1. OUT-OF-POCKET PAYMENTS AS A SHARE OF CURRENT TOTAL HEALTHCARE EXPENSES (A-2)

1.1. Documentation sheet

Description	Out-of-pocket payments on health (% of current expenditure on health) ***Important notice:*** *the current indicator is calculated using EU-SILC/IMA-AIM microdata and therefore differs from the A-2 indicator in the KCE Performance report 313 that is calculated using macrodata from the System of Health Accounts (SHA).[1] EU-SILC/IMA-AIM microdata were used to make a distinction between persons requiring chronic care. Such subdivision is not possible in the SHA data. Unfortunately, the EU-SILC/IMA-AIM microdata do not account for healthcare expenses that are not covered by the public health insurance, while such information is included in the SHA data.*
Calculation	**Numerator**: total household out-of-pocket payments (co-payments and supplements) in a given year, based on data from the InterMutualistic Agency (IMA-AIM). It concerns the amounts registered in variables ss00160 (co-payments) and ss00165 (supplements) for care expenditures and ss00160 (co-payments) for pharmaceutical products. Two corrections are made: (1) a correction for reimbursements related to the system of maximum billing (MAB), i.e. amounts in ss00060 when ss00020 refers to a pseudocode of the MAB (780975, 781771, 781793, 781815, 781874, 781896, 781911, 781933, 781955, 781970, 781616, 781631, 781653, 781675, 781690, 781712, 781734, 781756) and (2) a correction for double registration of expenses in the database for pharmaceutical products and the database for care expenditures by excluding amounts for care expenditures when ss00020 refers to codes for pharmaceutical products (753550, 753572, 753594, 753616). **Denominator**: total healthcare expenses at the household level (co-payments, supplements and expenses borne by the public health insurance RIZIV-INAMI) in a given year, based on IMA-AIM data. The expenses of the numerator are increased with the expenses borne by the public health insurance, i.e. the amounts registered in variables ss00060 for care expenditures and ss00060 and ss00195 for pharmaceutical products. Different categories of out-of-pocket payments are identified: hospital inpatient care, hospital day care, dental care, general practitioner (GP) care, specialist care and medicines. For a definition of these categories, we refer to section 3.2.2 of the Supplement of KCE report 334.[2] Calculations are done separately for households with and without a member with chronic condition, using two definitions: 1. **Individuals entitled to the status for persons with a chronic illness.** Entitlement is observed through IMA-AIM variables pp3015, pp3016 or pp3017. If the value for one of these 3 variables is equal to 1 or 2, the individual has an entitlement. Households with at least one member entitled to the chronic illness status, are defined as households entitled to the status. 2. **Individuals self-reporting to suffer from chronic (long-standing) illness or condition**. This is identified through EU-SILC variable PH020 equal to “yes”. Households with at least one member with a self-reported chronic condition, are defined as households with a self-reported chronic condition (see also indicator CHR-1).
Rationale	Financial accessibility is a basic condition for a functional healthcare system. There is a near consensus that the financial burden of healthcare payments should not disproportionately rest on persons who seek healthcare. The idea to decouple payments from health risks or the receipt of healthcare does not provide guidance on how payments should be allocated. However, it is generally presumed that payments should be determined by ability or capacity to pay. A rationale to relate payments for healthcare to capacity to pay is that one

	does not want that these payments hinder people's ability to seek healthcare when ill. Another rationale is that one wants to avoid that payments for healthcare reduce households' potential to consume other necessary goods and services such as food, housing and utilities. In this reasoning, it should be expected that the share of out-of-pocket payments (OOPs) as a share of current healthcare expenditures is lower for individuals suffering from a chronic illness with the aim to reduce the financial burden for those in high and frequent need of care.
Primary data source	EU Statistics on Income and Living Conditions (EU-SILC) coupled with data from the InterMutualistic Agency (IMA/AIM). Data from 2008, 2012 and 2016 are used. The EU-SILC microdata are the reference source for measuring socioeconomic disparities in Belgium (and Europe). The Belgian data are collected by Statistics Belgium and are representative of the population. The survey format is harmonized across the EU with small national differences. Each wave consists of about 11 000 to 12 000 individuals in about 6 000 households. For every respondent in the EU-SILC, the available information is enriched with additional data from the InterMutualistic Agency. The IMA-AIM data brings together data of the different sickness funds at the individual level in a common format. An advantage is that the data are not self-reported or limited to a certain registration period, but are continuously collected for administrative use and hence less prone to recall bias. The available information includes detailed individual-level data on the use and expenditures – further subdivided in co-payments, supplements and expenditures chargeable to the public health insurance – of all care covered by the public health insurance (procedures, services, admissions, prescribed medication, etc.) as well as the take-up and use of protection measures in the public health insurance, such as increased reimbursement status, the chronic illness status and the system of maximum billing.
Technical definitions	Out-of-pocket payments are expenditures borne directly by a patient because health insurance does not cover the (full) cost of the health good or service. They include cost-sharing (co-payment, coinsurance – "ticket modérateur" in French and "remgeld" in Dutch – or deductible) for health expenditures covered by the public health insurance, as well as supplements in case they are registered. It does not include expenses that are not covered by the public health insurance (glasses, certain dental care, over-the-counter drugs), as these are not registered in the IMA-AIM data.
Limitations	There is no registration of healthcare that is not covered by the public health insurance or used by residents not insured in the public health insurance. This leads to an underestimation of OOPs. Some vulnerable population groups are not included in the survey sample: people residing in collective facilities such as the elderly and prisoners, the homeless or refugees. We know from other studies that these groups experience higher than average healthcare needs or difficulties in accessing healthcare.[3-6]
International comparability	Based on individual level data. At the international level, no data are available that provide a distinction by chronic care patients
Performance dimension	Accessibility of care
Related indicators	Unmet needs for medical care due to financial reasons (A-4), Proportion of households with (further) impoverishing (EQ-4) and catastrophic (EQ-5) out of pocket payments.

1.2. Results

Figure 1 provides an overview of the share of out-of-pocket payments in total healthcare expenses for the population (red line) as well as for different subgroups of the population (blue bars) for the three years that are analysed. Figure 2 presents a subdivision of out-of-pocket payments in co-payments, supplements as well as information on the share of reimbursements in the system of maximum billing (MAB). Figure 3 breaks down the share of out-of-pocket payments by care category.

The overall share of out-of-pocket payments in total healthcare expenses shows a stable trend over time, amounting to 17.8% in 2008, 16.9% in 2012 and 17.9% in 2016. Figure 2, however clearly indicates that the underlying composition has changed profoundly over time with a decreasing share of co-payments in total healthcare expenses (from 15.3% in 2008 to 13.5% in 2016) and an increasing share of supplements (from 2.5% in 2008 to 4.3% in 2016).

Figure 1 shows that regional variation in the share of OOPs in total healthcare expenses is small, but increasing over time. Variation by household income category is more pronounced and also increasing over time, with in 2016 a share of over 22% in the upper middle class and top incomes compared to a share of 11% among households at risk of poverty. Other financially vulnerable groups also have lower out-of-pocket payments as a share of total healthcare expenses.

One potential explanation is that financial protection measures succeed in reducing the out-of-pocket payments. The results in Figure 1, for example clearly show a lower share of OOPs in total healthcare expenses for households benefitting from increased reimbursement, which effectively lowers co-payments chargeable for various types of care. Moreover households benefitting from reimbursements in the maximum billing system also have a lower share of OOPs.

An alternative explanation is that financially vulnerable households forgo or postpone care with a higher share of out-of-pocket payments, such as specialist or dental care. It has been demonstrated that financially vulnerable households and even household benefitting from increased reimbursement postpone medical and dental care due to financial reasons.

Lower share of OOPs in total healthcare expenses for households with a member having a chronic condition

Finally, a difference is observed between households with and without a member with a self-reported chronic condition. Households with at least one member self-reporting to suffer from a chronic condition pay a lower share in OOPs, equal to 15.1% in 2016 relative to 19.7% for household without a member with a self-reported condition.

The difference is more pronounced when using a definition based on the chronic illness status. In this case we find that households with a member entitled to the chronic illness status have a share of OOPs equal to 12.7% in 2016 compared to 19.4% for households without a member entitled to the status.

The results in Figure 2 indicate that the difference is in particular related to a lower share of co-payments, which is not surprising as these households are more likely to benefit from both the MAB and increased reimbursement status, effectively lowering their co-payments. In 2016, the fraction of households benefitting from increased reimbursement amounted to 37.6% and 16.3% for households with and without a member with a self-reported chronic condition, respectively, and to 40.3% and 20.4% for households with and without a member entitled to the chronic illness status, respectively. With respect to the system of maximum billing, the share of households receiving a reimbursement through this protection measure amounted in 2016 to 21.4% and 6.1% for households with and without a member with a self-reported chronic condition, respectively and to 35.2% and 5.6% for households with and without a member entitled to the chronic illness status, respectively.

Increasing share of supplements over time

The share of supplements is increasing over time for both households with and without members with a self-reported chronic condition. The difference between both groups is small and likely related to an income effect with household with a member with a self-reported chronic condition having a relatively lower income.

Lower share of OOPs for GP, dental and specialist care among households with a member having a chronic condition

Figure 3 shows variation in out-of-pocket payments for various care categories between households with and without a member with a self-reported chronic condition and between households with and without a member entitled to the chronic illness status. For both subdivisions, we find no important difference in the share of OOPs for medication, hospital care and other care. On the other hand, the share of OOPs for GP, specialist and dental care is substantially lower for households with a member with a self-reported chronic condition and for households with a member entitled to the chronic illness status. This can – in particular for GP and specialist care – be explained by lower co-payments related to increased reimbursement status. As already mentioned above, for specialist care and dental care, the lower share can also be related to postponement of care due to financial reasons (see also indicator A-4).

Figure 1 – Share of out-of-pocket payments (OOPs) in total healthcare expenses for various subgroups (years 2008, 2012, 2016)

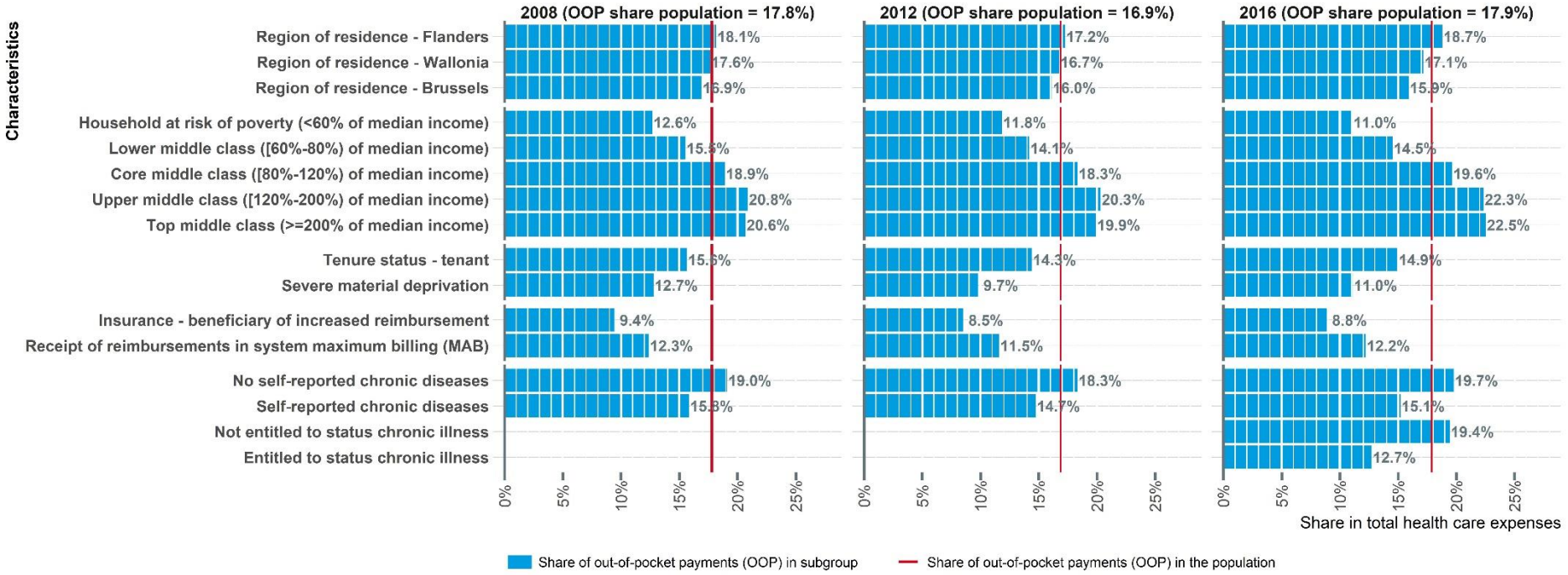


Figure 2 – Share of co-payments, supplements and MAB reimbursements in total healthcare expenses, subdivided by chronic condition (years 2008, 2012, 2016)

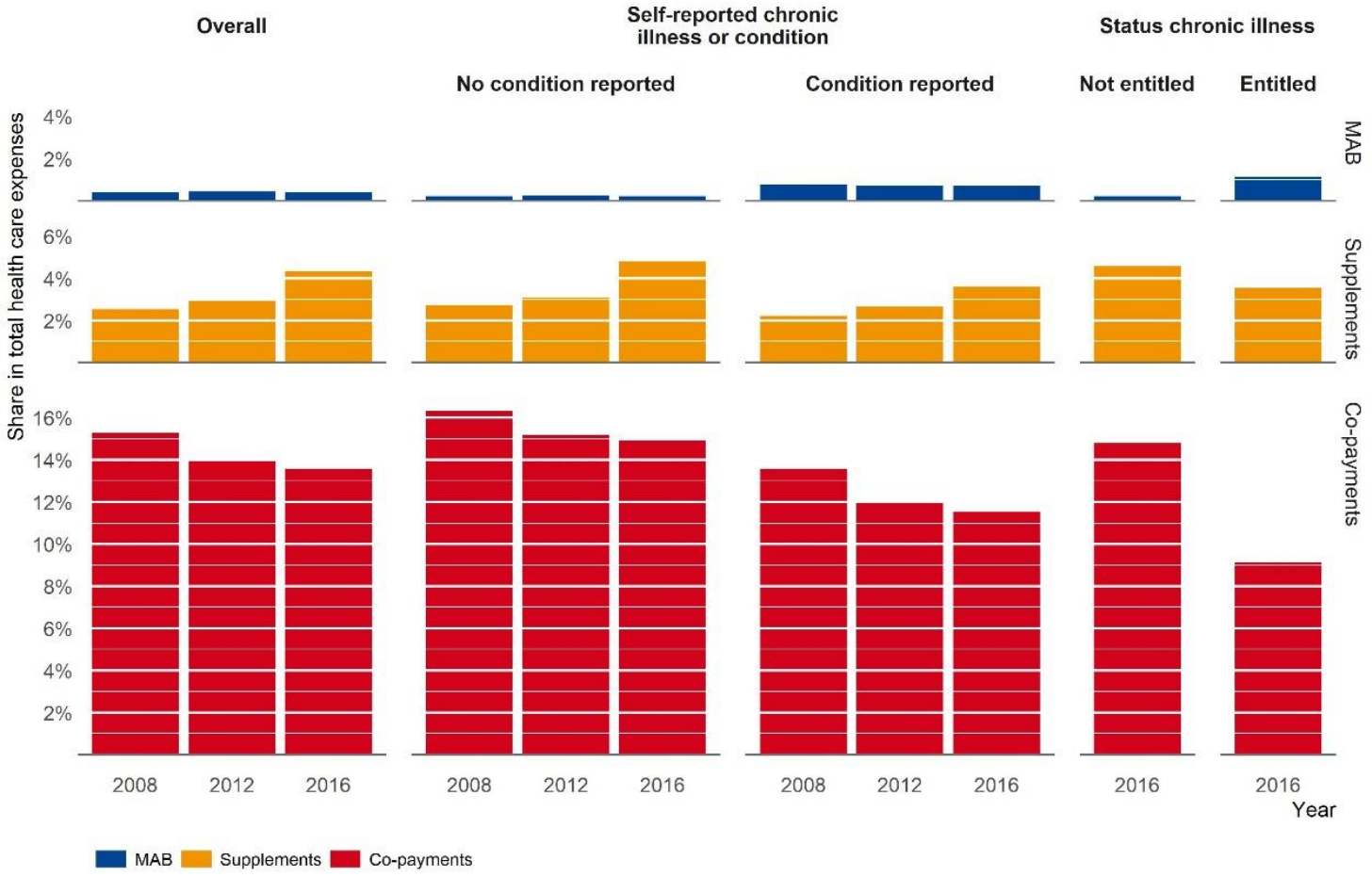
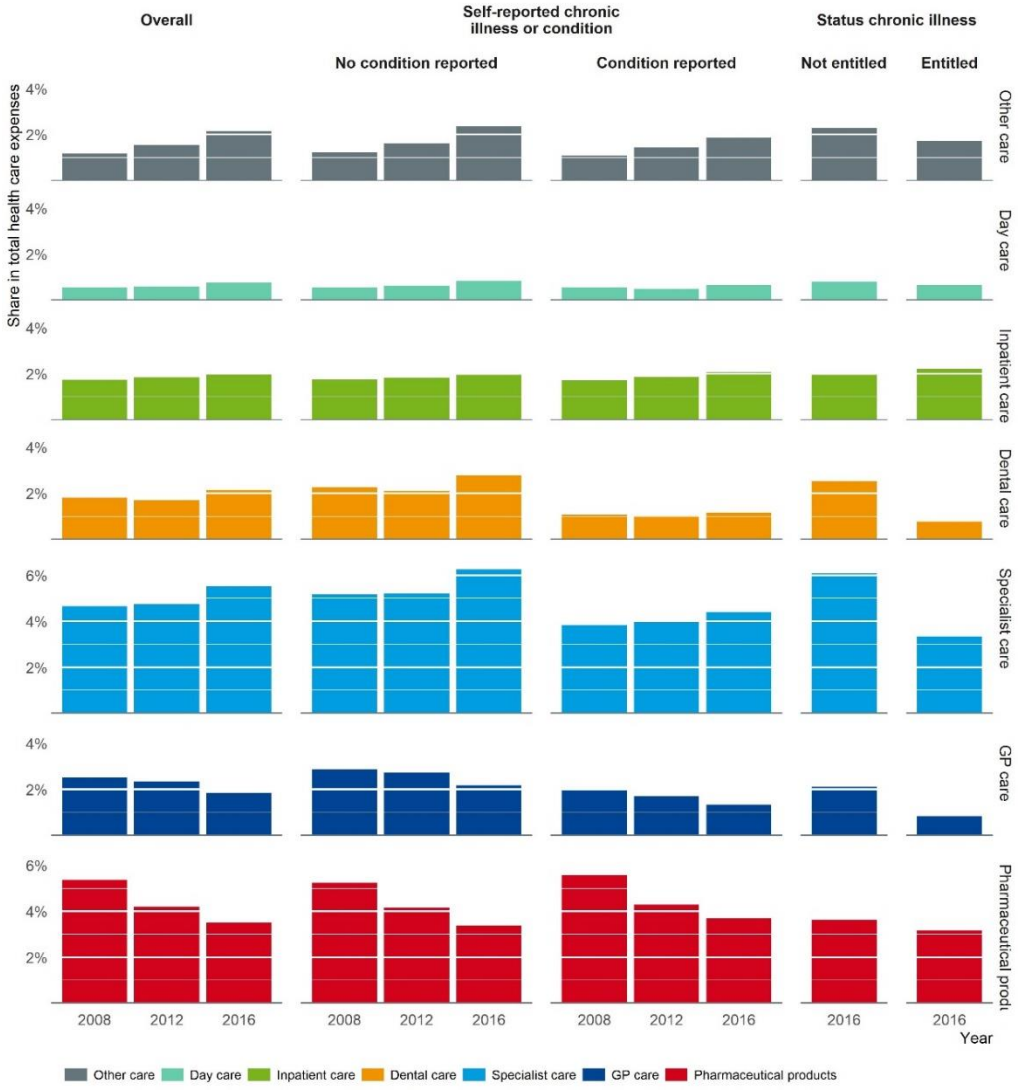


Figure 3 – Share of out-of-pocket payments for various care categories in total healthcare expenses, by chronic condition (years 2008, 2012, 2016)



Key points

- **The overall share of out-of-pocket payments in total healthcare expenses shows a stable trend over time, amounting to 17.8% in 2008, 16.9% in 2012 and 17.9% in 2016. The underlying composition has changed profoundly over time with a decreasing share of co-payments and an increasing share of supplements.**
- **The share of out-of-pocket payments in total healthcare expenses varies in particular in function of the financial means of the households, with lower share for financially vulnerable households. One potential explanation is that financial protection measures succeed in reducing the out-of-pocket payments. An alternative explanation is that financially vulnerable households forgo or postpone care with a higher share of out-of-pocket payments, such as specialist or dental care.**
- **There is a lower share of OOPs in total healthcare expenses for households with a member having a chronic condition. Household with and without a member with a self-reported chronic condition (EU-SILC) have a share of 15.1% and 19.7%, respectively, in 2016. Household with and without a member entitled to the chronic illness status have a share of 12.7% and 19.4%, respectively, in 2016.**
- **For both the distinction based on a self-reported chronic condition (EU-SILC) and the chronic illness status (IMA-AIM), the difference between households with and without a member with a chronic condition is in particular related to a lower share of co-payments for the former, which is not surprising as these households are more likely to benefit from both the MAB and increased reimbursement status, effectively lowering their co-payments. Moreover, we find that households with a member with a chronic condition have in particular a lower share of OOPs for GP, specialist and dental care.**

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