample (EPS)
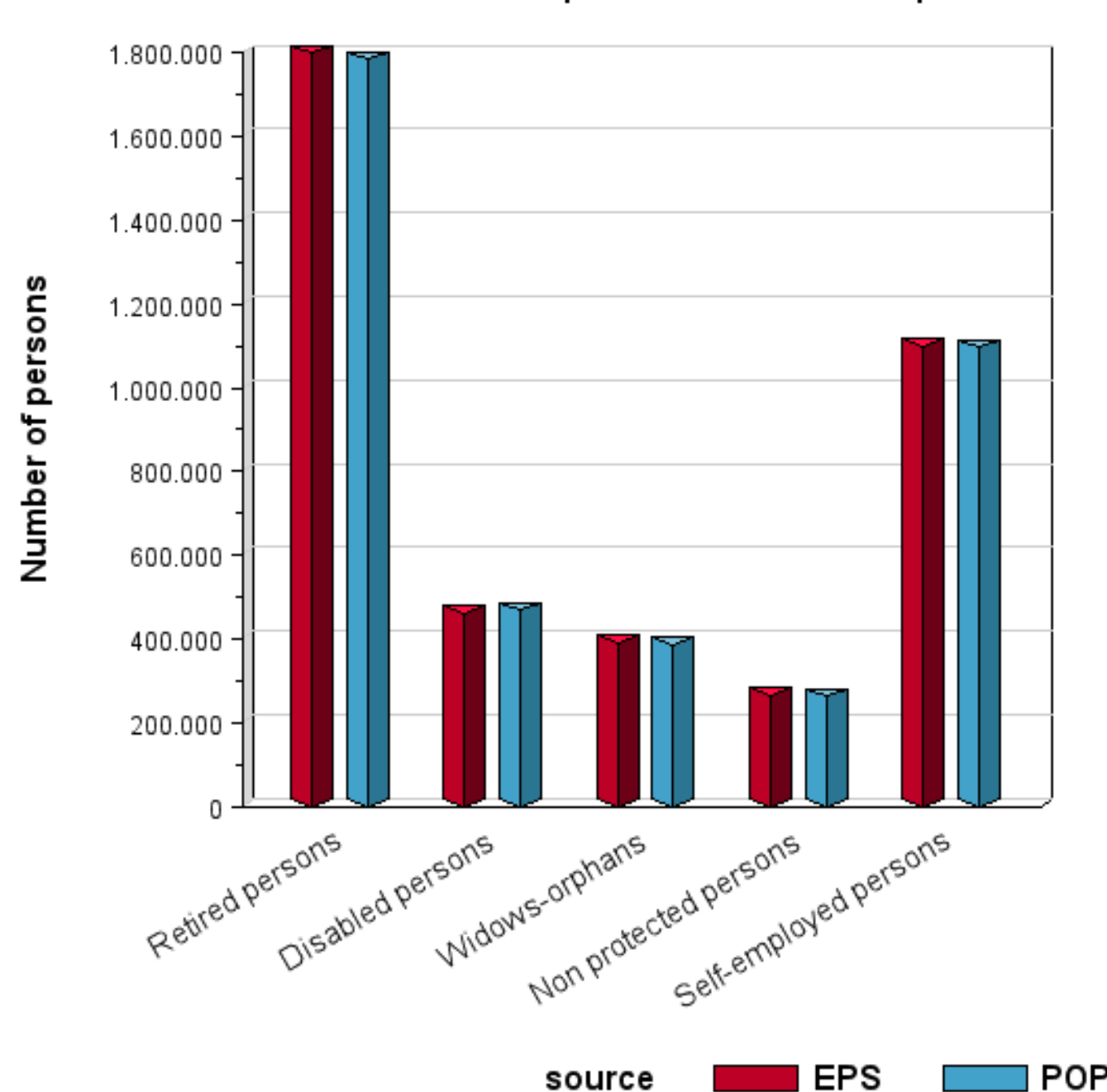
EPS actif : 6.862.680
POP actif : 6.837.362
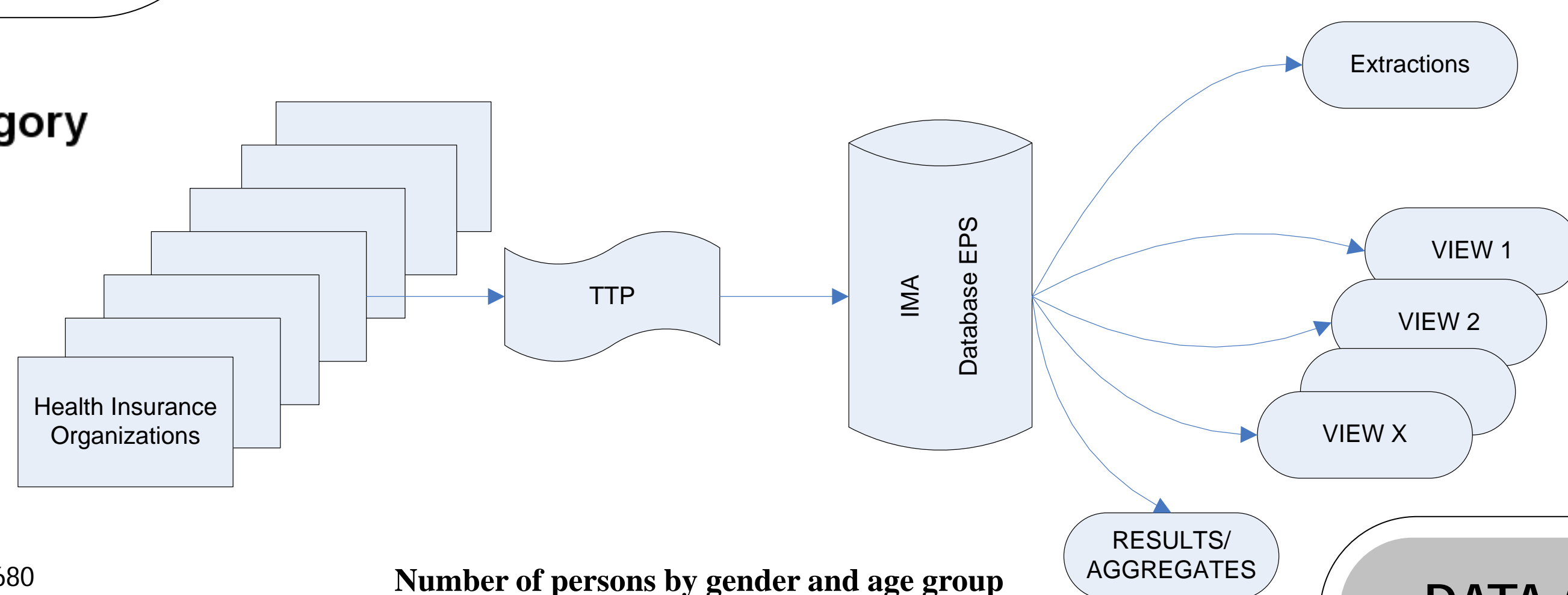
Number of persons by gender and age group
comparison between the total number of persons (POP) and the extrapolation based on the permanent sample (EPS)
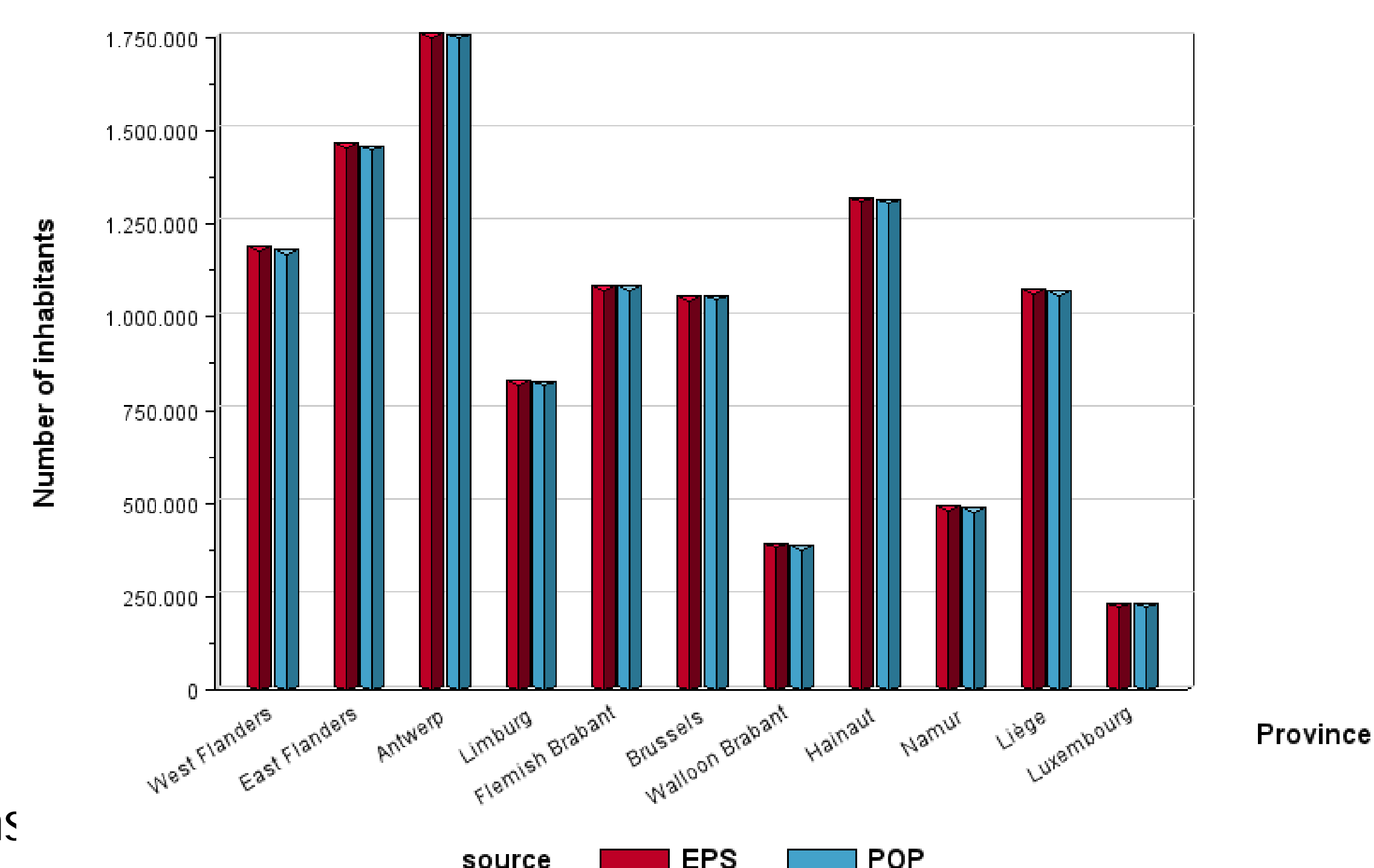

Number of inhabitants per province
Comparison between the total population (POP) and the extrapolation based on the permanent sample (EPS)

LIMITATIONS

Representativeness is borderline or insufficient for rare medical events.

	2002		2003		…	2008		2009		2010	
	No. individuals	%	No. individuals	%		No. individuals	%	No. individuals	%	No. individuals	%
Sample	258.413	84.9	261.096	84.9		269.592	85.0	271.880	84.9	274.179	84.8
Oversampling	45.887	15.1	46.577	15.1		47.750	15.0	48.392	15.1	48.987	15.2
All	304.300	100.0	307.673	100.0		317.342	100.0	320.272	100.0	323.166	100.0

ACCESS TO EPS

Access to EPS is strictly regulated and limited to dedicated persons in each of the partner organisations.

Third parties, such as university researchers, regional authorities, the cancer registry, etc. can request access to selected EPS data to answer specific research questions through a formalized request process. Fees for data extraction and analysis are charged.

CONCLUSION

In the near future, EPS is likely to become an essential instrument helping public health authorities and stakeholders making better-informed decisions.

Are you interested in using EPS for your research? Ask for request procedures: eps@intermut.be.