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Federaal Kenniscentrum voor de Gezondheidszorg
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Belgian Health Care Knowledge Centre

COST SHARING AND PROTECTION MECHANISMS IN HEALTH

TECHNICAL MANUAL

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HEALTH SERVICES RESEARCH

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APPENDIX REPORT

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

Patient cost sharing is a common feature of health insurance schemes. Patient cost sharing is what the patient pays for care at the point of use. Different kinds of arguments for patient cost sharing have been offered in the literature. It may be implemented to help finance universal healthcare systems by raising additional revenue (cost shifting). Second, cost sharing is often seen as a tool to reduce moral hazard and hence to increase efficiency and reduce overconsumption. Ideally, increased cost awareness should limit wasteful healthcare use without forgoing necessary care. A third rationale for cost sharing is to provide patients with monetary incentives to encourage or discourage the use of specific health services. However, since the financial burden for the poor and the sick may become considerable because of cost sharing, policymakers have introduced protection measures to keep the healthcare system financially accessible for vulnerable groups.

Patient cost sharing and social protection mechanisms are also inherent features of the Belgian health insurance system. The compulsory social health insurance system is characterised by coverage of nearly the entire population for a wide range of services. However, patient responsibility for financing healthcare costs at the point of use was introduced already in the Health Insurance Law of 1963. Various forms of cost sharing are implemented in the Belgian system of compulsory health insurance: co-payments, coinsurance and an income-dependent stop-loss limit, called the system of maximum billing. These forms of cost sharing are called direct forms of cost sharing.[1] A co-payment is a fixed fee (flat rate) per item or service. In case of coinsurance the patient pays a percentage of the cost of the service.

The system of maximum billing (MAB) puts a ceiling on the total amount of co-payments and coinsurance at the level of a household, where the ceiling is a function of the net taxable income of the household. Before the MAB ceiling is reached, households pay part of the cost in the form of co-payments and coinsurance. Once they reach the ceiling, there is full coverage of services included in the MAB system. The system of maximum billing is only one protection measure Belgian policymakers have introduced to keep healthcare financially accessible for vulnerable groups. Low-income households receive an increased reimbursement benefit, paying reduced co-payments and coinsurance rates at each encounter with the healthcare system. The reduction depends on the type of expenditure. In addition, several protection mechanisms have been put in place for chronically ill patients.

Aside from co-payments, coinsurance and a stop-loss policy, some indirect forms of cost sharing exist in Belgium. These include the difference between official tariffs and freely set fees by providers, called ‘supplements’ in Belgium, charges in excess of some amount (e.g. the cost of prescription drugs in excess of a reference price) and healthcare services not covered by compulsory health insurance. These indirect forms of cost sharing are in principle not included in the maximum billing system.

Why this manual?

The National Institute for Health and Disability Insurance (RIZIV – INAMI) asked the KCE to provide a descriptive analysis of current patient cost sharing and protection mechanisms and to simulate budgetary and distributional consequences of policy measures related to the design features of the health insurance system.

This manual is designed as a companion document to the scientific report and synthesis and contains a technical background, consisting of a description of the data sources, quality-control checks and the construction of derived variables (section 2) and a weighting procedure (section 3).

Section 4 of this manual describes the data adjustments that were necessary to reflect regulations applicable in 2012 and section 5 details the data adjustments and creation of new variables to allow an imputation of changes in social protection mechanisms between 2012 and 2016. The scientific report also shows the impact of hypothetical changes to the current design features of the health insurance system. The technical details of each possible change are described in a technical documentation sheet in the scientific report.

2. DESCRIPTION OF THE DATA

We first give a brief overview of the data that were used to perform the analyses (sections 2.1 and 2.2). Next, we discuss the choices that were made for selecting the relevant observations (sections 2.3 and 2.4), for cleaning the data (section 2.5) and for creating derived variables (section 2.6).

Two sources of data were used for the purposes of this manual: sickness fund data and fiscal data, which were linked to construct the database that was used to perform the analyses.[a] Data from both databases were linked using a recoded number as a unique identifier for each individual (with the variable name c3sid; see later).

2.1. IMA data

The IMA (IMA – AIM; Intermutualistic Agency which is a partnership of the seven sickness funds) data consist of the Permanent Sample (called EPS) of socially insured persons supplemented with all **de facto household** members of the individuals in the sample.

A **de facto household** consists of all persons residing at the same address on 1 January, as registered in the National Register. In the remainder of the document we will use the terms 'de facto' and 'maximum billing or MAB' household interchangeably.

The sampling fractions in the EPS are 1/40 for the population aged 0-64, and 1/20 for the population of 65 and over. The EPS has a panel structure.

Data for the years 2010, 2011 and 2012 were available, but most analyses were performed with data for 2012. Population data are reported as at 31 December of the respective year.

[a] Authorization by Sectoral Committee of the Federal Government (n° 37/2014 of 18 December 2014) and by the Sectoral Committee of Social Security and Health (n° 09/027 of 15 July 2014)

The EPS, supplemented with all de facto household members, consists of

- Population data: information is provided at the level of the individual;
- Healthcare expenditure data and Pharmanet: information is provided at the level of the procedure, service, admission, drug delivery, etc. but only for individuals with healthcare expenses (reimbursements from RIZIV – INAMI, co-payments or supplements).
- Appendix 1 provides a list of variables that were made available by IMA.

2.2. Fiscal data

The fiscal data were made available by the FPS (FOD – SPF) Finance and contain fiscal information for the income years 2009, 2010 and 2011 (assessment years 2010, 2011 and 2012). The fiscal information is, in principle, available for all taxpayers in the extended sample (see section 2.3.4 for missing data).

Appendix 2.1 provides a list of fiscal codes that were made available by the FPS Finance. Some fiscal codes were not supplied because they did not figure in the data of the requested sample (see Table 1 and Appendix 2.2 for details on the codes).

Table 1 – Number of fiscal codes asked and delivered per year

Year	N asked	N asked not delivered	% asked not delivered
2009	189	19	10.1%
2010	189	11	5.8%
2011	189	8	4.2%

2.3. Internal consistency of the data

This section concerns data controls with a possible impact on the number of observations. Controls with a possible impact on the value of a variable but not on the number of observations are discussed in section 2.5. We will use the term 'observation' or 'record' interchangeably as a generic term for a line in the database. In our database, an observation can be an individual or a service/product (e.g. procedure, service, admission, drug delivery, etc.).

2.3.1. IMA: population data

The original dataset for 2012 included 897 803 observations (at the level of the individual), consisting of 319 151 de facto households (based on PP3009 – MAB head of household). Table 2 gives an overview of the controls that were performed on the variables in the population dataset, whether a corrective action was taken or not and how many observations were marked invalid (including missing values). If an individual has invalid variable values, the other members of his/her de facto household are marked as invalid as well. In the analyses, observations marked as invalid were not taken into account. The remaining population dataset contains 881 108 records and 313 442 de facto households.

Table 2 – Control results of the population data and corrective actions

Description	How defined?	Corrective action	Marked invalid
Persons without a MAB head of household	PP3009 missing	/	242 individuals
Uninsured individuals	PP0030 = 0	/	9 450 individuals (3 177 households)
OMNIO eligibility is not coherent with the eligibility to increased reimbursement	PP1010=1 but third digit of PP0030 not equal to 1	/	5 individuals (2 households)
Persons with a head of the MAB household without data	PP3009 exists, but no data is available for the head of the MAB household	/	6 998 individuals (2 529 households)
Number of members per MAB head of household > 15	The size of the MAB household was calculated by counting the number of individuals sharing the same MAB head of household (PP3009)	Number of household members > 15 is set equal to 15	/
Total included observations			881 108 individuals (313 442 households)

MAB = maximum billing

Children head of a de facto household

In the extended sample (EPS plus de facto household members), a person aged less than 19 years is the head of a de facto household in 926 cases. In 892 of these cases, the household is a one-person household. Only in one household (size = 2), a person aged more than 19 years was identified. For the 926 de facto households, no income information was available (see section 2.3.4). These observations were marked invalid and excluded from the analyses.

Table 3 – Children head of a de facto household

Household size	Total number of households	Total number of households with children only	Total number of individuals
1	892	892	892
2	23	22	46
3	8	8	24
4	2	2	8
5	1	1	5
Total	926	925	975

After excluding households with a child as the head of the de facto household, the remaining population dataset contains 880 133 records and 312 516 de facto households.

2.3.2. IMA: healthcare expenditure data/Pharmanet

In 2012, 833 603 individuals (94.71% of the individuals with valid data in the population dataset) were also in the healthcare expenditure or Pharmanet dataset. The remaining 5.29% did not receive reimbursements from RIZIV – INAMI.

All data controls that were performed in the supplement of KCE Report 80S (Effects of the Maximum billing system on health care consumption and financial access to health care – Supplement)[2] have also been performed for the current study. All variables were checked to determine whether valid values were recorded and whether any values were missing.

The healthcare expenditure data also contain information that is not related to healthcare expenditure but to the process of data collection or accountancy rules:[3]

- Regularizations (N group 93 or nomenclature group sector 30): accountancy corrections and modifications no longer attributable to individual healthcare acts.
- Magnetic tapes codes (N group NMB or nomenclature group sector 34, 35 or 38): (pseudo)nomenclature codes that are already covered and reimbursed by other nomenclature codes (e.g. code for common hospital room which is covered by the per diem nomenclature code).
- Mandatory collection of co-payments (N group 95): codes related to the Royal Decree of 29 March 2002[4] concerning the mandatory collection of co-payments for pharmaceutical products.

These codes will not be used in the analyses.

2.3.2.1. Negative values for the sum of healthcare reimbursements by RIZIV – INAMI, co-payments or supplements

In the IMA dataset, some individuals had a negative value for the **sum** of RIZIV – INAMI reimbursements (SS00060), co-payments (SS00160) and/or supplements (SS00165) over one year. We performed different checks to understand whether these negative values correspond to administrative corrections (e.g. regularization of expenditures from previous years) or to coding practices. The checks were performed for the data for 2010, 2011 and 2012. In order to facilitate the interpretation of the data and of our (simulation) analyses, the records of individuals with a negative sum for co-payments and supplements were corrected or excluded.

Algorithm

- Selection of all individuals with a negative sum for reimbursements, co-payments or supplements;
- Selection of all nomenclature codes with a negative amount, for the individuals in the first step;
- For the nomenclature codes that were selected, we verified whether negative values correspond to a regular coding practice. This was done by looking at 'Nomensoft' and by calculating the overall frequency of negative values in the full sample.

Results

- Negative amounts were sometimes very small (e.g. -0.1).
- Most often (90% of all selected individuals), negative values concerned the sum of supplements (SS00165) only.
  - Negative supplements were often identified for lump sums (codes 754375, 784416, 784431, 784453, 784464, 761456, 761471, 761493, 761530, 761552, 761574, 761655, 761670, 763593, 772516, 775176).
- Individuals with a negative sum for RIZIV – INAMI reimbursements often had less than six records (services/products) and often there was a negative amount for nomenclature code 750595 ('Spécialités Catégorie SCx tarifées'/'Specialiteiten categorie SCx getarifeerd per verpakking'). In principle, for each delivered pharmaceutical in category Cx two codes should be included: 750595 and 753550 ('basishonorarium'/'honoraires de base'). Code 750595 is equal to the price minus the base fee of the pharmacist (code 753550) and minus the co-payment. For individuals with a negative sum for RIZIV – INAMI reimbursements, code 753550 was missing.
- Individuals with a negative sum for co-payments often had one of two nomenclature codes: 754552 ('Malades chroniques: forfait par mois pour pansements actifs'/'Chronisch zieken: forfait per maand voor actieve verbandmiddelen') or 762775 ('Intervention forfaitaire supplémentaire accordée par l'assurance maladie en vue d'améliorer l'accessibilité en MSP'/'Bijkomende forfaitaire tegemoetkoming door de ziekteverzekering ter verbetering van de betaalbaarheid in PVT'). For both codes, the negative amount for co-payments should be equal to the positive amount of RIZIV – INAMI reimbursements.

Correcting measures

- Small negative amounts ($-0.1 \leq value < 0$) were set to zero.
- Negative amounts for supplements in the codes 754375, 784416, 784431, 784453, 784464, 761456, 761471, 761493, 761530, 761552, 761574, 761655, 761670, 763593, 772516, 775176 754552 and 762775 were set to zero.
- Records for individuals with a negative sum for RIZIV – INAMI reimbursements who had less than six records that were often concentrated in code 750595 were excluded from the analysis.
- Negative amounts in co-payments for codes 754552 and 762775 were set to zero.
- After doing the above corrections, one individual with a large negative amount for the sum of RIZIV – INAMI reimbursements and another with a large negative amount for the sum of co-payments remained in our database. In both cases, a single nomenclature code (code 700893 and 618714) was responsible for the large negative value. These individuals (along with the members of the household; in total 4 individuals) were excluded from the analyses.

2.3.3. Valid observations in the IMA data

After linking the population data with healthcare expenditure and Pharmanet data, the sample with valid observations amounted to 880 129 individuals living in 312 514 de facto households.

Table 4 – Summary of excluded records and records used in the analysis

	Number of individuals	Number of households
Records marked as valid in population data	881 108	313 442
Records marked as invalid for children head of a de facto household	975	926
Records marked as invalid in healthcare data	4	2
IMA sample with valid data	880 129	312 514

IMA = Intermutualistic Agency

2.3.4. Fiscal data

We linked the IMA sample containing valid observations with the data delivered by the FPS Finance. The FPS Finance provided data for 631 457 (income 2009) and 649 403 (income 2011) individuals.

Individuals without income information

In principle, information from the fiscal administration is available for persons who fill out a tax declaration form. For instance, children younger than 16 years on 1 January of the tax assessment year and not having their own income do not fill out a tax declaration form. Table 5 shows whether individuals in our extended sample had fiscal data for the income year 2009 and 2011 (corresponding to the taxation year 2010 and 2012, respectively). The years 2009 and 2011 were used because they are the relevant income years for the application of the maximum billing system (T-3) and for the OMNIO status (T-1).

Table 5 – Number of individuals with or without fiscal data for 2009 or 2011, by age group

Age group in 2012	Income 2009 (taxation year 2010)	Income 2011 (taxation year 2012)	Number of individuals
15 or younger	Yes	Yes	527
	Yes	No	73
	No	No	195 088
16-17	Yes	Yes	268
	Yes	No	1
	No	Yes	48
	No	No	24 289
18-22	Yes	Yes	47 044
	Yes	No	41
	No	Yes	13 114
	No	No	1 044
23-65	Yes	Yes	418 804
	Yes	No	357
	No	Yes	4 757
	No	No	8 196
65+	Yes	Yes	164 373
	Yes	No	42
	No	Yes	395
	No	No	1 668

The fiscal authorities provided a reason explaining why fiscal data were not delivered for the income years 2009 and 2011 for a limited number of adults (see Table 6).

Table 6 – Invalid and valid data provided by the fiscal authorities according to the age group

Reason for incomplete data	Income 2009					Income 2011				
	Age in 2012					Age in 2012				
	≤15	16-17	18-22	23-65	>65	≤15	16-17	18-22	23-65	>65
Invalid fiscal data										
No declaration sent yet (a new request to be submitted later)								1	5	1
Declaration received but not treated yet						.	.	.	17	7
Declaration sent but not received yet								2	33	2
No declaration sent (not-renewables)									2	
Manual enrolment								1	74	6
Non-existing national number	137	347	13 558	8 511	572	9	8	68	672	133
Not subject to direct income tax								2	23	6
With item number but no calculation data								2	16	1
Wrong fiscal identifier	137	347	13 558	8 511	572			36	36	
Valid fiscal data										
Information not provided	195 024	23 990	595	4 348	1 452	195 079	24 282	1 009	7 675	1 518
Information available	527	269	47 085	419 161	164 415	600	316	60 158	423 561	164 768
Total sample	195 688	24 606	61 243	432 114	166 478	195 688	24 606	61 243	432 114	166 478

For the analyses, we excluded adults (and the members of their de facto household):

- who were aged 18 years or older in the year of the tax declaration and
- for whom fiscal authorities provided a reason explaining why fiscal data could not be retrieved.

For all other adults not having income information, we assumed that they are not subjected to a tax assessment. Their income was set to zero.

The number of adults excluded from the analyses (because income information for 2009 or/and 2011 was missing) amounts to 11 417. After selecting all members of their household, a total of **31 839** individuals living in **9 192** de facto households were excluded from the analysis (Table 7).

Table 7 – Individuals excluded because a reason for having missing fiscal data was available

	Missing fiscal data 2010 (income 2009)	Missing fiscal data 2012 (income 2011)	Number of individuals
Adults fulfilling one exclusion criterion	No	Yes	1 105
	Yes	No	10 271
	Yes	Yes	41
Total individuals excluded	No	Yes	1 603
	Yes	No	29 984
	Yes	Yes	252

Table 8 shows that households excluded from the analysis because of having invalid fiscal data have different characteristics than households included in the analysis. Please note that the variables included in Table 8 correspond to individual characteristics that are attributed to the household (see section 2.7 for a detailed description). If at least one individual in the household fulfils a given requirement (e.g. entitled to increased reimbursement) the household is considered as being entitled to increased reimbursement. We found that among the households excluded from the analysis there is:

- an overrepresentation of households with young children, entitled to guaranteed income and to increased reimbursement. In line with this, the fraction of households that benefit from the social MAB is higher than the share in the households included in the analysis.
- an underrepresentation of households with older persons and, retired persons. There is also an underrepresentation of households entitled to the MAB for the chronically ill, the lump sum allowance B or C, six months of physiotherapy (physiotherapy-E), increased child allowance, integration allowance for handicap, help for the elderly, long hospital stay and multiple hospital stays.
- a lower mean and ‘extreme (P90)’ healthcare expenditures (both at the level of RIZIV – INAMI reimbursements and patient co-payments).
- a lower mean and median net taxable income.

Table 8 – Characteristics of the households according to whether they have valid fiscal data

Variable[a]	Statistic	Households	
		Excluded for invalid fiscal data	Included in the analysis
Number of households	N	9 192	303 3223
RIZIV – INAMI reimbursements	Mean (€)	3 373	4 518
	P90 (€)	7 363	10 977
Patient's co-payments	Mean (€)	332	519
	P90 (€)	809	1 124
NTI (€)	Mean (€)	22 369	41 711
	Median (€)	14 129	32 945
Household size	Mean	3.46	2.80
Young children (0-6 years)	%	37.08	17.88
Older persons (65-74 years)	%	8.86	20.06
Older persons (75 years or more)	%	5.25	20.13
Guaranteed income	%	19.15	4.84
Early retired	%	0.32	1.82
Retired	%	8.06	32.92
Disability	%	4.51	6.12
Incapacity for work	%	1.68	1.22
Lump sum allowance B or C	%	0.51	1.54
Physiotherapy-E	%	1.13	2.98
Increased child allowance	%	2.33	1.95
Integration allowance handicap	%	1.51	2.07
Help for the elderly	%	0.62	3.08
Long hospital stay	%	0.81	0.99
Multiple hospital stays	%	1.76	3.01
MAB for the chronically ill	%	2.52	9.84
Increased reimbursement	%	36.23	22.32

Variable[a]	Statistic	Households	
		Excluded for invalid fiscal data	Included in the analysis
MAB eligibility			
Social MAB for the household	%	24.48	15.50
Income MAB for the household	%	65.01	78.77
Social and income MAB for different members of the household	%	8.28	4.36
Households having inconsistent values for MAB eligibility	%	2.23	1.37

[a] *A description of the variables included in the table can be found in Table 10. Please note that only unweighted results are presented.*

2.4. Final sample

After linking the IMA and fiscal data and excluding observations considered invalid, the final sample for the descriptive analyses and for the simulations includes 848 290 individuals living in 303 322 de facto households.

Table 9 – Summary of excluded records and records used in the analysis

	Number of individuals	Number of households
Extended EPS	897 803	319 151
Records marked as invalid in population data	16 695	5 709
Records marked as invalid for children head of a de facto household	975	926
Records marked as invalid in healthcare data	4	2
Records marked as invalid for incomplete fiscal data	31 839	9 192
Sample used for the analyses	848 290	303 322

EPS = Permanent Sample

2.5. Adjusting the values of variables

The document explaining the definition and values of the IMA variables also describes the relation between (the values of) variables. However, in the data some inconsistencies with this description and/or with the regulation applicable in 2012 were found, for example between entitlement to increased reimbursement and entitlement to the different subsystems of the maximum billing system.

2.5.1. Inconsistency in the transfer of eligibility to increased reimbursement of healthcare expenses from the beneficiary to the dependents

Eligibility to increased reimbursement of medical expenses is always defined at the level of a 'reference household', but the 'reference household' is defined differently for individuals who are entitled to OMNIO on the one hand and individuals who benefit from an allowance or have a specific condition (RVV-BIM) on the other hand. From 1 January 2014 onwards, the definition of the 'reference household' has changed (see section 5.3). The 'reference household' is different depending on whether or not a means-test of the income is a necessary condition.

The 'reference household' or **family** for RVV-BIM consists of the individual eligible to increased reimbursement, his/her partner and their dependents. For OMNIO, the 'reference household' was the **de facto household** in 2012 (all individuals who are officially registered at the same address; family ties are not required).

In the IMA data the entitlement to increased reimbursement was calculated for each individual (3rd digit of PP0030 equals 1). We identified 516 households (2 552 individuals) where the beneficiary was entitled to increased reimbursement but not his/her dependents. For these households, we corrected the variable and the entitlement of the beneficiary was allocated to all dependents.

2.5.2. *Inconsistency between eligibility to increased reimbursement and the maximum billing system*

Individuals entitled to increased reimbursement (3rd digit of PP0030 equals 1) are also entitled to the social maximum billing, except for (in 2012):

- Handicapped children with a 66% disability;
- Handicapped persons with an integration allowance and with a partner who has an income.

In the IMA data, the eligibility to the social MAB can be identified by combining the variable on the MAB household right (PP3001) and on the MAB individual right (PP3003). We constructed a new variable representing the individual right to the social MAB. The variable is equal to one

- when the MAB household right (PP3001) is equal to one (all members of the household are entitled to increased reimbursement); or
- when the MAB household right (PP3001) is equal to four (some members of the household are entitled to increased reimbursement) and the MAB individual right (PP3003) is equal to one.

In all other cases the variable is equal to zero meaning that the individual is not entitled to the social MAB.

The IMA population data, however, do not always reflect the eligibility rules between both protection mechanisms and adjustments to reduce data inconsistencies were performed. As a starting point, we kept the value of the 3rd digit of PP0030 (entitlement to increased reimbursement) for each individual in the sample and adapted the value of the variable(s) reflecting entitlement to the subsystem of the MAB. This adjustment was performed for each individual after correcting the inconsistencies in the transfer of the entitlement to increased reimbursement from the beneficiary to the dependents (see section 2.5.1). A two-step procedure was performed to adjust the data:

- First, if the 3rd digit of PP0030 equals 1, then the individual is also entitled to the social MAB.
- Second, for the two categories mentioned above (and the relevant household members), the eligibility to the social MAB was granted only if the newly constructed variable on the eligibility to the social MAB was equal to one.

2.6. Creating derived variables

2.6.1. *Demographic, socioeconomic or health status variables*

New variables were created to better describe demographic, socioeconomic or health status characteristics of the household (members). In Table 10 we refer to the variables as they are defined in the respective layouts of the IMA and fiscal databases. All variables in Table 10 are dummy (yes/no) variables.

Table 10 – Creation of derived variables

Definition	Source	Variable in database
Incapacity for work	IMA data - population	If PP4002>180 then value equal to 1 If PP4002≤180 then value equal to 0
Disability	IMA data - population	If PP4003>0 then value equal to 1 If PP4003=0 then value equal to 0
Lump sum allowance B or C for nursing care at home	IMA data - population	If PP2001=1 or PP2002=1 then value equal to 1 If PP2001=0 and PP2002=0 then value equal to 0
Lump sum allowance for persons with a chronic illness	IMA data -healthcare	At least one of the following nomenclature codes>0: 740014, 740036, 740051, 740073, 740095, 740110, 740132, 740154, 740176, 740235
Physiotherapy-E	IMA data - population	If PP2003=1 then value equal to 1 If PP2003=0 then value equal to 0
Increased child allowance	IMA data - population	If PP2004=1 then value equal to 1 If PP2004=0 then value equal to 0
Integration allowance handicap	IMA data - population	If PP2005=1 then value equal to 1 If PP2005=0 then value equal to 0
Help for the elderly	IMA data - population	If PP2006=1 then value equal to 1 If PP2006=0 then value equal to 0
Long hospital stay (at least 120 days in year T or T-1)	IMA data - population	If PP2010=1 then value equal to 1 If PP2010=0 then value equal to 0
Multiple hospital stays (at least six times in year T or T-1)	IMA data - population	If PP2011=1 then value equal to 1 If PP2011=0 then value equal to 0
Maximum billing for the chronically ill	IMA data - population	If PP3014>0 then value equal to 1 If PP3014=0 then value equal to 0
OMNIO status (2012)	IMA data - population	If PP1010=1 then value equal to 1 If PP1010=0 then value equal to 0
Guaranteed income (guaranteed minimum income, guaranteed income for the elderly, subsistence level income or assistance from a public municipal welfare centre)	IMA data - population	If PP3010=1 or PP3013=1 then value equal to 1 If PP3010=0 and PP3013=0 then value equal to 0

Definition	Source	Variable in database
Retired	IMA data - population	If 2nd digit of PP0030=3 then value equal to 1 If 2nd digit of PP0030≠3 then value equal to 0
Early retired	IMA data - population	If PP1004 in (9, 10, 13, 14, 18) then value equal to 1 If PP1004 ≠ (9, 10, 13, 14, 18) then value equal to 0
Eligibility to the social MAB	IMA data - population	If PP3001=1 or (PP3001=4 and PP3003=1) then value equal to 1 If PP3001=2 or (PP3001=4 and PP3003=0) then value equal to 0

2.6.2. Net and gross taxable income

2.6.2.1. Concepts used for different protection measures

- **Entitlement to increased reimbursement** of healthcare expenses depends on the gross taxable income (GTI) of the beneficiaries. In principle, the period taken into account for the income assessment is the year before the introduction of the claim (T-1). Since the simplification of the system of increased reimbursement in January 2014, the means testing procedure for reference households with an 'specific condition' is based on an estimate of GTI, based on the gross income of the month of or prior to the application.
- The ceilings for the **maximum billing system** depend on the net taxable income (NTI) of the year T-3.

2.6.2.2. Concepts used to measure the financial strength of the households

In our analyses, the financial strength of the households is measured using two different concepts:

- The **net taxable income of 2011** calculated at the level of the de facto household.
- The **equivalent net taxable income of the household** of 2011 corrected for household size. We use a scale which divides household income by the square root of household size.[5]

Table 11 – Year of the income taken into account for the entitlement to increased reimbursement in case a means test is necessary

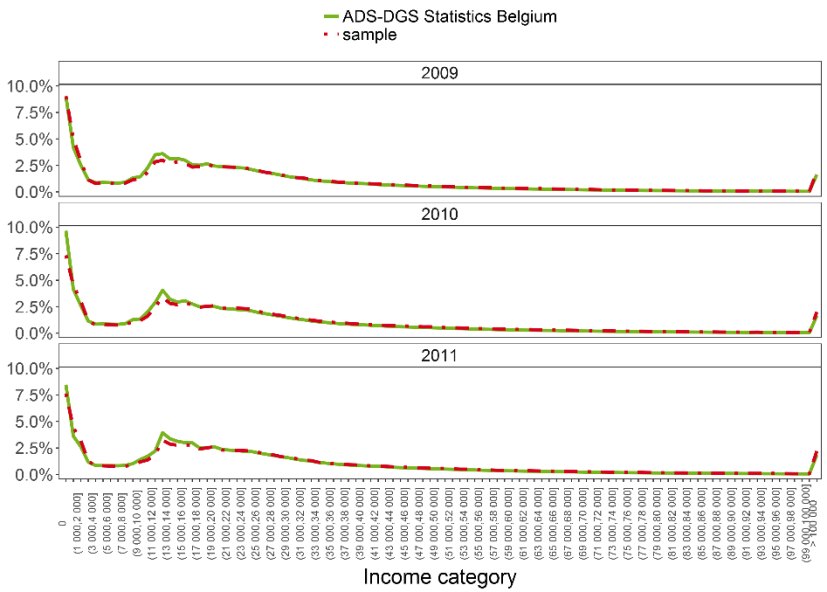
Until 31/12/2013	After 31/12/2013
• All reference households Gross taxable income of the **year before** the introduction of the application	• Reference household without a 'specific condition'[a] Gross taxable income of the **year before** the introduction of the application • Reference household with an 'indicator' Gross taxable income computed based on the gross income of the month of the application or the month preceding the application.

Source: RIZIV – INAMI[6], Royal Decree 1 April 2007[7] and Royal Decree 15 January 2014[8]. [a] Some characteristics of the household provide a 'specific condition' ('indicator'/'indicateur') of low income. The latter include, among others, persons in retirement, unemployed, etc. (see section 5.3 for more details).

2.6.2.3. Data controls

The most important data controls performed on the fiscal data on delivery are shown in Table 12.

Table 12 – Data controls on fiscal data

Control	Result
Correspondence IMA ID and fiscal ID	All fiscal ID exist in IMA. 73.6% of IMA ID have fiscal data in 2011.
Comparison of net income in the sample with the net income per income slice from ADSEI (national data)	
Net income larger than gross income	For 2011, 0.47% of those with an income had a net income larger than the gross income. The median difference in 2011 was € 846.3 (IQR € 2 364.1).

2.6.3. *Entitlement to increased reimbursement of healthcare expenses*

The aim of the derived increased reimbursement variables is to provide for each record reimbursement info both for increased reimbursement status and no increased reimbursement status of the patient. In the IMA healthcare expenditure and Pharmanet data, actual reimbursement and patient cost-sharing amounts are stored in the variables described in Table 13.

Table 13 – IMA reimbursement variables

Variable	Description
SS00060	Amount reimbursed by the health insurer: unit price x number of provided units
SS00160	Amount of co-payment
SS00165	Amount of supplement

For most RIZIV – INAMI nomenclature codes, there are specific amounts for increased reimbursement and no increased reimbursement. For pharmaceutical products different rules are applied. For each individual, the increased reimbursement status for 2012 was determined as described in Table 14.

Table 14 – Determining increased reimbursement status

Increased reimbursement in 2011?	Increased reimbursement in 2012?	Attributed code	Description	%
No	**No**	N	No increased reimbursement	78.44%
Yes	**Yes**	Y	Increased reimbursement	14.60%
No	**Yes**	CY	Changed to increased reimbursement	1.69%
	No	N	No increased reimbursement	1.46%
Yes	**No**	CN	Changed to no increased reimbursement	1.18%
		U	Unknown	1.09%
No		N	No increased reimbursement	0.85%
Yes		Y	Increased reimbursement	0.36%
	Yes	Y	Increased reimbursement	0.33%

Algorithms

Figure 1 shows the algorithm used to calculate the no increased reimbursement status for patients with increased reimbursement (codes Y and CY from Table 14).

Figure 1 – Algorithm to derive no increased reimbursement for patients with increased reimbursement

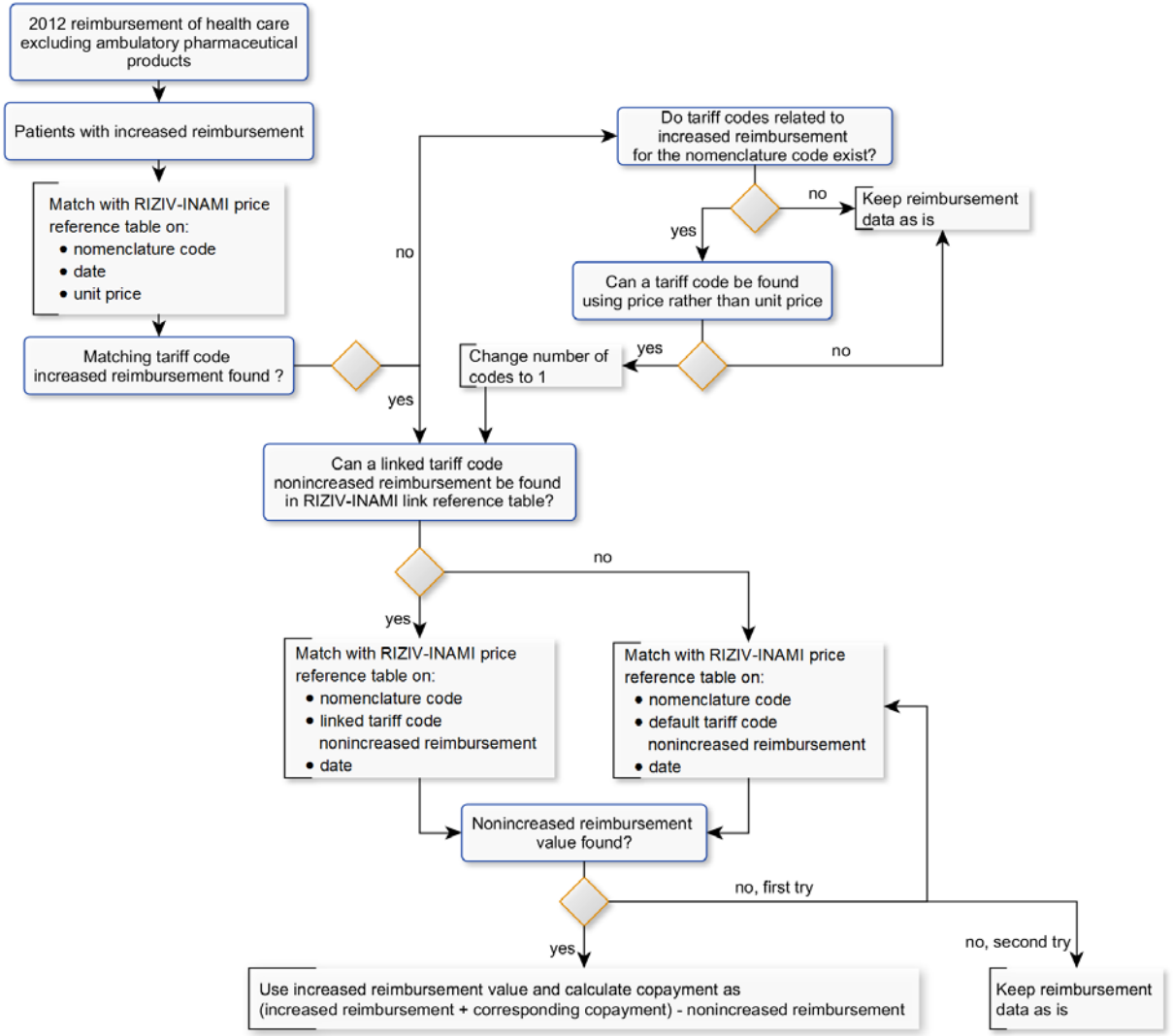


Figure 2 shows the algorithm used to calculate the increased reimbursement status for patients without increased reimbursement (codes N and CN from Table 14).

For pharmaceutical products delivered by a public pharmacy co-payment amounts are defined by the Royal Decree of 7 May 1991[9] and depend on the category to which the pharmaceutical product belongs. For some categories, co-payments are limited to a maximum, called the ceiling value.

For hospitalised patients, the co-payment is € 0.62 per diem without differentiation between patients with and without increased reimbursement status. Figure 3 shows the conversion algorithm for patients with increased reimbursement. Figure 4 shows the conversion algorithm for patients without increased reimbursement.

Figure 2 – Algorithm to derive increased reimbursement for patients without increased reimbursement

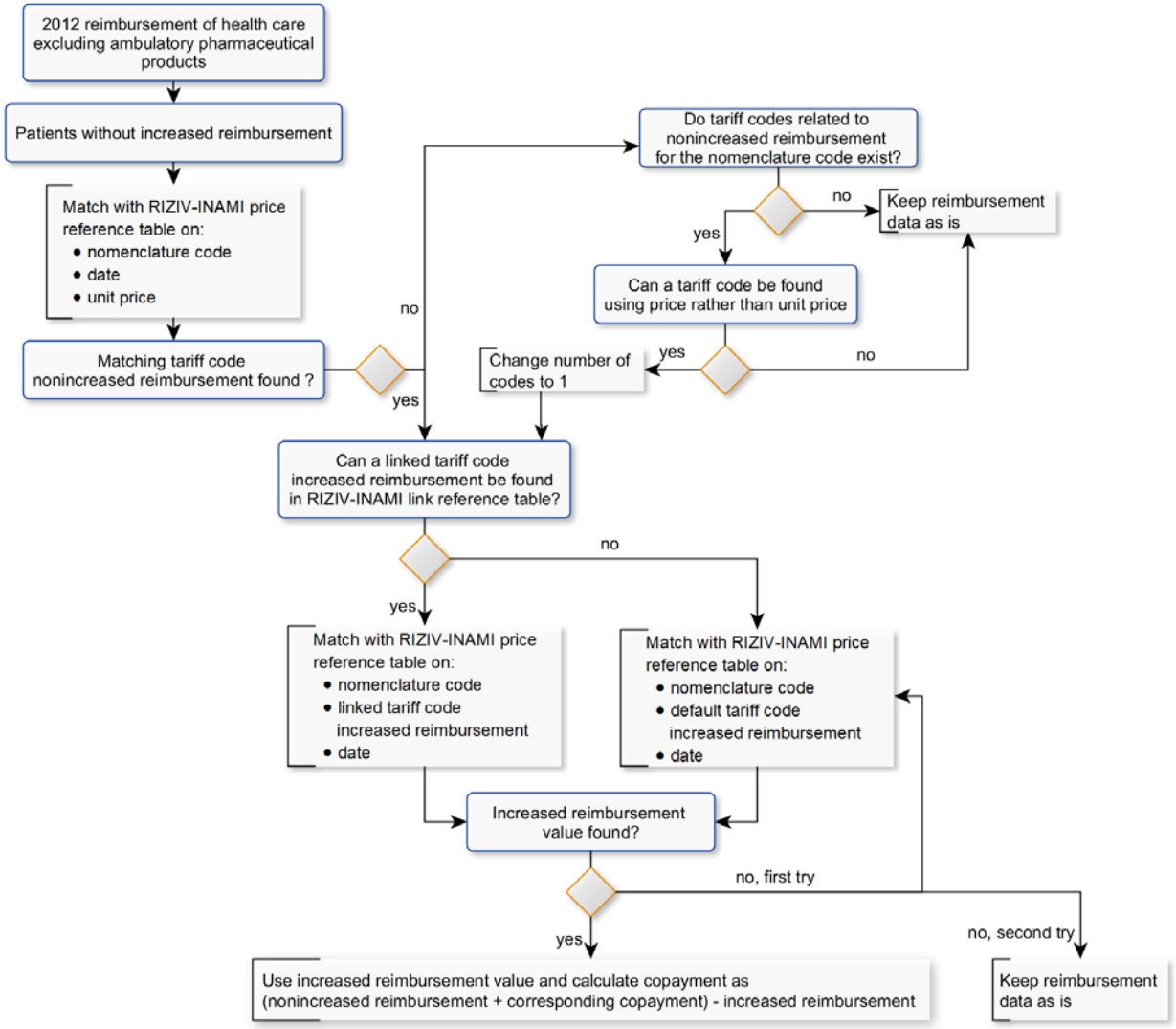


Figure 3 – Algorithm pharmaceutical products for patients with increased reimbursement

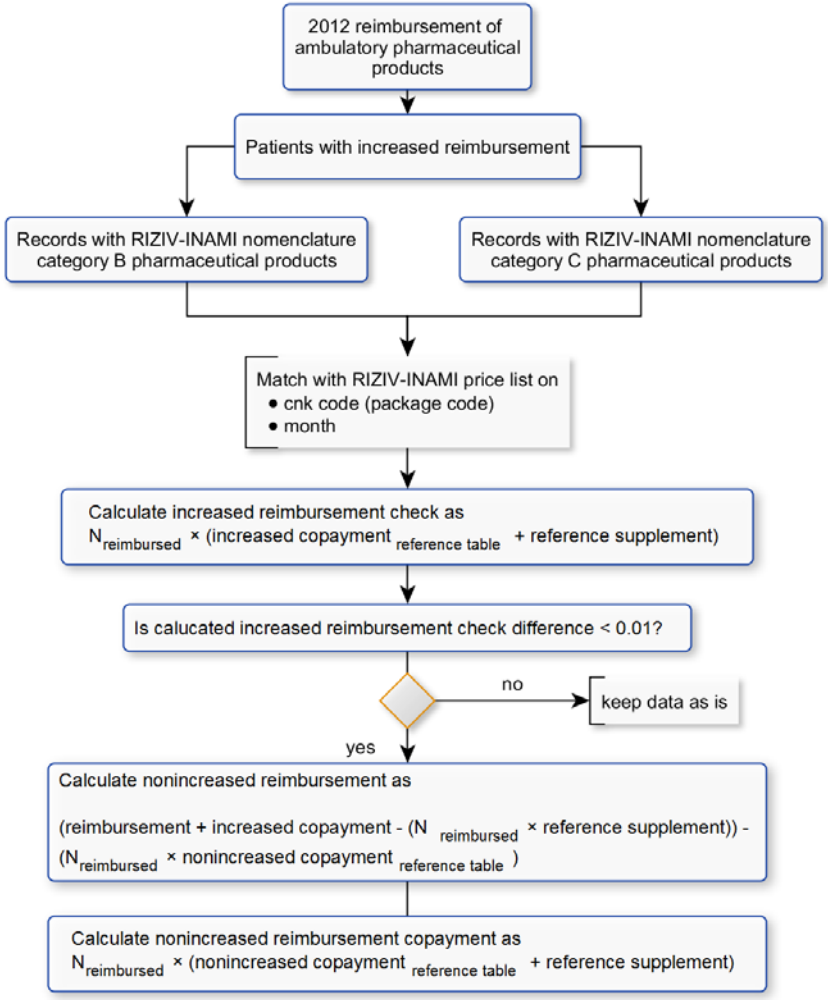
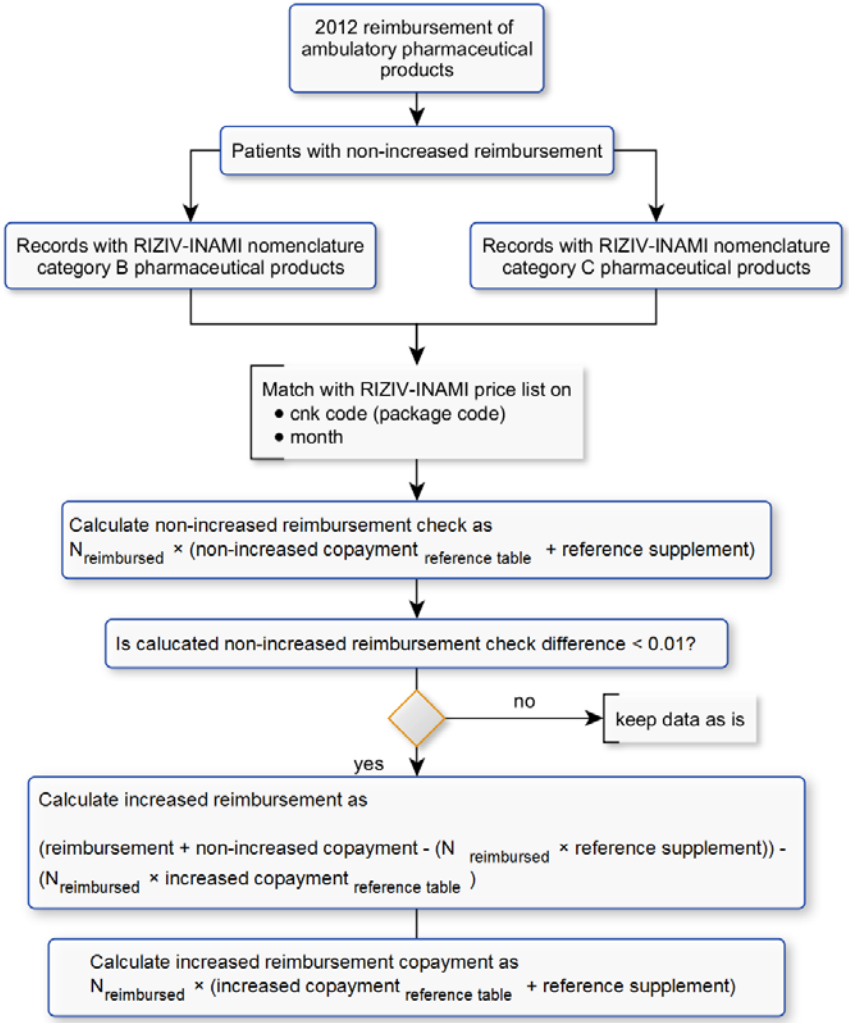


Figure 4 – Algorithm pharmaceutical products for patients without increased reimbursement



Negative values

For some individuals, the conversion from no entitlement to entitlement to increased reimbursement resulted in a negative value for the co-payment amount. In most cases, the co-payment amount before the conversion (so the value of the variable SS00160 in the data) was equal to zero although according to the nomenclature there should have been a positive value. Since the conversion algorithm starts from the reimbursement tariff code and not from the co-payment amount (which can be zero in the data), it is possible that after the conversion the co-payment amount that corresponds with entitlement to increased reimbursement becomes negative.

All records with a negative value for the co-payment amount after the conversion and with an original value for SS00160 ≥ 0 were set to zero.

2.7. Transferring characteristics of individuals to the household

All descriptive analyses and simulations are performed at the level of the de facto[b] household. However, characteristics such as age, gender, entitlement to increased reimbursement, chronic illness status etc. are individual characteristics. We attributed some of the individual characteristics to the de facto household of the individual: for example, a household is considered as being entitled to a guaranteed income as soon as one individual in the household is entitled to a guaranteed income.

A **sickness fund household** consists of the entitled person ('gerechtigde'/'titulaire') and his/her dependents. One de facto household may be composed of more than one sickness fund household.

Three characteristics need some further clarification. The first is unemployment, the second is employment status (salaried, self-employed or mixed) and the third is a single-parent household (see also Table 15).

- Unemployment was defined directly at the level of the household: a household is unemployed if the household's labour related income comes exclusively from an unemployment benefit. This information was derived from the fiscal data.
- A single-parent household was derived from the IMA population data and is defined as a household where there is only one entitled person ('gerechtigde'/'titulaire') who lives with descendants aged 24 years or less only.
- The employment status of the household was derived from the IMA population data. When the entitled persons of all sickness fund households ('gerechtigde'/'titulaire'; PP0045=cs3id) in a de facto household are self-employed then the household is also self-employed; when the entitled persons of all sickness fund households in a de facto household are salaried then the household is also salaried. A de facto household with salaried and self-employed entitled persons is called a mixed household. In some cases, no entitled person was found in the de facto household (N=1 040 households and 1 305 individuals). These households were attributed to a separate fourth category.

The variables 'unemployed' and 'single-parent household' are dummy variables, employment status is a categorical variables (with 4 possible values).

[b] Some descriptive results are at the level of the social MAB household which does not necessarily correspond to the de facto household.

Table 15 – Variables defined at the de facto household level

Definition	Source	Variable in database
Unemployed	Fiscal data	**Step 1: Selection of fiscal codes for unemployment (F_U^i) at an individual level** • Unemployment allowance: 2600, 3040, 2610, 2640, 2650 • Self-employed insurance: 2710 • Pre-pension: 2350, 2360, 2810, 2820, 3050 If $\sum(F_U^i)>1$ then value U^i equal to 1 If $\sum(F_U^i)=0$ then value U^i equal to 0 **Step 2: Selection of fiscal codes for income labour (F_L^i) at an individual level** • Salaries: 2400, 2420, 2450, 2500, 2490, 2510, 2590, 2670 • Sport income: 2730, 2740, 2770, 2780, 2840, 6580, 6590, 6880, 6890 • Managers: 4000, 4010, 4020, 4040, 4100, 4110, 4130, 4180, 4190, 4280 • Collaborating partner: 4500 • Self-employed: 6000, 6020, 6030, 6040, 6050, 6070, 6100, 6180, 6230, 6870, 6900, 6910, 6920, 6930, 6940, 6950 • Liberal professions: 6500, 6530, 6540, 6550, 6610, 6650, 6670 If $\sum(F_L^i)>1$ then value L^i equal to 1 If $\sum(F_L^i)=0$ then value L^i equal to 0 **Step 3: Unemployment at the level of the household (h)** • De facto household is unemployed if $\sum(Ui)>1$ and $\sum(Li)=0$
Single-parent household	IMA data - population	**Step 1: Selecting entitled persons of sickness fund household** If PP0045=CS3ID then head=1 If PP0045≠CS3ID then head=0 **Step 2: Selecting households with one entitled person who lives in a household with more than one person** • De facto household has one entitled person if $\sum(head) = 1$ and the household size>1 After step 2, the following households were excluded: **Step 3: Flagging dependent spouses and ascendants** • If PP1002 in (1 or 3) then flag_a=0 • If PP1002 ≠ (2 or 4) then flag_a=1 **Step 3: Excluding households with spouses and ascendants** • De facto household is flagged if $\sum(flag\_a) > 0$

Definition	Source	Variable in database
		Step 4: Flagging dependents not in charge of the head of the household • If PP1002=3 and PP0045≠ headID then flag_b=1 **Step 4: Flagging households with dependents linked to a head not living in the de facto household** • De facto household is flagged if ∑(flag_b) > 0 **Step 5: Flagging dependents aged<25 years** • If PP1002=3 and age>25 then flag_c=1 **Step 6: Flagging household with dependents aged>25 years** • De facto household is flagged ∑(flag_c) > 0
Affiliated to a sickness fund (salaried, self-employed or mixed)	IMA data - population	**Step 1: Self-employed individual** If 1st digit of PP0030=4 then value equal to 1 If 1st digit of PP0030≠4 then value equal to 0 **Step 2: Salaried individual** If 1st digit of PP0030=1 then value equal to 1 If 1st digit of PP0030≠1 then value equal to 0 **Step 3: Selection of head of sickness fund household** If PP0045=CS3ID then head=1 If PP0045≠CS3ID then head=0 **Step 4: Affiliation according to employment status of all heads of a sickness fund household in the de facto household** • De facto household is self-employed if ∑(head=1) = ∑(self-employed=1) • De facto household is salaried if ∑(head=1) = ∑(salaried=1) • De facto household is mixed if ∑(head=1) = ∑[(salaried=1)+(self-employed=1)] • A fourth category was added for de facto households without an entitled member.

3. WEIGHTING PROCEDURE

The EPS (without oversampling for persons aged 65 and more) is a representative sample for the Belgian population for the variables age and gender. The dataset with the oversampling for persons aged 65 and more supplemented with the other de facto household members is no longer representative for the Belgian population. Households with at least one individual aged 65 years or older and smaller households are oversampled compared to the population. Therefore, we applied a two-step weighting procedure that is based on the age and gender of all household members and on the size of the de facto household. The weights are based on the Belgian insured population (all members of a Belgian sickness fund) and counts per age, gender, and household size were made available by IMA.

The choice for applying weights at the level of the de facto household is motivated by the decision to perform all analyses at this level. Weights were calculated for the sample of households that had valid IMA and fiscal data (see section 2.4).

3.1. First step: weights based on the age and gender of the household members

Each household was assigned a category that reflected the age and gender of the household's members. For instance, a women and a man aged 29 years were assigned the category F29|M29. A larger number of categories was found in the Belgian population than in our sample. After applying the weights for each category, the number of households amounts to 4 908 318 and 3 941 398 in the Belgian population and in our sample, respectively.

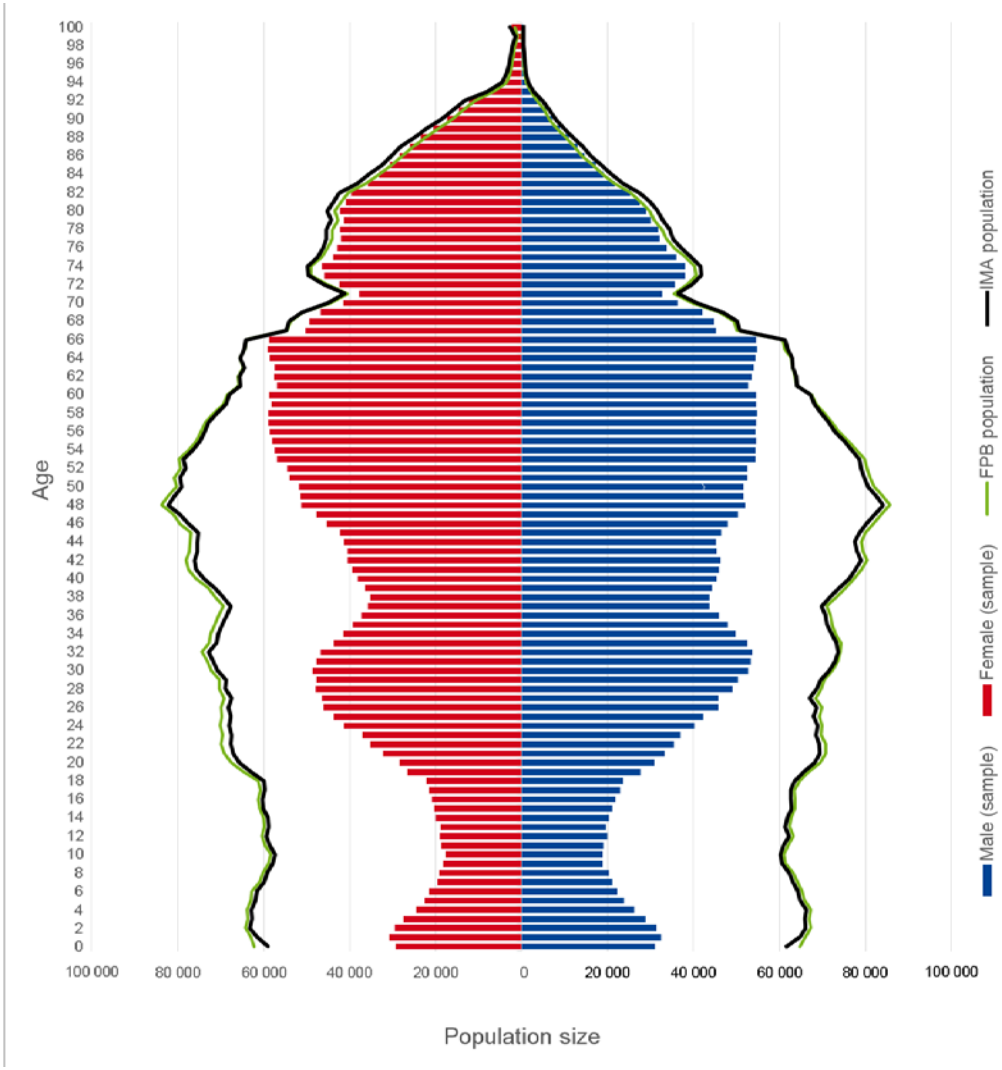
Table 16 – Number of households after the first step of the weighting procedure

	Belgian population	Sample	Sample weight based on the different categories
Categories	704 793	121 655	
Number of households	4 908 318	303 322	3 941 397

Source: IMA

When we apply the weights of this first step to our sample, individuals under the age of 66 are underrepresented (see Figure 5). The number of individuals obtained after using the weights amounts to 7 092 903. The difference between the Belgian insured population and our estimate is equal to 3 941 397 (35.7%).

Figure 5 – Population pyramid after applying the weights of the first step



3.2. Second step: adjusting weights based on the household size

Table 17 shows the coefficients that are used in the second step of the weighting procedure in order to correct for the household size.

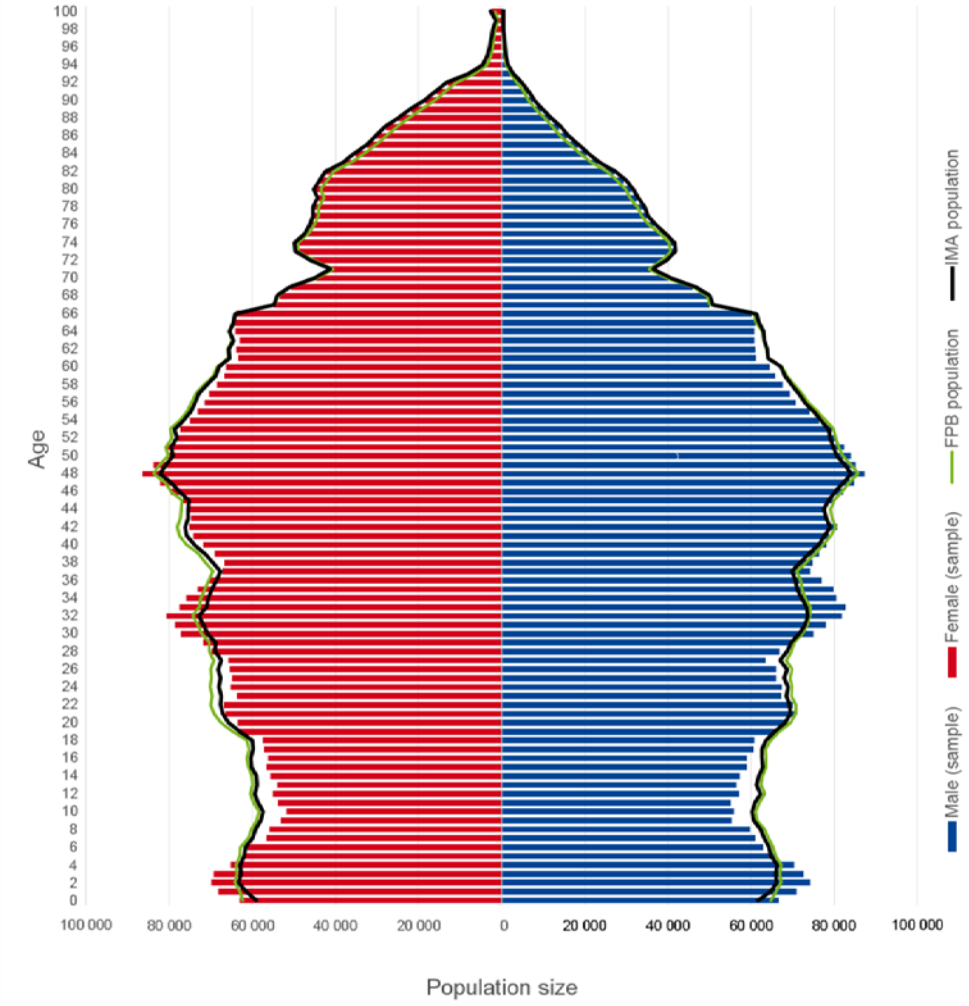
Table 17 – Adjustment coefficient for the second step of the weighting procedure

	Belgian population (1)		Weighted sample obtained in the first step (2)		Adjustment coefficient for the second step (1)/(2)
Household size	N households	%	N households	%	
1	1 930 913	38.77	1 846 178	46.84	1.04
2	1 442 373	28.96	1 385 020	35.14	1.04
3	693 130	13.92	432 590	10.98	1.60
4	592 606	11.90	233 460	5.92	2.53
5	218 618	4.39	29 746	0.75	7.34
6	68 495	1.38	9 032	0.23	7.58
7	21 024	0.42	3 120	0.08	6.73
8	7 478	0.15	1 205	0.03	6.20
9	2 960	0.06	540	0.01	5.48
10	1 175	0.02	226	0.01	5.19
11	593	0.01	108	0.00	5.49
12	305	0.01	71	0.00	4.29
13	148	0.00	40	0.00	3.70
14	89	0.00	19	0.00	4.68
15 or more	206	0.00	42	0.00	4.90
	4 980 113	100.0	3 941 397	100.0	

Source: IMA

After correcting the weights for the household size, a small oversampling of children younger than 6 years old and of adults in their thirties appeared (see Figure 6). The number of individuals in our sample obtained after adjusting for the household size amounts to 11 031 829. The difference between the second estimate and the Belgian insured population is equal to 28 (less than 0.001%).

Figure 6 – Population pyramid after applying the weights of the second step



3.3. Comparison of weighted estimates with real healthcare expenses

We compared the data on real healthcare expenditures in 2012[10] with weighted data[c] for persons included in the permanent sample (EPS) and with weighted data for our complete sample (EPS members extended with the persons from their MAB household after data cleaning). Please note that the results in columns 2 and 3 in Table 18 were calculated using two different weighting procedures. We applied individual weights to the EPS data and the household weights to the complete sample (see the description of the construction of the households' weights in section 3.1.1 and 3.1.2).

The RIZIV – INAMI expenditures excluding MAB reimbursements[d] recorded in the year report (see column 1) exceed the estimates based on our data (columns 2 and 3). The underestimation holds for the estimates based on the permanent sample (i.e. -1.27%) and based on the complete sample (- 2.51%). The computation of MAB reimbursements based on nomenclature codes included in the IMA dataset have a similar trend. MAB reimbursements are underestimated for the EPS members and for the complete sample and amount to 1.11% and 2.77%, respectively. Please note that for our simulations, MAB reimbursements at the level of the de facto household are recalculated in order to correct for possible incoherencies present in the data. The rationale behind this procedure and the steps performed are presented in section 4.

We observe that in comparison with the year report, the sample estimates overestimate patients' co-payments by 6.66% and 7.09% for persons in the permanent sample and for the complete sample, respectively.

We also computed the number and the share of persons entitled to increased reimbursements in our data. We find that the share of the eligible population amounts to 16.63% for persons in the permanent sample and to 15.05% for persons in the complete sample. The underestimation of the eligible population in the complete sample is more pronounced for RVV-BIM than for OMNIO.

[c] Comparison with adjusted data fitting the coverage of the MAB regulation is provided in section 4.3.

[d] In line with what was done in KCE report 80, the comparison with RIZIV – INAMI reimbursements[10] excludes the per diem price ('verpleegdagprijs'/'prix de la journée d'entretien') that amounted to € 5 180 920 000 (Column 1).

Table 18 – Healthcare expenditures in 2012 and weighted expenditure estimates

	Year report 2012 (1)[a]	EPS – individual weights (2)[b]		Total sample – household	weights (3)[b]
	Amount (€)	Amount (€)	% ((2 - 1)/1)	Amount (€)	% ((3 - 1)/1)
RIZIV – INAMI (without MAB reimbursements)	19 475 930 000	19 228 095 458	-1.27	18 987 818 044	-2.51
Co-payments (before MAB reimbursements)	1 999 611 000	2 132 726 721	6.66	2 141 322 625	7.09
MAB reimbursements	328 002 000	324 357 298	-1.11	318 931 090	-2.77
Increased reimbursement					
N persons	1 841 113	1 834 548	-0.36	1 660 732	-9.80
% of total	16.81	16.63		15.05	
RVV-BIM	1 561 861	1 561 643	-0.01	1 419 462	-9.12
OMNIO	279 252	272 905	2.27	241 270	-3.60

Source: Own calculations. [a] RIZIV – INAMI (2014)[10]. [b] MAB reimbursements are based on nomenclature codes; EPS = 'Permanente steekproef'/'Échantillon Permanent'

4. SETTING UP THE BASELINE SITUATION IN 2012

Starting from the merged IMA and fiscal data, we created a new **baseline dataset** using microsimulations. For a description of the basic idea of microsimulations, we refer to Chapter 6 in KCE Report 80.[2] We adjusted the raw data (i.e. including the data corrections described in section 2.5) to account as good as possible for two main shortcomings in the 2012 data. First, some crucial information on the maximum billing system in 2012 is not readily available, such as the selection of co-payments[e] that are included in the system. Second, some combinations of variables show inconsistencies. We specify the choices we have made in sections 4.2.1 and 4.2.2.

4.1. Co-payments included in the maximum billing counter

The variable SS00160 in the healthcare dataset gives the amount of co-payments per item that is reimbursed by the compulsory health insurance system. However, not all co-payments are included in the MAB counter. The selection of nomenclature codes to be excluded from the MAB system is however not straightforward. Only the main categories of services that are excluded from the MAB system are explicitly mentioned in Article 37sexies of the Health Insurance Law of 14 July 1994.[11]The Law does not provide details on specific items. We constructed the list of excluded codes (see Appendix 3) as follows:

- The main excluded categories that are mentioned in Article 37quinquies were identified. The nomenclature codes that could be unambiguously related to these categories were put on the exclusion list.
- For pharmaceuticals, a detailed analysis using the RIZIV – INAMI grouping of nomenclature codes ('groepdetail'/'détail de groupe') was performed and a number of codes were added to the exclusion list.
- The list of excluded codes obtained in the two previous steps was adapted according to the MAB counter created in KCE Report 80 and with information provided by two sickness funds (LMC and NVSM).

The amount of co-payments included in the MAB counter for each person is equal to the sum of all co-payments in 2012 (hence the sum of all amounts in variable SS00160) minus the sum of co-payments for the excluded codes.

It should, however, be kept in mind that neither RIZIV – INAMI nor the two contacted sickness funds could provide us with a validated list of codes that are excluded from the maximum billing counter. Moreover, some differences were found between both sickness funds.

4.2. Ceilings and reimbursement of co-payments of the different maximum billing subsystems

The system of maximum billing consists of different subsystems: the child MAB, the social MAB, the income MAB and the MAB for the chronically ill. The systems are not mutually exclusive and for some households, multiple subsystems apply.

4.2.1. Construction of the MAB ceilings in the different subsystems

Inconsistencies in entitlement to a maximum billing subsystem for members of the same de facto household

Variable PP3001 in the IMA population data gives the entitlement to a MAB subsystem at the level of a de facto household. Three values are possible: entitled to the social MAB (PP3001=1); entitled to the income MAB (PP3001=2) or entitled to the social and income MAB (PP3001=4). However, in some cases individuals of the same de facto household have different values for PP3001.

[e] We use the term co-payments for co-payments and coinsurance rates, unless otherwise mentioned.

In the sample used for the analyses, the number of unweighted and weighted households having an inconsistent value in PP3001 amounted to 4 158 (1.37 %) and 32 307 (0.6%), respectively. For these households the value of PP3001 was changed in such a way that entitlement to increased reimbursement and entitlement to the social MAB were made coherent with the 2012 regulation (see the section on the social MAB ceiling for further explanation).

Ceiling for the child MAB

All children aged 18 years or younger are allocated a ceiling of € 650. This ceiling is not income-related and is an individual right not transferable to other household members.

Handicapped children benefit from a reduced ceiling of € 450 instead of € 650. In 2012 the reduced ceiling applied to handicapped children who were entitled to an increased child allowance before 4 July 2002 – and still received it in 2012. We defined the latter group as children who received an increased child allowance (PP2004=1) that were aged between 10 and 18 years in 2012 and were entitled to increased reimbursement of healthcare expenditure. The number of unweighted and weighted households with at least one child eligible for the € 450 ceiling amounted to 1 951 and 16 720, respectively.

Social MAB ceiling

The social MAB ceiling is equal to € 450. As mentioned in section 2.5.2, we adjusted the data such that a person entitled to increased reimbursement is also entitled to the social MAB. The latter holds in 2012 for all individuals, except for:

- Handicapped children with a 66% disability;
- Handicapped persons with an integration allowance and with a partner who has an income.

For these two groups, the entitlement to the social MAB was granted only if the newly constructed variable on the entitlement to the social MAB was equal to one (section 2.5.2).

After adapting the data at the level of the individual (section 2.5.2), the following steps were performed:

- If all persons living in the de facto household (PP3009) are entitled to increased reimbursement then the household is categorized as eligible for the social MAB;
- If all persons living in the de facto household (PP3009) are not entitled to increased reimbursement then the household is categorized as eligible for the income MAB; and
- If some persons living in the de facto household (PP3009) are entitled to increased reimbursement and others are not, then the household is categorized as eligible for the social and income MAB.

In the final sample, data adjustments were performed for 8 170 unweighted households (90 251 weighted) corresponding to 2.69% of the total unweighted sample (and 1.81% of the total weighted sample).

Table 19 compares the MAB eligibility in the data with the MAB eligibility as adjusted on the basis of entitlement to increased reimbursement. The figures in bold represent the number of households for whom no changes in the data were required.

Table 19 – Comparison of the number of households between the MAB eligibility in the data and the MAB eligibility adjusted on the basis of entitlement to increased reimbursement

	MAB eligibility after adapting the data							
	Social MAB for the household		Income MAB for the household		Social and income MAB for different members of the household		Change compared with original data (row %)	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
MAB eligibility (PP3001) as in the original data								
Social MAB	**46 217**	**858 712**	395	8 722	393	3 982	1.7	1.5
Income MAB	1 157	22 076	**237 103**	**3 933 611**	660	6 411	0.8	0.7
Social and income MAB	936	11 302	471	5 453	**11 832**	**97 533**	10.6	14.7
Households having inconsistent values for the MAB eligibility	547	4 990	147	1 380	3 464	25 935	100	100
Total	48 857	897 080	238 116	3 949 166	16 349	133 861	2.08	1.36

Income MAB ceiling

The income MAB applies to all de facto households that are not entitled to the social MAB, or to the members of a de facto household who are not entitled to the social MAB. The ceiling for the income MAB is means-tested and takes into account the net taxable income of year T-3 of all members of the de facto household for the application of the MAB in year T.

Variable PP3002 in the IMA population data gives the MAB ceiling at the household level. In principle, all members of a de facto household have the same income MAB ceiling, except for the members who are entitled to the social MAB. However, in our sample 8 206 de facto households (85 459 weighted) have more than one value for the income MAB ceiling. Moreover, information on the MAB ceiling is only available for those de facto households that reached € 450 of total co-payments (included in the MAB counter). At that moment the sickness fund administrating the household file sends a request to the fiscal administration via RIZIV – INAMI to know the net taxable income of the household.

We used the linked IMA-fiscal database to compute the income MAB ceiling for all de facto households on the basis of the net taxable income of 2009. Households entitled to the social MAB only were always attributed a € 450 ceiling (social MAB ceiling). For other households (entitled to the income MAB only and to the social and income MAB), we computed the MAB ceiling that applies to the income MAB taking into account the income of all members of the de facto household.

Table 20 compares the new ceiling calculated on the basis of the fiscal data with the information available in our dataset (PP3001 and PP3002). For de facto households entitled to the social and income MAB (PP3001=4), Table 20 shows the value for the ceiling that applies to the income MAB. The table includes only households with one ceiling in the original data (295 116 unweighted). For 96.2% of the households there was a match between the MAB ceiling in the data (when the ceiling was known) and the MAB ceiling calculated with the fiscal data.

Table 20 – Comparison between the MAB ceiling in the data and the MAB ceiling adjusted on the basis of the fiscal data (for households with only one ceiling in the data)

		MAB eligibility after adapting the data (new value PP3001)											
		Social MAB for the household	Income MAB for the household					Social and income MAB for different members of the household					
		Social MAB € 450	€ 450	€ 650	€ 1 000	€ 1 400	€ 1 800	€ 450	€ 650	€ 1 000	€ 1 400	€ 1 800	Change compared with original data (row %)
MAB eligibility (PP3001) as in the original data	**MAB ceiling (PP3002) as in the original data**												
Social MAB	**Social MAB € 450**	46 215	241	110	26	6	6	199	130	40	7	11	1.2

	unknown	1	5	1	0	0	0	1	0	0	0	0	
Income MAB	**€ 450**	79	6 043	33	2	0	4	54	3	0	0	0	1.9
	€ 650	112	290	17 784	28	13	4	2	130	0	0	0	2.4
	€ 1 000	63	34	762	14 071	19	15	1	3	91	0	0	6.0
	€ 1 400	17	26	42	1180	9 406	18	0	0	4	45	1	12.0
	€ 1 800	5	95	107	104	1 722	35 482	1	1	1	6	75	5.4
	unknown	881	23 255	26 420	22 952	18 750	52 232	38	63	45	33	35	
Social and income MAB	**Social MAB € 450**	2	0	0	0	0	0	0	0	0	0	0	100
	€ 450	56	43	1	1	0	1	234	29	29	32	73	44.5
	€ 650	52	2	49	0	0	0	14	595	3	0	1	10.1
	€ 1 000	34	0	4	28	0	0	3	33	846	4	2	8.4
	€ 1 400	15	0	1	2	22	0	0	2	42	713	2	8.0
	€ 1 800	12	2	1	1	2	59	2	10	11	60	1954	4.8
	unknown	753	71	59	55	29	30	1 230	1 631	1 592	1 213	1 273	100
Households having inconsistent values for MAB eligibility	**€ 450**	7	3	0	0	0	0	105	0	0	0	0	100
	€ 650	3	0	17	0	0	0	1	174	2	0	1	100
	€ 1 000	3	0	0	13	0	0	1	3	130	0	0	100
	€ 1 400	0	0	0	1	4	0	0	0	3	53	0	100
	€ 1 800	0	0	0	0	0	17	1	3	1	11	317	100
	unknown	7	9	6	13	10	14	191	276	363	262	390	100
All		48 317	30 119	45 397	38 477	29 983	87 882	2 078	3 086	3 203	2 439	4 135	
Excluding unknown		46 675	6 779	18 911	15 457	11 194	35 606	618	1 116	1 203	931	2 437	4.8

Reduction in the MAB ceiling

A € 100 reduction of the ceiling is applied in all subsystems when a member of the de facto household benefits from the MAB for the chronically ill ('maximumfactuur chronisch zieken'/'maximum à facturer pour les malades chroniques'; variable PP3014) or from the status of a person with a chronic illness ('statuut van person met een chronische aandoening'/'statut de personne atteinte d'une affection chronique') (see details on the construction of the latter variable in section 5.2). The reduction of € 100 in the MAB ceiling, however, does not apply to the child subsystem when the ceiling is equal to € 450 (confirmed by experts from the socialist sickness fund).

4.2.2. Construction of MAB reimbursements

Basic principles

The following codes in the healthcare expenditure data made available by IMA represent MAB reimbursements: 781616, 781631, 781653, 781675, 781690, 781712, 781734, 81756, 781771, 781793, 781815, 781874, 771896, 781911, 781933 and 781955.

However, not all MAB reimbursements in the data are related to co-payments incurred in 2012. Co-payments paid at the end of the year T may be reimbursed by the sickness fund in the beginning of the year T+1. Consequently, part of the MAB reimbursements realised in 2012, relate to co-payments made in 2011 and part of co-payments incurred in 2012 were reimbursed only in 2013. Also the changes described in section 4.2.1 have an impact on the amount of MAB reimbursements. Therefore, we calculated MAB reimbursements according to the following principles.

Reimbursements

We computed total MAB reimbursements from all subsystems at the level of the de facto household (variable PP3009 – head of the MAB household) using the individual MAB counter, a MAB counter at the level of the household and MAB ceilings for each subsystem. The MAB reimbursements are equal to the amount of co-payments included in the relevant MAB counter minus the MAB ceiling. The following principles were applied to construct the MAB reimbursements:

- A co-payment is reimbursed only once in one of the different MAB subsystems.
- A co-payment that is not reimbursed in one subsystem is always added to the MAB counter used for the reimbursement of co-payments in the other subsystems.
- The reduction in the MAB ceiling of € 100 is applied if a person in the household is entitled to the chronic MAB or to the status of a person with a chronic illness.
- The reimbursement of co-payments for members of a de facto household benefiting from different MAB subsystems (for example social and income MAB or child and social MAB) was always calculated in the following order:
  - I. Social MAB: this is motivated by the fact that the MAB ceiling (€ 450/€ 350[f]) is lower than or equal to the MAB ceiling of all other subsystems. Moreover, in case a handicapped child with a MAB ceiling of € 450[g] lives in a household where all household members are entitled to the social MAB, and € 450 co-payments in the MAB child counter have been paid, the social MAB applies to all household members.
  - II. Income MAB (where all household members are entitled to the income MAB): the amounts of individual MAB counters are summed up and the respective ceiling is applied.

[f] If entitled to the chronic MAB or to the status of a person with a chronic illness.

[g] Please note that the reduction of € 100 in the MAB ceiling linked to the entitlement to the chronic MAB does not apply to the child subsystem.

III. Mixed household (entitled to social and income MAB):

III. 1. Social MAB (see point I);

III. 2. Income MAB. The counter for the income MAB includes the co-payments that were not reimbursed via the social MAB (previous step, see point III.1) plus the amount of the individual MAB counter for household members not entitled to the social MAB. MAB reimbursements are calculated as explained in point II.

IV. Child MAB for handicapped children (ceiling of € 450):

IV. 1. Living in a social MAB household: see rule for the social MAB in point I;

IV. 2. Living in an income MAB household:

IV. 2. i) With a MAB ceiling of € 450/€ 350: this is a similar situation to that of households entitled to the social MAB; see point I. Since the income MAB applies to all household members, the income MAB is calculated (also when the € 450 co-payments were made by the handicapped child);

IV. 2. ii) With a MAB ceiling larger than € 450: it is first checked whether the child has € 450 co-payments. If this is the case, the child MAB applies and the remaining co-payments of the members of the household plus the € 450 of the child are taken into account for the calculation of the MAB reimbursements of the other household members via the income MAB.

IV. 3. Living in a mixed household:

IV. 3. i) If the child is entitled to the social MAB: see rule for social MAB (point I);

IV. 3. ii) If the child is entitled to the income MAB: see rule for income MAB (point IV. 2. i and IV. 2. ii.).

V. Child MAB (ceiling of € 650/€ 550):

V. 1. Living in a social MAB household: see rule for the social MAB in point I;

V. 2. Living in an income MAB household:

V. 2. i) With a MAB ceiling of € 450/€ 350 or € 650/ € 550 since the income MAB applies to all household members, the income MAB is calculated;

V. 2. ii) With a MAB ceiling larger than € 650: it is first checked whether the child has € 650 co-payments. If this is the case, the child MAB applies and the remaining co-payments of the members of the household plus the € 650 of the child are taken into account for the calculation of the MAB reimbursements of the other household members via the income MAB.

V. 3. Living in a mixed household:

V. 3. i) If the child is entitled to the social MAB: see rule for social MAB in point I;

V. 3. ii) If the child is entitled to the income MAB: see rule for income MAB. (point IV. 2. I and IV. 2. ii.).

4.3. MAB reimbursements in the baseline situation: number of households and amount

Table 21 presents an overview of the baseline simulation results of the decomposed healthcare expenditures after applying the MAB regulation. Compared to the RIZIV – INAMI records, we obtain an underestimation of RIZIV – INAMI reimbursements and an overestimation of patient's co-payments (as was the case in the raw data, see section 3.1.3). The simulation model also overestimates the MAB reimbursements compared to the RIZIV – INAMI records. The overestimation in MAB reimbursements may be due to the fact that in our sample, households have higher co-payments.

Table 21 – Overview expenditures in the baseline situation

	RIZIV – INAMI 2012 (1)[a]	Baseline simulation (2)	
	Amount (€)	Amount (€)	% ((2 - 1)/1)
RIZIV – INAMI (without MAB reimbursements)	19 475 930 000	18 987 955 317	-2.51
Co-payments (before MAB reimbursements)	1 999 611 000	2 141 223 394	7.08
MAB reimbursements	328 002 000	361 829 676	10.31

Source: Own calculations. [a] RIZIV – INAMI (2014)[10, 12]

A more detailed look at the households with positive MAB reimbursements in the baseline situation is presented in Table 22 to Table 24 (columns 1 to 5). Direct comparisons between the results of the baseline situation produced by the simulation model with those of RIZIV – INAMI must be done with caution as the latter are less detailed than the former. In our data, we differentiated positive MAB reimbursements for households where all members shared the same MAB eligibility (column 1) and for households entitled to both the social and the income MAB (columns 2 to 5). Information on these 'mixed' households is provided as follows:

- Column 2 shows information about the reimbursements that mixed households received through the social MAB. It is further specified (in the rows) according to the ceiling that is applicable in the income MAB.
- Column 3 presents information about the reimbursements that mixed households received through the income MAB. It is further specified (in the rows) according to the ceiling that is applicable in the income MAB.
- Column 4 illustrates whether mixed households had MAB reimbursements via any of the two subsystems. Some households may receive benefits via the two subsystems.

In order to have an overall estimate on MAB reimbursements, column 5 shows information for each subsystem specified in the table rows, i.e. either the social MAB or the income MAB subdivided by the value of the ceiling. For instance, all reimbursements via the social MAB are grouped together in the first row. It equals the sum of the first row in column 2 and all the rows in column 3.

Table 22 shows that in the baseline situation there is a higher total number of households receiving MAB reimbursements than stated by the RIZIV – INAMI (i.e. 650 181 vs. 615 989). There is especially a higher number of households entitled to the income MAB with a ceiling of € 450 and € 650. There is a large correspondence between the number of households in the baseline and the RIZIV – INAMI for the social MAB and the other ceilings of the income MAB. For example, the number of households receiving reimbursements via the social MAB amounts to 176 328 (i.e. 154 100 in column 2 and 22 228 in column 3) which is nearly identical to that reported by the RIZIV – INAMI (i.e. 177 689).

The difference in the number of households in column 4 and the sum of columns 2 and 3 provides information on the number of mixed households that receives reimbursement both through the social and the income MAB. There are 5 911 households in this situation.

Table 22 – Number of households with MAB reimbursements in the baseline situation and in RIZIV – INAMI data

	MAB reimbursements in the baseline situation					RIZIV –INAMI (6)[a]
	All share same MAB right (1)	Mixed right: Social MAB (2)	Mixed right: Income MAB (3)	Mixed right: any sub-systems(4)	All cases confounded (5)[b]	All
Social MAB	154 100	N.A	N.A	N.A	176 328	**177 689**
Income MAB						
€ 450	133 234	2 249	5 737	5 946	138 971	**121 915**
€ 650	188 320	4 363	7 529	9 684	195 841	**181 278**
€ 1 000	76 590	5 073	3 483	7 460	79 000	**76 814**
€ 1 400	25 939	4 060	1 012	4 841	24 829	**24 844**
€ 1 800	36 490	6 483	1 430	7 576	30 559	**33 449**
Total	614 673	22 228	19 190	35 507	-	**615 989**

Source: Own calculations. [a] RIZIV – INAMI (2014)[12]. [b] The household can be counted more than once. For instance, if a household received reimbursements via the social MAB and an income MAB of € 650 will be included in the total for the social MAB and the € 650 income MAB. N.A=Not applicable.

Table 23 and Table 24 compare the total and the average amount of MAB reimbursements in the different MAB subsystems. With respect to the total MAB reimbursements, the most pronounced difference between RIZIV – INAMI data and our baseline situation is found for the social MAB and the € 450 ceiling of the income MAB (see columns 5 and 6). The latter implies that in our simulation, low-income households have higher average reimbursements via the MAB system as is the case for the social MAB (see Table 24), or the average amount is correct but the number of recipients is overestimated as is the case for the € 450 ceiling of the income MAB (see Table 22).

When we look at the average amount of MAB reimbursements per household, the difference between our simulation and RIZIV – INAMI data is particularly high for households receiving MAB reimbursements via the social MAB (i.e. € 433.66 vs € 382.69). Moreover, an important higher simulated average reimbursement is found for households in the € 1 000 ceiling of the income MAB, while a lower simulated amount is estimated for households in the € 1 800 ceiling of the income MAB.

Table 23 – Total MAB reimbursements in the baseline situation and in RIZIV – INAMI data

	MAB reimbursements in the baseline situation					RIZIV – INAMI (6)[a]
	All share same MAB right (1)	Mixed right: Social MAB (2)	Mixed right: Income MAB (3)	Mixed right: any sub-systems(4)	All cases confounded (5)[b]	All
Social MAB	66 598 786	N.A	N.A	N.A	76 466 729	**67 999 000**
Income MAB						
€ 450	71 208 495	1 062 232	2 133 457	3 195 690	73 341 953	**63 260 000**
€ 650	116 276 784	2 036 515	3 954 268	5 990 782	120 231 052	**111 688 000**
€ 1 000	48 989 703	2 103 036	2 238 935	4 341 971	51 228 638	**46 557 000**
€ 1 400	15 330 715	1 757 447	589 297	2 346 744	15 920 012	**14 701 000**
€ 1 800	19 771 509	2 908 712	1 015 071	3 923 783	20 786 581	**20 352 000**
Total	338 175 993	9 867 942	9 931 028	19 798 971	357 974 963	**324 557 000**

Source: Own calculations. [a] RIZIV – INAMI (2014)[12]. [b] The household can be counted more than once. For instance, if a household received reimbursements via the social MAB and an income MAB of € 650 will be included in the total for the social MAND and the €650 income MAB. N.A=Not applicable.

Table 24 – Average amount of MAB reimbursements per household in the baseline situation and in RIZIV – INAMI data

Healthcare expenditures	MAB reimbursements in the baseline situation					RIZIV – INAMI (6)[a]
	All share same MAB right (1)	Mixed right: via Social MAB (2)	Mixed right: via Income MAB (3)	Mixed right: any sub-systems(4)	All cases confounded (5)[a]	All
Social MAB	432.18	N.A	N.A	N.A	433.66	**382.69**
Income MAB						
€ 450	534.46	472.32	371.89	537.43	527.75	**518.89**
€ 650	617.44	466.74	525.22	618.64	613.90	**616.11**
€ 1 000	639.64	414.56	642.75	582.01	639.77	**606.10**
€ 1 400	591.03	432.87	582.48	484.79	590.71	**591.73**
€ 1 800	541.83	448.68	709.93	517.90	548.17	**608.45**
Total	550.17	443.94	517.50	557.60	550.58	**526.89**

Source: Own calculations. [a] RIZIV – INAMI (2014)[12]. [b] The household can be counted more than once. For instance, if a household received reimbursements via the social MAB and an income MAB of € 650 will be included in the total for the social MAND and the €650 income MAB. N.A=Not applicable.

5. IMPUTATION OF CHANGES IN SOCIAL PROTECTION MECHANISMS BETWEEN 2012 AND 2016 IN THE DATA

Several changes in social protection mechanisms were introduced in 2014. Hereafter we describe how those measures were taken account of through different simulations. The starting point for our analysis was the baseline situation as previously described (section 4). Between 2014 and 2016 no major changes were identified.

5.1. Child MAB for handicapped children

Since 1 January 2014, the eligibility to the lower ceiling of € 450 for the child MAB was extended to all children with a physical or mental handicap of at least 66%. We defined the latter group as children who received an increased child allowance (PP2004=1) that were aged 18 years or younger in 2012 and were entitled to increased reimbursement of healthcare expenditures. The number of unweighted and weighted households with at least one child eligible for the € 450 ceiling amounted to 2 966 and 26 401, respectively.

5.2. Status of a person with a chronic illness

On 1 January 2013, a new status for persons with a chronic illness (‘statuut van persoon met een chronische aandoening’/‘statut de personne atteinte d'une affection chronique’) was introduced.

Table 25 shows how we simulated eligibility for this status in the 2012 data. The status is granted at an individual level but the advantages are extended to all members of the household. We proceeded in two steps:

- A dummy variable with a value of one was constructed for each person that fulfilled the criteria 1 or 2 (see Table 25). If the criteria were not fulfilled then the variable is equal to zero.
- If a person is eligible to the status (individual dummy equal to one), the household dummy is equal to one for all persons living in the de facto household (sharing the same head of the household (PP3009)).

Table 25 – Eligibility criteria and accompanying entitlement to the status of person with a chronic illness

Criteria	Eligibility	Construction of the variable
1	Total healthcare expenses for services that are partially or totally reimbursed by the compulsory health insurance amounted to a minimum of € 300* during eight consecutive trimesters (in years T-1 and T-2).	• The chronic status was computed on data for 2012. We used information on reimbursements from the compulsory health insurance (SS00060) and co-payments (SS00160) for 2010 and 2011. • A limited number of services that are covered by the compulsory social health insurance are not taken into account when determining eligibility. We constructed a list of the excluded services that was validated with a list provided by the sickness funds (see Appendix 4).
2	Or: The person benefited from a lump sum allowance for persons with a chronic illness in the previous year. The status is granted for two years.	If one of the following RIZIV – INAMI billing codes for the lump sum chronically ill in 2011 was equal to one: 740014, 740036, 740051, 740073, 740095, 40110, 740132, 740154, 740176, 740235
3	Or: The person suffers from a rare disease and his/her healthcare expenses exceed € 300 during eight consecutive trimesters. The status is granted for 5 years.	The IMA database does not allow to find out whether someone has a rare disease.

*Source: Royal Decree of 15 December 2013[13]. * From 1 January 2014 onwards, the ceiling of € 300 is subjected to indexation (based on the health index)*

5.3. Increased reimbursement of medical expenses: household definition applicable in 2014

The entitlement to increased reimbursement is defined at the level of the 'reference' household. The 'reference' household is, however, defined differently for individuals who are granted eligibility based on a specific condition (e.g. being orphan) or the receipt of a specific allowance (e.g. subsistence income) on the one hand, and households with an income below a threshold related to the number of household members on the other hand.

Moreover, in 2014, the policy reform of the system of increased reimbursement comprehends a change in the definition of the 'reference' household. Table 26 provides an overview of the eligibility condition, and the corresponding household definitions in 2012 and 2014.

For households which are automatically entitled to increased reimbursement given that one of its members receives a specific means-tested allowance or has a specific condition, the reference household definition did not change between 2012 and 2014.

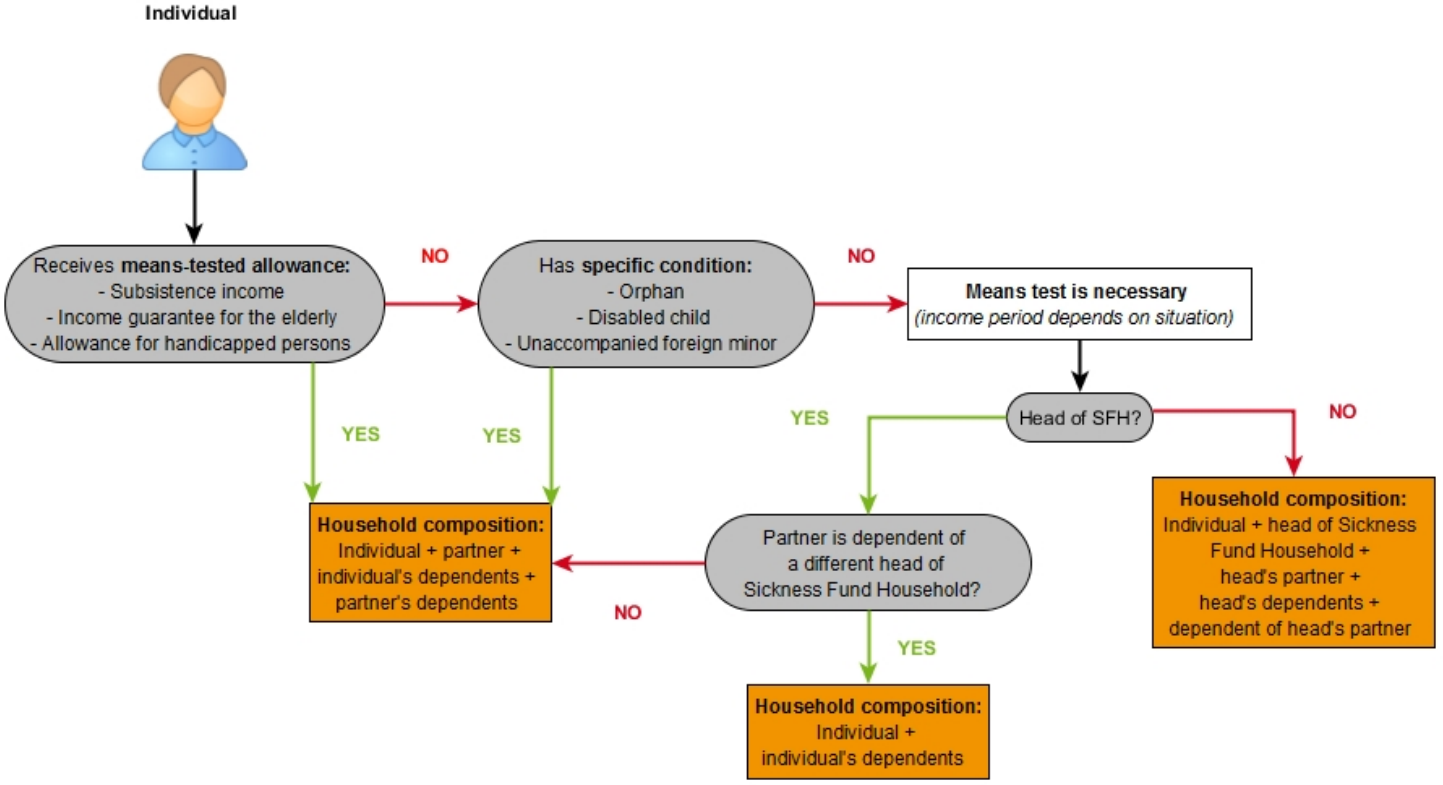
For households which are eligible for increased reimbursement because of their low income level, there is a change in the definition of the 'reference' household. Before 2014, the 'reference' household in the OMNIO-system was defined as the de facto household. As from 2014 onwards, the 'reference' household generally consists in the applicant, his/her head of the sickness fund household, the partner of the head and their dependents (see section 5.3.1 for more details). This new household concept is potentially more restrictive than the de facto household.

For households in which one of the members has a specific condition, but a means-test remains a necessary condition for entitlement to increased reimbursement, the opposite is true. The new reference household is potentially more inclusive than before. Before 2014 the reference household did not automatically include the head of the sickness fund household of the applicant, whereas the head is included since 2014.

5.3.1. Household concept as from 2014

Since 1 January 2014, the definition of the household that is entitled to increased reimbursement depends on whether eligibility depends on a means test or not. A schematic overview is provided in Figure 7.

Figure 7 – Household definition for entitlement to increased reimbursement as from 2014



In case **eligibility is granted to an individual because he/she has a specific condition** or receives a specific means-tested allowance, the 'reference' household includes his/her partner[h], and the potential dependents of the eligible individual and the partner. If the person who benefits from the specific allowance or who has the specific condition is a dependent person, the entitlement does not extend to his/her head of the sickness fund household.

In case **the eligibility to increased reimbursement is granted after a means-test,** performed by the sickness fund, the 'reference' household consists of the applicant's head of sickness fund household (possibly, but not necessarily the applicant himself/herself), the head's partner (unless the partner is a dependent of a different head) and their dependents. Being in a specific condition (e.g. being retired) is still important for the income concept that is used in the means test.

5.3.2. Definition of the new household concept in the data

We created the new household definition as follows:

1. We select all heads of a sickness fund household (an individual is defined as head if cs3id = pp0045) and link partners to each other. Partners are primarily identified based on the legal information recorded in the tax assessment of 2012. This information refers to the situation on 1 January 2012. Two individuals who live in the same MAB household (value for pp3009 is the same for all individuals) and who satisfy one of the following conditions are considered as partners:
    a. 2 individuals with a joint tax assessment, excluding individuals who indicate to be (de facto) divorced (IPCAL code A0180 = 1 or A0190 = 1).
    b. 2 individuals with separate tax assessments who during the previous year (i.e. between 2 January 2011 and 31 December 2011) got married (IPCAL code A0030 = 1) or entered into a legal cohabitation (IPCAL code A0070 = 1).
    c. 2 individuals with separate tax assessments, one indicating to be an international civil servant (IPCAL code A0200 = 1), the other indicating to be married to an international civil servant (IPCAL code A0210 = 1).
    d. 2 individuals who were married or legally cohabitating, but where one partner died in 2011. In this case, the partners can have separate tax assessments. One assessment for the person who is still alive, in which it is indicated that his/her partner died (IPCAL code A0110 = 1). One assessment for the deceased partner (IPCAL code A0220 = 1 and A0270 ≠ 1).
    e. A de facto household with exactly 2 heads of a sickness fund household who do not satisfy the above rules, who have an age difference of 20 years or less (based on birth date PP0015), unless they both indicate to be (de facto) divorced (IPCAL codes (A0140 = 1 and A150 = 1) or (A0160 = 1 and A170 = 1) or (A0180 = 1 and A190 = 1)).
    f. 2 individuals indicating to be partners based on the IMA data. In this case only 1 of the partners is head of a sickness fund household (variable PP1002 = 1) and the other person is a dependent partner (variable PP1002=2).
2. For all identified couples, we link dependents to their heads. We attribute a dependent to one of the partners of the couple if he/she has a value for PP0045 equal to the individual identifier (cs3id) of the partner.

[h] Partners are defined as any two persons who live together (based on records from the National Register), who form a de facto household and who are not related in the third degree or less. Legally cohabitating individuals and married individuals are considered to be partners.

3. All heads of a sickness fund household who have no partner as specified above are considered to be single. We attribute the following dependents to them:
    g. We relate a dependent to the single head if he/she has a value for PP0045 equal to the individual identifier (cs3id) of the head.
    h. We relate dependents from a missing sickness fund head (the head is missing if for a value of PP0045, there is no corresponding individual with cs3id = PP0045) to a single head who lives in the same de facto household (value for PP3009 is the same for all individuals) and who is observed in the data. Such a situation most frequently occurs for (de facto) divorced individuals, where one head (recently) moved out. It is possible that children are fiscally dependent on one partner and are dependent on the other partner for the sickness fund. The idea is to limit the number of new households consisting only of children and hence try to attribute them to a sickness fund head wherever realistic. We do this under a set of restrictive conditions:
        i. There are dependents with a missing head present in the de facto household.
        ii. There is an inconsistency between the number of dependents declared in the fiscal data (recorded by IPCAL codes A0300, A0320, A0340, A0430) and the sickness fund data (based on variable PP0045, see also point 3.a). The number of dependents based on the sickness fund data is below the number of dependents based on the fiscal data.
        iii. There is a correspondence between the number of dependents with a missing head in the de facto household and the number of missing dependents in the tax assessment.
    i. If a head is (de facto) divorced (IPCAL codes A0140 = 1 or A0160 = 1 or A0180 = 1), the tax assessment can be silent on the number of dependents. Therefore we link a divorced head to the dependents with a missing head living in the same de facto household.
2. The remaining dependents of a missing sickness fund head, who are not yet linked to a different head of sickness fund household present in the dataset, are considered to form a household with the other dependents from the same missing head

Table 26 – Eligibility criteria and household composition for increased reimbursement: changes between 2012 and 2014

Eligibility conditions		Household composition		Detailed in data
Until 31/12/2013	**Since 1/1/2014**	**Until 31/12/2013**	**Since 1/1/2014**	
Specific allowance				
1. Subsistence income ('leefloon'/''revenu d'intégration')				
2. Support from public welfare centres ('steun verleend door een openbaar centrum voor maatschappelijk welzijn (OCMW)'/'secours accordés par les centres publics d'action sociale (CPAS)')				
During at least 3 consecutive months or at least 6 interruptive months during 12 consecutive calendar months	During at least 3 consecutive months	Individual + partner + individual's dependents + partner's dependents	No change	Keep situation of 2012
3. Income guarantee for the elderly ('inkomensgarantie voor ouderen of gewaarborgd inkomen voor bejaarden'/'garantie de revenus aux personnes âgées ou revenu garanti aux personnes âgées')				
4. Allowance for handicapped persons: income-replacement allowance, integration allowance or allowance for assistance to the elderly ('inkomensvervangende tegemoetkoming, integratietegemoetkoming en tegemoetkoming voor hulp aan bejaarden'/'allocation de remplacement de revenus, allocation d'intégration et allocation d'aide aux personnes âgées')				
Receipt of benefit	No change	Individual + partner + individual's dependents + partner's dependents	No change	Keep situation of 2012
Being in a specific condition				
1. Children with a physical or mental handicap of at least 66% ('lichamelijke of geestelijke ongeschiktheid van ten minste 66 % van een kind'/'incapacité physique ou mentale d'au moins 66 % dont est atteint un enfant')				
2. Unaccompanied foreign minor ('niet-begeleide minderjarige vreemdeling'/'mineur étranger non accompagné')				
No means test required	No change	Individual + partner + individual's	No change	Keep situation of 2012

Eligibility conditions		Household composition		Detailed in data
Until 31/12/2013	Since 1/1/2014	Until 31/12/2013	Since 1/1/2014	
		dependents + partner's dependents		
3. Orphans ('wezen'/'orphelins')				
Means test required (see below)	No means test required	Individual + partner + individual's dependents + partner's dependents	No change	Keep situation of 2012
Means test required				
Individual is in a specific condition:				
1. Pensioners ('gepensioneerden'/'pensionnés')				
2. Widow(er)s ('weduwnaars of weduwen'/'veufs ou veuves')				
3. Single parent households ('eenoudergezin'/'famille monoparentale'), possibly including individuals living in a community				
4. Handicapped persons ('personen met een handicap'/'les personnes handicapées')				
5. Disabled persons ('invaliden'/'invalides')	*5. + 6. One year of disability, of unemployment or both ('arbeidsongeschikt of een werkloze in gecontroleerde werkloosheid'/' en incapacité de travail ou chômeur en chômage contrôlé')*			
6. Entirely unemployed for at least one year ('werkloze in gecontroleerde werkloosheid gedurende ten minste een jaar de hoedanigheid van volledig werkloze'/''chômeur en chômage contrôlé depuis un an')				
7. Beneficiaries of the heating allowance ('rechthebbende op een verwarmingstoelage'/'bénéficiaire d'une allocation de chauffage')	/			
8. Residents aged 65 years or older ('resident die ten minste vijfenzestig jaar oud is'/'résident âgé de 65 au moins')	/			
/	*9. Beneficiaries of a disability allowance and other associated categories*			

Eligibility conditions		Household composition		Detailed in data
Until 31/12/2013	**Since 1/1/2014**	**Until 31/12/2013**	**Since 1/1/2014**	
	('rechthebbende op een invaliditeitsuitkering en de daaraan gelijkgestelde categorieën'/'bénéficiaire d'indemnités d'invalidité et les catégories y assimilées')			
Recent monthly income of all household members below a ceiling that depends on the number of household members	No change	Individual + partner + individual's dependents + partner's dependents	Individual + his/her head of sickness fund household (possibly him/herself) + head's dependents + head's partner + dependents of head's partners (the latter two if the head's partner is not dependent on a different head of sickness fund household)	Change into account taken
All other Individuals:				
Gross income of T-1 of all household members below a ceiling that depends on the number of household members	No change	All individuals of the de facto household	Individual + his/her head of sickness fund household (possibly him/herself) + head's dependents + head's partner + dependents of head's partners (the latter two if the head's partner is not dependent on a different head of sickness fund household)	Change into account taken

Sources: RIZIV – INAMI (2014)[6] Royal Decree of 1 April 2007[7], Royal Decree of 15 January 2014[8]

APPENDICES

APPENDIX 1. IMA DATA

Appendix 1.1. Population data

Zone	Recoded	Label zone
PP0010	RECODED	N° identificatie rechthebbende
PP0015		Geboortejaar
PP0020		Geslacht
PP0025		NIS code
PP0030		KG1
PP0035		KG2
PP0040		Jaar-maand van overlijden
PP0045	RECODED	N° identificatie titularis
PP0050		Referentie zending
PP1002		Code gerechtigde of persoon ten laste
PP1003		Sociale toestand op de datum van de model E
PP1004		Code werkloosheid
PP1008		Aard/bedrag inkomen
PP1009		Oorsprong erkenning als mindervalide
PP1010		OMNIO
PP2001		Forfait B verpleegkundige zorgen
PP2002		Forfait C verpleegkundige zorgen
PP2003		Kinesitherapie E of fysiotherapie
PP2004		Verhoogde kinderbijslagen
PP2005		Toelage voor de integratie van gehandicapten (cat III of IV)
PP2006		Toelage voor hulp aan ouderen (cat III IV of V)
PP2007		Uitkering hulp aan derden
PP2008		Uitkering voor primaire arbeidsongeschiktheid of invaliditeitsuitkering
PP2009		Forfaitaire uitkering hulp aan derden
PP2010		Criterium hospitalisatie (120 dagen)
PP2011		Criterium hospitalisatie (6 hospitalisaties)
PP3001		Recht MAF Gezin
PP3002		Categorie MAF Gezin
PP3003		Recht MAF Individu
PP3004		Terugbetaling en plafond – gezin
PP3005		Terugbetaling en plafond – individu

Zone	Recoded	Label zone
PP3006		Datum recht MAF
PP3007		Mono of mixed gezin
PP3008		Type gezin
PP3009	RECODED	Nummer gezinshoofd MAF
PP3010		Recht op gewaarborgd inkomen, inkomensgarantie voor oudere of op het leefloon
PP3011		Recht op toelage van gehandicapten
PP3012		Meer dan 6 maanden werkloosheidsuitkering
PP3013		Recht op hulp van OCMW
PP4001		Aantal dagen werkloosheid
PP4002		Aantal dagen arbeidsongeschiktheid
PP4003		Aantal dagen invaliditeit

Appendix 1.2. Healthcare expenditure data and Pharmanet

Zone	Recoded	Label zone
SS00010	RECODED	N° identificatie rechthebbende
SS00015		Begindatum prestatie/leveringsdatum
SS00020		Nomenclatuurcode/code categorie
SS00030		Bron van de gegevens
SS00035		Code documenten C
SS00040		Suffix code documenten C
SS00045		Code documenten N
SS00050		Aantal gevallen/hoeveelheid
SS00055		Aantal dagen
SS00060		Bedrag terugbetaling
SS00065	RECODED	Zorgverstrekker + kwalificatie
SS00070	RECODED	Voorschrijver + kwalificatie
SS00075		Nummer instelling
SS00080		Dienst/Galenische vorm magistrale bereiding
SS00095		KG1
SS00100		KG2
SS00110		Opnamedatum
SS00115		Ontslagdatum
SS00120		Type factuur
SS00125		Datum laatste prestatie
SS00130		Betrekkelijke verstrekking
SS00135		Nummer product

Zone	Recoded	Label zone
SS00140		Normcode prestatie
SS00145		Nacht-WE-tarief of niet
SS00160		Persoonlijk aandeel patiënt
SS00165		Supplement/verminderde terugbetaling
SS00170		Nummer implantaat
SS00175		Uitgestelde levering
SS00180		Bedrag verminderde terugbetaling
SS00185		Indicator DCI

APPENDIX 2. FISCAL DATA

Appendix 2.1. Layout fiscal data

IPCAL codes				Label zone
A0010	B0010	10	Personalia	Ongehuwd en niet wettelijk samenwonend
A0020	B0020	20	Personalia	Gehuwd
A0030	B0030	30	Personalia	Huwelijk in 2011
A0040	B0040	40	Personalia	echtgenoot met bestaansmiddelen <= 2.890 €
A0050	B0050	50	Personalia	echtgenoot met bestaansmiddelen > 2.890 €
A0060	B0060	60	Personalia	Wettelijk samenwonend
A0070	B0070	70	Personalia	Verklaring wettelijke samenwoning in 2011
A0080	B0080	80	Personalia	partner met bestaansmiddelen <= 2.890 €
A0090	B0090	90	Personalia	partner met bestaansmiddelen > 2.890 €
A0100	B0100	100	Personalia	Weduwnaar, weduwe (of gelijkgestelde)
A0110	B0110	110	Personalia	Overlijden partner in 2011
A0120	B0120	120	Personalia	gemeenschappelijke aanslag
A0130	B0130	130	Personalia	afzonderlijke aanslagen
A0140	B0140	140	Personalia	Uit de echt gescheiden (of gelijkgestelde)
A0150	B0150	150	Personalia	in 2011
A0160	B0160	160	Personalia	Van tafel en bed gescheiden
A0170	B0170	170	Personalia	in 2011
A0180	B0180	180	Personalia	Feitelijk gescheiden
A0190	B0190	190	Personalia	in 2011
A0200	B0200	200	Personalia	Internationale ambtenaar > 9.470 €
A0210	B0210	210	Personalia	Partner internationale ambtenaar
A0220	B0220	220	Personalia	Overlijden belastingplichtige
A0230	B0230	230	Personalia	was gehuwd of wettelijk samenwonend
A0240	B0240	240	Personalia	was in 2011 weduwnaar geworden
A0250	B0250	250	Personalia	gemeenschappelijke aanslag

IPCAL codes				Label zone
A0260	B0260	260	Personalia	afzonderlijke aanslagen
A0270	B0270	270	Personalia	was niet gehuwd of WS
A0280	B0280	280	Personalia	Handicap belpl.
A0290	B0290	290	Personalia	Handicap echtgenote of WS
A0300	B0300	300	Personalia	Aantal kinderen ten laste (niet co-ouderschap)
A0310	B0310	310	Personalia	Aantal gehandicapte kinderen ten laste (niet co-ouderschap)
A0320	B0320	320	Personalia	Andere personen ten laste
A0330	B0330	330	Personalia	Handicap andere persoon ten laste
A0340	B0340	340	Personalia	Co-ouderschap ten laste
A0350	B0350	350	Personalia	Handicap kind co-ouderschap ten laste
A0360	B0360	360	Personalia	Co-ouderschap niet ten laste
A0370	B0370	370	Personalia	Handicap kind co-ouderschap niet ten laste
A0380	B0380	380	Personalia	Kinderen < 3 jaar zonder bewakingskosten
A0390	B0390	390	Personalia	Handicap kind < 3j.zonder bewakingskosten
A0430	B0430	430	Personalia	Ascendenten ten laste
A0440	B0440	440	Personalia	Handicap ascendenten ten laste
A0540	B0540	540	Personalia	Co-ouderschap ten laste kinderen < 3 jaar zonder bewakingskosten
A0550	B0550	550	Personalia	Co-ouderschap ten laste handicap kinderen < 3 jaar zonder bewakingskosten
A0580	B0580	580	Personalia	Co-ouderschap niet ten laste kinderen < 3 jaar zonder bewakingskosten
A0590	B0590	590	Personalia	Co-ouderschap niet ten laste handicap kinderen < 3 jaar zonder bewakingskosten
A1000	B1000	1000	Onroerende	KI van de eigen woning onderworpen aan de OV
A1001	B1001	1001	Onroerende	Geïndexeerd K.I.
A1010	B1010	1010	Onroerende	K.I. niet onderworpen aan de OV
A1011	B1011	1011	Onroerende	Geïndexeerd K.I.
A1061	B1061	1061	Onroerende	Geïndexeerd en verhoogd KI
A1071	B1071	1071	Onroerende	Geïndexeerd KI
A1081	B1081	1081	Onroerende	Geïndexeerd KI
A1091	B1091	1091	Onroerende	Geïndexeerd KI

IPCAL codes				Label zone
A1101	B1101	1101	Onroerende	Aanvullende huuropbrengst
A1111	B1111	1111	Onroerende	Geïndexeerd gedeelte
A1121	B1121	1121	Onroerende	Geïndexeerd K.I.
A1131	B1131	1131	Onroerende	Aanvullende huuropbrengst
A1140	B1140	1140	Onroerende	Erfpacht- of opstalvergoedingen
A1151	B1151	1151	Onroerende	Geïndexeerd K.I.
A1161	B1161	1161	Onroerende	Aanvullende huuropbrengst
A1251	B1251	1251	Onroerende	Totaal
A1331	B1331	1331	Onroerende	Totaal
A1690	B1690	1690	Diverse	verwezenlijkt vanaf 12.1.2009
A1693	B1693	1693	Roerende	10%
A1695	B1695	1695	Roerende	25%
A1697	B1697	1697	Roerende	15%
A1705	B1705	1705	Roerende	Gezamenlijk belastbare netto roerende inkomsten
A1710	B1710	1710	Diverse	Meerwaarden belastbaar tegen 16,5 %
A1740	B1740	1740	Diverse	Meerwaarden van deelnemingen buitenlandse vennootschap
A1892	B1892	1892	Diverse	voor RIZ Vak 4: gezamenlijk belastbaar
A1895	B1895	1895	Diverse	afzonderlijk belastbaar tegen 25%
A1897	B1897	1897	Diverse	afzonderlijk belastbaar tegen 15%
A1898	B1898	1898	Diverse	afzonderlijk belastbaar tegen 10%
A1920	B1920	1920	Diverse	Niet gekapitaliseerde onderhoudsuitkeringen (100%)
A1930	B1930	1930	Diverse	Achterstallige uitkeringen (gerechtelijke beslissing)
A1940	B1940	1940	Diverse	Gekapitaliseerde uitkeringen (fictief jaarbedrag)
A2020	B2020	2020	Diverse	Nog niet afgetrokken verliezen vorige vijf jaren
A2022	B2022	2022	Diverse	Netto-inkomen (positief of negatief)
A2030	B2030	2030	Diverse	Belastbaar bedrag
A2050	B2050	2050	Diverse	Meerwaarden belastbaar tegen 33%
A2060	B2060	2060	Diverse	Meerwaarden belastbaar tegen 16,5%

IPCAL codes				Label zone
A2110	A2110	2110	Loontrekkers	Andere pensioenen, renten
A2120	B2120	2120	Loontrekkers	Achterstallen andere pensioenen, renten
A2130	B2130	2130	Loontrekkers	tegen 33%
A2140	B2140	2140	Loontrekkers	tegen 16,5% andere
A2150	B2150	2150	Loontrekkers	tegen 10%
A2160	B2160	2160	Loontrekkers	1° tijdens het inkomstenjaar
A2170	B2170	2170	Loontrekkers	Uitkeringen, toelagen en renten
A2180	B2180	2180	Loontrekkers	2° tijdens de vorige jaren
A2190	B2190	2190	Loontrekkers	Gezamenlijk belastbaar
A2200	B2200	2200	Loontrekkers	1° tegen 33%
A2210	B2210	2210	Loontrekkers	2° tegen 16,5%
A2220	B2220	2220	Loontrekkers	3° tegen 10%
A2240	B2240	2240	Loontrekkers	Achterstallen
A2260	B2260	2260	Loontrekkers	Omzettingsrenten van het jaar
A2270	B2270	2270	Loontrekkers	Omzettingsrenten vorige jaren
A2280	B2280	2280	Loontrekkers	Wettelijke pensioenen
A2290	B2290	2290	Loontrekkers	Overlevingspensioenen
A2300	B2300	2300	Loontrekkers	Achterstallen wettelijke pensioenen
A2310	B2310	2310	Loontrekkers	Achterstallen overlevingspensioenen
A2320	B2320	2320	Loontrekkers	tegen 16,5% wettelijke pensioenen
A2350	B2350	2350	Loontrekkers	Aanvullende vergoedingen
A2370	B2370	2370	Loontrekkers	tegen 16,5% overlevingspensioenen
A2400	B2400	2400	Loontrekkers	Werkgeverstussenkomsten
A2410	B2410	2410	Loontrekkers	Gevraagde vrijstelling
A2420	B2420	2420	Loontrekkers	Niet-recurrente voordelen
A2430	B2430	2430	Loontrekkers	Achterstallen niet-recurrente voordelen
A2450	B2450	2450	Loontrekkers	Inschakelingsvergoedingen
A2470	B2470	2470	Loontrekkers	Betaalde bezoldigingen van december die in dezelfde maand zijn betaald

IPCAL codes				Label zone
A2480	B2480	2480	Loontrekkers	Aandelenopties vorige jaren
A2490	B2490	2490	Loontrekkers	Aandelenopties van het jaar
A2500	B2500	2500	Loontrekkers	Wedden en lonen
A2510	B2510	2510	Loontrekkers	Vervroegd vakantiegeld
A2520	B2520	2520	Loontrekkers	Achterstallen
A2530	B2530	2530	Loontrekkers	Opzeggingsvergoedingen
A2540	B2540	2540	Loontrekkers	Terugbetaling woon-werk. totaal bedrag
A2590	B2590	2590	Loontrekkers	Inkomen volgens indiciën
A2600	B2600	2600	Loontrekkers	Wettelijke en aanvullende uitkeringen
A2610	B2610	2610	Loontrekkers	Achterstallen
A2640	B2640	2640	Loontrekkers	Wettelijke en aanvullende uitkeringen (2005)
A2650	B2650	2650	Loontrekkers	Achterstallen
A2660	B2660	2660	Loontrekkers	Wettelijke uitkeringen
A2670	B2670	2670	Loontrekkers	Tegen 16,5 % belastbare premie van het Impulsfonds voor de huisartsengeneeskunde (introductie aanslagjaar 2012)
A2680	B2680	2680	Loontrekkers	Achterstallen
A2690	B2690	2690	Loontrekkers	Aanvullende ziekte- of invaliditeitsuitkeringen
A2700	B2700	2700	Loontrekkers	Beroepsziekte of arbeidsongevallen
A2710	B2710	2710	Loontrekkers	Andere
A2720	B2720	2720	Loontrekkers	Achterstallen
A2730	B2730	2730	Loontrekkers	Wedden en lonen sporters
A2750	B2750	2750	Loontrekkers	Achterstallen sporters
A2760	B2760	2760	Loontrekkers	Opzeggingsvergoedingen sporters
A2770	B2770	2770	Loontrekkers	Wedden en lonen scheidsrechters enz
A2780	B2780	2780	Loontrekkers	Vervroegd vakantiegeld scheidsrechters enz
A2790	B2790	2790	Loontrekkers	Achterstallen scheidsrechters enz
A2800	B2800	2800	Loontrekkers	Opzeggingsvergoedingen scheidsrechters enz
A2810	B2810	2810	Loontrekkers	Werkloosheidsuitkeringen
A2820	B2820	2820	Loontrekkers	Achterstallen werkloosheidsuitkeringen

IPCAL codes				Label zone
A2840	B2840	2840	Loontrekkers	Werkbonus
A2890	B2890	2890	Loontrekkers	Inkomsten van onbepaalde oorsprong (indiciën)
A2920	B2920	2920	Loontrekkers	Vergoedingen met clausule van doorbetaling (art 31bis)
A2930	B2930	2930	Loontrekkers	Achterstallen vergoedingen met clausule van doorbetaling (art 31bis)
A2940	B2940	2940	Loontrekkers	Vergoedingen zonder clausule van doorbetaling (art 31bis)
A2950	B2950	2950	Loontrekkers	Achterstallen vergoedingen zonder clausule van doorbetaling (art 31bis)
A3000	B3000	3000	Loontrekkers	Vergoedingen van december 2011 met clausule van doorbetaling (art 31bis)
A3010	B3010	3010	Loontrekkers	Vergoedingen van december 2011 zonder clausule van doorbetaling (art 31bis)
A3020	B3020	3020	Loontrekkers	Andere vergoedingen van december 2011
A3030	B3030	3030	Loontrekkers	Uitkeringen van december
A3040	B3040	3040	Loontrekkers	Uitkeringen van december
A3050	B3050	3050	Loontrekkers	Vergoedingen van december
A3510	B3510	3510	Bouwsparen	contracten gesloten vanaf 1.1.1989
A3520	B3520	3520	Bouwsparen	contracten gesloten voor 1.1.1989
A3530	B3530	3530	Lange termijnsparen	contracten gesloten vanaf 1.1.1989
A3540	B3540	3540	Lange termijnsparen	contracten gesloten voor 1.1.1989
A4000	B4000	4000	Bedrijfsleiders	Bezoldigingen
A4010	B4010	4010	Bedrijfsleiders	Als bezoldigingen aan te merken huurinkomsten
A4020	B4020	4020	Bedrijfsleiders	Vervroegd vakantiegeld
A4030	B4030	4030	Bedrijfsleiders	Opzeggingsvergoedingen
A4040	B4040	4040	Bedrijfsleiders	Aandelenopties van het jaar
A4100	B4100	4100	Bedrijfsleiders	Inkomsten van onbepaalde oorsprong (indiciën)
A4110	B4110	4110	Bedrijfsleiders	Bezoldigingen tewerkgesteld in dienstverband
A4130	B4130	4130	Bedrijfsleiders	Inschakelingsvergoedingen
A4140	B4140	4140	Bedrijfsleiders	Aandelenopties van vorige jaren
A4170	B4170	4170	Bedrijfsleiders	Bruto loon nieuwe activiteit (art 147 2°)
A4180	B4180	4180	Bedrijfsleiders	Niet-recurrente voordelen
A4190	B4190	4190	Bedrijfsleiders	Werkbonus

IPCAL codes				Label zone
A4280	B4280	4280	Bedrijfsleiders	Tegen 16,5 % belastbare premie van het Impulsfonds voor de huisartsengeneeskunde
A6125	B6125	6125	Winsten	TOTAAL (nettoresultaat + indiciën)
A6605	B6605	6605	Baten	TOTAAL (nettoresultaat + indiciën)
A7059	B7059	7059	Vorige werkzaamheid	Verschil (positief of negatief)
A7440	B7440	7440		TOTAAL VAN DE NETTO-INKOMSTEN
A7441	B7441	7441	Interesten > 30.4.1986	a) enig woonhuis bouwen
A7442	B7442	7442	Interesten > 30.4.1986	b) enig woonhuis hernieuwen
A7443	B7443	7443		Giften
A7444	B7444	7444		Opvang van kinderen jonger dan 3 jaar
A7445	B7445	7445		Onderhoud en restauratie monumenten
A7447	B7447	7447		Bijzondere bijdrage sociale zekerheid (1982-1988)
A7448	B7448	7448		Bezoldigingen van een huisbediende
A7449	B7449	7449		Onderhoudsuitkeringen verschuldigd door beide echtg.
A7450	B7450	7450		Onderhoudsuitkeringen (persoonlijk verschuldigd)
A7451	B7451	7451		Onderhoudsuitkeringen beide NI-NI
A7452	B7452	7452		Onderhoudsuitkeringen persoonlijk NI-NI
A7457	B7457	7457		Totaal negatief saldo van B en aanrekening op ink. BE
A7458	B7458	7458		Totaal negatief saldo van BE en aanrekening op ink. B
A7494	B7494	7494	Baten	Achterstallige erelonen
A7555	B7555	7555	Gezamenlijk Belastbaar inkomen	

Appendix 2.2. Fiscal codes asked but not delivered

Year	Asked	ipcal_A	ipcal_B	Desc2	Desc4
2009	230	A0230		Personalia	Was gehuwd of wettelijk samenwonend
2009	1290	A1290	B1290	Diverse	Vergoedingen voor ontbrekende coupon met 10%
2009	1690	A1690	B1690	Diverse	verwezenlijkt vanaf 12.1.2009
2009	1740	A1740	B1740	Diverse	Meerwaarden van deelnemingen buitenlandse vennootschap
2009	1898	A1898	B1898	Diverse	afzonderlijk belastbaar tegen 10%
2009	1990	A1990	B1990	Diverse	Vergoedingen voor ontbrekende coupon met 10%
2009	2590	A2590	B2590	Loontrekkers	Inkomen volgens indiciën
2009	2670	A2670	B2670	Loontrekkers	Tegen 16,5 % belastbare premie van het Impulsfonds voor de huisartsengeneeskunde (introductie inkomsten 2011 / aanslagjaar 2012)
2009	2780	A2780	B2780	Loontrekkers	Vervroegd vakantiegeld scheidsrechters enz
2009	2790	A2790	B2790	Loontrekkers	Achterstallen scheidsrechters enz
2009	2840	A2840	B2840	Loontrekkers	Werkbonus (introductie inkomsten 2011 / aanslagjaar 2012)
2009	3000	A3000	B3000	Loontrekkers	Vergoedingen van december met clausule van doorbetaling (art 31bis) (introductie inkomsten 2010 / aanslagjaar 2011)
2009	3010	A3010	B3010	Loontrekkers	Vergoedingen van december zonder clausule van doorbetaling (art 31bis) (introductie inkomsten 2010 / aanslagjaar 2011)
2009	3020	A3020	B3020	Loontrekkers	Andere vergoedingen van december (introductie inkomsten 2010 / aanslagjaar 2011)
2009	3030	A3030	B3030	Loontrekkers	Uitkeringen ziekte-invaliditeit van december (introductie inkomsten 2010 / aanslagjaar 2011)
2009	3040	A3040	B3040	Loontrekkers	Uitkeringen werkloosheid van december (introductie inkomsten 2010 / aanslagjaar 2011)
2009	3050	A3050	B3050	Loontrekkers	Vergoedingen brugpensioen van december (introductie inkomsten 2010 / aanslagjaar 2011)
2009	4130	A4130	B4130	Bedrijfsleiders	Inschakelingsvergoedingen
2009	4170	A4170	B4170	Bedrijfsleiders	Bruto loon nieuwe activiteit (art 147 2°)
2009	4190	A4190	D4190	Bedrijfsleiders	Werkbonus (introductie inkomsten 2011 / aanslagjaar 2012)

Year	Asked	ipcal_A	ipcal_B	Desc2	Desc4
2009	4280	A4280	B4280	Bedrijfsleiders	Tegen 16,5 % belastbare premie van het Impulsfonds voor de huisartsengeneeskunde (introductie inkomsten 2011 / aanslagjaar 2012)
2009	7446	A7446	B7446	Aftrekbare uitgaven	Cumulatieactiviteit (code afgeschaft)
2009	7565				Onbestaande code, verwarring met 7556
2009	7575				Onbestaande code, verwarring met 7557
2010	550	A0550		Personalia	Co-ouderschap ten laste handicap kinderen < 3 jaar zonder bewakingskosten
2010	1290	A1290	B1290	Diverse	Vergoedingen voor ontbrekende coupon met 10%
2010	1690	A1690	B1690	Diverse	Verwezenlijkt vanaf 12.1.2009
2010	1740	A1740	B1740	Diverse	Meerwaarden van deelnemingen buitenlandse vennootschap
2010	1898	A1898	B1898	Diverse	Afzonderlijk belastbaar tegen 10%
2010	1990	A1990	B1990	Diverse	Vergoedingen voor ontbrekende coupon met 10%
2010	2590	A2590	B2590	Loontrekkers	Inkomen volgens indiciën
2010	2670	A2670	B2670	Loontrekkers	Tegen 16,5 % belastbare premie van het Impulsfonds voor de huisartsengeneeskunde (introductie inkomsten 2011 / aanslagjaar 2012)
2010	2840	A2840	B2840	Loontrekkers	Werkbonus (introductie inkomsten 2011 / aanslagjaar 2012)
2010	3000	A3000	B3000	Loontrekkers	Vergoedingen van december 2010 met clausule van doorbetaling (art 31bis) (introductie inkomsten 2010 / aanslagjaar 2011)
2010	4100	A4100	B4100	Bedrijfsleiders	Inkomsten van onbepaalde oorsprong (indiciën)
2010	4170	A4170	B4170	Bedrijfsleiders	Bruto loon nieuwe activiteit (art 147 2°)
2010	4190	A4190	D4190	Bedrijfsleiders	Werkbonus (introductie inkomsten 2011 / aanslagjaar 2012)
2010	4280	A4280	B4280	Bedrijfsleiders	Tegen 16,5 % belastbare premie van het Impulsfonds voor de huisartsengeneeskunde (introductie inkomsten 2011 / aanslagjaar 2012)
2010	7446	A7446	B7446	Aftrekbare uitgaven	Cumulatieactiviteit ambtenaren (code afgeschaft)
2010	7565				Onbestaande code, verwarring met 7556
2010	7575				Onbestaande code, verwarring met 7557

Year	Asked	ipcal_A	ipcal_B	Desc2	Desc4
2011	550	A0550		Personalia	Co-ouderschap ten laste handicap kinderen < 3 jaar zonder bewakingskosten
2011	1290	A1290	B1290	Diverse	Vergoedingen voor ontbrekende coupon met 10%
2011	1690	A1690	B1690	Diverse	Verwezenlijkt vanaf 12.1.2009
2011	1740	A1740	B1740	Diverse	Meerwaarden van deelnemingen buitenlandse vennootschap
2011	1898	A1898	B1898	Diverse	Afzonderlijk belastbaar tegen 10%
2011	1990	A1990	B1990	Diverse	Vergoedingen voor ontbrekende coupon met 10%
2011	2790	A2790	B2790	Loontrekkers	Achterstallen scheidsrechters enz
2011	2800	A2800	B2800	Loontrekkers	Opzeggingsvergoedingen scheidsrechters enz
2011	2950	A2950	B2950	Loontrekkers	Achterstallen vergoedingen zonder clausule van doorbetaling (art 31bis)
2011	4100	A4100	B4100	Bedrijfsleiders	Inkomsten van onbepaalde oorsprong (indiciën)
2011	4170	A4170	B4170	Bedrijfsleiders	Bruto loon nieuwe activiteit (art 147 2°)
2011	7446	A7446	B7446	Aftrekbare uitgaven	Cumulatieactiviteit (code afgeschaft)
2011	7565				Onbestaande code, verwarring met 7556
2011	7575				Onbestaande code, verwarring met 7557

APPENDIX 3. CO-PAYMENTS EXCLUDED FROM THE MAXIMUM BILLING SYSTEM

Nom du groupe	Identifiant dans les données IMA (code de nomenclature, Nrubriek, sector)
Alimentations médicales Cs,Cx,D	Codes: 755576, 755580, 755591, 755602, 755635, 755650, 755672
Alimentation groupe lait maternel et Autres médicaments diététiques	Codes: 695052, 695063, 755532, 755510, 755554, 755576, 755591, 755543, 755521, 755613, 755565, 755694
Pansements actifs non remboursables	Codes: 757271
Catégorie Cx	Codes:750396, 750595, 750816, 750993, 753992, 750805, 750923, 753804
Catégorie Cs[a]	Codes: 750374, 750573, 750831, 750971, 753970, 754095, 754773, 750783, 750901, 753782
Hôpitaux aigus - forfaitarisation - catégorie Cs	Codes: 756206, 756221, 756243, 756825, 756840, 756862, 757120, 757142, 757164
Hôpitaux aigus - forfaitarisation - catégorie Cx	Codes: 756265, 756280, 756302, 756884, 756906, 756921, 757186, 757201, 757223
Hôpitaux aigus - non - forfaitarisation - catégorie Cs	Codes: 756501, 756523, 756545
Hôpitaux aigus - non - forfaitarisation - catégorie Cx	Codes: 756560, 756582, 756604
Honoraire de garde	Codes: 754412
Nutrition parentérale	Codes: 751435, 751450, 751833, 751855, 751870, 751892, 754714, 751354, 751376, 751391, 751413
Seringues à insuline mucoviscidose	Codes: 754736, 755031, 755053, 755075, 755090, 755112, 755134, 755156, 755171, 755193, 755215, 755230, 755252, 755274, 755296, 755311, 755333, 755392
Autosondage	Codes: 754331, 754353, 754375, 754795
Bains désinfectants en cas de brûlures	Codes: 754526, 754541
Mucoviscidose	Codes: 764551, 764562, 764573, 764584, 764595, 764606, 764816, 764831, 764853
Bénéficiaires non-hospitalisés dans les officines publiques - groupe 1/2/3/4	Codes: 750035, 750050, 750072, 750094, 755974, 750234, 750256, 750271, 750293, 755473
Prothèses capillaires	Codes: 755425, 755436 755440, 755451, 755462
Contraception	Codes:752732, 752754, 752776, 752791, 752813, 752835, 752850, 752872, 752894, 752916, 752931, 752953, 752975, 752990
Diminution de l'intervention de l'assurance	Codes: 753233, 753255, 753270, 753292, 753314, 753336, 753351, 753373, 753395, 753410, 780953

Nom du groupe	Identifiant dans les données IMA (code de nomenclature, Nrubriek, sector)
Garantie Pharmanet	Codes: 753535
Pompes à élastomère	Codes: 754390
Solution d'inhalation de chlorure de sodium hypertonique	Codes: 753432, 753454, 753465
Patient non en règle d'assurabilité - forfaitarisation des médicaments pour les patients hospitalisés	Codes: 757282
TVA sur la cotisation	Codes: 750131
Trajet de soins insuffisance rénale chronique – tensiomètre	Codes: 754294, 757433, 757492
Rééducation fonctionnelle et professionnelle - quote part personnelle	Dans la catégorie 'Rubriek' (N88) à laquelle les Codessont attribués
Hôpital psychiatrique >= 366 jours hôpital général >90 jours	Codes: 799746, 799761, 799783, 799805, 799820, 799842, 799886, 799923, 766426, 766441, 766463, 766485, 766500, 766522 pour des séjours dans un hôpital psychiatrique (identifiant de l'hôpital inclut dans la base de données)
MRS/MR/CSJ/MSP	Dans la catégorie 'Rubriek' (N87) ou dans la sous-catégorie 'Sector' (16, 17, 29) à lesquelles les codes de la nomenclature sont attribués
Sevrage tabagique	Dans la catégorie 'Rubriek' N90 ou dans la sous-catégorie 'Sector' (32) à lesquelles les codes de la nomenclature sont attribués
Projets article 56	Dans la catégorie 'Rubriek' N94 à laquelle les codes de la nomenclature sont attribués
Placement et frais déplacement- quote-part personnelle	Dans la catégorie 'Rubriek' ('N80') à laquelle les codes de la nomenclature sont attribués
Article 28 - implants	Les codes de la nomenclature liées aux articles de la nomenclature Art. 28. § 1 et Art. 28. § 8
Maximum à facturer	Codes: 781616, 781631, 781653, 781675, 781690, 781712, 781734, 781756, 781771, 781793, 781815, 781874, 781896, 781911, 781933, 781955, 785330
Régularisation	Dans la catégorie 'Rubriek'(N93) ou dans la sous-catégorie 'Sector' (30) à lesquelles les codes de la nomenclature sont attribués
Bande magnétique	Dans la catégorie 'Rubriek' (NMB) ou dans la sous-catégorie 'Sector' (34, 35, 38) à lesquelles les codes de la nomenclature sont attribués Rubriek in ('NMB') or Sector in (34, 35, 38)
Perception obligatoire du ticket modérateur	Dans la catégorie 'Rubriek' (N95)

Note: Sélection faite en utilisant les tableaux de références de Nomensoft disponibles au KCE. [a] Parmi les médicaments Cs, ceux avec un ATC4 'J07BB' sont inclus dans le compteur du MAF.

APPENDIX 4. CO-PAYMENTS EXCLUDED FROM THE COMPUTATION STATUS PERSON WITH A CHRONIC ILLNESS

Nom du groupe	Identifiant dans les données IMA (code de nomenclature, Nrubriek, sector)
Médicament catégorie D	Codes: 750820, 751015, 756626, 757245, 757260, 757271
Montants payés indûment inférieurs à 25 euro et non récupérés	Codes: 780986
Art. 136	Codes: 768401, 768423, 768445, 768460, 768471, 768482, 768504
941 – HOPITAL AIGU 12EME	Codes: 768526, 768541, 768563, 768585
942 – SP NON PAL.12EME	Codes: 768600, 768622, 768644, 768666
943 – HOP PSYCH.12EME	Codes: 768681, 768703, 768725, 768740,
944 – SP PAL 12EME	Codes: 768762, 768784, 768806, 768821
945 – GR BRULES 12EME	Codes: 768843, 768865, 768880, 768902
Honoraires médical et paramédical - Prestations de laboratoires non remboursables	Codes: 960035, 960046, 960050, 960061, 960072, 960083,
Implants non remboursables avec obligation de notification	Codes: 960234, 960245, 960536 ,960540
Frais divers dans les hôpitaux ou MSP	Codes: 960492, 960503, 960190, 960201, 960411, 960422, 960433, 960444, 960455, 96046, 960470, 960481
frais de séjour tel qu'il est mentionné dans la convention de séjour	Codes: 960315
coûts éventuels surplus au frais de séjour tels qu'ils sont prévus dans la convention de séjour	Codes: 960330
‘autres’ coûts surplus qui ne sont pas prévus dans la convention de séjour	Codes: 960352
Suppléments MRPA-MRS-CSJ	Codes: 960551, 960573, 960595, 960610, 960632, 960654, 960676
Suppléments liés aux soins	Codes: 960691, 960713, 960735, 960750, 960772
Autres suppléments: buanderie	Codes: 960794, 960816, 960831, 960853, 960875
Transport lié aux soins	Codes: 960890, 960912, 960934

Nom du groupe	Identifiant dans les données IMA (code de nomenclature, Nrubriek, sector)
Frais médecin (mention facultative)	Codes: 960956
Frais kiné (mention facultative)	Codes: 960971
Frais labo (mention facultative)	Codes: 960993
Frais policlinique (mention facultative)	Codes: 960094
Ristourne convention art.10bis	Codes: 961111, 961133, 961155
Accidents de travail conventions internationales	Codes: 961030, 961041, 961052, 961063, 961074, 961085, 961096, 961100, 961214, 961225,
Maximum à facturer	Codes: 781616, 781631, 781653, 781675, 781690, 781712, 781734, 781756, 781771, 781793, 781815, 781874, 781896, 781911, 781933, 781955, 785330
Régularisation	Dans la catégorie ‘Rubriek’ (N93) ou dans la sous-catégorie ‘Sector’ (30) à lesquelles les codes de la nomenclature sont attribués
Bande magnétique	Dans la catégorie ‘Rubriek’ (NMB) ou dans la sous-catégorie ‘Sector’ (34, 35, 38) à lesquelles les codes de la nomenclature sont attribués Rubriek in ('NMB') or Sector in (34, 35, 38)
Perception obligatoire du ticket modérateur	Dans la catégorie ‘Rubriek’ (N95)

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