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Can people afford to pay for health care?

New evidence
on financial protection
in Germany

Martin Siegel
Reinhard Busse



Germany

WHO Barcelona Office for Health Systems Strengthening

The WHO Barcelona Office is a centre of excellence in health financing for universal health coverage (UHC). It works with Member States across WHO's European Region to promote evidence-informed policy making.

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This review is part of a series of country-based studies generating new evidence on financial protection in European health systems. Financial protection is central to universal health coverage and a core dimension of health system performance.

GERMANY
HEALTHCARE FINANCING
HEALTH EXPENDITURES
HEALTH SERVICES ACCESSIBILITY
FINANCING, PERSONAL
POVERTY
UNIVERSAL COVERAGE

About the series

This series of country-based reviews monitors financial protection in European health systems by assessing the impact of out-of-pocket payments on household living standards. Financial protection is central to universal health coverage and a core dimension of health system performance.

What is the policy issue? People experience financial hardship when out-of-pocket payments – formal and informal payments made at the point of using any health care good or service – are large in relation to a household's ability to pay. Out-of-pocket payments may not be a problem if they are small or paid by people who can afford them, but even small out-of-pocket payments can cause financial hardship for poor people and those who have to pay for long-term treatment such as medicines for chronic illness. Where health systems fail to provide adequate financial protection, people may not have enough money to pay for health care or to meet other basic needs. As a result, lack of financial protection may reduce access to health care, undermine health status, deepen poverty and exacerbate health and socioeconomic inequalities. Because all health systems involve a degree of out-of-pocket payment, financial hardship can be a problem in any country.

How do country reviews assess financial protection? Each review is based on analysis of data from household budget surveys. Using household consumption as a proxy for living standards, it is possible to assess:

- how much households spend on health out of pocket in relation to their capacity to pay; out-of-pocket payments that exceed a threshold of a household's capacity to pay are considered to be *catastrophic*;
- household ability to meet basic needs after paying out of pocket for health; out-of-pocket payments that push households below a poverty line or basic needs line are considered to be *impoverishing*;
- how many households are affected, which households are most likely to be affected and the types of health care that result in financial hardship; and
- changes in any of the above over time.

Why is monitoring financial protection useful? The reviews identify the factors that strengthen and undermine financial protection; highlight implications for policy; and draw attention to areas that require further analysis. The overall aim of the series is to provide policy-makers and others with robust, context-specific and actionable evidence that they can use to move towards universal health coverage. A limitation common to all analysis of financial protection is that it measures financial hardship among

households who are using health services, and does not capture financial barriers to access that result in unmet need for health care. For this reason, the reviews systematically draw on evidence of unmet need, where available, to complement analysis of financial protection.

How are the reviews produced? Each review is produced by one or more country experts in collaboration with the WHO Barcelona Office for Health Systems Strengthening, part of the Division of Health Systems and Public Health of the WHO Regional Office for Europe. To facilitate comparison across countries, the reviews follow a standard template, draw on similar sources of data (see Annex 1) and use the same methods (see Annex 2). Every review is subject to external peer review. Results are also shared with countries through a consultation process held jointly by the WHO Regional Office for Europe and WHO headquarters. The country consultation includes regional and global financial protection indicators (see Annex 3).

What is the basis for WHO's work on financial protection in Europe? WHO support to Member States for monitoring financial protection in Europe is underpinned by the Tallinn Charter: Health Systems for Health and Wealth, Health 2020 and resolution EUR/RC65/R5 on priorities for health systems strengthening in the WHO European Region 2015–2020, all of which include a commitment to work towards a Europe free of impoverishing out-of-pocket payments for health. Resolution EUR/RC65/R5 calls on WHO to provide Member States with tools and support for monitoring financial protection and for policy analysis, development, implementation and evaluation. At the global level, support by WHO for the monitoring of financial protection is underpinned by World Health Assembly resolution WHA64.9 on sustainable health financing structures and universal coverage, which was adopted by Member States in May 2011. The Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 also call for monitoring of, and reporting on, financial protection as one of two indicators for universal health coverage. Resolution EUR/RC67/R3 – a roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020 – calls on WHO to support Member States in moving towards universal health coverage.

Comments and suggestions for improving the series are most welcome and can be sent to euhsf@who.int.

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Abbreviations

EHIS	European Health Interview Survey
EU	European Union
EU15	European Union Member States from 1 January 1995 to 30 April 2004
EU27	European Union Member States as of 1 January 2007
EU28	European Union Member States as of 1 July 2013
EU-SILC	European Union Statistics on Income and Living Conditions
GDP	gross domestic product
PHI	private health insurance
SGB	Sozialgesetzbuch (Social Code Book)
SHI	social health insurance
VHI	voluntary health insurance

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Executive summary

Financial protection is stronger in Germany than in many European Union (EU) countries. This is largely due to high levels of public spending on health, resulting in out-of-pocket payments that are low as a share of total spending on health – just over 12% in 2015. It also reflects coverage policy carefully designed to protect children and regular users of health care.

Since health insurance was made universally mandatory in 2009, the share of the population without any form of coverage has fallen from 0.25% in 2007 to less than 0.1% in 2015. All sickness funds must offer a standard benefits package, which is comprehensive and informed, to a degree, by health technology assessment. The only significant change in service coverage over time has been the exclusion of over-the-counter medicines in 2004 for persons aged over 12.

Although user charges apply to many health services, children under 18 covered by social health insurance (SHI) are exempt from all co-payments, while outpatient visits, conservative dental care and diagnostic tests are free for SHI-covered adults. In addition, SHI-covered adults benefit from a cap of €10 per pack of prescribed medicine and a general cap on all co-payments. The general cap is set at 2% of gross income per person per year, lowered to 1% for people who can demonstrate they have a chronic condition; it must be applied for on an annual basis.

The main gaps in coverage are related to over-the counter medicines and non-conservative dental care (crowns and dentures), for which the actual costs are often higher than the fixed sum that is reimbursed. Voluntary health insurance plays a role in covering gaps relating to dental care, but its contribution to both total and private spending on health is very small (1.5% and 10% respectively in 2015).

This review analyses data from the German household budget survey – *Einkommens- und Verbrauchsstichprobe* (EVS) – carried out in 2003, 2008 and 2013. It finds that in 2013 2.4% of households (around 1.6 million people) experienced catastrophic out-of-pocket payments. Catastrophic spending on health is heavily concentrated among people in the poorest quintile, people aged over 60 and those living in households whose main source of income is social benefits or income from spouses or partners. Dental care and outpatient medicines are the main drivers of catastrophic spending among the poorest quintile; among richer quintiles, dental care is the main driver.

Financial protection deteriorated between 2003 and 2008, in part linked to changes in policy beyond the health system. The significant increase in the incidence of catastrophic out-of-pocket payments between 2003 and

2008 (from 1.8% to 3.2% of households) was almost entirely driven by a rise in incidence among the two poorest quintiles. It coincided with the Hartz reforms introduced in 2003–2005, which led to a reduction in social benefits for unemployed people, prompted growth in the low-wage sector and was accompanied by rising poverty rates among poorer people and unemployed people.

Changes in the incidence, distribution and structure of catastrophic out-of-pocket payments have also closely mirrored important changes in coverage policy in 2004 – the abolition of exemptions for social beneficiaries and low-income households, the introduction of co-payments for outpatient visits, and the exclusion of over-the-counter medicines from SHI coverage – and in 2012, when co-payments for outpatient visits were abolished. These changes had a particularly marked effect on poorer households. Outpatient care was an important driver of catastrophic spending among the poorest households in 2008 but not in 2003 or 2013. Similarly, outpatient medicines accounted for a greater share of catastrophic spending after the exclusion of over-the-counter medicines from SHI coverage and following the shift from fixed to percentage co-payments per pack, but only among the poorest households.

The introduction of an income-related cap on co-payments in 2004 was an important protective measure. However, the results of this analysis suggest the cap does not fully compensate for the abolition of the exemption from co-payments for social beneficiaries and low-income households. This may be because even small out-of-pocket payments can lead to financial hardship for poor households; the cap does not cover payments for over-the-counter medicines or payments for non-reimbursed costs for prescribed medicines and non-conservative dental care; and the complex process required to benefit from the cap is an obstacle for some households.

To reduce financial hardship, especially among poor households, policy-makers could consider:

- simplifying the process of applying for the cap;
- reintroducing an exemption from co-payments for social beneficiaries and low-income households (beyond crowns and dentures), alongside the cap; and
- extending this exemption to cover out-of-pocket payments for over-the-counter medicines prescribed by physicians (beyond children under 12 years), which would address a potentially important cause of financial hardship among the poorest households.

Unmet need for treatment and income inequality in unmet need have decreased over time and are now low by EU standards, but socioeconomic inequalities in unmet need remain an issue for dental care. Barriers to accessing dental care and the financial hardship associated with the use of dental care should also be a matter of policy concern.

1. Introduction

This review assesses the extent to which people in Germany experience financial hardship when they use health services, including medicines. Research shows that financial hardship is more likely to occur when public spending on health is low in relation to gross domestic product (GDP) and out-of-pocket payments account for a relatively high share of total spending on health (Xu et al., 2003; Xu et al., 2007; WHO, 2010). Increases in public spending or reductions in out-of-pocket payments are not, in themselves, a guarantee of better financial protection, however. Policy choices are also important.

The German health system benefits from a high level of public spending on health; as a result, out-of-pocket payments are low, accounting for around 12% of total spending on health in 2015 (WHO, 2018). Health insurance is mandatory for all citizens and permanent residents, but provided through a dual system of more than 100 competing, non-profit, nongovernmental health insurance funds (sickness funds) – this is known as the social health insurance (SHI) system – and a system of substitutive private health insurance (PHI) operated by private insurance companies. SHI is funded mainly through income-related contributions, with transfers from the government budget, while PHI is funded through risk-related premiums. SHI covers around 90% of the population.

Over the last two decades, the country has experienced a number of sociopolitical and health system changes. First, between 1998 and 2004, the so-called Agenda 2010 or Hartz reforms aimed to contain public spending on social welfare by relaxing labour market regulation, reducing benefits (Siegel et al., 2014), lowering pensions and encouraging people to join private pension schemes. In addition to this process, in 2004 the health system increased existing user charges, introduced new user charges for outpatient visits, and removed some medicines from the publicly financed benefits package. The analysis in this review, which draws on household budget survey data collected in 2003, 2008 and 2013, shows that household capacity to pay for health care fell between 2003 and 2008. Second, the global financial crisis that began in 2008 affected Germany in 2009, but the economy recovered quickly. Unemployment rates are currently lower than before the crisis and are also low compared to other countries. Third, a decade of reforms intended to contain health care costs came to an end in 2012, and was replaced by changes that aim to improve financial protection by increasing benefits and reducing user charges (Busse & Blümel, 2014; Busse et al., 2017).

This review is the first comprehensive and up-to-date analysis of financial protection in Germany. Global studies have produced estimates for Germany drawing on household budget survey data from 1993, and have not provided any context-specific analysis (Xu et al., 2003; Xu et al., 2007; WHO & World Bank, 2017). European studies that include Germany focus on older people (Scheil-Adlung & Bonan, 2013; Arsenijevic et al., 2016; Palladino et al., 2016). One study compares financial protection in Germany with Denmark and Poland, but uses only one year of data from the German Socio-Economic Panel (2009) and does not include analysis of the effect of out-of-pocket payments on poverty (Zawada et al., 2017). The methods used in this study are different from the methods used in previous analyses.

The review is structured as follows. Section 2 sets out the analytical approach and sources of data used to measure financial protection. Section 3 provides a brief overview of health coverage and access to health care. Sections 4 and 5 present the results of the statistical analysis of household data, with a focus

on out-of-pocket payments in section 4 and financial protection in section 5. Section 6 provides a discussion of the results of the financial protection analysis and identifies factors that strengthen and undermine financial protection: those that affect people's capacity to pay for health care and health system factors. Section 7 highlights implications for policy. Annex 1 provides information on household budget surveys, Annex 2 the methods used, Annex 3 regional and global financial protection indicators and Annex 4 a glossary of terms.

2. Methods

This section summarizes the study's analytical approach and its main data sources. More detailed information can be found in Annexes 1–3.

2.1 Analytical approach

The analysis of financial protection in this study is based on an approach developed by the WHO Regional Office for Europe, building on established methods of measuring financial protection (Wagstaff & van Doorslaer, 2003; Xu et al., 2003). Financial protection is measured using two main indicators: catastrophic out-of-pocket payments and impoverishing out-of-pocket payments. Table 1 summarizes the key dimensions of each indicator.

2.2 Data sources

The study analyses anonymized microdata from the Germany household budget survey (*Einkommens- und Verbrauchsstichprobe (EVS)*) carried out by the Federal Statistical Office for Germany. Approximately 40 000 households complete a budget diary every five years, recording detailed information about sources of income and types of spending over a three-month period. A quarter of the households are allocated to each quarter of the year to avoid seasonal bias.

This analysis focuses on households with no members covered by substitutive PHI. This is because the data on out-of-pocket spending on health collected for households with substitutive PHI are not suitable for financial protection analysis and would produce misleading results. Unlike people with SHI, privately insured people pay their health care providers directly and are subsequently reimbursed by their insurance company. The data collected in the household budget survey do not distinguish between payments people make that are subsequently reimbursed, which should not be counted as out-of-pocket spending on health, and those that are not reimbursed. If people with substitutive PHI were included in the analysis, their out-of-pocket payments would be overestimated relative to people with SHI, who receive benefits in kind.

The analysis excludes 9389 observations with at least one household member with substitutive PHI (corresponding to 14.7% of households) in 2003, 9402 observations (14.6% of households) in 2008, and 8802 observations (15.2% of households) in 2013. This leaves 33 349 observations for 2003, 34 657 observations for 2008 and 33 989 observations for 2013. In the following sections, any figures presenting data from the household budget survey exclude households with one or more privately insured people.

When using data from the German household budget survey, two caveats should be borne in mind. First, households with high incomes are often underrepresented. However, this analysis excludes households with people covered by substitutive PHI, who tend to be concentrated in higher-income groups, which addresses this source of selection bias. Second, out-of-pocket spending on health may be overstated by people who do not take into account retrospective reimbursement of out-of-pocket payments above the

cap on SHI user charges (described in section 3.1) or of non-recurrent needs by social assistance.

All currency units are presented in euros.

Table 1. Key dimensions of catastrophic and impoverishing spending on health

Note: See Annex 4 for definitions of words in italics.

Source: Thomson et al. (2018).

Catastrophic out-of-pocket payments	
Definition	The share of households with <i>out-of-pocket</i> payments that are greater than 40% of household <i>capacity to pay for health care</i>
Numerator	Out-of-pocket payments
Denominator	Total household <i>consumption</i> minus a standard amount to cover basic needs. The standard amount to cover basic needs is calculated as the average amount spent on food, housing and <i>utilities</i> by households between the 25th and 35th percentiles of the household consumption distribution, adjusted for household size and composition
Disaggregation	Results are disaggregated into household <i>quintiles</i> by consumption. Disaggregation by place of residence (urban–rural), age of the head of the household, household composition and other factors is included where relevant
Impoverishing out-of-pocket payments	
Definition	The share of households <i>impoverished</i> or <i>further impoverished</i> after out-of-pocket payments
Poverty line	A <i>basic needs line</i> , calculated as the average amount spent on food, housing and utilities by households between the 25th and 35th percentiles of the household consumption distribution, adjusted for household size and composition
Poverty dimensions captured	The share of households further impoverished, impoverished, <i>at risk of impoverishment</i> and <i>not at risk of impoverishment</i> after out-of-pocket payments
Disaggregation	Results can be disaggregated into household quintiles by consumption and other factors where relevant

3. Coverage and access to health care

This section briefly describes the governance and dimensions of publicly financed health coverage (population entitlement, service coverage and user charges) and the role played by voluntary health insurance (VHI). It summarizes some key trends in rates of health service use, levels of unmet need for health care, and inequalities in service use and unmet need.

3.1 Coverage

Because Germany has two distinct systems of health insurance – SHI and PHI – there is no single legal basis for coverage. Social Code Book V (SGB V) on SHI provides the basis for population coverage in general. It is also the basis for population and service coverage and user charges for SHI. In addition to this legislative framework, a large degree of the regulation of SHI is delegated to the most important body of self-governing associations – the Federal Joint Committee, which sets out legal instructions concerning uniform rules for access to and the distribution of health services, health coverage, coordination of care across sectors, and quality and efficiency in health service delivery.

3.1.1 Population entitlement

As of 2009, all residents are obliged to have either SHI or PHI. All employed people and other groups such as pensioners or unemployed people earning less than the opt-out threshold (€3825 per month in 2003, €4015.50 in 2008, €4350 in 2013 and €4950 in 2018) are mandatorily covered by SHI; their non-earning dependents are covered free of charge. People whose gross wages exceed this threshold and self-employed people can remain enrolled in SHI on a voluntary basis or opt out of it and purchase substitutive PHI. If they do this, they are exempt from paying SHI contributions. Dependent spouses and the children of a voluntarily or mandatorily insured person are covered by SHI without having to pay additional contributions as long as they have no or minor earnings. In contrast, dependents in PHI must all pay premiums (see Busse & Blümel, 2014 for a discussion).

Special regulations apply to civil servants. Their employers (mainly federal, state or local governments) do not pay SHI contributions; instead, they cover 50–70% of their health care costs. The vast majority of civil servants therefore choose PHI for financial reasons. Starting in 2018, the Hamburg region has decided to pay 50% of SHI contributions if its new civil servants opt for SHI.

Almost 89% of the German population is covered by SHI and just over 10% through substitutive PHI. The rest (e.g., soldiers, police officers and refugees) are covered by specific government schemes (Bundesministerium für Gesundheit, 2018; Federal Statistical Office, 2016).

A range of regulations govern access to coverage, including exemptions from the obligation to obtain coverage through SHI (§6 SGB V) and restrictions on voluntarily joining SHI (§8 SGB V): voluntary SHI membership is only granted to people who have previously been covered by SHI; after opting for substitutive PHI, returning to SHI is only possible within a certain time period or if a person meets the criteria for mandatory SHI coverage (that is, their earnings are below the threshold); and people older than 55

years are excluded from SHI if they have not been covered by SHI in the preceding five years. These restrictions are not problematic for most people with SHI, however.

People with coverage problems: Entitlement regulations can cause practical challenges for people who have difficulty paying or stop paying their SHI contributions or PHI premiums – for example, self-employed people experiencing financial problems (voluntary SHI members or those with PHI), civil servants who change status and lose their right to coverage under the government scheme, and older people with PHI who become unemployed. People qualifying for social benefits may be able to have their health insurance contributions or premiums paid for them (the latter if they are reasonable). Those who have stopped paying contributions or premiums are only entitled to a limited range of services (mainly emergency care) until their unpaid contributions or premiums are settled. According to PHI data, around 94 000 people in 2013 and 114 000 people in 2014 fell into this category (around 1.3% of all those with PHI). Unpaid SHI contributions amount to more than €1 billion annually (around 0.5% of all contributions), with the total debt currently around €7 billion (Krankenkasseninfo, 2017). Details on the number of SHI members not paying contributions are not publicly available.

Uncovered people: Census data suggest that less than 0.25% of the population had no coverage at all in 2003 and 2007. After health insurance was made mandatory for everyone (in 2009), the figure declined to around 0.16% in 2011 and was less than 0.1% in 2015 (Federal Statistical Office, 2012; 2016). In 2011, people without any coverage were most likely to be self-employed with no employees (over 1% without coverage) and the unemployed (0.7%). Lack of coverage is higher among younger adults and people with lower incomes (Federal Statistical Office, 2012). In 2015, lack of coverage was still above average among self-employed people with no employees (0.8%), unemployed people (0.6%), younger adults and people with lower income (Federal Statistical Office, 2016).

3.1.2 Service coverage

SHI covers a broad range of health services, ranging from physician consultations to expensive diagnostic and curative procedures. All prescription medicines are covered unless explicitly excluded by law or following a benefit assessment by the Federal Joint Committee. Patient information and support for self-help groups may also be covered.

While the broad framework of the SHI benefits package is legally defined, the Federal Joint Committee decides on specifics (Busse & Blümel, 2014; Busse et al., 2017). Ambulatory care is informed by health technology assessment-based recommendations from the Institute for Quality and Efficiency in Health Care, but the Joint Federal Committee has discretion to make a final decision; decisions are published in the Federal Gazette. Sickness funds must offer the same benefits to everyone, although they can add benefits (e.g. health promotion, homeopathy) to compete for members. In inpatient care, hospitals can provide any service (but may not be reimbursed for all of them) except those that are explicitly excluded by the Federal Joint Committee. The coverage status of medicines is coupled to prescription status: over-

the-counter medicines are generally not covered unless the Federal Joint Committee puts them on an exception list, while prescription-only medicines are generally covered, with the exception of a few so-called lifestyle drugs (such as those for erectile dysfunction). New medicines that are found to have added benefit over existing alternatives are also generally covered. Long-term care is covered by a separate insurance scheme.

PHI generally provides similar benefits to SHI, but because physicians can be paid more when treating privately insured patients, they have financial incentives to prioritize them, leading to inequalities in waiting times between people with SHI and PHI (see below).

3.1.3 User charges

User charges are fixed by law and uniform across all sickness funds. Sickness funds may, however, waive some charges for insured people who subscribe to so-called selective contracts. People covered by SHI have had to pay user charges for some health services in all the years included in this analysis (2003, 2008 and 2013).

In **2003**, outpatient services were fully covered as benefits in kind, with no co-payments or extra billing for services covered by SHI (Table 2). Fixed co-payments of €4–5 (depending on pack size) were charged for outpatient prescription medicines. Dental care was subject to a percentage co-payment of 50%, which could be reduced if people could demonstrate they had had regular check-ups. Fixed co-payments for inpatient care were €9 per day and limited to a maximum of two weeks a year. The main protection mechanisms in place were exemptions for children under 18 and for low-income people. In 2001, nearly a third of SHI people were exempt from user charges (19% were children; another 13% were exempt because of their status as low-income persons or social welfare recipients, up from 10% in 1993) (Kern et al., 2003).

Reforms introduced at the beginning of **2004** changed these SHI regulations considerably, leading to a significant increase in user charges (Table 3 and Table 4). The most notable changes were the introduction of a new fixed co-payment for the first outpatient visit in a quarter (known as *Praxisgebühr*) and a change from a fixed co-payment to a percentage co-payment for outpatient medicines.

Protection mechanisms also changed in 2004. Children under 18 remained exempt from all user charges but the exemption for low-income people was abolished. It was replaced with an overall cap for all user charges set at 2% of an individual's annual gross income (or 1% for people with chronic conditions). Part of a household's income is discounted in this calculation for additional family members. Any money people may spend on covering dental care costs above the fixed sum does not count towards the cap.

A household with out-of-pocket payments (through user charges) above the cap can apply for an exemption from having to pay any further user charges in that year. The application involves sending their sickness fund receipts for user charges already paid and proof of the actual gross incomes of all household members. If the application is accepted, any additional payments are waived and no further charges need to be paid within the year. For each

year in which the threshold is exceeded, a new application with proof of out-of-pocket spending and income is required.

In 2014, about 300 000 SHI members exceeded the 2% cap and were exempt from further user charges (down from a high of 500 000 people in 2011 and 2012). The cap is lowered to 1% of annual gross income for chronically ill people; to qualify, people have to demonstrate that they have attended recommended counselling or screening procedures prior to becoming ill. Around 6.4 million people, or around 9% of all SHI members, benefited from this regulation in 2014 (down from a high of 7 million in 2012).

Table 2. User charges for publicly financed health services, 2003

Note: NA: not applicable.

Source: authors.

Service area	Type of user charge	Level of user charge	Exemptions	Cap on user charges paid
Outpatient visits	None	NA	NA	NA
Diagnostic tests	None	NA	NA	NA
Inpatient medicines	None	NA	NA	NA
Medical aids (prescribed medical products)	None	NA	NA	NA
Outpatient prescription medicines	Fixed co-payment	€4–5 depending on package size	<ul style="list-style-type: none"> • Children under 18 years • People in care homes or nursing homes • Recipients of social welfare • People with incomes below a threshold 	No
Dental care	None (preventative and conservative treatment) Co-insurance	NA 50% of treatment cost (40%/35% if annual check-ups obtained in last 5/10 years)	<ul style="list-style-type: none"> • Children under 18 years • People in care homes or nursing homes • Recipients of social welfare • People with incomes below a threshold 	Three times the difference between the income threshold and the person's gross income
Inpatient care	Fixed co-payment	€9 per day	Children under 18 years	14 days a year (€126 a year)

Table 3. Changes to coverage policy, 2004–2017

Source: authors.

Year	Change	Health service targeted	Population group targeted
2004	New fixed co-payment for the first visit in a quarter (known as Praxisgebühr)	Outpatient visits, including psychotherapy and dental visits	Adults with SHI
	Fixed co-payment per pack replaced by a percentage co-payment of 10% of the actual price up to the reference price (plus any cost exceeding the reference price), with a minimum of €5 and maximum of €10 per pack, but never more than the medicine price	Outpatient prescribed medicines	Adults with SHI
	Over-the-counter medicines excluded from SHI coverage	Over-the-counter medicines	SHI insured aged over 12 years
	New percentage co-payment of 10%, with a cap of €10 per month	Medical aids	Adults with SHI
	Fixed co-payment was increased from €9 to €10 per day in hospital and the maximum period was doubled to 28 days a year	Inpatient care	Adults with SHI
	Exemption for low-income people abolished and replaced with an income-related cap for all user charges	All health services	Low-income adults with SHI
2005	Percentage co-payments for crowns and dentures are replaced by a system of fixed amounts which are based on 50% of expected costs for basic treatment; the percentage co-payment is 50% for basic treatment but higher for non-basic treatment	Dental care	All SHI insured
2009	Health insurance becomes mandatory for all residents	All health services	People eligible to opt out of SHI or who have already opted out
2012	Quarterly fixed co-payment abolished	Outpatient visits	Adults with SHI

An early evaluation using data from the German Socio-Economic Panel showed that physician contacts declined from 2003 to 2004 (Grabka et al., 2005), but the share of patients who had at least one physician contact in both years remained stable. Necessary physician contacts still took place, e.g. in the case of disabled people and people in poor health, and no discrimination against people of low social status was observed. Other studies confirmed these results. The number of physician–patient contacts rose again in the following years, suggesting that any reduction in potentially unnecessary physician visits resulting from the introduction of co-payments was short lived.

Reforms introduced at the end of 2012 abolished the quarterly co-payment for outpatient visits (Table 4).

Table 4. User charges for publicly financed health services, 2004–2018

Note: NA: not applicable.

Source: authors.

Service area	Type of user charge	Level of user charge	Exemptions	Cap on user charges paid
Outpatient visits	Fixed co-payment	€10 for the first visit in every quarter, including psychotherapy and dental visits (abolished in 2012)	<ul style="list-style-type: none"> • Children under 18 years 	
Outpatient prescription medicines	Percentage co-payment plus reference pricing	10% of the price up to the reference price (plus any cost exceeding the reference price), with a minimum of €5 and maximum of €10 per pack, but never more than the medicine price	<ul style="list-style-type: none"> • Children under 18 years • Medicines that cost at least 30% less than the reference price (since 2006) 	
Medical aids (prescribed medical products)	Percentage co-payment	10% up to €10 per month	<ul style="list-style-type: none"> • Children under 18 years 	
Dental care	<p>None (medically necessary preventative and conservative treatment)</p> <p>Fixed sum with excess cost-sharing</p>	<p>Before 2012: fixed co-payment of €10 for the first visit in every quarter</p> <p>Since 2005 (medically necessary non-conservative dental treatment e.g. crowns and dentures): sickness funds reimburse a fixed sum based on 50% of the expected costs for basic treatment (the fixed sum is higher after 5/10 years of regular annual check-ups); any excess cost has to be paid by the patient (NB: for 2004, cf. Table 3)</p>	<ul style="list-style-type: none"> • Children under 18 years • Fixed amount is doubled (i.e. to 100% of the expected costs for basic treatment) for persons below a certain income threshold (€1218 gross/month for individuals in 2018) and those on social welfare 	2% of gross income (1% for chronically ill people)
Inpatient care	Fixed co-payment	€10 per day up to 28 days a year	<ul style="list-style-type: none"> • Children under 18 years 	
Inpatient medicines	None	NA	NA	
Diagnostic tests	None	NA	NA	

3.1.4 The role of VHI

Substitutive PHI is available to those who are not obliged to join the SHI system (mostly civil servants, individuals above the opt-out threshold and self-employed people).

VHI also plays a supplementary or complementary role for SHI members. The association of PHI companies (Verband der Privaten Krankenversicherung, 2015) reported 24.3 million supplementary or complementary VHI policies in 2014, mainly for denture and crown user charges (roughly 14.4 million policies), services not covered by SHI (around 7.7 million policies) and options such as one- or two-bed rooms in hospital or treatment by the head physician (around 5.9 million policies).

In 2015, VHI only accounted for 1.5% of total (current) spending on health care and just over 10% of private spending on health care, indicating the minor role it plays in protecting households from out-of-pocket payments (WHO, 2018).

Table 5 summarizes the main gaps in SHI coverage and indicates the role of VHI in filling these gaps.

Table 5. Gaps in coverage

Source: authors.

	Population entitlement	Service coverage	User charges
Issues in the governance of publicly financed coverage	Self-employed people only qualify for SHI coverage if previously covered by SHI; those who default on paying contributions or premiums are only entitled to emergency care; civil servants are financially incentivized to opt for PHI	Waiting time differences between people with SHI and substitutive PHI due to provider payment incentives	Use of co-payments, including percentage co-payments
Main gaps in publicly financed coverage	Self-employed people and people who have never been employed and never been insured through SHI before	Dental care exceeding covered standard treatment (e.g. better materials for crowns); over-the-counter medicines (people >12 years); lifestyle medicines	Co-payments for outpatient care; although there is an income-related cap there are no general exemptions for poor or regular users of care
Are these gaps covered by VHI?	Mostly covered by special schemes for civil servants and PHI	Complementary VHI for dental care and supplementary VHI available, but only accounts for 1.5% of total spending on health	Complementary VHI available but plays a very minor role

3.2 Access, use and unmet need

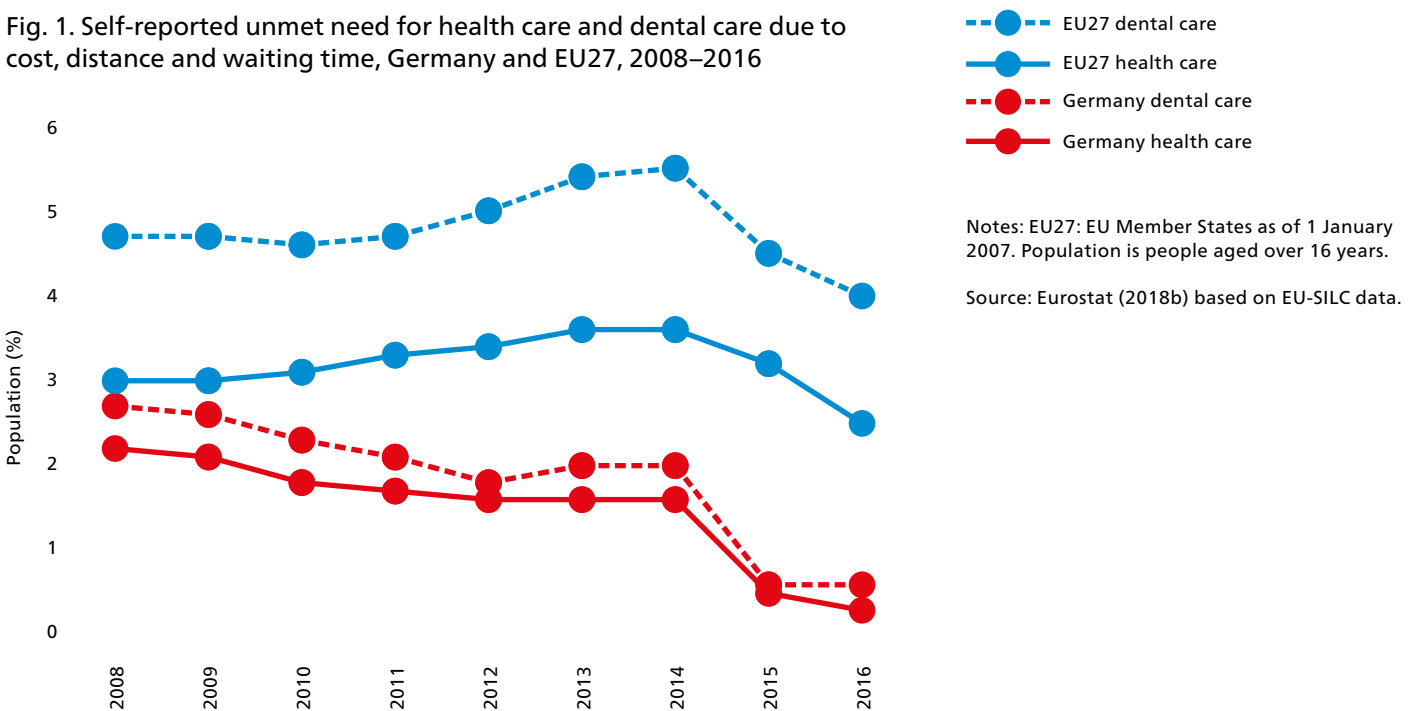
On average, there were 8 outpatient contacts per person in 2003, 8.4 in 2008 and 9.9 in 2013 (WHO Regional Office for Europe, 2016). These numbers are based on cases, however (i.e. the number of ambulatory care physicians contacted per time unit for reimbursement – three months). Many patients contact the same physician more than once within a three month period, leading to a higher average number of around 17 patient–physician contacts per year in 2007 (Riems et al., 2012).

There were about 17.3 million inpatient cases in 2003, rising to 17.5 million in 2008 and 19.1 million in 2014 (Federal Statistics Office, 2016). In contrast, the

number of hospital beds available fell from about 542 000 in 2003 to 503 000 in 2008 to 501 000 in 2014. This was accompanied by a decrease in the average length of stay from 8.9 days in 2003 to 8.1 days in 2008 to 7.4 days in 2014. These statistics indicate that hospital use (average days in hospital per person) has remained constant since 2008 at around 1.7 days per person a year, so decreasing length of stay has been offset by additional cases (Busse et al., 2017).

A common measure for perceived problems with access to health services is unmet need (Box 1). Data on unmet need vary by source. According to the European Union Statistics on Income and Living Conditions (EU-SILC), unmet need for health care and dental care due to cost, distance or waiting time is much lower in Germany (affecting under 1% of the population aged over 16 years in 2016) than in the EU on average (2.5% for health care and 4.0% for dental care) (Fig. 1).

Fig. 1. Self-reported unmet need for health care and dental care due to cost, distance and waiting time, Germany and EU27, 2008–2016



EU-SILC data show that unmet need for both health and dental care due to cost, distance or waiting times fell from 2008 to 2012, slightly increased from 2012 to 2014 and fell sharply in 2015 (Fig. 1). Unmet need for dental care is consistently higher than unmet need for health care. Income-related inequality in unmet need for both health and dental care has been substantial in the past but appears to have narrowed markedly since 2012 (Fig. 2).

Box 1. Unmet need for health care

Source: WHO Barcelona Office for Health Systems Strengthening.

Financial protection indicators capture financial hardship among people who incur out-of-pocket payments through the use of health services. They do not, however, indicate whether out-of-pocket payments create a barrier to access, resulting in unmet need for health care. Unmet need is an indicator of access, defined as instances in which people need health care but do not receive it because of barriers to access.

Information on health care use or unmet need is not routinely collected in the household budget surveys used to analyse financial protection. They indicate which households have not made out-of-pocket payments but not why. Households with no out-of-pocket payments may have no need for health care, be exempt from user charges or face barriers to accessing the health services they need.

Financial protection analysis that does not account for unmet need could be misinterpreted. A country may have a relatively low incidence of catastrophic out-of-pocket payments because many people do not use health care, due to limited availability of services or other barriers to access. Conversely, reforms that increase the use of services can increase people's out-of-pocket payments – for example, through user charges – if protective policies are not in place. In such instances, reforms might improve access to health care but at the same time increase financial hardship.

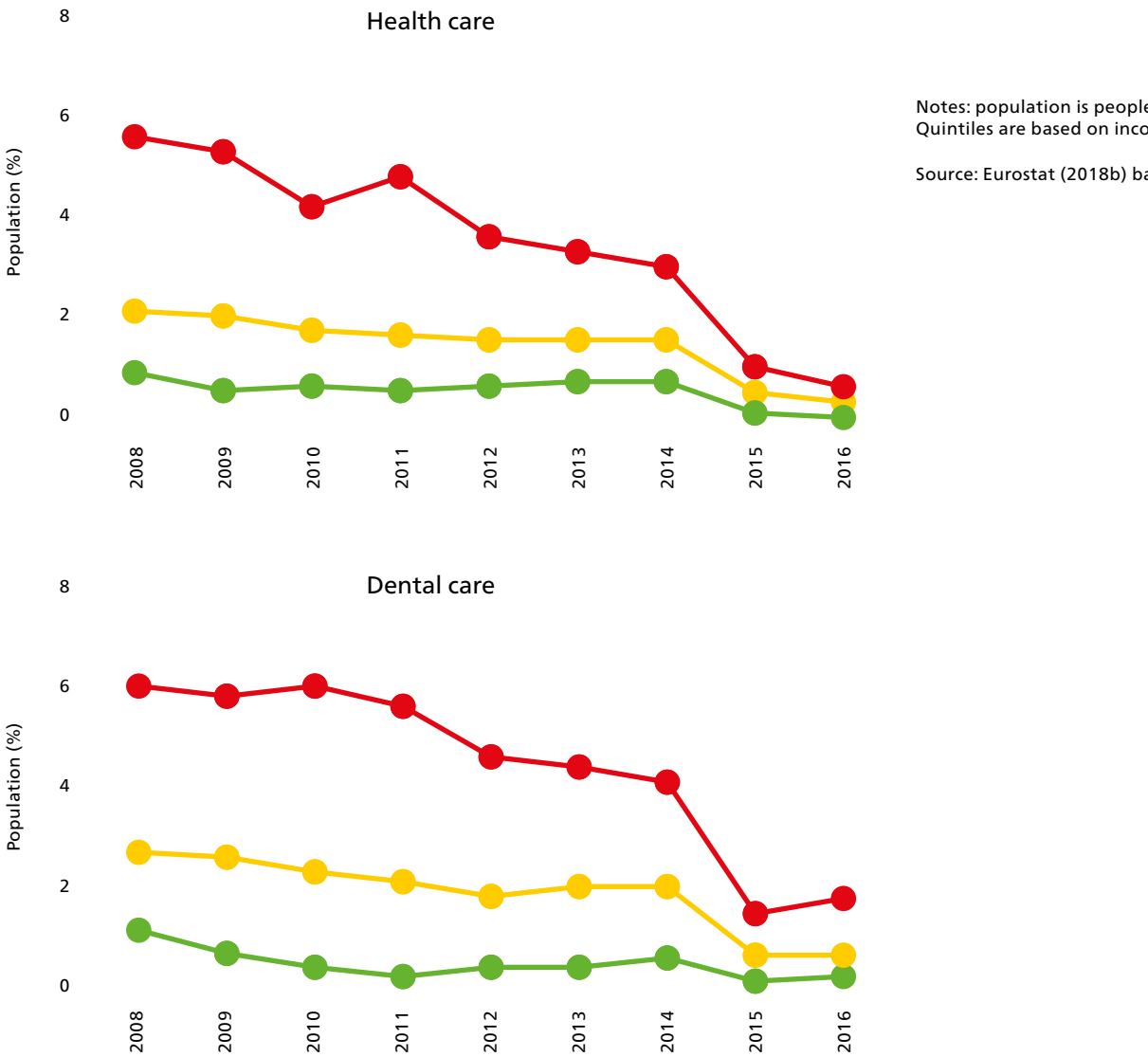
This review draws on data on unmet need to complement the analysis of financial protection (section 3.2). It also draws attention to changes in the share and distribution of households without any out-of-pocket payments (section 4.1). If increases cannot be explained by changes in the health system – for example, increased protection for certain households – they may be due to increased unmet need.

Every year, EU Member States collect data on unmet need for health and dental care through EU-SILC. Although this important source of data lacks explanatory power and is of limited value for comparative purposes because of differences in reporting by countries, it is useful for identifying trends over time within a country (Arora et al., 2015; EXPH, 2016; EXPH, 2017).

EU Member States also collect data on unmet need through the European Health Interview Survey (EHIS) carried out every five years or so. The second wave of this survey was conducted in 2014. A third wave is scheduled for 2019.

Whereas EU-SILC provides information on unmet need as a share of the population aged over 16 years, EHIS provides information on unmet need among those reporting a need for care. EHIS also asks people about unmet need for prescribed medicines.

Fig. 2. Income inequality in self-reported unmet need for health and dental care due to cost, distance and waiting time in Germany, 2008–2016



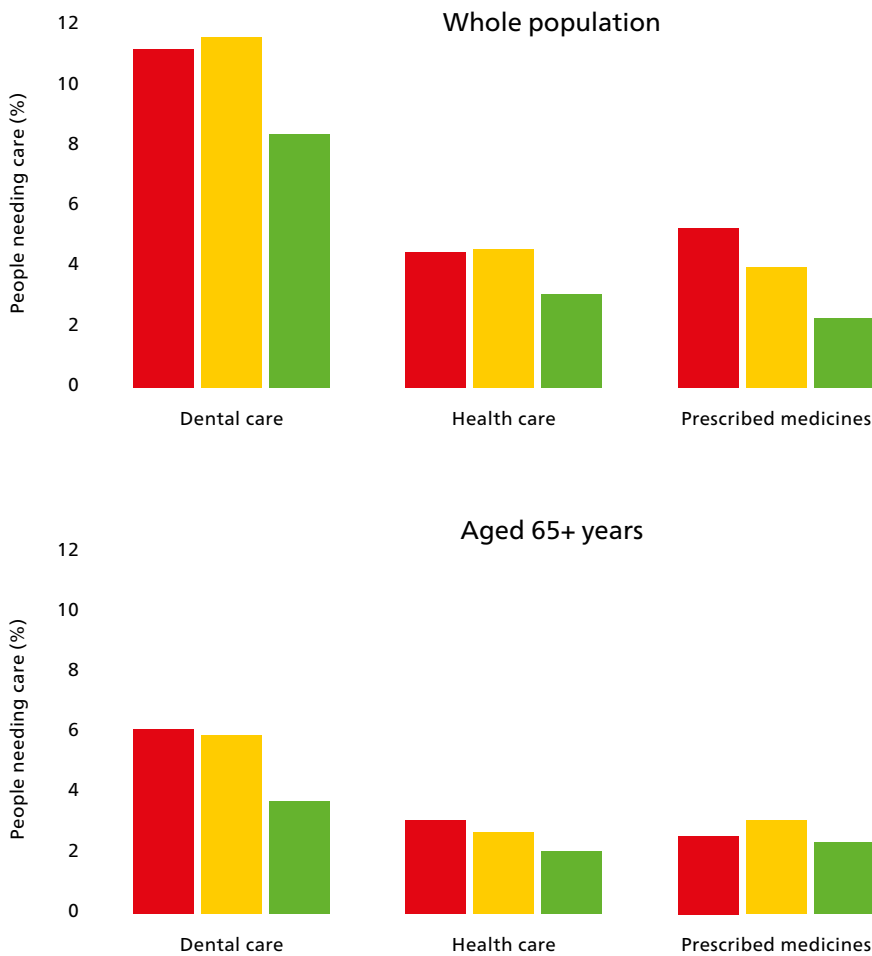
Notes: population is people aged over 16 years. Quintiles are based on income.

Source: Eurostat (2018b) based on EU-SILC data.

According to EHIS data, levels of unmet need for health care due to cost, distance or waiting time among people reporting a need for care are above the EU28¹ average in Germany (30% in Germany in 2014 compared to an EU28 average of 27%) (Eurostat, 2018a). EHIS data confirm that unmet need is greater for dental care than for health care (Fig. 3). They show that unmet need for prescribed medicines is on a par with unmet need for health care, although socioeconomic differences in unmet need are more marked for prescribed medicines than for health or dental care. The EHIS results suggest that unmet need and socioeconomic inequality in unmet need are less of a problem for people aged over 65 than for the general population (in contrast to the EU average).

1. EU Member States as of 1 July 2013

Fig. 3. Self-reported unmet need due to cost in Germany by age and educational status, 2014



- Secondary or below
- Post-secondary
- Tertiary

Note: self-reported unmet need among people aged over 15 years reporting a need for care. Secondary or below: people with less than primary, primary and lower secondary education. Post-secondary: people with upper secondary and post-secondary non-tertiary education. Tertiary: people with tertiary education.

Source: Eurostat (2018a) based on EHIS data.

Analysis from a Commonwealth Fund survey suggests that in 2011 about 13% of “patients with complex care needs” skipped drug doses or fully refrained from taking a prescribed drug because of the required co-payments (Schoen et al., 2011). This is a higher ratio than in all other European countries included in the survey (France, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom). In the other countries, this share ranged from 2% in the United Kingdom to 9% in France. Around 12% of these patients in Germany did not consult a physician despite having a health condition requiring treatment – again, the highest share among European countries included in the survey. See Busse & Blümel (2014) for more details.

German studies find that differences in the use of doctors seem to depend largely on differences in health status, suggesting there is little inequality in access to health care (Lüngen et al., 2011). There are regional differences, however. Siegel et al. (2016) find that geographical access to general

practitioners, ambulatory specialists and inpatient care is much better in urban areas than rural areas.

When comparing SHI and PHI, the range of services covered, the network of contracted providers and quality of care seem to be similar across the two systems. Nevertheless, the dual health insurance system gives rise to some concerns about equity of access to care. For example, physicians can charge more for services provided to people with PHI, and are often paid more quickly when treating privately insured people (Busse & Blümel, 2014). This creates a financial incentive for doctors to favour people with PHI (Greß, 2009). Differences in payment systems between SHI and PHI may lead to under treatment of SHI members or overtreatment of people with PHI (Greß, 2009; Busse & Blümel, 2014). Analysis of waiting times has shown that SHI members wait considerably longer for appointments and spend more time in waiting rooms when seeking ambulatory or inpatient care, compared to people with PHI (Lüngen et al., 2008; Schellhorn, 2007; Kuchinke et al., 2009). While differences in waiting time are evident, they are comparatively short for both groups in international context.

3.3 Summary

Germany provides very close to universal population coverage. Since health insurance was made mandatory for the whole population in 2009, the share of the population without any form of coverage has fallen from 0.25% in 2007 to less than 0.1% in 2015.

The population is covered by a dual system of health insurance: SHI covers almost 89% of the population and substitutive PHI covers just over 10%. Almost all of the remaining 1% is covered by special government schemes. Those without coverage have access to publicly financed emergency care.

All sickness funds must offer a standard SHI benefits package defined by the Federal Joint Committee, although they can offer additional benefits to attract members. The SHI benefits package is comprehensive and informed, to a degree, by health technology assessment. The only significant change over time has been the exclusion of over-the-counter medicines in 2004 for persons aged over 12.

User charges for SHI-covered services are also defined centrally. New co-payments for outpatient visits were introduced in 2004 and abolished in 2012. User charges for outpatient prescription medicines also rose in 2004, changing from a fixed co-payment of €4–5 per pack to a percentage co-payment of 10%, with a minimum of €5 and a maximum of €10 per pack. Currently, user charges are applied to outpatient prescription medicines, medical aids (i.e. prescribed medical products), non-conservative dental care, inpatient care and ambulance transportation.

Children under 18 covered by SHI are exempt from all user charges and therefore enjoy free access to health care; in addition, children under 12 are covered for over-the-counter drugs if prescribed by a physician. Exemptions from user charges for low-income people were abolished in 2004 and replaced with an income-related cap on almost all out-of-pocket spending

through user charges (it does not cover payments above the reference price for prescribed medicines or costs above the fixed sum for non-conservative dental care; for the latter there is a special income cap, however, below which the fixed amount is doubled). The cap is set at 2% of gross income, lowered to 1% for people who can demonstrate they have a chronic condition, and must be applied for on an annual basis.

The main gaps in coverage are related to:

- over-the counter medicines; and
- non-conservative dental care (crowns and dentures) with the actual costs being higher than the fixed sum that is reimbursed.

VHI plays a role in covering gaps relating to dental care, but its contribution to total and private spending on health is very small (1.5% and 10% respectively in 2015).

The extent of unmet need for care varies by data source, but both main sources (EU-SILC and EHIS) indicate that unmet need for dental care is a greater problem than unmet need for health care. EU-SILC data suggest that unmet need for health and dental care has fallen steadily over time and is now low by EU standards; income inequalities in unmet need have been substantial in the past but have narrowed markedly since 2012.

When comparing SHI and PHI, the range of health services covered, the network of contracted providers and quality of care seem to be similar across the two systems. Differences in physician payment across the two systems create financial incentives for doctors to favour people with PHI, leading to longer waiting times for people with SHI, but waiting times for both groups are relatively short by international standards.

4. Household spending on health

In the first part of this section, data from the household budget survey are used to present trends in household spending on health: that is, out-of-pocket payments, the formal and informal payments made by people at the time of using any good or service delivered in the health system. The section also briefly presents the role of informal payments and the main drivers of changes in out-of-pocket payments over time. Note that the household budget survey data presented here do not include households with one or more people covered by substitutive PHI (see section 2.2 for details).

4.1 Out-of-pocket payments

The share of households with out-of-pocket payments rose between 2003 and 2008 (from 87% to 94%), and subsequently fell to 90% in 2013 (Fig. 4). The fall in the share of households without out-of-pocket payments in 2008 was evident across all consumption quintiles (Fig. 5). It is consistent with the introduction of the new user charge for outpatient visits in 2004 (*Praxisgebühr*) and the abolition of exemptions for low-income people in the same year (reflected in the dip in 2008), followed by the abolition of the user charge for outpatient visits in 2012 (reflected in the increase in 2013).

Fig. 4. Share of households with and without out-of-pocket payments

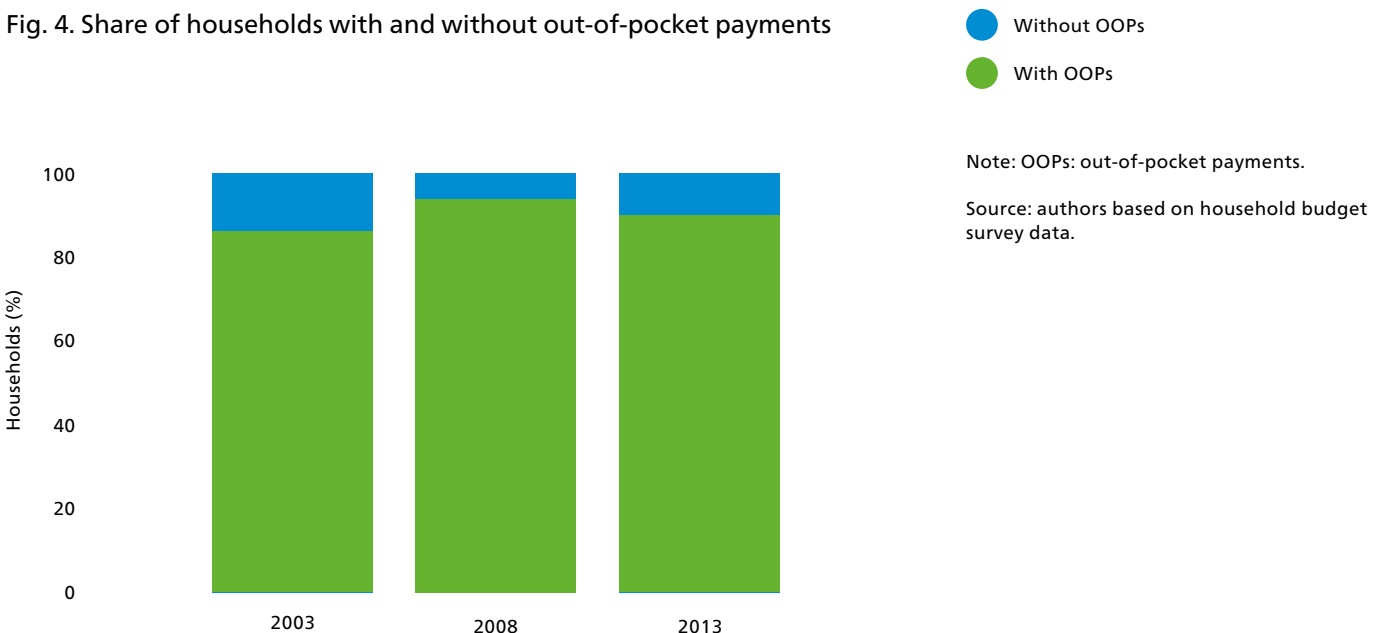
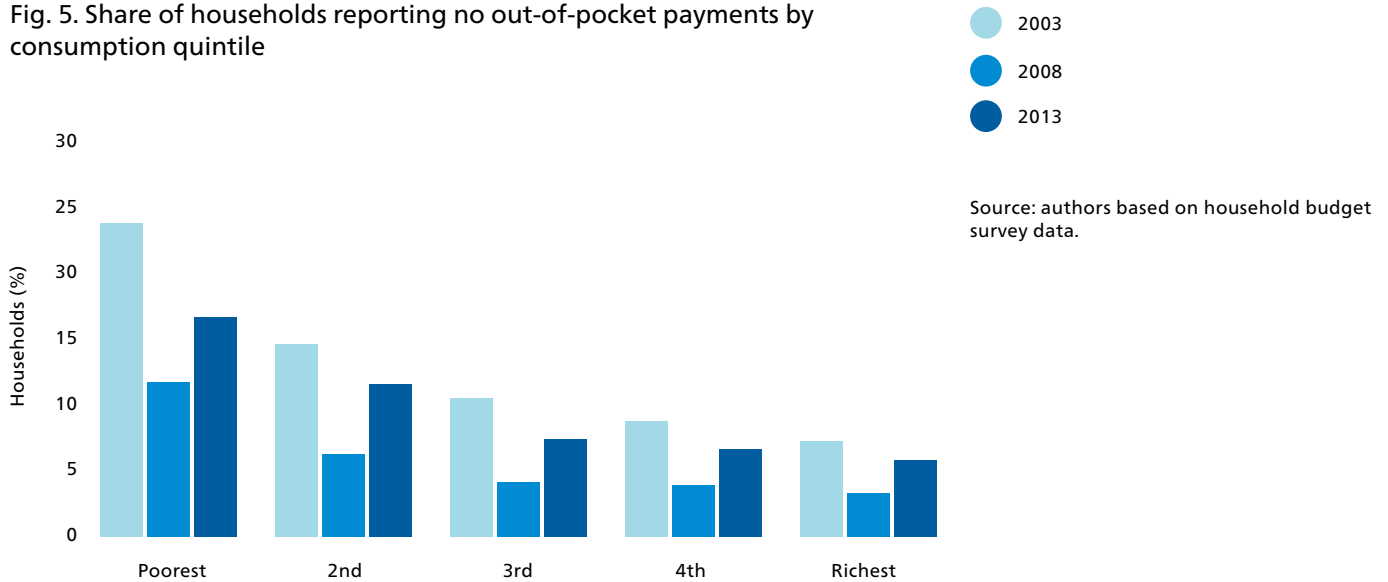


Fig. 5. Share of households reporting no out-of-pocket payments by consumption quintile



As the share of households with out-of-pocket payments increased and then declined, so too did the average amount spent per person per year (Fig. 6). Adjusted for inflation (i.e. in constant 2015 euros), this rose from €361 in 2003 to €408 in 2008 (an increase of 13%), then fell to €387 in 2013 (a decrease of 5%). This pattern is apparent across all consumption quintiles. However, the increase between 2003 and 2008 was much steeper for the two poorest quintiles than the other quintiles. The decrease between 2008 and 2013 was steepest for the poorest quintile. Fig. 6 also shows that the richest quintile consistently spends around six or seven times as much as the poorest quintile.

Fig. 6. Annual out-of-pocket spending on health care per person by consumption quintile

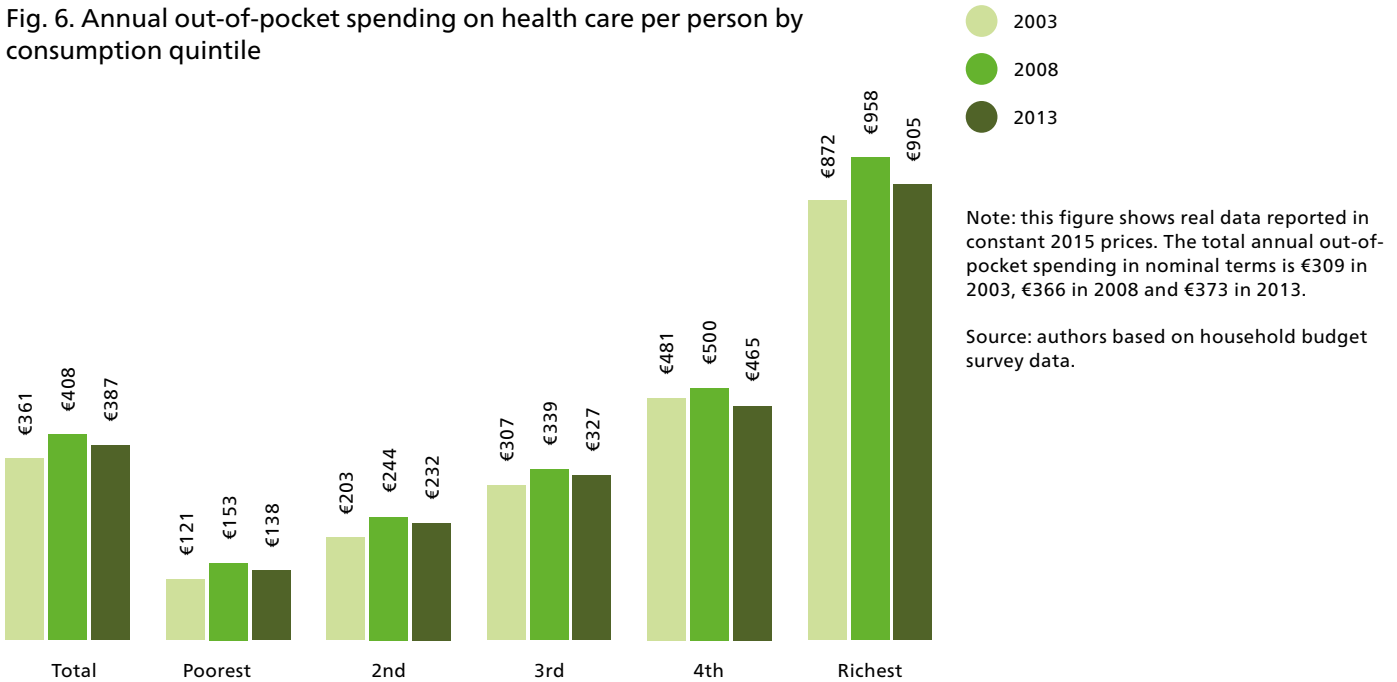
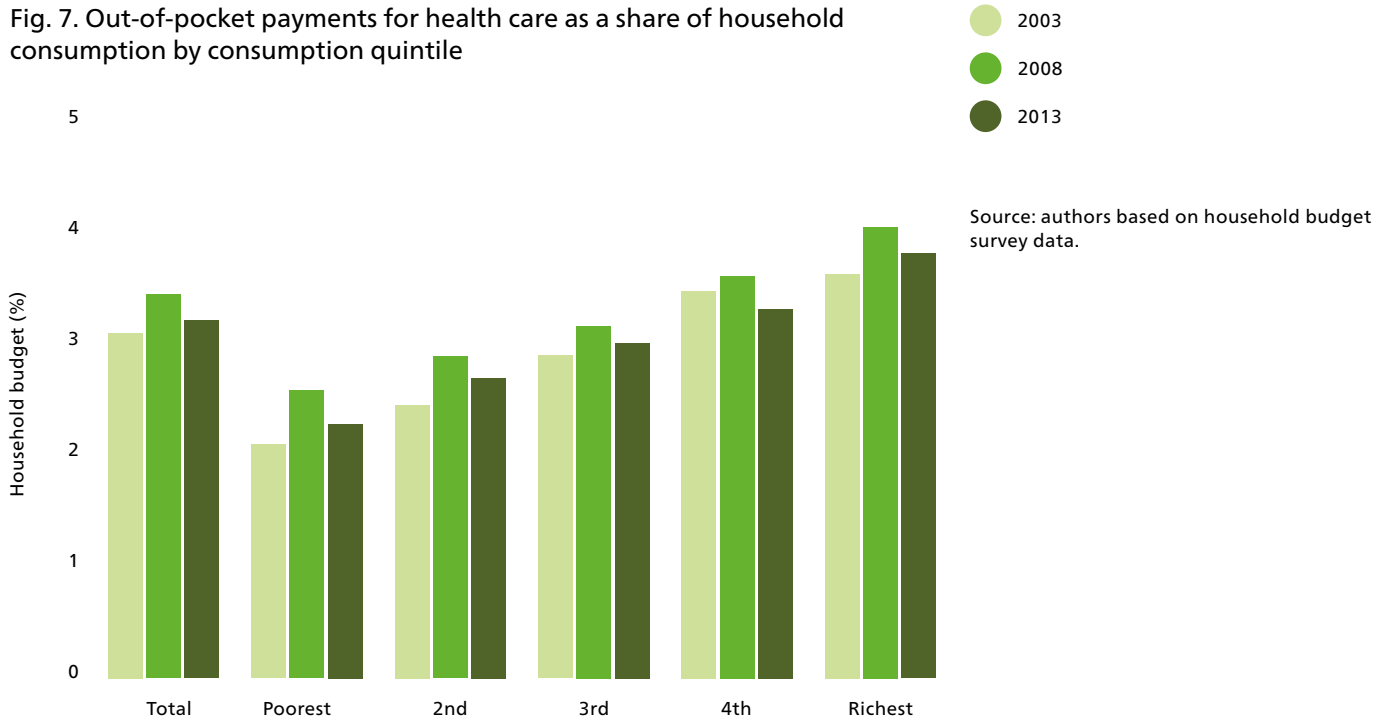


Fig. 7 shows average out-of-pocket spending on health as a share of total household consumption. The overall share was slightly above 3% in all years, rising in 2008 and falling in 2013. Households in the poorest quintile have the lowest share (2.2% in 2013) while households in the richest quintile have the highest share (3.8%). Between 2003 and 2008, the out-of-pocket share increased in all quintiles, with the greatest increase in the poorest quintile. Between 2008 and 2013, it fell again in all consumption quintiles.

The distribution shown in Fig. 7 suggests that the overall cap on user charges introduced in 2004, which is set at 2% of household income or 1% for people who can demonstrate they are chronically ill, is exceeded on average in all except the poorest quintile. One reason for this may be that the cap does not include dental care payments above the fixed sum. It is also possible that some households applied for the cap in the third or fourth quarter of the calendar year and were subsequently reimbursed by SHI for out-of-pocket payments above the cap, but did not account for this when recording out-of-pocket payments in the survey.

Fig. 7. Out-of-pocket payments for health care as a share of household consumption by consumption quintile



In all three years, dental care, medicines and medical products account for the largest shares of out-of-pocket spending, with medicines and dental care each accounting for roughly 30% in 2013 (Fig. 8). The share spent on inpatient care and diagnostic tests is small and does not change over time or across quintiles (Fig. 9). This is consistent with the absence of user charges for diagnostic tests, the moderate user charges for inpatient care and the absence of change in these charges over time.

The effects of the introduction of co-payments for outpatient visits in 2004 and their subsequent abolition in 2012 can be seen in the increase in share of out-of-pocket spending on outpatient care, which doubled from 6.4% in 2003 to 13.8% in 2008 and then fell back to 6.5% in 2013. The effects can be seen most clearly in the poorest quintile (Fig. 9). The outpatient care share of out-of-pocket payments was lowest in the poorest quintile in 2003 and 2013 compared to the other quintiles, but highest in 2008, when the so-called *Praxisgebühr* was in place. Between 2003 and 2008, the outpatient care share increased by more than four times for the poorest quintile (from 4% to 18%). It was also pronounced for the second and third quintiles, but much less so for the two richest quintiles.

The dental care share of out-of-pocket spending rises with total household spending; it is much higher for the richest quintile than for the poorest quintile (Fig. 9). Between 2003 and 2008, the dental care share fell for all but the richest quintile and increased between 2008 and 2013. This trend is possibly due to the abolition of the quarterly user charges for outpatient visits at the end of 2012, which may have increased use.

Spending on medicines shows the opposite trend: its share is highest among the poorest quintile and lowest in the richest quintile across all three years. The medicines share of out-of-pocket payments remained stable overall between 2003 and 2008.

Medical products account for approximately one quarter of all out-of-pocket payments. Their share is highest in the third and fourth quintiles and decreased, on average, over time.

Fig. 8. Breakdown of total out-of-pocket spending by type of health care

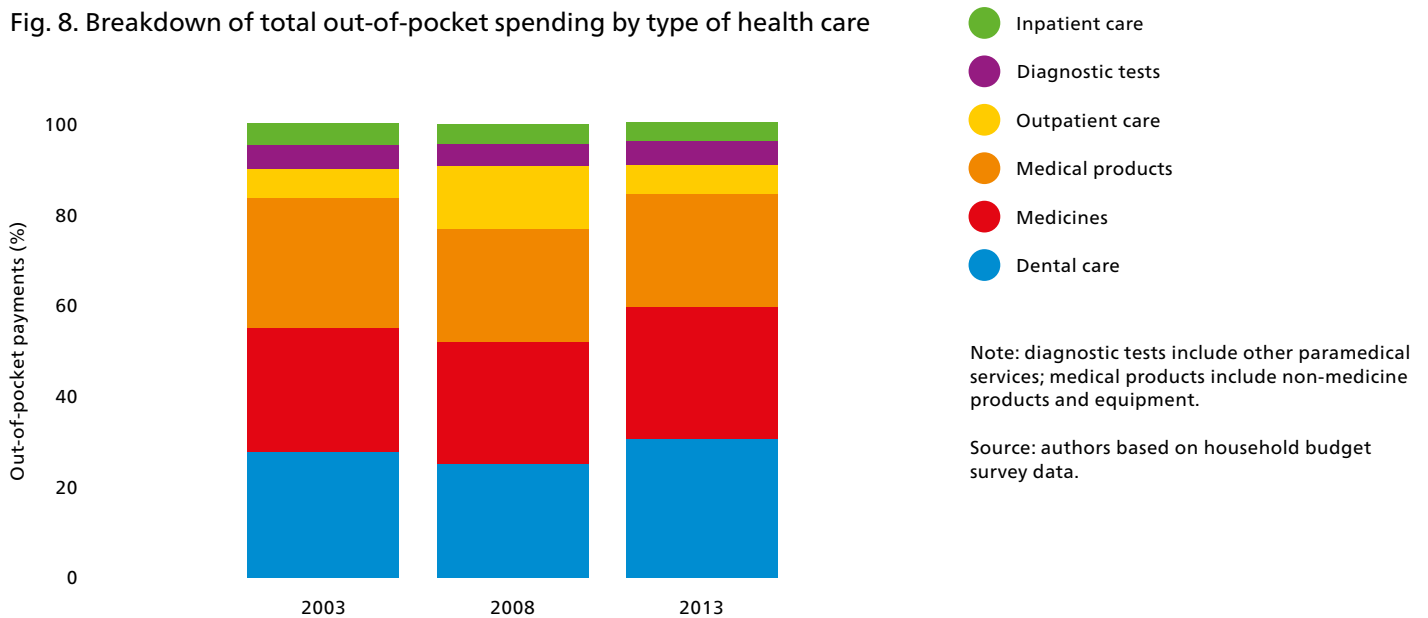
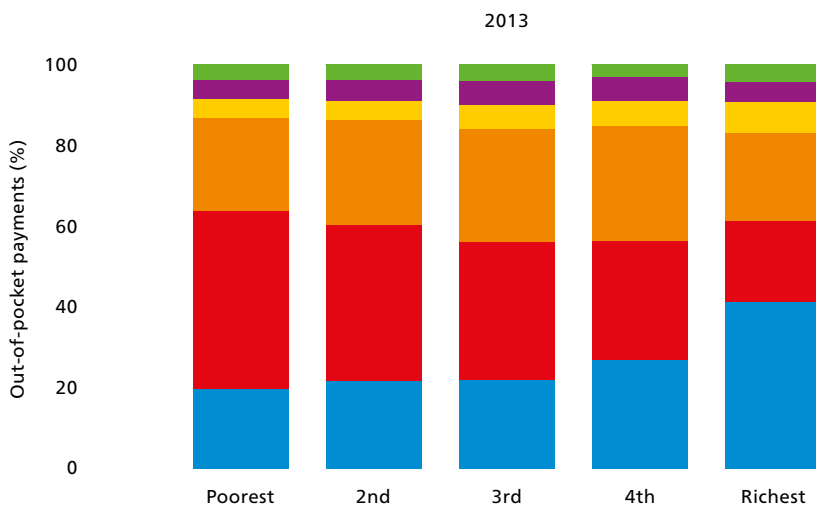
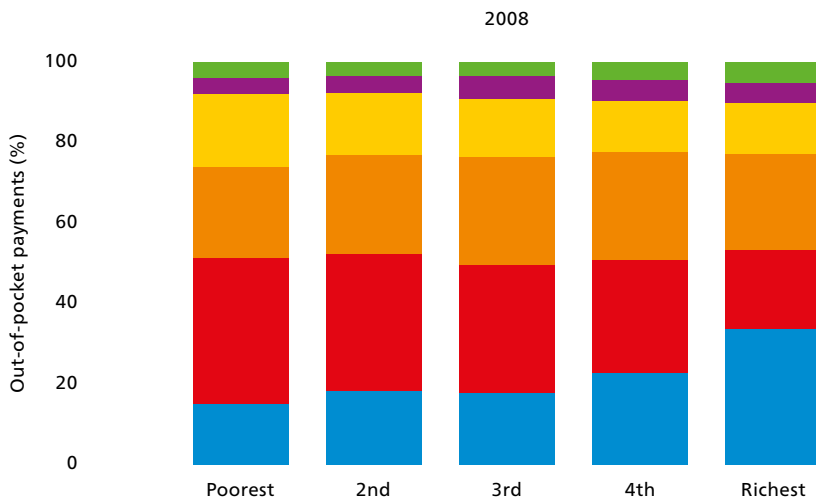
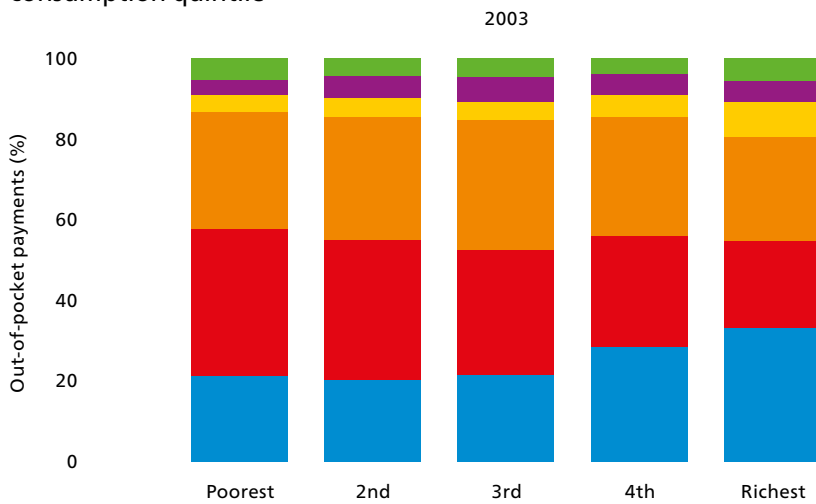


Fig. 9. Breakdown of out-of-pocket spending by type of health care and consumption quintile



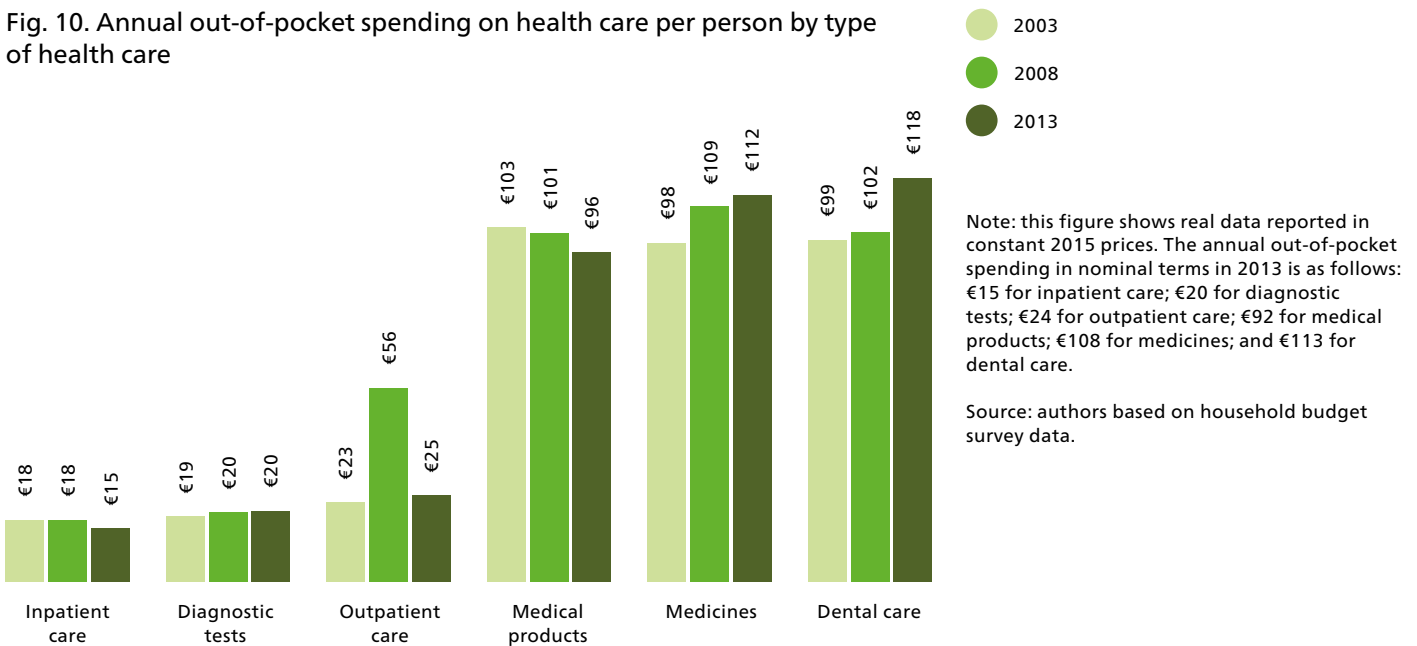
- Inpatient care
- Diagnostic tests
- Outpatient care
- Medical products
- Medicines
- Dental care

Note: diagnostic tests include other paramedical services; medical products include non-medicine products and equipment.

Source: authors based on household budget survey data.

Between 2003 and 2013, inflation-adjusted out-of-pocket spending per person (i.e. in constant 2015 euros) increased for dental care and medicines and fell for inpatient care and medical products (Fig. 10). The co-payment change for outpatient care can be seen in the large spike in out-of-pocket spending per person in 2008 and large fall in 2013.

Fig. 10. Annual out-of-pocket spending on health care per person by type of health care



4.2 Informal payments

A 2017 Special Eurobarometer report on corruption found that 4% of survey respondents in Germany who had visited a public health care provider in the previous 12 months reported having had to make an extra payment or give a valuable gift to a nurse or doctor, or make a donation to the hospital (European Commission, 2017). This is in line with the EU28 average of 4%.

4.3 What drives changes in out-of-pocket payments?

Public spending on health has remained fairly stable over time as a share of GDP and as a share of total spending on health (WHO, 2018). In per person terms it has risen steadily, as shown in Fig. 11. The apparently larger than normal increase in 2009 reflects a change in international accounting method to group premiums for substitutive PHI with public spending under compulsory financing arrangements. In contrast, national health accounts data show out-of-pocket payments per person have not grown so much over time (Fig. 10).

The out-of-pocket share of total spending on health rose from 12.7% in 2003 to 14.1% in 2004, following the increase in user charges in 2004 (Fig. 12). It has fallen since 2012, perhaps reflecting a combination of the abolition of user charges for outpatient visits in 2012 and higher public spending on health per person. In 2015, at 12.5%, the out-of-pocket share of total spending on health in Germany was below the EU15² average, but higher than in France (6.8%) and the Netherlands (12.3%) (Fig12).

2. EU Member States from 1 January 1995 to 30 April 2004.

Fig. 11. Spending on health per person by financing scheme, 2000–2015

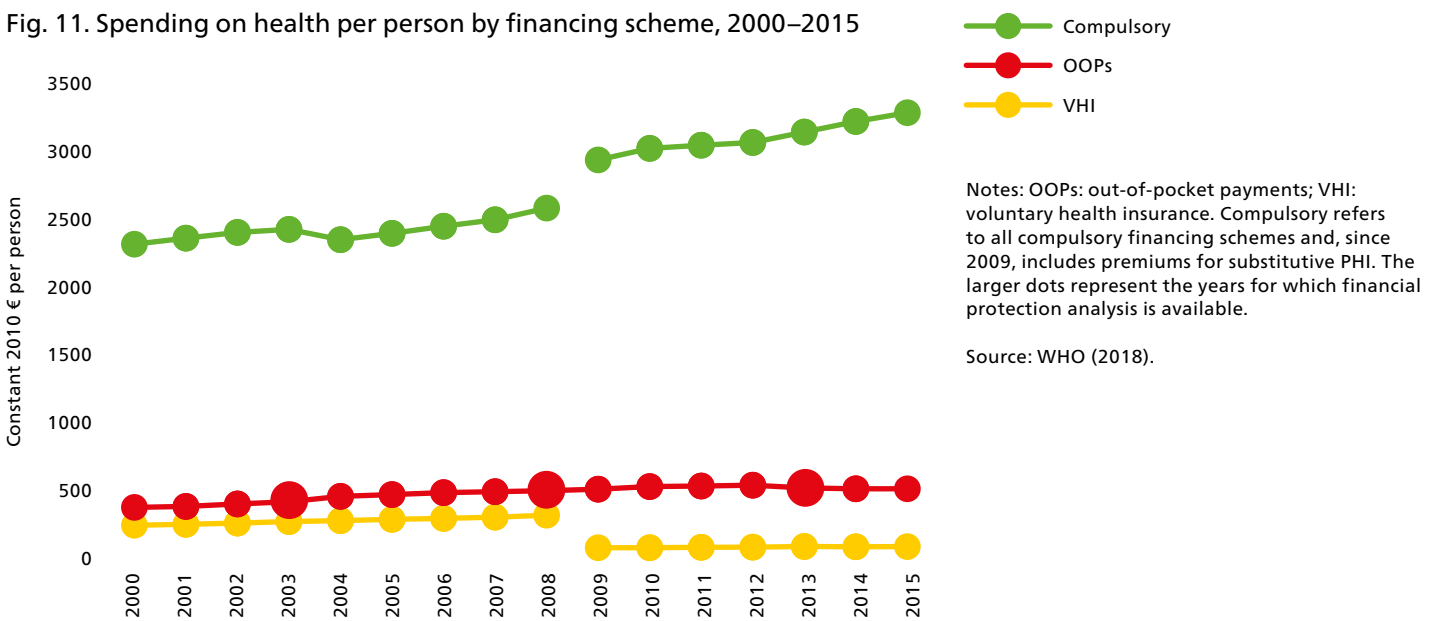
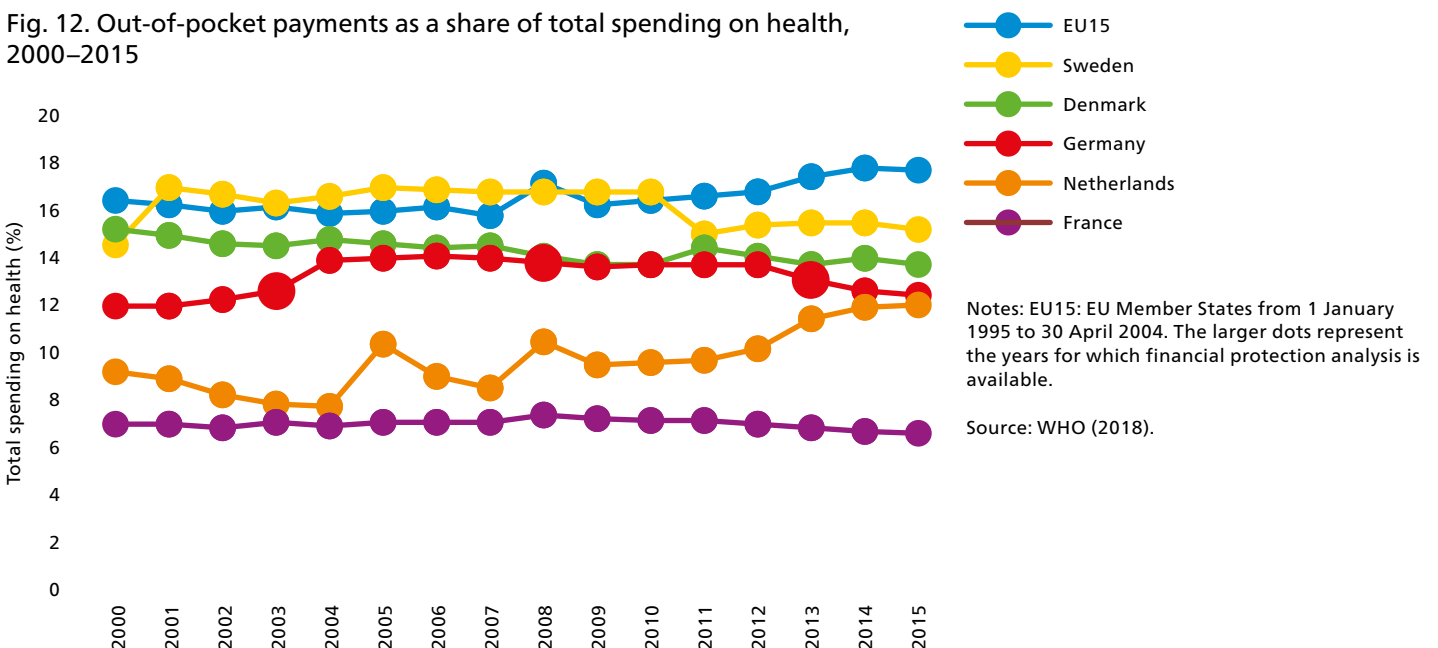


Fig. 12. Out-of-pocket payments as a share of total spending on health, 2000–2015



4.4 Summary

Household budget survey data indicate that the vast majority of households (90% in 2013) pay for health care out of pocket, with the richest quintile consistently paying over seven times as much as the poorest quintile in both nominal and real terms and significantly more proportionately too: out-of-pocket payments for health accounted for 3.8% of total household spending among the richest quintile in 2013 versus 2.2% among the poorest quintile.

Across all three years, out-of-pocket payments are mainly spent on dental care (around 30%), medicines (around 30%) and medical products (around 25%). Dental care accounts for a smaller share of out-of-pocket spending for poorer households than richer households (probably due to income thresholds for non-conservative dental treatments, below which patients are de-facto exempt if they choose basic treatment), but medicines account for a greater share of out-of-pocket spending for poorer households than richer households. The share spent on inpatient care and diagnostic tests is small for all quintiles.

Household budget survey data clearly show the effects of the introduction of co-payments for outpatient visits in 2004 and their subsequent abolition in 2012. First, between 2003 and 2008, out-of-pocket payments rose in real terms by 13% and the increase was steepest for the two poorest quintiles. They also rose as a share of household budgets. Between 2008 and 2013, out-of-pocket payments fell by 5%. This pattern of change was almost entirely driven by changes in spending on outpatient care. Second, the outpatient care share of out-of-pocket spending doubled from 6.4% in 2003 to 13.8% in 2008 and then fell back to 6.5% in 2013. The effects were most marked for the poorest quintile, among whom the outpatient care share more than quadrupled, rising from 4% in 2003 to 18% in 2008. It was also marked for the second, third and fourth quintiles.

The increase in user charges in 2004 is also seen in national health accounts data, which show that the out-of-pocket share of total spending on health rose from 12.7% in 2003 to 14.1% in 2004, in spite of steady per person growth in public spending on health. The out-of-pocket share has fallen since 2012, reflecting both the abolition of user charges for outpatient visits and continued growth in public spending on health per person. At 12.5% in 2015, the out-of-pocket share of total spending on health in Germany is below the EU15 average and similar to the Netherlands (12.3%) but much higher than in France (6.8%).

5. Financial protection

This section uses data from the German household budget survey to assess the extent to which out-of-pocket payments result in financial hardship for households who use health services. The section shows the relationship between out-of-pocket spending on health and risk of impoverishment, and presents estimates of the incidence, distribution and drivers of catastrophic out-of-pocket payments. Note that the household budget survey data presented here do not include households with one or more people covered by substitutive PHI (see section 2.2 for details).

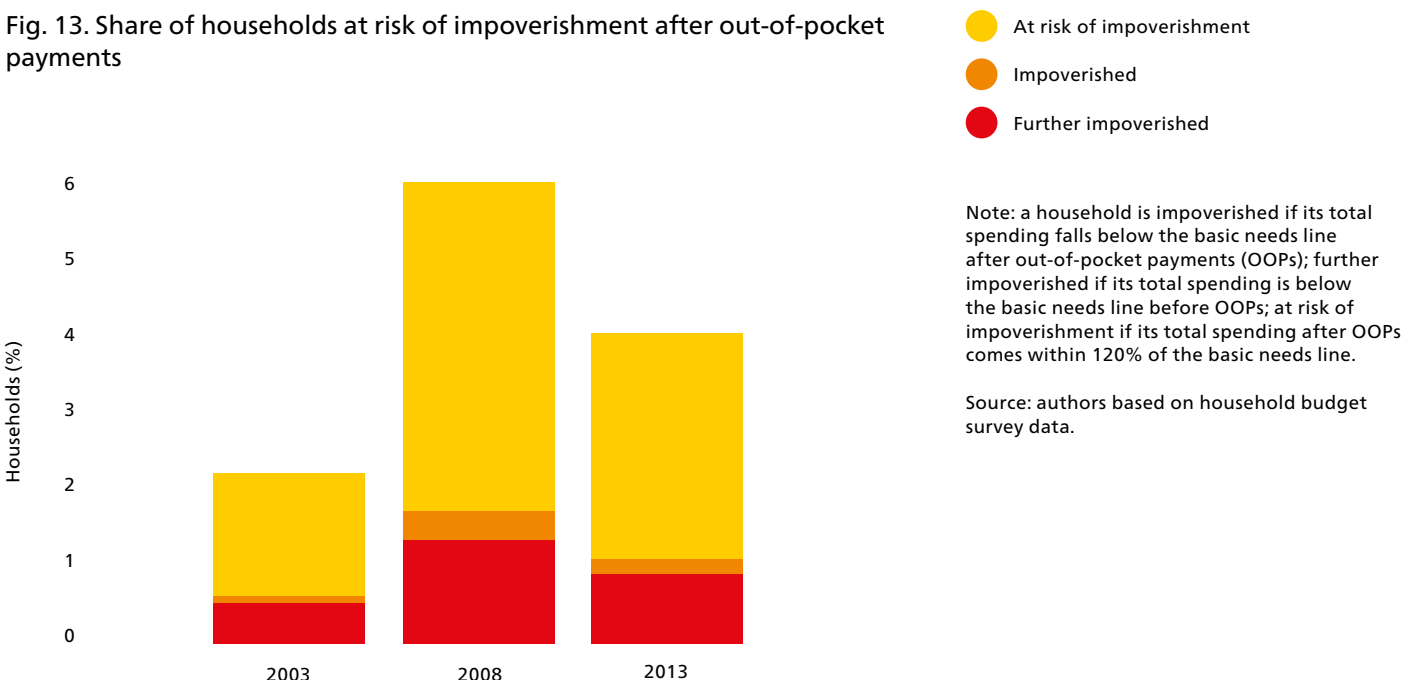
5.1 How many households experience financial hardship?

5.1.1 Out-of-pocket payments and risk of impoverishment

Fig. 13 shows the share of households at risk of impoverishment after out-of-pocket spending on health. The poverty line reflects the cost of spending on basic needs (food, rent and utilities) among a relatively poor part of the German population (households between the 25th and 35th percentiles of the consumption distribution, adjusted for household size and composition). In 2013, the monthly cost of meeting these basic needs – the basic needs line – was €708.

The share of households further impoverished, impoverished or at risk of impoverishment after out-of-pocket payments rose from around 2% to just over 5% between 2003 and 2008, and fell to 3.5% in 2013. All three risk categories more than doubled as a share of households between 2003 and 2008.

Fig. 13. Share of households at risk of impoverishment after out-of-pocket payments



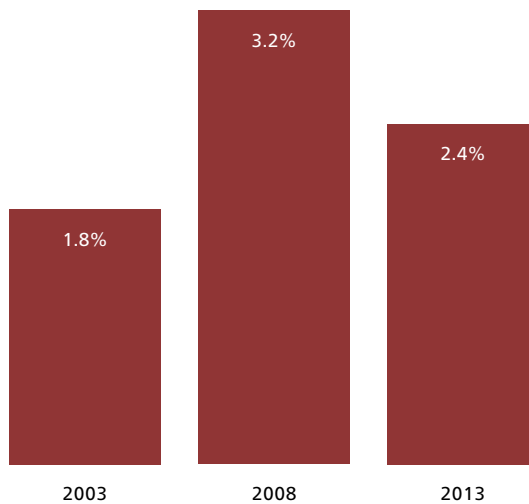
5.1.2 Catastrophic out-of-pocket payments

Households with catastrophic levels of out-of-pocket spending are defined as those who spend more than 40% of their capacity to pay for health care. This includes households who are impoverished after out-of-pocket payments (because they no longer have any capacity to pay) and further impoverished (because they had no capacity to pay before paying out of pocket for health care).

In 2013, it is estimated that 2.4% of households – 1.6 million people – experienced catastrophic levels of spending on health care (Fig. 14). Overall, the incidence of households experiencing catastrophic health spending nearly doubled between 2003 and 2008, rising significantly from 1.8% of households in 2003 (1.2 million people) to 3.2% in 2008 (2.2 million people) (Fig. 14). It fell significantly to 2.4% in 2013, but remained higher in 2013 than in 2003. This pattern of change mirrors the introduction of user charges for outpatient visits in 2004 and their subsequent abolition in 2012. The overall incidence masks important differences in distribution, both at a given point in time and over time.

Fig. 14. Share of households with catastrophic out-of-pocket payments

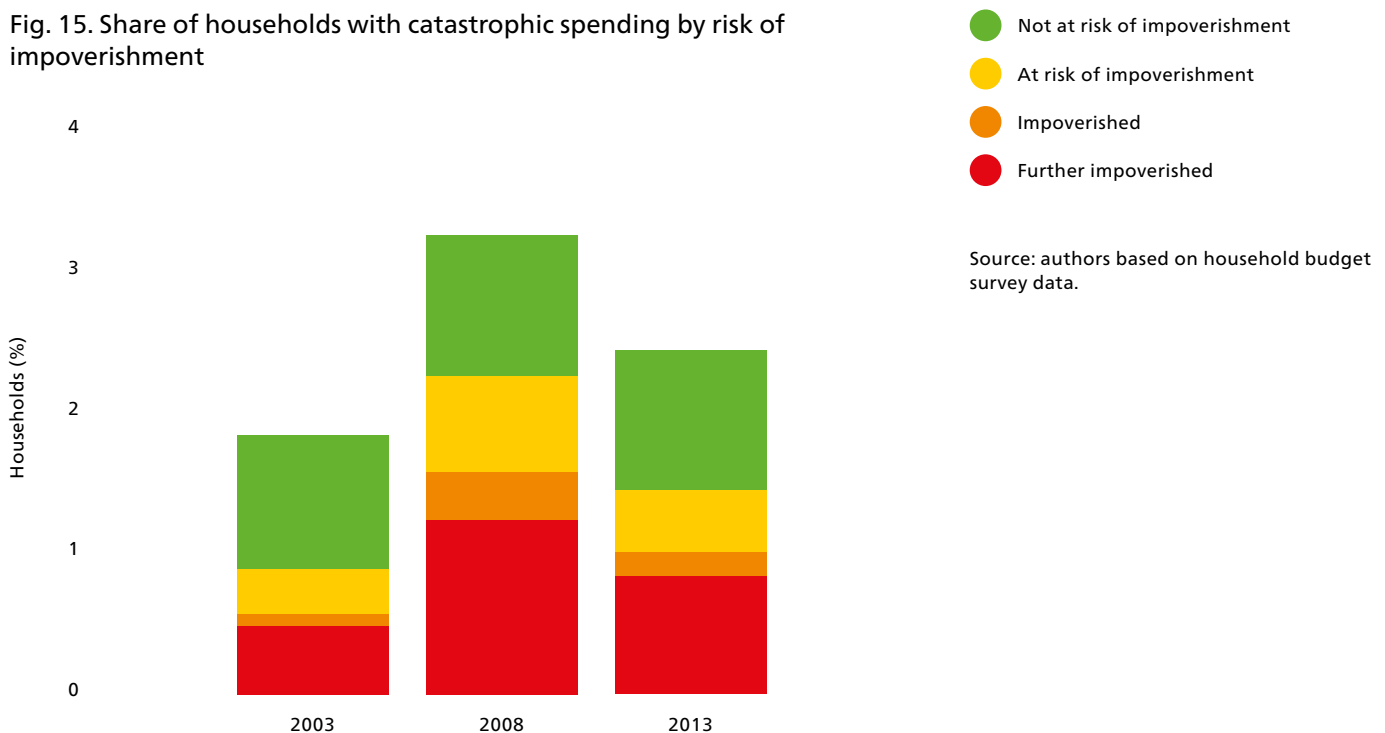
Source: authors based on household budget survey data.



5.2 Who experiences financial hardship?

In 2013, the incidence of catastrophic spending was concentrated among those who are at risk of impoverishment, impoverished or further impoverished after out-of-pocket payments (Fig. 15). Households not at risk of impoverishment accounted for over a third of all households with catastrophic spending in 2013. Their share was 30% in 2008 and 50% in 2003.

Fig. 15. Share of households with catastrophic spending by risk of impoverishment



wFig. 16 shows how the incidence of catastrophic spending is heavily concentrated among the poorest quintiles in all years, but more so in 2008 and 2013 than in 2003. Households in the poorest quintile accounted for more than 50% of all households with catastrophic spending in 2003, rising to 70% in 2008 and falling slightly to around 63% in 2013. In 2013, 4.6% of households in the poorest quintile experienced catastrophic spending, rising to 11% in 2008 and falling to 7.4% in 2013 (Fig. 17).

Between 2003 and 2008, the incidence of catastrophic spending increased among all except the middle quintile (Fig. 17). The increase in the poorest quintile was by far the largest, followed by the increase in the second quintile. Thus, the overall increase in catastrophic incidence seen during this period (from 1.8% to 3.2%) is almost entirely driven by increases among the two poorest quintiles.

Between 2008 and 2013, the incidence of catastrophic spending fell overall, and in the poorest, second and fourth quintiles. The most significant fall was in the poorest quintile.

Fig. 16. Share of households with catastrophic spending by consumption quintile

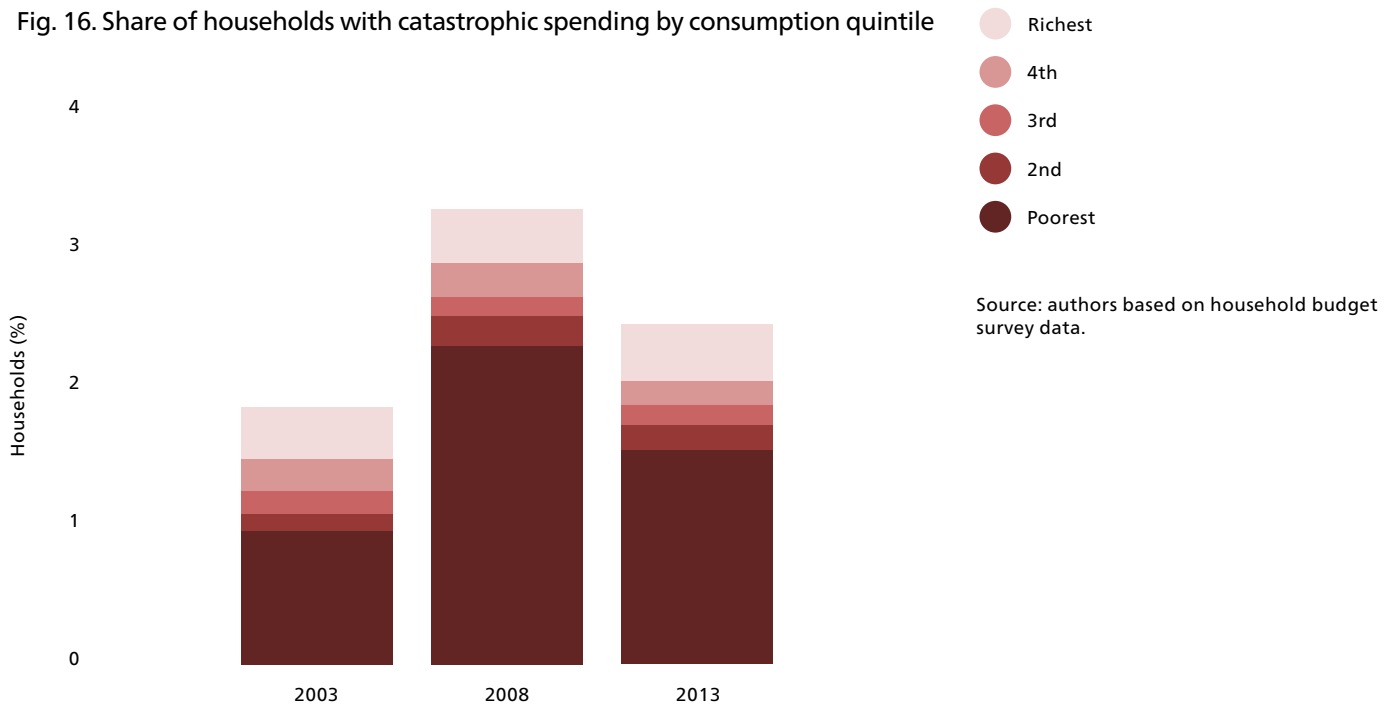
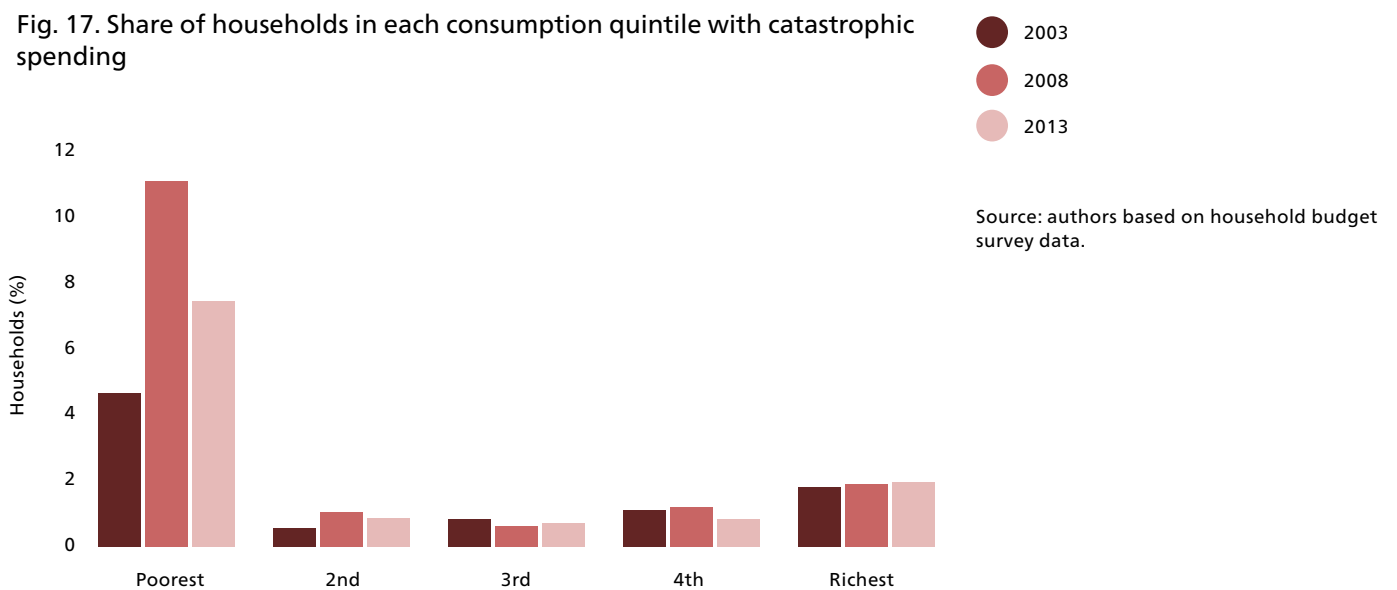


Fig. 17. Share of households in each consumption quintile with catastrophic spending



Catastrophic spending is heavily concentrated among households headed by people aged over 60, probably due to higher levels of health service use among older people (Fig. 18). Between 2003 and 2008, the incidence of catastrophic spending nearly doubled in households headed by people aged 0–39 years.

Fig. 18. Breakdown of households with catastrophic spending by age

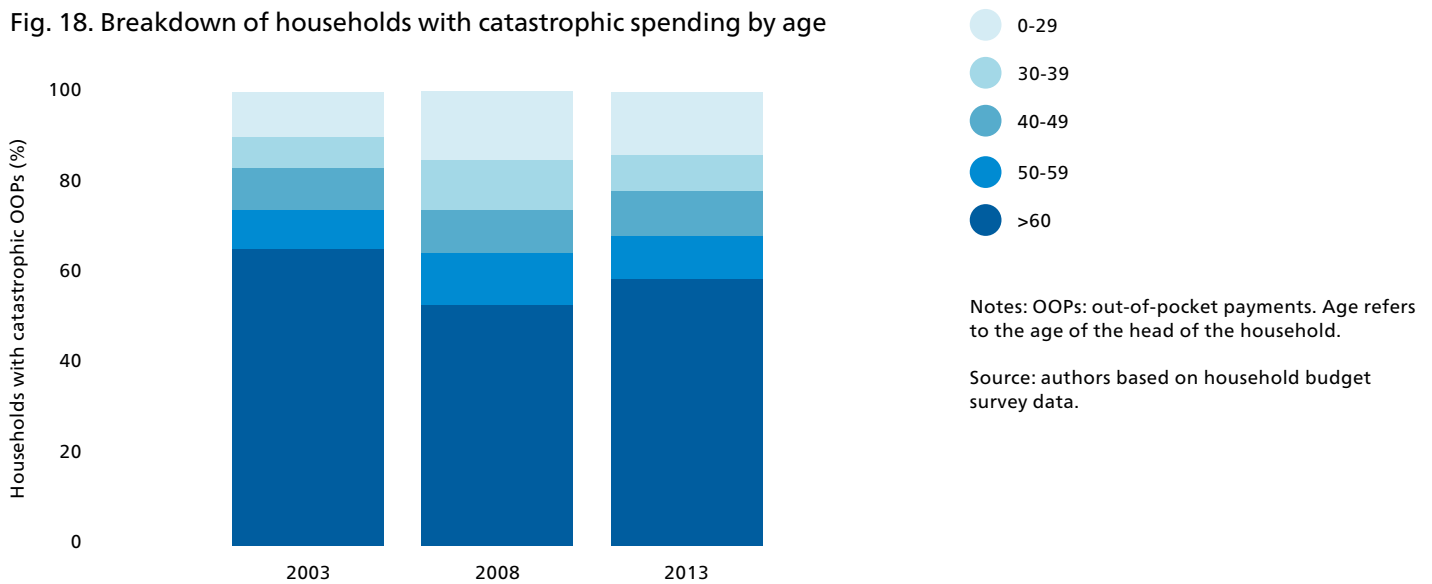
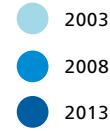
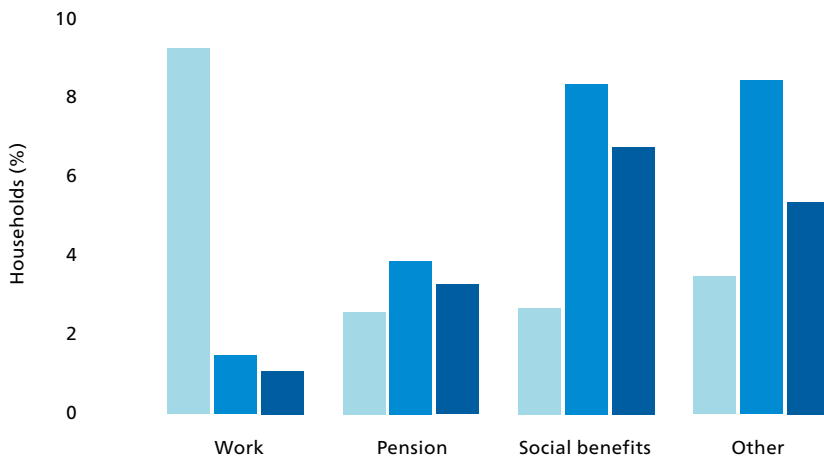


Fig. 19 shows how a household's main source of income largely drives its risk of catastrophic spending. In 2013, catastrophic spending is concentrated among households whose main source of income is social benefits or "other" (income from a spouse or partner, income from assets, etc.); people in work are least likely to experience catastrophic spending; and pensioners also appear to be relatively protected.

Over time, the biggest shifts have been among social beneficiaries and other households. In 2003, pensioners, social beneficiaries and other households had similar rates of catastrophic spending, but by 2008, the incidence among social beneficiaries more than tripled and the incidence among other households more than doubled. The incidence fell across all households in 2013, but remained higher than it had been in 2003 in all households except those who work, and substantially higher for social beneficiaries.

Fig. 19. Share of households with catastrophic spending by main source of income



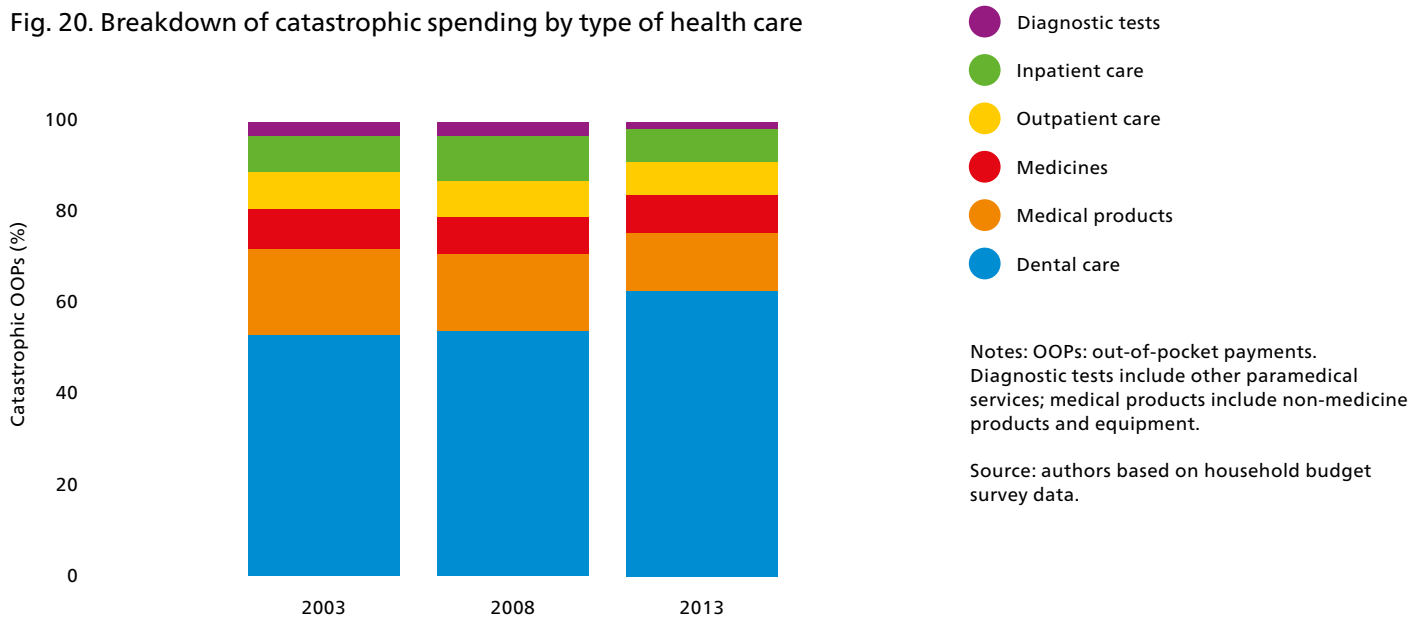
Note: other: income from a spouse or partner, income from assets, etc.

Source: authors based on household budget survey data.

5.3 Which health services are responsible for financial hardship?

Overall, dental care is the largest single driver of catastrophic spending, followed by medical products (Fig. 20). The dental care share grew between 2008 and 2013. The dental care share of out-of-pocket spending is around 25–30%, but its share of catastrophic spending is much higher – around 55–60%. While medicines account for 27–29% of out-of-pocket payments, they account for only 7–8% of catastrophic out-of-pocket payments.

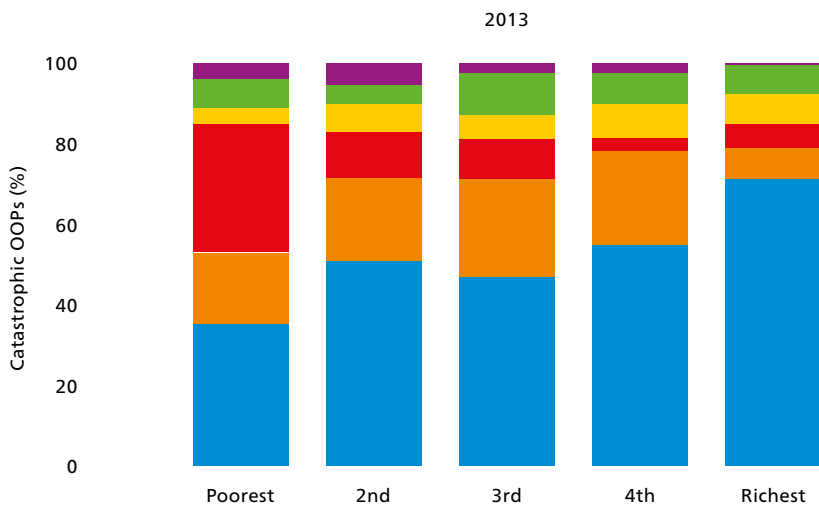
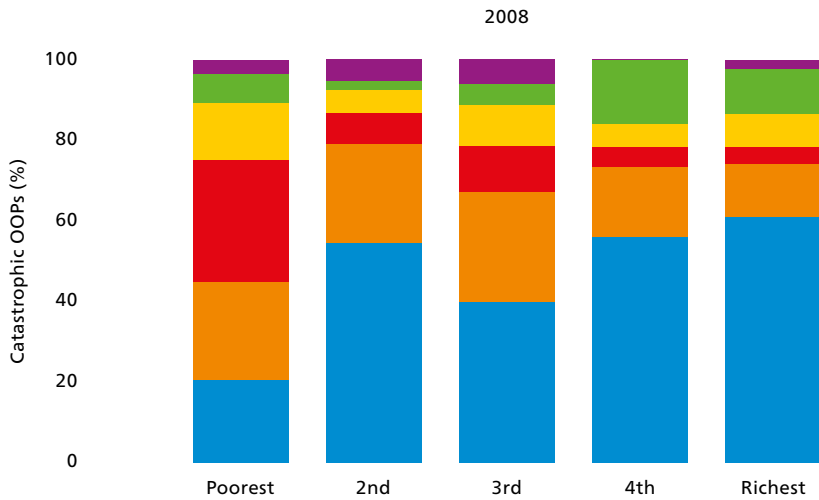
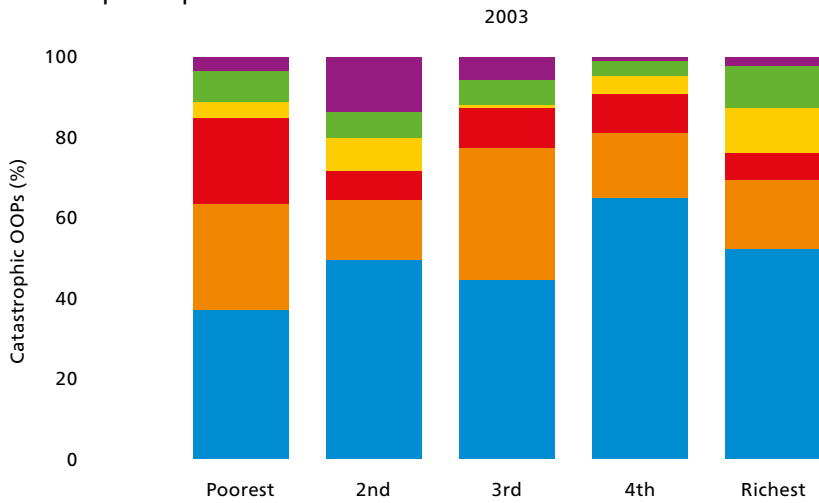
Fig. 20. Breakdown of catastrophic spending by type of health care



Broken down by quintile, dental care remains the largest single driver for all quintiles with one exception (the poorest quintile in 2008, where medicines and medical products account for a larger share), but it accounts for a much higher share of catastrophic spending among richer households than among poorer households (Fig. 21). For the poorest quintile, medicines were the second-largest driver after dental care in 2013, accounting for about a third of catastrophic out-of-pocket payments.

In terms of changes over time, the dental care share rose for the richest quintile in 2008 and 2013. For the poorest quintile, the medicines share and the outpatient care share rose in 2008; the medicines share stayed the same in 2013, but the outpatient care share fell back to its 2003 level.

Fig. 21. Breakdown of catastrophic spending by type of health care and consumption quintile



- Diagnostic tests
- Inpatient care
- Outpatient care
- Medicines
- Medical products
- Dental care

Note: OOPs: out-of-pocket payments. Diagnostic tests include other paramedical services; medical products include non-medicine products and equipment.

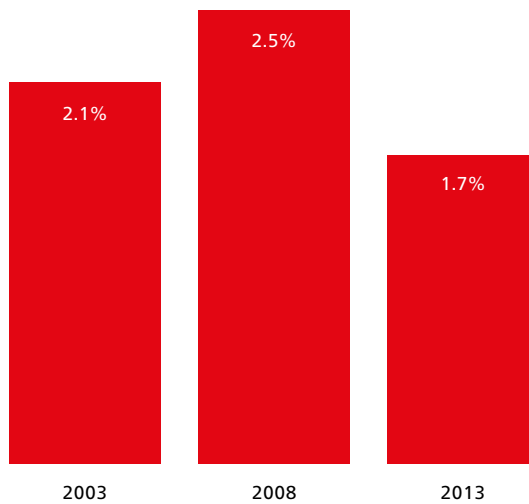
Source: authors based on household budget survey data.

5.4 How much financial hardship?

The average out-of-pocket share among the very poorest households already living below the basic needs line – those that are further impoverished after out-of-pocket payments – was just under 2% in 2013 (Fig. 22). It rose slightly between 2003 and 2008 but was lower in 2013 than in both earlier years.

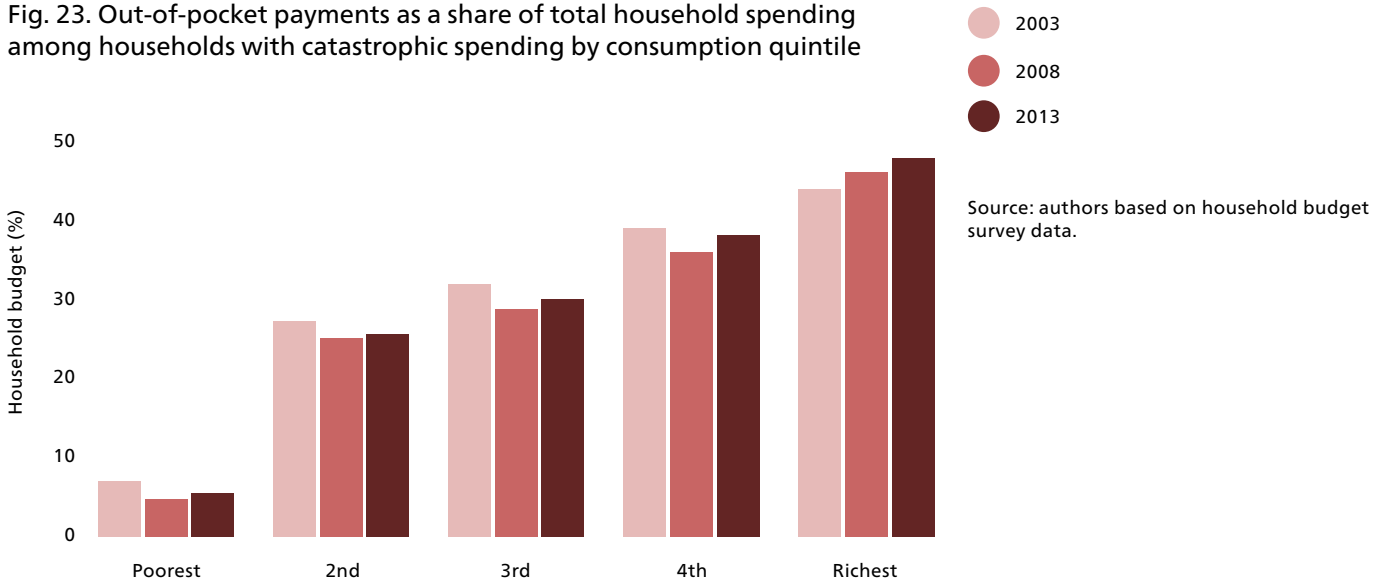
Fig. 22. Out-of-pocket payments as a share of total household spending among further impoverished households

Source: authors based on household budget survey data.



Among households with catastrophic spending, on average the richest quintile spent 48% of its total budget on health in 2013, while the poorest quintile spent 6% (Fig. 23). The out-of-pocket share was lower on average in 2008 than in 2003 for all except the richest quintile, but was slightly higher in 2013.

Fig. 23. Out-of-pocket payments as a share of total household spending among households with catastrophic spending by consumption quintile



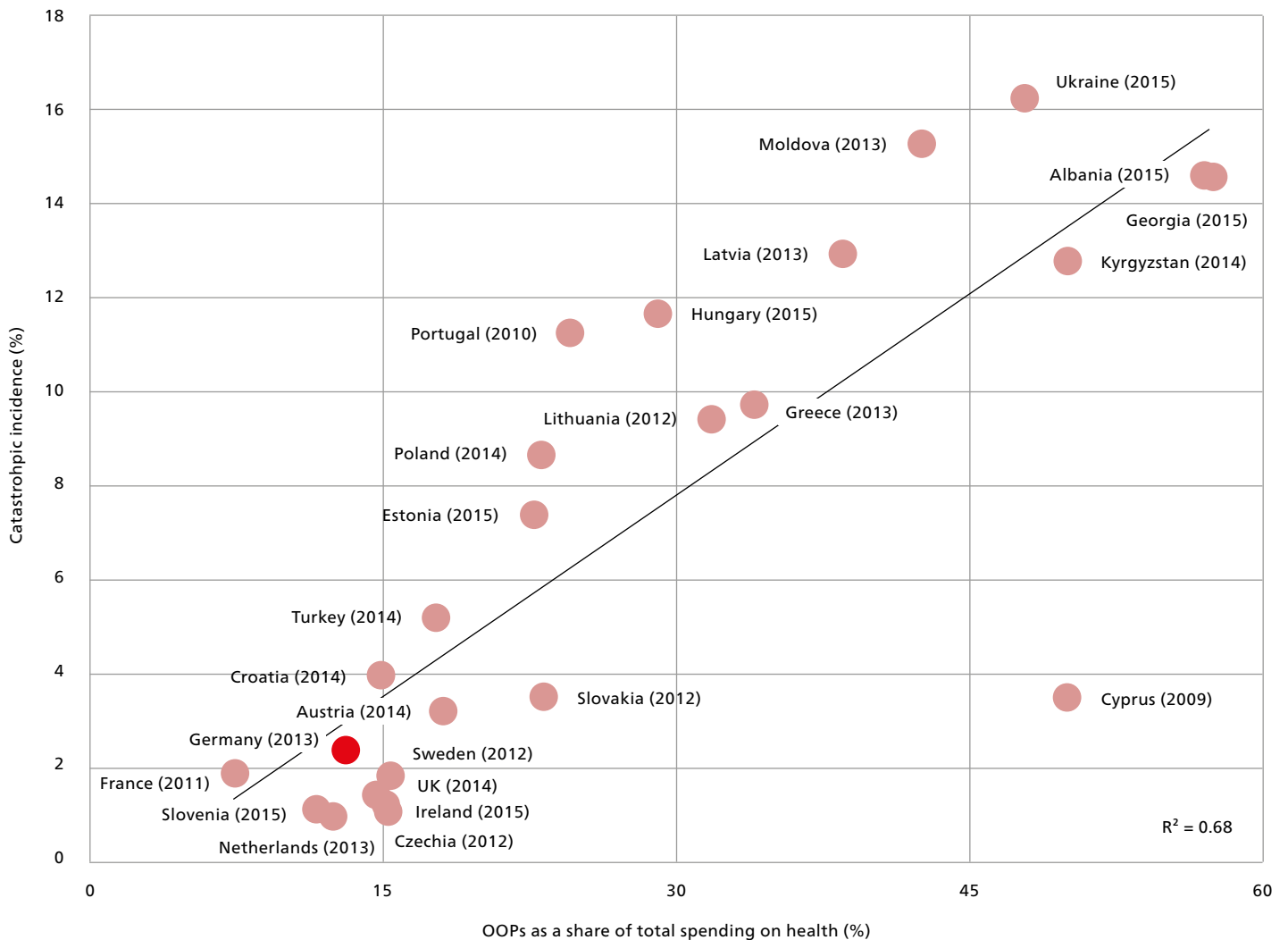
5.5 International comparison

The incidence of catastrophic out-of-pocket payments is low in Germany in comparison to many other EU countries, although it is slightly higher than in some comparator EU15 countries and Slovenia (Fig. 24).

Fig. 24. Incidence of catastrophic spending on health and the out-of-pocket share of total spending on health in selected European countries, latest year available

Notes: OOPs: out-of-pocket payments. R²: coefficient of determination. The OOPs data are for the same year as those for catastrophic spending. Germany is highlighted in red.

Sources: WHO Barcelona Office for Health Systems Strengthening; WHO (2018).



5.6 Summary

In 2013, 1% of households were impoverished or further impoverished after out-of-pocket payments; 2.4% of households – around 1.6 million people – experienced catastrophic out-of-pocket payments.

Catastrophic spending on health is heavily concentrated among poor people. In 2013, close to two thirds of households with catastrophic out-of-pocket payments were in the poorest consumption quintile; just over a third were also impoverished or further impoverished after out-of-pocket payments. Households whose main source of income is social benefits or income from spouses or partners are most at risk of catastrophic spending; households whose main source of income is work or pensions are least at risk. Catastrophic spending is concentrated among people aged over 60, probably due to greater need for health care among older people.

Dental care is the single largest cause of catastrophic spending for the population as a whole, followed by medical products. Broken down by quintile, dental care remains the largest single driver for all quintiles, but it accounts for a much higher share of catastrophic spending among richer households than poorer households, probably due to special income-related exemptions from user charges for crowns and dentures. For the poorest quintile, medicines were the second-largest driver after dental care in 2013, accounting for about a third of catastrophic out-of-pocket payments.

The incidence of households experiencing catastrophic spending nearly doubled between 2003 and 2008, rising significantly from 1.8% of households in 2003 (1.2 million people) to 3.2% in 2008 (2.2 million people). This was almost entirely driven by increased incidence among the two poorest quintiles, among households whose main source of income is social benefits or income from spouses or partners, and among younger households. Although the overall incidence of catastrophic out-of-pocket payments fell significantly in 2013, it remained higher in 2013 than in 2003.

For the poorest quintile, the outpatient care share and the medicines share of catastrophic out-of-pocket payments rose in 2008; in 2013, the outpatient care share fell back to its 2003 level, but the medicines share stayed the same.

The incidence of catastrophic and impoverishing out-of-pocket payments is low in Germany in comparison to many other EU countries, although it is slightly higher than in some comparator EU15 countries and Slovenia.

6. Factors that strengthen and undermine financial protection

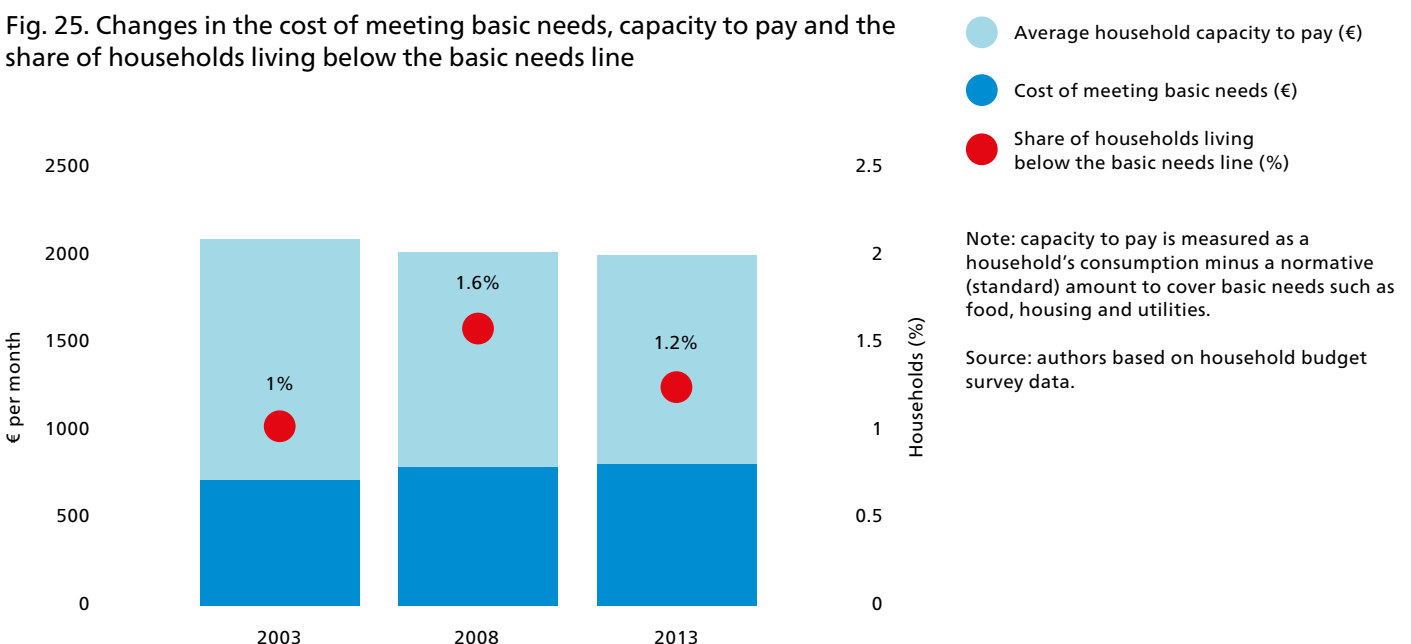
This section considers the factors that may be responsible for financial hardship caused by out-of-pocket payments in Germany and that may explain the trend over time. It begins by looking at factors outside the health system affecting people's capacity to pay – for example, changes in incomes and the cost of living – and then looks at factors within the health system.

6.1 Factors affecting people's capacity to pay for health care

The following paragraphs draw on data from the household budget survey and other sources to review changes in people's capacity to pay for health care. Poverty among people more likely to need health care is a particular challenge for financial protection.

Household budget survey data show that between 2003 and 2008 the average cost of meeting basic needs (food, housing and utilities) rose by nearly 8%, but total household spending fell by nearly 3%, pushing down household capacity to pay for health care by 7% (Fig. 25). As a result, the share of households with budgets below the basic needs line rose from 1.0% to 1.6%. Between 2008 and 2013, the average cost of meeting basic needs did not change, and the decline in total household spending was small; although household capacity to pay for health care fell, it did so by a smaller amount than in 2008 (1.5%), so the share of households with budgets below the basic needs line fell from 1.6% to 1.2%.

Fig. 25. Changes in the cost of meeting basic needs, capacity to pay and the share of households living below the basic needs line

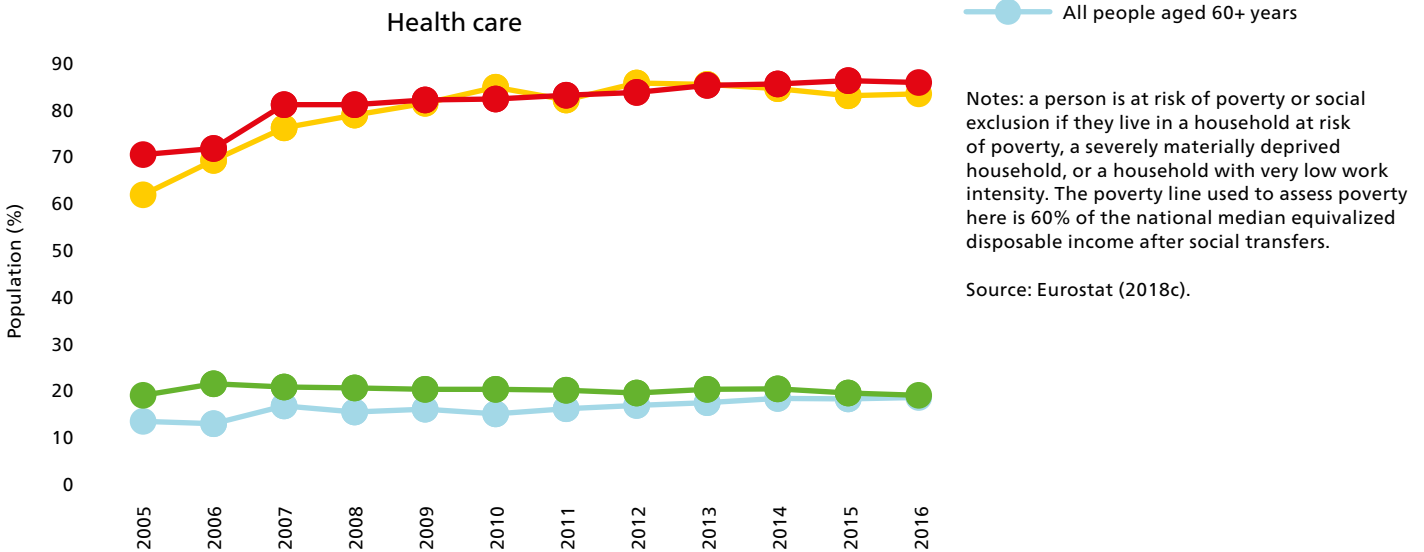


Germany was affected by the global financial crisis in 2009, but any negative effects were short lived. The Hartz reforms of 2003–2005 have had a deeper and more long-lasting effect on household incomes. These reforms relaxed labour market regulation, allowing temporary (on demand) work and fixed-term contracts. They also reduced social benefits, abolishing the right for unemployed people to refuse unsuitable job offers and restricting long-term unemployment benefits so that they are no longer linked to former earnings and are also subject to means testing (see Siegel et al. (2014) for an overview).

Unemployment peaked in 2005 (at 11.2%) and has steadily decreased since then (to 3.8% in 2017) (Eurostat, 2018c). Wages have also increased over time (OECD, 2018). However, the Hartz reforms enabled the growth of a low-wage sector (Siegel et al., 2014). In addition, regular full-time employment has declined while part-time and temporary (on demand) work has increased, rising from 21% of all work in 2003 to 27% in 2016 (Eurostat, 2018c), mainly due to the fact that female participation in the labour market increased substantially over this period. The impact of the reforms on living standards can be seen in the sharp increase in the risk of poverty or social exclusion among unemployed people and people in the poorest income quintile from 2005 (the first year for which national poverty statistics are available) (Fig. 26).

National poverty statistics broadly reflect the pattern suggested by household budget survey data. While, the overall share of the population at risk of poverty or social exclusion has remained relatively stable since 2005, at around 20%, the disaggregated picture is very different (Eurostat, 2018c). The risk of poverty or social exclusion is highest for people in the poorest income quintile and unemployed people aged 16–64 and has increased substantially over time for both groups, by 15 percentage points for the poorest income quintile and by 20 percentage points for unemployed people (Fig. 26). The risk of poverty or social exclusion has also increased for people aged over 60, albeit from a much lower starting point, rising from 14% in 2005 to 19% in 2016. As a result, a gap of over five percentage points between people aged over and under 60 in 2005 had closed by 2016.

Fig. 26. Share of the population at risk of poverty or social exclusion by age and socioeconomic status, 2005–2016



A growing low-wage sector, a reduction in social benefits for unemployed people and rising poverty rates among disadvantaged people may have contributed to the increase in catastrophic spending on health between 2003 and 2008. As section 5 shows, lack of financial protection is particularly problematic for poor people. In 2003, 52% of households with catastrophic out-of-pocket payments were in the poorest consumption quintile, but by 2008 their share had risen to 70%. It was only slightly lower in 2013, at 63% (Fig. 16). Put another way, in 2003 only 4.6% of households in the poorest quintile experienced catastrophic out-of-pocket payments, but this more than doubled to 11% in 2008, before falling to 7.4% in 2013 (Fig. 17). There is a similar pattern for households whose main source of income is social benefits or income from spouses or partners (Fig. 19).

6.2 Health system factors

The following paragraphs look at spending on health and health coverage.

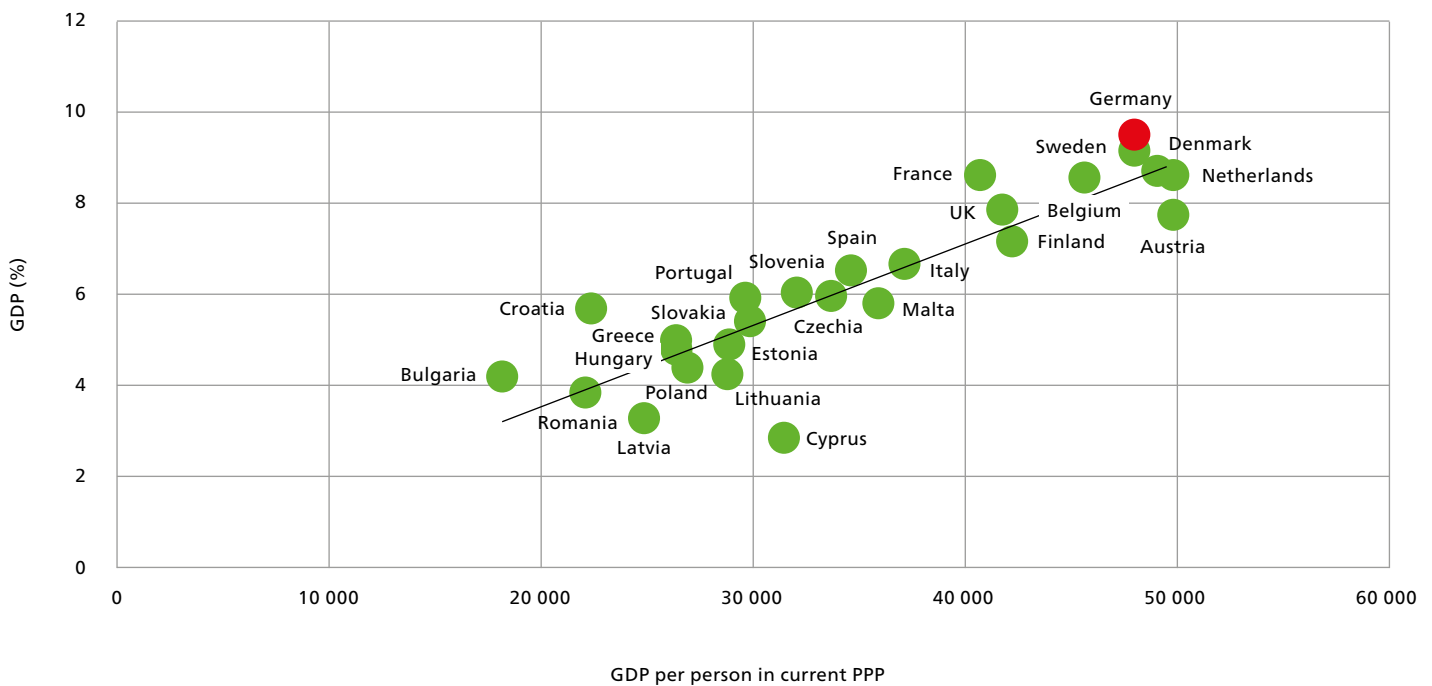
6.2.1 Spending on health

Public spending on health is higher in Germany than in any other EU country: as a share of total spending on health, as a share of the government budget and as a share of GDP – the latter is shown in Fig. 27. This high level of public spending on health is reflected in a low share of out-of-pocket payments in total spending on health, as shown in Fig. 12, although the out-of-pocket share is not as low in Germany as it is in France and the Netherlands.

Fig. 27. Public spending on health and GDP per person in the EU, 2015

Notes: PPP: purchasing power parity. Public refers to all compulsory financing arrangements. The figure excludes Ireland and Luxembourg. Germany is shown in red.

Source: WHO (2018).



6.2.2 Health coverage

Coverage is near universal, especially since health insurance was made mandatory for the whole population in 2009. However, a very small share of people have no form of coverage or are only able to access emergency care because they have defaulted on paying contributions or substitutive PHI premiums. The people most likely to be affected by these issues in the governance of **population entitlement** tend to be relatively vulnerable (see section 3.1.1).

Service coverage is comprehensive. The main issues affecting financial protection are limited coverage of non-standard dental care and the exclusion of over-the-counter medicines from SHI coverage in 2004. Although there are some inequalities in waiting time for treatment between people with SHI and people with substitutive PHI, waiting times are generally not long by international standards.

Current **user charges** policy has some highly protective features: outpatient visits are free at the point of use; percentage co-payments for outpatient medicines are capped at €10 per pack; and there is an overall cap on all user charges for all households, which is set as a share of household income

(2%, or 1% for people who can demonstrate they have a chronic illness; the cap does not include out-of-pocket payments for the costs of prescribed medicines above the reference price or dental care above the fixed sum). However, changes in user charges policy over time have had a significant impact on financial protection (see Table 3 in section 3.1.3 for an overview).

As with the exclusion of over-the-counter medicines, the most important user charges policy changes took place in 2004: the introduction of fixed co-payments for outpatient visits; a shift from fixed co-payments to percentage co-payments plus reference pricing for outpatient prescribed medicines; a shift from percentage co-payments for non-conservative dental care to reimbursement of a fixed sum; and the abolition of exemptions from user charges for social beneficiaries and low-income people, to be replaced by the income-related cap. Co-payments for outpatient visits were abolished in 2012.

The overall incidence of catastrophic and impoverishing out-of-pocket payments rose in 2008, with the increase heavily concentrated among poorer households, social beneficiaries and households reliant on income from spouses or partners. The overall incidence fell in 2013, but remained higher than in 2003 and was still concentrated among these vulnerable groups of people. Catastrophic spending among the poorest quintile shifted towards outpatient care and outpatient medicines in 2008, and then shifted away from outpatient care toward dental care in 2013, while the outpatient medicines share increased even further in 2013 (Fig. 21).

This pattern of financial hardship points to the effect of key changes in coverage policy in 2004: the new co-payment for outpatient visits; the exclusion of over-the-counter medicines from SHI coverage and the change from fixed co-payments per pack to percentage co-payments plus reference pricing; and the abolition of the exemption from user charges for social beneficiaries and low-income people. These changes appear to have had a clear negative impact, leading to a more than doubling of the incidence of catastrophic and impoverishing out-of-pocket payments among the poorest quintile in 2008 (from 4.6% to 11%; Fig. 17), as well as an increase in the outpatient care and medicines share of catastrophic spending (Fig. 20). Once the co-payments for outpatient visits were abolished (in 2012), the outpatient visit share of catastrophic spending among the poorest quintile fell back to its 2003 share in 2013. There was no change to user charges for outpatient medicines in 2012, and the outpatient medicines share did not decrease in 2013.

It is notable that the cap on user charges, which replaced the exemption, does not seem to have provided adequate protection for social beneficiaries or the poorest quintile more generally,³ even though it is set as a share of household income. This may reflect several factors:

- even very small amounts of money can lead to financial hardship for poor households;
- over-the-counter medicines have been excluded from SHI coverage and are therefore not included in the cap; Fig. 28 shows that the use of non-prescribed medicines in Germany is above the EU average;

3. This is assuming households accounted for retrospective reimbursement by SHI of out-of-pocket payment above the cap when reporting out-of-pocket payments in the survey. See section 2.2 and section 4.1).

- the cap does not cover out-of-pocket payments for prescribed medicines for costs above the reference price or dental services that cost more than the fixed sum price; this may be particularly problematic for dental care, where prices are likely to be high; and
- the process required in order to benefit from the cap is bureaucratic and must be repeated annually (see section 3.1.3), which may be an obstacle for some households; a 2010 survey by the Commonwealth Fund found that about 16% of respondents reported spending a lot of time on health insurance paperwork and disputes (Schoen et al., 2010).

Dental care is the largest single driver of catastrophic out-of-pocket payments. Dental care accounts for a much higher share of catastrophic out-of-pocket payments (around 55–60%) than out-of-pocket payments in general (around 25–30%). Its share of catastrophic spending remained unchanged between 2003 and 2008, possibly reflecting the fact that income-related exemptions for non-conservative treatment were maintained after 2005. It grew between 2008 and 2013, however, particularly among the poorest and richest quintiles.

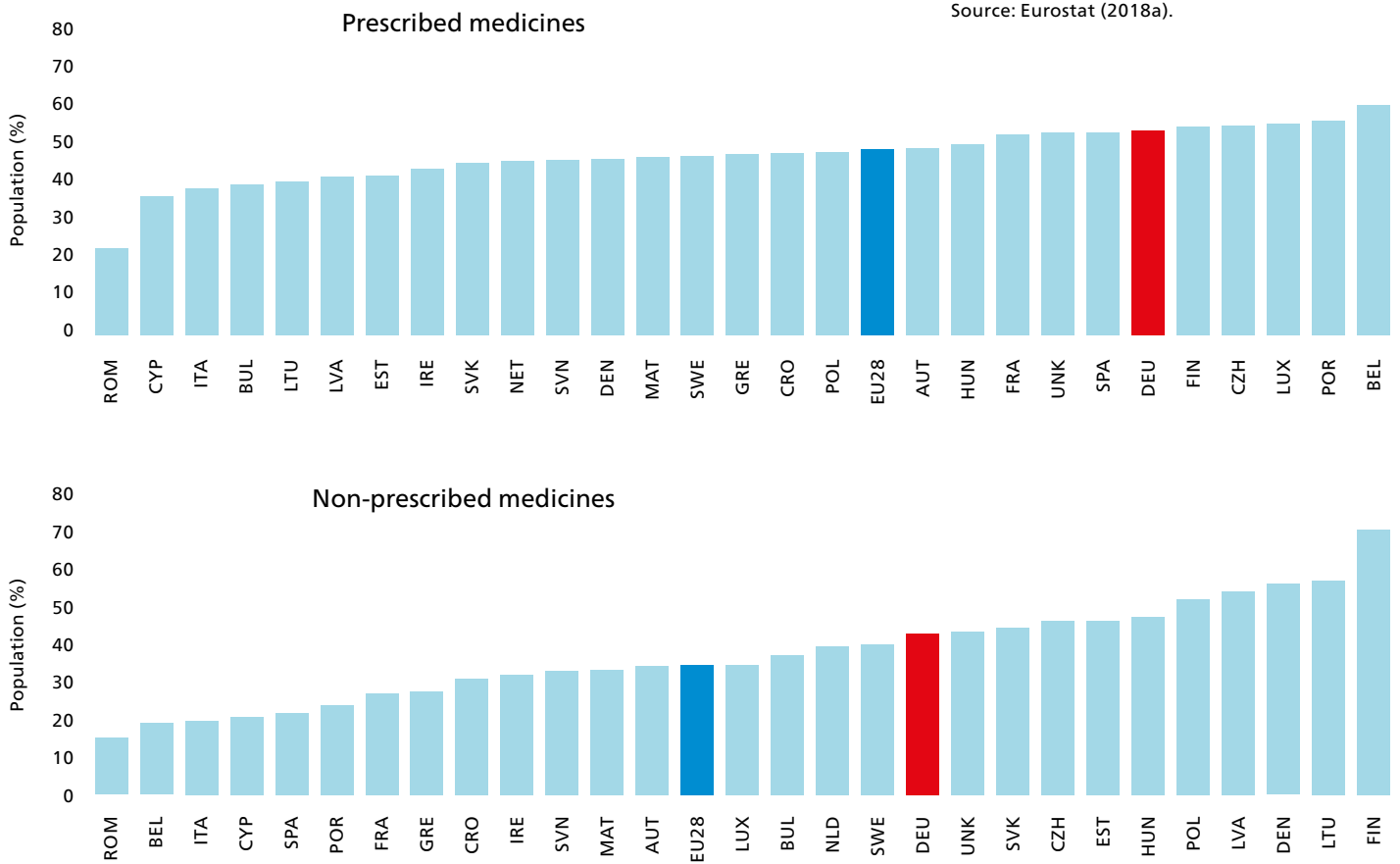
In contrast to dental care, medicines account for a much larger share of out-of-pocket payments in general (27–29%) than catastrophic out-of-pocket payments (7–8%). This is likely to reflect three factors: the cap on user charges per prescription (€10 per pack); the exemption from user charges for medicines priced at least 30% less than the reference price; and higher prices for dental care, with most people having to pay more than the 50%, which is the official calculation for the fixed sums.

The fact that dental care accounts for a smaller share of catastrophic spending for the poorest quintile than for other quintiles may also indicate unmet need for dental care. In fact, unmet need for dental care is much higher among lower socioeconomic groups than higher socioeconomic groups (see Fig. 2 and Fig. 3). Some people may also choose to pay extra in order to benefit from higher quality materials for dentures and crowns. These people may generally be from richer households, because poverty does not seem to be an issue for households spending larger amounts of money on dental care.

Fig. 28. Use of medicines in the EU, 2014

Notes: EU28: European Union Member States as of 1 July 2013. Share of the population who used medicines prescribed by a doctor or medicines, herbal medicines or vitamins not prescribed by a doctor in the previous two weeks.

Source: Eurostat (2018a).



6.3 Summary

Financial protection in Germany is strong compared to many EU countries. This is largely due to high levels of public spending on health, resulting in out-of-pocket payments that are low as a share of total spending on health. It also reflects relatively robust coverage policy, which has been strengthened over time. Very few people lack coverage; the SHI benefits package is comprehensive, includes dental care for adults and is informed by health technology assessment; and current user charges policy has some highly protective features – for example, outpatient visits are free at the point of use; percentage co-payments for outpatient medicines are capped at €10 per pack; and there is an overall cap on almost all user charges for all households, which is set as a share of household income (2%, or 1% for people who can demonstrate they have a chronic illness; the cap does not include out-of-pocket payments for costs of prescribed medicines above the reference price or non-conservative dental care above the fixed sum).

The significant increase in the incidence of catastrophic and impoverishing out-of-pocket payments between 2003 and 2008 was almost entirely driven by increased incidence among the two poorest quintiles. It coincided with a reduction in social benefits for unemployed people, growth in the low-wage sector and rising poverty rates among poor people and unemployed people following the Hartz reforms introduced in 2003–2005.

Policy changes within the health system also contributed, notably the abolition of exemptions for social beneficiaries and low-income households, the introduction of co-payments for outpatient visits, and the exclusion of over-the-counter medicines from SHI coverage in 2004; and the abolition of co-payments for outpatient visits in 2012. Changes in the distribution and structure of catastrophic out-of-pocket payments over time have closely mirrored these health system changes.

For various reasons, the income-related cap on user charges does not seem to have offset the negative effects of reductions in benefits and increases in user charges: even small amounts of money can lead to financial hardship for poor households; the cap does not apply to payments for over-the-counter medicines, to payments for costs above the reference price for prescribed medicines or to costs for non-conservative dental services above the fixed sum; and the process of applying for the cap is complex, requiring people to provide annual proof of income for all household members, proof of payment and (for people with chronic conditions) proof of having attended recommended counselling or screening services prior to becoming ill.

7. Implications for policy

Financial protection in Germany is on a par with countries such as France and Sweden but slightly weaker than in countries such as the Netherlands, Slovenia and the United Kingdom. It is stronger in Germany than in many other EU countries because public spending on health is high as a share of GDP; out-of-pocket payments are low as a share of total spending on health; and coverage policy, which has been strengthened in recent years, has some highly protective features.

Nevertheless, in 2013, 1.6 million people living in Germany faced catastrophic out-of-pocket payments; many of them live in poor households. Two thirds of households with catastrophic health spending are in the poorest fifth of the population. The risk of incurring catastrophic out-of-pocket payments is much higher among households reliant on social benefits and income from spouses and partners than households in work or living on pensions. Households headed by people aged over 60 are also at high risk of catastrophic spending on health.

Financial protection deteriorated between 2003 and 2008; this can in part be linked to changes in policy beyond the health system. The significant increase in the incidence of catastrophic out-of-pocket payments between 2003 and 2008 was almost entirely driven by a rise in incidence among the two poorest quintiles. It coincided with the Hartz reforms introduced in 2003–2005, which led to a reduction in social benefits for unemployed people, prompted growth in the low-wage sector and was accompanied by rising poverty rates among poorer people and unemployed people.

Changes in the incidence, distribution and structure of catastrophic out-of-pocket payments have also closely mirrored changes in coverage policy, notably the abolition of exemptions for social beneficiaries and low-income households, the introduction of co-payments for outpatient visits, and the exclusion of over-the-counter medicines from SHI coverage in 2004; and the abolition of co-payments for outpatient visits in 2012.

Catastrophic out-of-pocket payments are mainly spent on outpatient medicines, dental care and medical products among the poorest households and almost exclusively spent on dental care among the richest households. Before user charges for outpatient visits were abolished in 2012, outpatient visits were an important cause of catastrophic health spending among the poorest households. Outpatient medicines accounted for a greater share of catastrophic health spending after the exclusion of over-the-counter medicines from SHI coverage and following the shift from fixed to percentage co-payments per pack, but only among the poorest households.

Although the introduction of an income-related cap on user charges in 2004 was an important protective measure, the cap does not fully compensate for the abolition of the exemption from user charges for social beneficiaries and low-income households. This may be because even small out-of-pocket payments can lead to financial hardship for poor households; the cap does not cover payments for over-the-counter medicines or payments for costs exceeding the reference price for prescribed medicines and the fixed sum for non-conservative dental care; and the complex process required to benefit from the cap is an obstacle for some households.

To reduce financial hardship, especially among poor households, policy-makers could consider the following actions.

- **Simplify the process of applying for the cap.** The results of this analysis suggest that the current policy is not sufficiently protective for poor households. Households may be deterred from applying for the cap due to lack of awareness, having to apply on an annual basis and the complex process involved. This measure would benefit all households and people with chronic conditions.
- **Reintroduce an exemption from co-payments for social beneficiaries and low-income households (beyond crowns and dentures), alongside the cap.** This would improve financial protection for those most at risk of catastrophic and impoverishing out-of-pocket payments.
- **Extend this exemption to cover out-of-pocket payments for over-the-counter medicines prescribed by physicians (beyond children under 12 years).** This would address a potentially important cause of financial hardship among the poorest households.

Barriers to accessing dental care and the financial hardship associated with the use of dental care should be a matter of policy concern. Dental care is a much greater cause of financial hardship among richer households than among poorer households, reflecting a combination of factors: higher levels of self-reported unmet need for dental care among poorer households; differences in willingness and ability to pay for quality dentures and crowns; and prices. Better control of dental care prices and better provision of information for users may be warranted.

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Annex 1. Household budget surveys in Europe

What is a household budget survey? Household budget surveys are national sample surveys that aim to measure household consumption of goods and services over a given period of time. In addition to information about consumption expenditure, they include information about household characteristics.

Why are they carried out? Household budget surveys provide valuable information on how societies and people use goods and services to meet their needs and preferences. In many countries, the main purpose of a household budget survey is to calculate weights for the Consumer Price Index, which measures the rate of price inflation as experienced and perceived by households (Eurostat, 2015). Household budget surveys are also used by governments, research entities and private firms wanting to understand household living conditions and consumption patterns.

Who is responsible for them? Responsibility for household budget surveys usually lies with national statistical offices.

Are they carried out in all countries? Almost every country in Europe conducts a household budget survey (Yerramilli et al., 2018).

How often are they performed? EU countries conduct a household budget survey at least once every five years, on a voluntary basis, following an informal agreement reached in 1989 (Eurostat, 2015). Many countries in Europe conduct them at more frequent intervals (Yerramilli et al., 2018).

What health-related information do they contain? Information on household consumption expenditure is gathered in a structured way, usually using the United Nations Classification of Individual Consumption According to Purpose (COICOP). Information on health-related consumption comes under COICOP code 6, which is further divided into three groups, as shown in Table A1.1. In this study, health-related information from household budget surveys is divided into six groups (with corresponding COICOP codes): medicines (06.1.1), medical products (06.1.2 and 06.1.3), outpatient care (06.2.1), dental care (06.2.2), diagnostic tests (06.2.3) and inpatient care (06.3).

Surveys will usually specify that household spending on health services should be net of any reimbursement to the household from a third party such as the government, a health insurance fund or a private insurance company. Some surveys ask households about spending on voluntary health insurance, but this is reported under a different COICOP code (12.5.3 Insurance connected with health, which covers "Service charges for private sickness and accident insurance") (United Nations Statistics Division, 2018).

Are household budget surveys comparable across countries? Household budget surveys vary across countries in terms of frequency, timing, content and structure. These differences limit comparability. Even among EU countries, where there have been sustained efforts to harmonize data collection, differences remain.

An important methodological difference in quantitative terms is owner-occupier imputed rent. Not all countries impute rent and, among those that do, the methods used to impute rent vary substantially (Eurostat, 2015). In this series, imputed rent is excluded when measuring total household consumption.

Table A1.1. Health-related consumption expenditure in household budget surveys

Source: United Nations Statistics Division (2018).

COICOP codes	Includes	Excludes
06.1 Medical products, appliances and equipment 06.1.1 Pharmaceutical products 06.1.2 Other medical products 06.1.3 Therapeutic appliances and equipment	This covers medicaments, prostheses, medical appliances and equipment and other health-related products purchased by individuals or households, either with or without a prescription, usually from dispensing chemists, pharmacists or medical equipment suppliers. They are intended for consumption or use outside a health facility or institution.	Products supplied directly to outpatients by medical, dental and paramedical practitioners or to inpatients by hospitals and the like are included in outpatient services (06.2) or hospital services (06.3).
06.2 Outpatient services 06.2.1 Medical services 06.2.2 Dental services 06.2.3 Paramedical services	This covers medical, dental and paramedical services delivered to outpatients by medical, dental and paramedical practitioners and auxiliaries. The services may be delivered at home or in individual or group consulting facilities, dispensaries and the outpatient clinics of hospitals and the like. Outpatient services include the medicaments, prostheses, medical appliances and equipment and other health-related products supplied directly to outpatients by medical, dental and paramedical practitioners and auxiliaries.	Medical, dental and paramedical services provided to inpatients by hospitals and the like are included in hospital services (06.3).
06.3 Hospital services	Hospitalization is defined as occurring when a patient is accommodated in a hospital for the duration of the treatment. Hospital day care and home-based hospital treatment are included, as are hospices for terminally ill persons. This group covers the services of general and specialist hospitals; the services of medical centres, maternity centres, nursing homes and convalescent homes that chiefly provide inpatient health care; the services of institutions serving older people in which medical monitoring is an essential component; and the services of rehabilitation centres providing inpatient health care and rehabilitative therapy where the objective is to treat the patient rather than to provide long-term support. Hospitals are defined as institutions that offer inpatient care under the direct supervision of qualified medical doctors. Medical centres, maternity centres, nursing homes and convalescent homes also provide inpatient care, but their services are supervised and frequently delivered by staff of lower qualification than medical doctors.	This group does not cover the services of facilities (such as surgeries, clinics and dispensaries) devoted exclusively to outpatient care (06.2). Nor does it include the services of retirement homes for older people, institutions for disabled people and rehabilitation centres providing primarily long-term support (12.4).

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Annex 2. Methods used to measure financial protection in Europe

Background

The indicators used for monitoring financial protection in Europe are adapted from the approach set out in Xu et al. (2003, 2007). They also draw on elements of the approach set out in Wagstaff & Eozenou (2014). For further information on the rationale for developing a refined indicator for Europe, see Thomson et al. (2016).

Data sources and requirements

Preparing country-level estimates for indicators of financial protection requires nationally representative household survey data that includes information on household composition or the number of household members.

The following variables are required at household level:

- total household consumption expenditure ;
- food expenditure (excluding tobacco and alcohol if possible) ;
- housing expenditure, disaggregated by rent and utilities (such as water, gas, electricity and heating); and
- health expenditure (out-of-pocket payments), disaggregated by type of health care good and service.

Information on household consumption expenditure is gathered in a structured way, usually using the United Nations Classification of Individual Consumption According to Purpose (COICOP) (United National Statistics Division, 2018).

If the survey includes a household sampling weight variable, calculations should consider the weight in all instances. Information on household or individual-level characteristics such as age, sex, education and location are useful for additional equity analysis.

Defining household consumption expenditure variables

Survey data come in various time units, often depending on whether the reporting period is 7 days, 2 weeks, 1 month, 3 months, 6 months or 1 year. It is important to convert all variables related to household consumption expenditure to a common time unit. To facilitate comparison with other national-level indicators, it may be most useful to annualize all survey data. If annualizing survey data, it is important not to report the average level of out-of-pocket payments only among households with out-of-pocket payments, as this will produce inaccurate figures.

Total household consumption expenditure not including imputed rent

Household consumption expenditure comprises both monetary and in-kind payment for all goods and services (including out-of-pocket payments) and the money value of the consumption of home-made products. Many household budget surveys do not calculate imputed rent. To maintain cross-country comparability with surveys that do not calculate imputed rent, imputed rent (COICOP code 04.2) should be subtracted from total consumption if the survey includes it.

Food expenditure

Household food expenditure is the amount spent on all foodstuffs by the household plus the value of the family's own food production consumed within the household. It should exclude expenditure on alcoholic beverages and tobacco. Food expenditure corresponds to COICOP code 01.

Housing expenditure on rent and utilities

Expenditure on rent and utilities is the amount spent by households on rent (only among households who report paying rent) and on utilities (only among households who report paying utilities) including electricity, heating and water. These data should be disaggregated to correspond to COICOP codes 04.1 (for rent) and 04.4 and 04.5 (for utilities). Care should be taken to exclude spending on secondary dwellings. Imputed rent (COICOP code 04.2) is not available in all household budget surveys and should not be used in this analysis.

Health expenditure (out-of-pocket payments)

Out-of-pocket payments refer to formal and informal payments made by people at the time of using any health service provided by any type of provider (COICOP code 06). Health services are any good or service delivered in the health system. These typically include consultation fees, payment for medications and other medical supplies, payment for diagnostic and laboratory tests and payments occurring during hospitalization. The latter may include a number of distinct payments such as to the hospital, to health workers (doctors, nurses, anaesthesiologists etc.) and for tests. Both cash and in-kind payments should be included if the latter are quantified in monetary value. Both formal and informal payments should also be included. Although out-of-pocket payments include spending on alternative or traditional medicine, they do not include spending on health-related transportation and special nutrition. It is also important to note that out-of-pocket payments are net of any reimbursement to households from the government, health insurance funds or private insurance companies.

Estimating spending on basic needs and capacity to pay for health care

Basic needs expenditure is a socially recognized minimum level of spending considered necessary to ensure sustenance and other basic personal needs. This report calculates household-specific levels of basic needs expenditure to estimate a household's capacity to pay for health care. Households whose total consumption expenditure is less than the basic needs expenditure level generated by the basic needs line are deemed to be poor.

Defining a basic needs line

Basic needs can be defined in different ways. This report considers food, utilities and rent to be basic needs and distinguishes between:

- households that do not report any utilities or rent expenses; their basic needs include food;
- households that do not report rent expenses (households that own their home outright or make mortgage payments, which are not included in consumption expenditure data), but do report utilities expenses; their basic needs include food and utilities;
- households that pay rent, but do not report utilities expenditure (for example, if the reporting period is so short that it does not overlap with billing for utilities and there is no alternative reporting of irregular purchases); their basic needs include food and rent;
- households that report paying both utilities and rent, so that their basic needs include food, utilities and rent.

Adjusting households' capacity to pay for rent (among renters) is important. Household budget surveys consider mortgages to be investments, not consumption expenditure. For this reason most do not collect household spending on mortgages. Without subtracting some measure of rent expenditure from those who rent, renters will appear to be systematically wealthier (and have greater capacity to pay) than identical households with mortgages.

To estimate standard (normative) levels of basic needs expenditure, all households are ranked based on their per (equivalent) person total consumption expenditure. Households between the 25th and 35th percentiles of the total sample are referred to as the representative sample for estimating basic needs expenditure. It is assumed that they are able to meet, but not necessarily exceed, basic needs for food, utilities and rent.

In some countries it is common to finance out-of-pocket payments from savings or borrowing, which might artificially inflate a household's consumption and affect household ranking. Where this is an issue, it may be preferable to rank households by per equivalent person non-out-of-pocket payment consumption expenditure.

Calculating the basic needs line

To begin to calculate basic needs, a household equivalence scale should be used to reflect the economy scale of household consumption. The Organisation for Economic Co-operation and Development equivalence scale (the Oxford scale) is used to generate the equivalent household size for each household:

$$\text{equivalent household size} = 1 + 0.7 * (\text{number of adults} - 1) + 0.5 * (\text{number of children under 13 years of age})$$

Each household's total consumption expenditure (less imputed rent), food expenditure, utilities expenditure and rent expenditure is divided by the equivalent household size to obtain respective equalized expenditure levels.

Households whose equivalized total consumption expenditure is between the 25th and 35th percentile across the whole weighted sample are the representative households used to calculate normative basic needs levels. Using survey weights, the weighted average of spending on food, utilities and rent among representative households that report positive values for food, utilities and rent expenditure, respectively, gives the basic needs expenditure per (equivalent) person for food, utilities and rent.

Note again that households that do not report food expenditure are excluded as this may reflect reporting errors. For households that do not report any rent or utilities expenses, only the sample-weighted food basic needs expenditure is used to represent total basic needs expenditure per (equivalent) person. For households that report utilities expenditures but do not report any rent expenses, the two basic needs expenditure sample-weighted averages for food and utilities are added to calculate total basic needs expenditure per (equivalent) person. For households that report rent expenditures but do not report any utilities expenses, the two basic needs expenditure sample-weighted averages for food and rent are added to calculate total basic needs expenditure per (equivalent) person. For households that report both rent and utilities, the three basic needs expenditure sample-weighted averages for food, utilities and rent are added to calculate total basic needs expenditure per (equivalent) person.

Calculating basic needs expenditure levels for each household

Calculate the basic needs expenditure specific to each household by multiplying the total basic needs expenditure per (equivalent) person level calculated above by each household's equivalence scale. Note that a household is regarded as being poor when its total consumption expenditure is less than its basic needs expenditure.

Capacity to pay for health care

This is defined as non-basic needs resources used for consumption expenditure. Some households may report total consumption expenditure that is lower than basic needs expenditure, which defines them as being poor. Note that if a household is poor, capacity to pay will be negative after subtracting the basic needs level.

Estimating impoverishing out-of-pocket payments

Measures of impoverishing health spending aim to quantify the impact of out-of-pocket payments on poverty. For this indicator, households are divided into five mutually exclusive categories based on their level of out-of-pocket payments in relation to the basic needs line.

No out-of-pocket payments are those households that report no health expenditure.

Not at risk of impoverishment after out-of-pocket payments are non-poor households with out-of-pocket payments that do not push them below the multiple of the basic needs line.

At risk of impoverishment after out-of-pocket payments are non-poor households with out-of-pocket payments that push them below a multiple of the basic needs line. This review uses a multiple of 120%, but the author also prepared estimates using 105% and 110%.

Impoverished after out-of-pocket payments are non-poor households that are pushed into poverty after paying out of pocket for health services. For them, the ratio of out-of-pocket payments to capacity to pay is greater than one. In the exceptional case that capacity to pay is zero and out-of-pocket payments are greater than zero, a household would be considered to be impoverished by out-of-pocket payments.

Further impoverished after out-of-pocket payments are households already below the basic needs line with out-of-pocket payments. Any household whose ratio of out-of-pocket payments to capacity to pay is less than zero (that is, negative) is pushed further into poverty by out-of-pocket payments.

Estimating catastrophic out-of-pocket payments

Catastrophic out-of-pocket payments are measured as out-of-pocket payments that equal or exceed some threshold of a household's capacity to pay. Thresholds are arbitrary. The threshold used most often with capacity to pay measures is 40%. This review uses 40% for reporting purposes, but the author also prepared estimates using thresholds of 20%, 25% and 30%.

Households with catastrophic out-of-pocket payments are defined as:

- those with out-of-pocket payments greater than 40% of their capacity to pay; this includes all households who are impoverished after out-of-pocket payments, because their ratio of out-of-pocket payments to capacity to pay is greater than one; and
- those with out-of-pocket payments whose ratio of out-of-pocket payments to capacity to pay is less than zero (negative) – that is, all households who are further impoverished after out-of-pocket payments.

Households with non-catastrophic out-of-pocket payments are defined as those with out-of-pocket payments that are less than the pre-defined catastrophic spending threshold.

For policy purposes it is useful to identify which groups of people are more or less affected by catastrophic out-of-pocket payments (equity) and which health services are more or less responsible for catastrophic out-of-pocket payments.

Distribution of catastrophic out-of-pocket payments

The first equity dimension is expenditure quintile. Expenditure quintiles are determined based on equalized per person household expenditure. Household weights should be used when grouping the population by quintile. Countries may find it relevant to analyse other equity dimensions such as differences between urban and rural populations, regions, men and women, age groups and types of household.

In some countries it is common to finance out-of-pocket payments from savings or borrowing, which might artificially inflate a household's consumption and affect household ranking. Where this is an issue, it may be preferable to calculate quintiles based on non-health equivalized per person household expenditure.

Structure of catastrophic out-of-pocket payments

For households in each financial protection category, the percentage of out-of-pocket payments on different types of health goods and services should be reported, if the sample size allows, using the following categories, with their corresponding COICOP categorization: medicines (06.1.1), medical products (06.1.2 and 06.1.3), outpatient care (06.2.1), dental care (06.2.2), diagnostic tests (06.2.3) and inpatient care (06.3). Where possible, a distinction should be made between prescription and over-the-counter medicines.

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Annex 3. Regional and global financial protection indicators

WHO uses regional and global indicators to monitor financial protection in the European Region, as shown in Table A3.1.

Table A3.1. Regional and global financial protection indicators in the European Region

Regional indicators (R1, R2)	Global indicators (G1–G4)
Catastrophic out-of-pocket payments	
Indicator R1: the proportion of households with out-of-pocket payments greater than 40% of household capacity to pay	Indicator G1: the proportion of the population with large household expenditure on health as a share of total household consumption or income (greater than 10% or 25% of total household consumption or income)
Impoverishing out-of-pocket payments	
Indicator R2: risk of poverty due to out-of-pocket payments – the proportion of households further impoverished, impoverished, at risk of impoverishment or not at risk of impoverishment after out-of-pocket payments using a country-specific line based on household spending to meet basic needs (food, housing and utilities)	<p>Indicator G2: changes in the incidence and severity of poverty due to household expenditure on health using an international poverty line of PPP-adjusted US\$ 1.90 per person per day</p> <p>Indicator G3: changes in the incidence and severity of poverty due to household expenditure on health using an international poverty line of PPP-adjusted US\$ 3.10 per person per day</p> <p>Indicator G4: changes in the incidence and severity of poverty due to household expenditure on health using a relative poverty line of 60% of median consumption or income per person per day</p>

Note: PPP: purchasing power parity.

Sources: WHO headquarters and WHO Regional Office for Europe.

Regional indicators

Indicators R1 and R2 reflect a commitment to the needs of European Member States. They were developed by the WHO Barcelona Office for Health Systems Strengthening (part of the Division of Health Systems and Public Health in the WHO Regional Office for Europe), at the request of the WHO Regional Director for Europe, to meet demand from Member States for performance measures more suited to high- and middle-income countries and with a stronger focus on pro-poor policies, in line with Regional Committee resolutions (see Annex 2).

At the regional level, WHO's support for monitoring financial protection is underpinned by the Tallinn Charter: Health Systems for Health and Wealth, Health 2020 and resolution EUR/RC65/R5 on priorities for health systems strengthening in the WHO European Region 2015–2020, all of which include the commitment to work towards a Europe free of impoverishing payments for health.

Global indicators

Indicators G1–G4 reflect a commitment to global monitoring. They enable the performance of Member States in the European Region to be easily compared to the performance of Member States in the rest of the world.

At the global level, support by WHO for the monitoring of financial protection is underpinned by World Health Assembly resolution WHA64.9 on sustainable health financing structures and universal coverage, which was adopted by Member States in May 2011. More recently, with the adoption of the 2030 Agenda for Sustainable Development and its concomitant Sustainable Development Goals (SDGs) in 2015, the United Nations has recognized WHO as the custodian agency for SDG3 (Good health and well-being: ensure healthy lives and promote well-being for all at all ages) and specifically for target 3.8 on achieving universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all. Target 3.8 has two indicators: 3.8.1 on coverage of essential health services and 3.8.2 on financial protection when using health services.

The choice of global or regional indicator has implications for policy

Global and regional indicators provide insights into the incidence and magnitude of financial hardship associated with out-of-pocket payments for health, but they do so in different ways. As a result, they may have different implications for policy and suggest different policy responses.

For example, global indicator G1 defines out-of-pocket payments as catastrophic when they exceed a fixed percentage of a household's consumption or income (its budget). Applying the same fixed percentage threshold to all households, regardless of wealth, implies that very poor households and very rich households spending the same share of their budget on health will experience the same degree of financial hardship.

Global studies find that this approach results in the incidence of catastrophic out-of-pocket payments being more concentrated among richer households (or less concentrated among poorer households) (WHO & World Bank 2015; 2017). With this type of distribution, the implication for policy is that richer households are more likely to experience financial hardship than poorer households. The appropriate policy response to such a finding is not clear.

In contrast, to identify households with catastrophic out-of-pocket payments, regional indicator R1 deducts a standard amount representing spending on three basic needs – food, housing (rent) and utilities – from each household's consumption expenditure. It then applies the same fixed percentage threshold to the remaining amount (which is referred to as the household's capacity to pay for health care). As a result, although the same threshold is applied to all households, the amount to which it is applied is now significantly less than total household consumption for poorer households but closer to total household consumption for richer households. This implies that very poor households spending small amounts on out-of-pocket payments, which constitute a relatively small share of their total budget, may experience financial hardship, while wealthier households are assumed to not

experience hardship until they have spent a comparatively greater share of their budget on out-of-pocket payments.

This approach results in the incidence of catastrophic out-of-pocket payments being highly concentrated among poor households in all countries. For countries seeking to improve financial protection, the appropriate response to this type of distribution is clear: design policies that protect poorer households more than richer households.

Recent global studies most commonly report impoverishing out-of-pocket payments using absolute international poverty lines set at US\$ 1.90 or US\$ 3.10 a day in purchasing power parity (indicators G2 and G3) (WHO & World Bank 2015; 2017). These poverty lines are found to be too low to be useful in Europe, even among middle-income countries. For example, the most recent global monitoring report suggests that in 2010 only 0.1% of the population in the WHO European Region was impoverished after out-of-pocket payments using the US\$ 1.90 a day poverty line (0.2% at the US\$ 3.10 a day poverty line) (WHO & World Bank, 2017).

European studies make greater use of national poverty lines or poverty lines constructed to reflect national patterns of consumption (Yerramilli et al., 2018). While national poverty lines vary across countries, making international comparison difficult, poverty lines constructed to reflect national patterns of consumption – such as that which is used as the poverty line for the regional indicator R2 – facilitate international comparison (Saksena et al., 2014).

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Annex 4. Glossary of terms

Ability to pay for health care: Ability to pay refers to all the financial resources at a household's disposal. When monitoring financial protection, an ability to pay approach assumes that all of a household's resources are available to pay for health care, in contrast to a capacity to pay approach (see below), which assumes that some of a household's resources must go towards meeting basic needs. In practice, measures of ability to pay are often derived from household survey data on consumption expenditure or income and may not fully capture all of a household's financial resources— for example, savings and investments.

Basic needs: The minimum resources needed for sustenance, often understood as the consumption of goods such as food, clothing and shelter.

Basic needs line: A measure of the level of personal or household income or consumption required to meet basic needs such as food, housing and utilities. Basic needs lines, like poverty lines, can be defined in different ways. They are used to measure impoverishing out-of-pocket payments. In this study the basic needs line is defined as the average amount spent on food, housing and utilities by households between the 25th and 35th percentiles of the household consumption distribution, adjusted for household size and composition. Basic needs line and poverty line are used interchangeably. See poverty line.

Budget: See household budget.

Cap on benefits: A mechanism to protect third party payers such as the government, a health insurance fund or a private insurance company. A cap on benefits is a maximum amount a third party payer is required to cover per item or service or in a given period of time. It is usually defined as an absolute amount. After the amount is reached, the user must pay all remaining costs. Sometimes referred to as a benefit maximum or ceiling.

Cap on user charges (co-payments): A mechanism to protect people from out-of-pocket payments. A cap on user charges is a maximum amount a person or household is required to pay out of pocket through user charges per item or service or in a given period of time. It can be defined as an absolute amount or as a share of a person's income. Sometimes referred to as an out of pocket maximum or ceiling.

Capacity to pay for health care: In this study capacity to pay is measured as a household's consumption minus a normative (standard) amount to cover basic needs such as food, housing and utilities. This amount is deducted consistently for all households. It is referred to as a poverty line or basic needs line.

Catastrophic out-of-pocket payments: Also referred to as catastrophic spending on health. An indicator of financial protection. Catastrophic out-of-pocket payments can be measured in different ways. This study defines them as out-of-pocket payments that exceed 40% of a household's capacity to pay for health care. The incidence of catastrophic health spending includes households who are impoverished (because they no longer have any capacity to pay after incurring out-of-pocket payments) and households who are further impoverished (because they have no capacity to pay from the outset).

Consumption: Also referred to as consumption expenditure. Total household consumption is the monetary value of all items consumed by a household during a given period. It includes the imputed value of items that are not purchased but procured for consumption in other ways (for example, home-grown produce).

Co-payments (user charges or user fees): Money people are required to pay at the point of using health services covered by a third party such as the government, a health insurance fund or a private insurance company. Fixed co-payments are a flat amount per good or service; percentage co-payments (also referred to as co-insurance) require the user to pay a share of the good or service price; deductibles require users to pay up to a fixed amount first, before the third party will cover any costs. Other types of user charges include extra billing (a system in which providers are allowed to charge patients more than the price or tariff determined by the third party payer) and reference pricing (a system in which people are required to pay any difference between the price or tariff determined by the third party payer – the reference price – and the retail price).

Equivalent adult: To ensure comparisons of household spending account for differences in household size and composition, equivalence scales are used to calculate spending levels per equivalent adult in a household. This review uses the Oxford scale (also known as the Organisation for Economic Co-operation and Development equivalence scale), in which the first adult in a household counts as one equivalent adult, subsequent household members aged 13 or over count as 0.7 equivalent adults and children under 13 count as 0.5 equivalent adults.

Exemption from user charges (co-payments): A mechanism to protect people from out-of-pocket payments. Exemptions can apply to groups of people, conditions, diseases, goods or services.

Financial hardship: People experience financial hardship when out-of-pocket payments are large in relation to their ability to pay for health care.

Financial protection: The absence of financial hardship when using health services. Where health systems fail to provide adequate financial protection, households may not have enough money to pay for health care or to meet other basic needs. Lack of financial protection can lead to a range of negative health and economic consequences, potentially reducing access to health care, undermining health status, deepening poverty and exacerbating health and socioeconomic inequalities.

Further impoverishing out-of-pocket payments: An indicator of financial protection. Out-of-pocket payments made by households living below a national or international poverty line or a basic needs line. A household is further impoverished if its total consumption is below the line before out-of-pocket payments and if it incurs out-of-pocket payments.

Health services: Any good or service delivered in the health system, including medicines, medical products, diagnostic tests, dental care, outpatient care and inpatient care. Used interchangeably with health care.

Household budget: Also referred to as total household consumption. The sum of the monetary value of all items consumed by the household during a given period and the imputed value of items that are not purchased but procured for consumption in other ways.

Household budget survey: Usually national sample surveys, often carried out by national statistical offices, to measure household consumption over a given period of time. Sometimes referred to as household consumption expenditure or household expenditure surveys. European Union countries are required to carry out a household budget survey at least once every five years.

Impoverishing out-of-pocket payments: An indicator of financial protection. Out-of-pocket payments that push people into poverty or deepen their poverty. A household is measured as being impoverished if its total consumption was above the national or international poverty line or basic needs line before out-of-pocket payments and falls below the line after out-of-pocket payments.

Out-of-pocket payments: Also referred to as household expenditure (spending) on health. Any payment made by people at the time of using any health good or service provided by any type of provider. Out-of-pocket payments include: (a) formal co-payments (user charges or user fees) for covered goods and services; (b) formal payments for the private purchase of goods and services; and (c) informal payments for covered or privately purchased goods and services. They exclude pre-payment (for example, taxes, contributions or premiums) and reimbursement of the household by a third party such as the government, a health insurance fund or a private insurance company.

Poverty line: A level of personal or household income or consumption below which a person or household is classified as poor. Poverty lines are defined in different ways. This study uses basic needs line and poverty line interchangeably. See basic needs line.

Quintile: One of five equal groups (fifths) of a population. This study commonly divides the population into quintiles based on household consumption; the first quintile is the fifth of households with the lowest consumption, referred to in the study as the poorest quintile; the fifth quintile has the highest consumption, referred to in the study as the richest quintile.

Risk of impoverishment after out-of-pocket payments: After paying out of pocket for health care, a household may be further impoverished, impoverished, at risk of impoverishment or not at risk of impoverishment. A household is at risk of impoverishment (or not at risk of impoverishment) if its total spending after out-of-pocket payments comes close to (or does not come close to) the poverty line or basic needs line.

Universal health coverage: All people are able to use the quality health services they need without experiencing financial hardship.

Unmet need for health care: An indicator of access to health care. Instances in which people need health care but do not receive it due to access barriers.

User charges: Also referred to as user fees. See co-payments.

Utilities: Water, electricity and fuels used for cooking and heating.

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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