

# Can people afford to pay for health care?

New evidence on financial protection in Latvia

Maris Taube Edmunds Vaskis Oksana Nesterenko





Latvia





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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# Can people afford to pay for health care?

New evidence on financial protection in Latvia

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### Abstract & keywords

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.

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#### 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 outof-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**

**EU** European Union

**EU13** European Union Member States joining after 30 April 2004

**EU15** European Union Member States from 1 January 1995 to 30 April 2004

EU27 European Union Member States as of 1 January 2007EU28 European Union Member States as of 1 July 2013

**EU-SILC** European Union Statistics on Income and Living Conditions

GDP gross domestic productNHS National Health ServiceVHI voluntary health insurance

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#### **Executive summary**

Latvia's health system relies heavily on out-of-pocket payments. The share of out-of-pocket payments in total health spending is consistently among the highest in the European Union (EU), reaching 42% in 2015, nearly double the EU average of 22%. This high share reflects the relatively small share of total government spending allocated to health (8.9% in 2015, as compared with the EU average of 13.5%) and the design of coverage policies.

Financial protection in Latvia is weaker than in other EU countries. In 2013, 13% of households experienced catastrophic out-of-pocket payments, up from 10% in 2008. Around 4% of households were impoverished or further impoverished as a result of having to pay out-of-pocket for health. Catastrophic out-of-pocket payments affect the poorest households the most, are concentrated among pensioners and are due largely to spending on outpatient medicines.

Out-of-pocket payments lead to financial hardship through three mechanisms:

- services excluded from National Health Service (NHS) coverage, such as dental care for adults and outpatient medicines that are not on the positive list;
- volume limits for NHS treatment, which result in long waiting times, thus
  encouraging those who can afford it to pay out of pocket for private
  treatment (or self-treatment in the case of medicines); and
- the application of user charges to almost all NHS care, with weak protection mechanisms.

Voluntary health insurance does not cover these gaps well. It is purchased mainly by richer households, exacerbating inequality in access to health care.

Between 2008 and 2010, financial protection improved for the poorest quintiles but remained stable overall. By 2013, it had deteriorated overall, due largely to a rise in the incidence of catastrophic out-of-pocket payments among the poorest quintiles. Possible explanations for the decreased incidence of catastrophic spending among poor households in 2009 and 2010 and increased incidence in 2013 include:

- the introduction in 2009 of exemptions from co-payments for very poor households through the Social Safety Net, which was extended to other low-income households from 2010 to 2012;
- an increase in self-reported unmet need for health and dental care from 2010; and

• maintenance of pensions during the crisis, so that the risk of poverty fell among older people but increased among younger people.

Stronger financial protection will require additional public investment in the health system. Latvia's public spending on health is lower than it can afford, given its gross domestic product. Any increase in public spending should be used to expand NHS coverage and prioritize stronger protection for poor adults and regular users of health care, building on lessons learnt from the Social Safety Net programme.

Areas that require particular attention include:

- unmet need for health and dental care, particularly among poor people;
- access to and the affordability of outpatient medicines, which could be improved by extending the positive list, decreasing the use of percentage co-payments and including prescribed medicines in the cap on co-payments;
- the cap on co-payments, which is currently too high to be protective, and extending exemption from co-payments to more people; and
- the much higher use of non-prescribed medicines than in other EU countries.

# 1. Introduction

This review assesses the extent to which people in Latvia 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.

Latvia spends less on health care than most other European Union (EU) countries. In 2015, public spending on health accounted for 3.3% of GDP, the second-lowest share in the EU. Both the public share of total spending on health and the health share of total government spending are very low. As a result, out-of-pocket spending is among the highest in the EU. In 2015, out-of-pocket payments accounted for close to 42% of total spending on health – almost twice the EU average of 22%.

Few changes took place in the health system between 2005 and 2007, a period of rapid economic growth. During this time, reform focused on centralizing institutions and incremental shifts from hospital to outpatient care (Mitenbergs et al., 2012). In 2008, Latvia experienced an economic shock. In 2009, GDP fell by nearly 18% and unemployment rose rapidly to reach 20% by 2010 (Taube et al., 2015). Severe constraints were placed on public sector spending, including the health sector. Budget consolidation triggered a series of far-reaching reforms, including major restructuring and downsizing of the hospital sector, a reduction in public spending on hospitals, a merging of State health agencies into fewer institutions, lower salaries for health professionals and changes to the reference pricing system to reduce the price of medicines (Taube et al., 2015). In 2011, Latvia formally established its National Health Service (NHS), with population coverage based on residence.

The policy changes that affected financial protection most strongly were an increase in user charges for almost all NHS services, a reduction in the number of services covered by the NHS benefits package and the introduction of the Social Safety Net strategy from 2009 to protect low-income households from co-payments through exemptions or reductions. The Social Safety Net was part of a larger structural reform package of the Latvian Government, with support from the World Bank, the European Commission and the International Monetary Fund. External funding was available only until the end of 2012, however. From December 2012, some elements, such as co-payment exemptions for the very poorest households, were continued and financed via the health budget, but other components had to be discontinued because of insufficient funding. The analysis of household budget data for this review suggests that the Social Safety Net played a key role in mitigating the adverse effects of the crisis on some households.

Latvia has been included in several global studies of financial protection based on data from household budget surveys conducted in the 1990s or World Health Survey data from 2002 to 2003 (Yerramilli et al., 2018). More recent global studies are based on household budget survey data from 2006 (WHO & World Bank, 2015, 2017). A national study of out-of-pocket payments in Latvia drew on household budget survey data for 2002–2006 (Xu et al., 2009). The analysis presented here draws on household budget survey data for 2008, 2009, 2010 and 2013 and is based on a different method from those used in previous studies.

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 Annex 1, Annex 2 and Annex 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 Latvian household budget surveys carried out in 2008, 2009, 2010 and 2013.

All currency units are presented in euros. *Lati* reported in the household budget survey before 2014 were converted into euros at the standard conversion rate of 1.42 *lati* to 1 euro.

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			
<b>Definition</b> The share of households with <i>out-of-pocket</i> payments that are great 40% of household <i>capacity</i> to pay for health care				
Numerator	Out-of-pocket payments			
Denominator	Total household consumption 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 utilities 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 impoverished or further impoverished after out-of-pocket payments			
Poverty line	A basic needs line, 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, at risk of impoverishment and not at risk of impoverishment 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

Entitlement to publicly financed benefits under the NHS is specified by legislation. The scope of the NHS benefits package and user charges is defined by the Ministry of Health through Cabinet regulations.

#### 3.1.1 Population entitlement

The NHS was in place during the period covered by this analysis. The Medical Treatment Law granted access to health care to all Latvian citizens; to citizens of EU Member States, European Economic Area states and Switzerland who resided in Latvia for the purposes of employment or as self-employed persons, as well as their family members; third-country nationals who had a permanent residence permit in Latvia; refugees, asylum seekers and people who had been granted alternative status; prisoners; and non-citizens (nepilsoṇi), who are not citizens of Latvia or of any other country but who, in accordance with the Latvian law "Regarding the status of citizens of the former USSR who possess neither Latvian nor other citizenship", have the right to a non-citizen passport issued by the Latvian Government and other specific rights.

In 2018, new health financing legislation introduced a compulsory national health insurance system. Full entitlement to publicly financed benefits has been granted since 2018 to those who pay an earmarked social health insurance contribution and to individuals in one of 21 population groups covered by the State (e.g. children, pensioners and disabled people). Entitlement to minimum benefits (emergency care, family doctor, maternity care, psychiatric care, treatment of infectious diseases and reimbursement of medicines) is granted to people of working age who do not pay compulsory contributions (for example, because they have no taxable income); they have the option of joining the compulsory health insurance system by paying an annual contribution.

#### 3.1.2 Service coverage

The NHS benefits package is determined by a number of explicit inclusions and exclusions. It is not as broad as in many other EU countries. The services excluded from coverage include dental care for adults, rehabilitation (with a long list of exceptions), most rehabilitative and physiotherapy services, medical check-ups for occupational purposes, sight correction, hearing aids for adults, psychotherapy, spa treatment and termination of pregnancy (if there are no medical or social grounds).

Although the benefits package formally covers broad types of services, in practice, the volume of specialist and hospital outpatient and inpatient

services is often tightly controlled through an annual "quota" system. Once providers' annual service quotas with the NHS have been reached, patients must wait until the following year when the quota is renewed, resulting in long waiting times. There are no waiting time guarantees. Patients who wish to avoid waiting or to receive services excluded from NHS coverage must cover all costs out of pocket or through VHI.

1. In 2016, a requirement was introduced that only specialists can order certain highly specialized diagnostic and laboratory examinations.

A number of criteria determine the inclusion of new services in the benefits package, but a major consideration is financial resources. Cost–effectiveness studies are conducted before a pharmaceutical is added to the positive list, according to the Common Baltic Guidelines on Economic Evaluation of Pharmaceuticals (Government of Latvia, 2006). The list of medicines covered by the NHS is relatively short and applies to certain diagnostic groups only. Patients therefore pay the full price out of pocket for many prescribed medicines and for all nonprescription (over-the-counter) medicines (World Bank, 2010; Mitenbergs et al., 2012).

General practitioners are the main entry point to the health system and refer people to specialist services, although some specialists (such as paediatricians, gynaecologists and ophthalmologists) can be consulted without a referral. Similarly, patients with certain conditions have direct access to the relevant specialists (e.g. oncologists and psychiatrists). With a referral from a general practitioner, a patient may choose any specialist or hospital that has a contract with the NHS.<sup>1</sup>

#### 3.1.3 User charges

People must pay user charges for almost all health services in Latvia (Table 2). Some NHS co-payments have changed since the onset of the economic crisis. For example, in 2009, when broader fiscal consolidation policies were introduced, the daily co-payment for an inpatient hospital stay increased substantially, from €7.10 to €17, as did co-payments for outpatient specialist visits. The aim of the increase was to reduce service use and to steer patients away from inpatient care and specialist outpatient care. In response to the problem of out-of-pocket payments and unmet need, however, co-payments for outpatient specialist services were reduced in 2010. The hospital per diem co-payment was reduced again to €10 in 2015, as was the user charge for surgical interventions (Table 3). The cap on co-payments for a single hospitalization (see below), which tripled in 2009 from €114 to €356 has, however, remained unchanged. Co-payments for primary care visits doubled from €0.72 to €1.42 in 2009 and remained stable subsequently.

Co-payments for medicines have been applied since the 1990s. The coverage for medicines is relatively limited. The system is based on diagnosis and is divided into groups according to the severity of disease (for which 100%, 75% or 50% of the product price is covered by the State); before 2009, there were four reimbursement categories: 100%, 90%, 75% and 50%. Outpatient prescription medicines that are reimbursed at 100% incur a charge of  $\{0.71\}$  per prescription item, with exemptions for some groups, such as children and asylum seekers.

#### Table 2. User charges for publicly financed health services, 2015

Notes: NA: not applicable. Supplies (devices) such as equipment for colostomy and urostomy care and spacers for inhalers are included on the positive list.

Source: authors.

Service area	Type of user charge	Level of user charge	Exemptions	Cap on user charges paid
Visit to general practitioner	Fixed co- payment	€1.42 per visit (increased from €0.72 in 2009)	Children under 18 years Pregnant women and women up to 70 days after childbirth Victims of political repression and participants in the national resistance movement Victims of the Chernobyl nuclear reactor accident Severely disabled people (disability category 1 of 3) Tuberculosis patients and those being examined for tuberculosis People with some specified infectious diseases Mentally ill people under treatment Organ donors Employees of the State emergency care service Emergency care, palliative care, prevention visits, vaccination and some others Households with a monthly income of less than €128 per family member are exempt under the Social Safety Net (since 2009)	All co- payments for outpatient and inpatient health services are capped at €569 per person per year  Co-payments are capped at €356 per hospitalization
Outpatient visit to specialist	Fixed co- payment	€4.28 per visit (since 2010)	As above	Cap does not apply to outpatient
Diagnostic tests	Fixed co- payment	Varies, up to €35.64 per service unit; no charge for approved laboratory tests with referral	As above	medicines or medical products
Inpatient care	Fixed co- payment	Since 2015, €10 per day (€7.11 in care hospitals) starting from the second day and a nonmandatory co-payment up to €31 for inpatient surgical intervention	As above	
Inpatient medicines	None	NA	NA	NA
Outpatient prescription medicines covered by the NHS	Fixed and percentage co-payments plus reference pricing	€0.71 per prescription for medicines reimbursed 100%; percentage copayments of 25% or 50%  Reference pricing: people pay 25% or 50% of the reference price and any difference between the reference price and the retail price	Children under 18 years: no percentage co-payments for medicines on the list  Medicines priced below €4.27  50% reimbursement for children under 24 months and pregnant women (including ≤ 70 days after childbirth) for all prescription medicines (also if not on the list)  No percentage co-payment for medicines on the list for diabetes, cancer and schizophrenia In general, the level of reimbursement is determined by the severity and chronicity of the disease; for example, listed medicines for heart diseases incur a percentage co-payment of 25%, and medicines for ulcers and depression incur a percentage co-payment of 50%  Households with a monthly income of less than €128 per family member are exempt under the Social Safety Net (since 2009)	No
Medical products covered by the NHS	Fixed and percentage co-payments plus reference pricing	€0.71 per prescription (for medical supplies reimbursed 100%), with co-payments of 25% or 50%, plus reference pricing	Children under 18 years: no percentage co-payment for medical supplies (devices) on the list Medical supplies (devices) priced below €4.27 Households with a monthly income of less than €128 per family member are exempt under the Social Safety Net (since 2009)	No
Dental care	Not covered for adults	Market price	Children under 18 years (under 22 years for patients with facial jaw cleft) 50% reimbursement for dental care and full reimbursement of dental plastic prostheses for victims of the Chernobyl nuclear reactor accident Asylum seekers	No

Table 3. Changes to user charges, 2008-2015

Note: NA: not applicable. Source: authors based on data in the EU Mutual Information System on Social Protection.

Service area	2008	2009	2010	2011	2012	2013	2015
Visit to general practitioner	€0.72	€1.42	€1.41	€1.41	€1.42	€1.43	€142
Outpatient visit to specialist	€2.86	€7.12	€4.23	— <del>=</del> 4.23	— €4.28	— <del>=</del> 4.28	— <del></del> €4.27
Diagnostic tests	NA NA	NA NA	NA NA	NA	NA NA	— €1.43 to €36	— €1.42 to
Daily inpatient charge	€7.16	€17.00	€13.00	€13.00	€14.00	€14.00	€10.00
Inpatient surgical procedure	NA	NA	≤ €42.00	≤ €42.00	≤ €43.00	≤ €43.00	≤ €31.00
Annual cap on co-payments for all inpatient and outpatient services (excluding medicines, medical products and dental care)	€215.00 (only total inpatient care used in 1 year)	€569.00	€564.00	€564.00	€572.00	€573.00	€569.15
Cap on co-payments per hospitalization	€114.00	€356.00	€352.00	€352.00	€357.00	€358.00	€355.72
Outpatient medicines	4 percentage co-payment rates: 0%, 10%, 25%, 50%	3 percentage co-payment rates: 0%, 25%, 50%					

A number of mechanisms are in place to protect people from catastrophic spending or underuse of needed services.

- An annual cap on user charges applies to the entire population but, notably, not to outpatient medicines (Box 1).
- Very poor households have been exempt from all user charges since 2009 (Box 1).
- Children under the age of 18 are exempt by law from payment of a fee for any service on the statutory list of reimbursable services. Other exempt groups include pregnant women and women up to 70 days after childbirth, victims of political repression, participants in the national resistance movement, victims of the Chernobyl nuclear reactor accident, severely disabled people, patients with tuberculosis or being examined for tuberculosis, people with some specified infectious diseases, mentally ill people under treatment, organ donors, employees of the State emergency care service, people receiving emergency care or palliative care, people attending prevention visits and those attending for vaccination according to the vaccination calendar (Government of Latvia, 2017).
- Extra billing is not allowed; providers are not allowed to charge people more than the official, State-approved tariff for NHS-contracted services.

#### Box 1. Caps and exemptions from user charges

Caps on co-payments are set high and do not apply to all health services. Co-payments per person per year for all publicly financed health services, except outpatient medicines, must not exceed €569 per year (in 2015). This is a relatively large amount in Latvia, equal to one and a half month's minimum wage (in 2015), and may not be sufficiently protective for poorer households.

Co-payment exemptions for low-income households were introduced in 2009 during the crisis; some are still in place, but others have been discontinued. Within the Social Safety Net measures introduced in 2009 in response to the economic crisis, households with a monthly income that is less than 50% of the minimum wage, i.e. below €128.06 per family member per month (or €1536 per person per year) are exempt from all inpatient and outpatient user charges, including for outpatient prescribed medicines. Between 2010 and 2012, households earning €128–171 per person per month were also exempted from co-payments, and co-payments by those earning €171–213 per person per month were reduced. These programmes were, however, discontinued in December 2012, and only the programme for very low-income households remains in place.

#### 3.1.4 The role of VHI

VHI does not play a major role in health care financing, representing 0.8% of total spending on health in 2015. The people most likely to purchase VHI are those who are wealthier and, especially, employers in State administrations and private companies who offer group plans to their employees as bonuses (Brigis, 2016). There is a wide range of plans: VHI can cover user charges, fixed sums for inpatient and outpatient services and services not covered by the NHS, and faster access to NHS services.

At the beginning of the crisis, the number of people who had VHI fell rapidly, particularly as State and municipal institutions stopped offering it to their employees. The number of private individuals who purchased VHI also fell. Household budget survey data indicate that 19% of the population had VHI in 2008, 17% in 2009 and only 10% by 2010 (Fig. 1); the numbers have recovered somewhat but are still far below pre-crisis levels. Fig. 1 also shows the considerable income inequality in uptake of VHI, which is much higher among richer people.

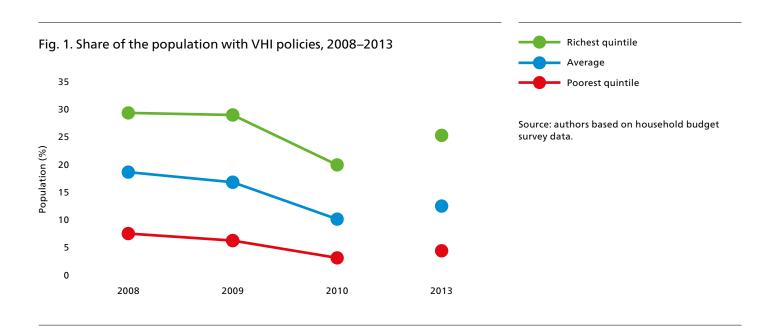


Table 4 highlights key issues in the governance of coverage, summarizes the main gaps in publicly financed coverage and indicates the role of VHI in filling these gaps.

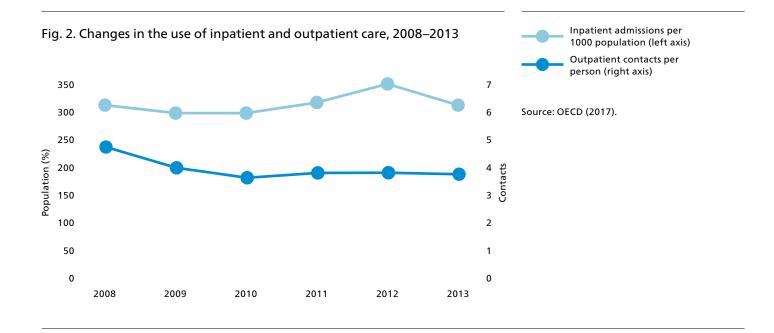
Table 4. Gaps in coverage

Source: authors.

	Population entitlement	Service coverage	User charges	
Issues in the governance of publicly financed coverage	None during the study period; from 2019, when the new Health Financing Law is fully implemented, there will be limited health coverage for those not paying the social tax	Exclusions from the positive list; narrow positive list of covered outpatient medicines; lack of waiting time guarantees	Co-payments levied on all health services; use of percentage co-payments; weak protection	
Main gaps in publicly financed coverage	Around 6–10% of the population are uninsured, although some of these people are likely to be working abroad	Dental care for adults; waiting times	Outpatient prescription medicines for adults	
Are these gaps covered by VHI?	No	VHI covers around 12% of the population – mainly wealthier people – and provides access to private providers; in 2015 it accounted for less than 1% of total spending on health	No	

# 3.2 Access, use and unmet need

The total number of outpatient contacts, which was 6.2 per person per year in 2013, remained below the EU average of about 7 (Fig. 2). The number has fluctuated since 2008, when it was about 6, falling slightly in 2009 and 2010, rising in 2011 and 2012 (to 7) and falling again in 2013 (Mitenbergs et al., 2012; Taube et al., 2015). The increase in the number of outpatient contacts in 2011 and 2012 may partly reflect the policy to shift from inpatient to outpatient care that began in those years.



According to NHS data, there were 4.4 reimbursed outpatient contacts per person in 2010, and the number remained stable, with 4.7 contacts in 2013. About half of all contacts were with primary care physicians; the other half were distributed among specialists and diagnostic investigations. There were considerable geographical differences in the ratio of reimbursed outpatient visits by region.

A clear trend can be seen in the rate of use of inpatient care. Inpatient admissions fell from 236 per 1000 population in 2008 to 198 in 2009 and 180 in 2010 and then remained relatively stable (Fig. 2). The main reason for the fall is that, between 2008 and 2010, many fewer hospitals had contracts with the NHS (from 79 to 39), as part of large-scale reform and restructuring of the hospital sector. Several local hospitals were reassigned to a different "level" to provide either lower intensity care or no inpatient care, with outpatient and day care units.

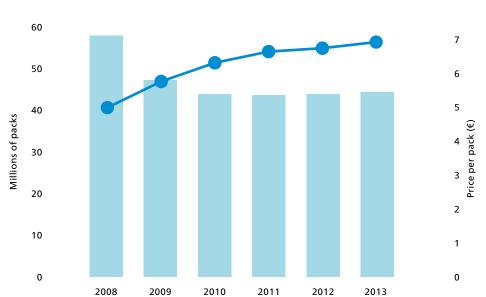
Public spending on hospitals per person fell by 22% between 2008 and 2013, and the daily co-payment for inpatient hospital stays rose sharply in 2009. The number of hospitalized patients paid for by the State has remained relatively

stable over the past few years (234 049 patients in 2011, 232 168 in 2012 and 230 095 in 2013), which broadly reflects the volume controls in place for inpatient services.

Consumption of medicines can be reported in terms of either volume or value. Although the volume of medicines consumed in Latvia has grown dramatically since 2000, per capita consumption remains substantially lower than that in western Europe. There was a marked reduction in volume in 2009 and a further fall in 2010 (Fig. 3); consumption has since stabilized but is still below the 2008 level.

Spending on medicines as a share of total spending on health has remained steady. Although the volume of medicines purchased is lower in all years after 2008, the average price per pack has increased each year, so that the average prices in 2013 were 38.5% higher than those in 2008. As a result, spending on medicines grew in every year, reaching over €307 million in 2013.





Volume: number of packs (left axis)

Price: average per pack (right axis)

Source: State Agency of Medicines, statistics on medicine consumption.

EU Statistics on Income and Living Conditions (EU-SILC) data indicate that unmet need for health and dental care (see Box 2) decreased massively in the years before the crisis and then rose. In 2015, self-reported unmet need for health care due to cost, distance and waiting time in Latvia was 8.4%, the fourth highest rate in the EU, albeit down from 16.1% in 2011 and 12.5% in 2014, when it was the highest rate among EU countries (Fig. 4). Self-reported unmet need for dental care is even higher (Fig. 4), rising from 12.8% in 2008 to 20.7% in 2011, before falling to 8.0% in 2015.

#### Box 2. 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.

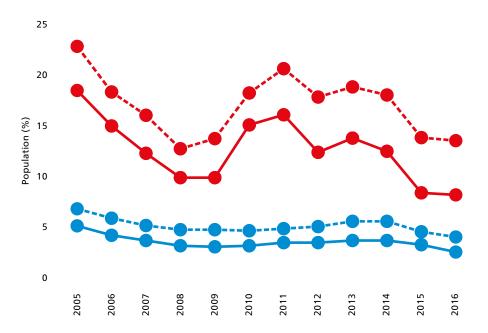
Information on health care use or unmet need is not routinely collected in the household budget surveys used to analyse financial protection. They indicate which households have not made out-of-pocket payments, but not why. Households with no out-of-pocket payments may have no need for health care, be 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 n the share of households without out-of-pocket payments 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 the 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).

Fig. 4. Self-reported unmet need for health and dental care due to cost, distance and waiting time, Latvia and EU27, 2005–2016





Notes: EU27: EU Member States as of 1 January 2007. Population is people aged over 16 years.

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

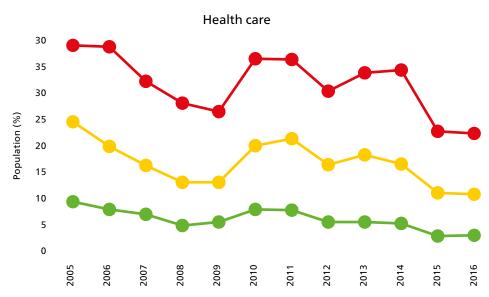
Income inequality in unmet need for health and dental care is substantial in Latvia (Fig. 5). EU-SILC data show that, for the poorest quintile, unmet need for health care due to cost, distance and waiting time was worse in 2009 than in 2008, remained steady in 2010 and improved slightly in 2011 (Fig. 5). In 2012, unmet need among the poorest quintile increased again, coinciding with discontinuation of co-payment exemptions and reductions for many poor households, although a definitive link cannot be established. EU-SILC may also underestimate unmet need because people are not asked specifically about their need for prescribed medicines.

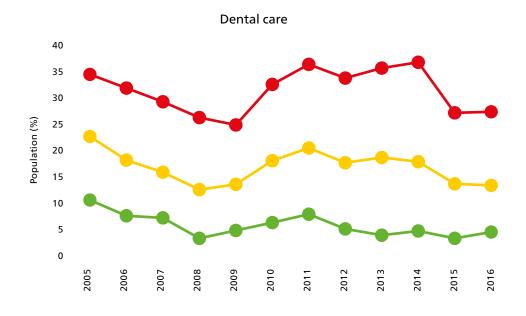
Fig. 5. Income inequality in self-reported unmet need for health and dental care due to cost, distance and waiting time in Latvia, 2005–2016



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

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





# 3.3 Summary

During the period covered by this analysis, entitlement to publicly financed health care in Latvia was based on residence and was therefore almost universal. New legislation in 2018 introduced a compulsory national health insurance system, and full entitlement to publicly financed benefits is now based on payment of contributions or belonging to one of the groups covered by the State. People of working age who do not pay compulsory contributions are eligible for a reduced number of services (minimum entitlement); they have the option of joining the compulsory health insurance system by making an annual payment.

Under the policies in place during the study period, the main gaps in coverage were related to widespread user charges, the extent of the benefits package (including a short list of covered medicines) and long waiting times for treatment.

- User charges are applied to almost all NHS services. Children under 18 years are usually exempt, as are some vulnerable and very low-income groups, but not regular users, such as those with chronic conditions and older people.
- A cap on user charges (€569 per person per year) applies to the entire population but not to co-payments for outpatient medicines, medical products or dental care. The cap is relatively high, equal to one and a half months' minimum wage (in 2015).
- A number of services are excluded from NHS coverage, including dental care for adults, employment-related medical check-ups, optometry services, hearing aids (for adults) and termination of pregnancy on non-medical grounds.
- The limits on the volume of services provided under the NHS (the quota system) result in long waiting times for treatment.

VHI plays a very small role in filling these gaps. Since the crisis, the share of the population covered by VHI has almost halved. VHI is taken up mainly by richer households, exacerbating inequality in access to health care.

The use of outpatient care, inpatient care and medicines decreased during the crisis. After 2010, Latvia implemented a concerted policy of shifting hospital care from inpatient to outpatient or day care settings, in line with a reduction in the number of hospitals that had contracts with the NHS. Consequently, the volume of outpatient visits increased, while the volume of inpatient hospital care continued to fall.

EU-SILC data indicate high levels of self-reported unmet need for both health and dental care, mainly due to cost, with huge inequality between poorer and richer people.

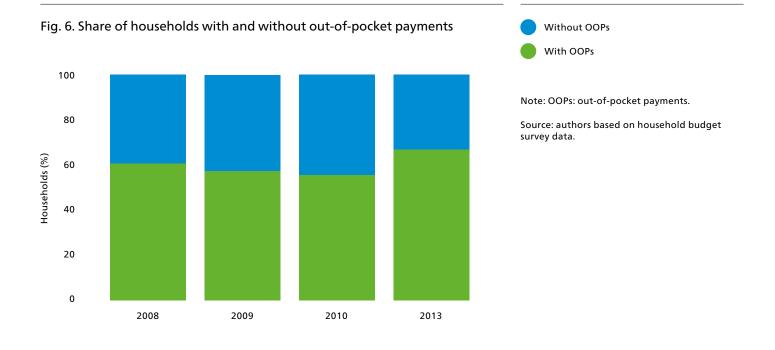
# 4. Household spending on health

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.

### 4.1 Out-of-pocket payments

Out-of-pocket payments are made in Latvia for three reasons. First, almost all health services covered by the NHS require co-payments. Second, individuals must pay out of pocket to obtain a wide range of services that are not included in the NHS benefits package, including many prescription medicines. Third, low public spending on health has led to long waiting times for treatment, so that some people choose to pay out of pocket or make informal payments to bypass waiting lists for NHS treatment.

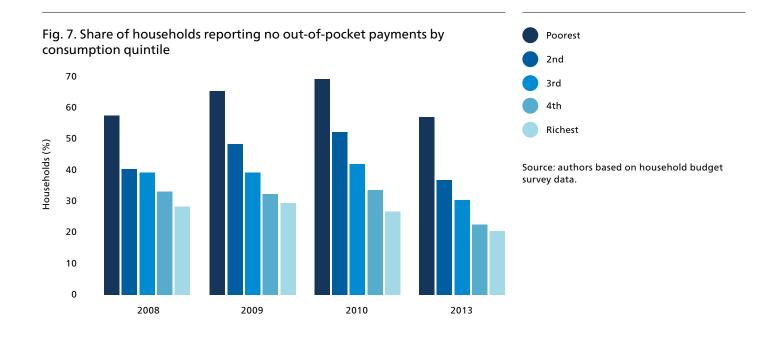
In 2013, 67% of all households paid for health care out of pocket (Fig. 6). The share of households that made out-of-pocket payments fell between 2008 and 2010 but had increased by 2013.



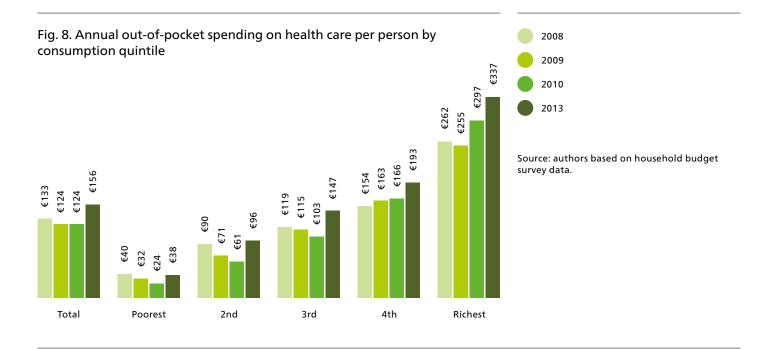
As shown in Fig. 7, in all four years, households that did not make out-of-pocket payments were more likely to be poor than rich. In 2013, 57% of households in the poorest quintile and 20% in the richest quintile made no out-of-pocket payments.

As the Latvian household budget survey does not include questions on health status, use of health services or unmet need for health care, it is not possible to determine whether these households did not spend on health care because they did not need it, because they were exempted from user charges or because they did not seek care due to barriers to access.

Exemptions from co-payment were put in place from 2009 for very poor households, with incomes of less than 50% of the monthly minimum wage; further (temporary) exemptions or reductions were applied to other low-income households between 2010 and 2012 (Box 1). These exemptions account for some of the increase in the number of poorer households that made no out-of-pocket payments in 2009 and 2010. In addition, growing unemployment from 2009 onwards put household budgets under pressure, so that some people used health services less often or less intensively than before. The decreased numbers of inpatient and outpatient contacts in 2009 and 2010 (Fig. 2) support this explanation, as do the increases in unmet need for health and dental care in 2010 and 2011 (Fig. 5), particularly for the poorest households.

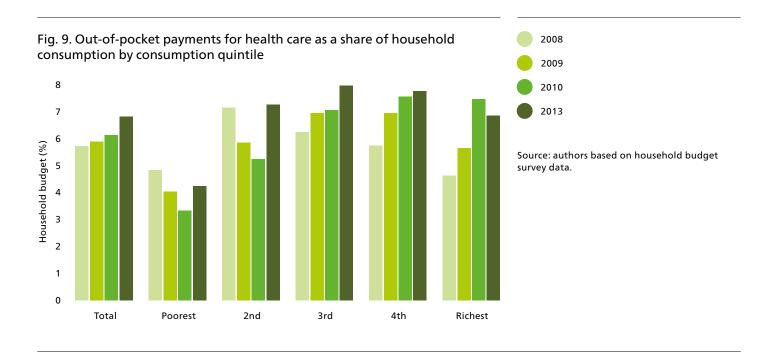


Average annual out-of-pocket spending per person was slightly lower in 2009 than in 2008 and remained steady in 2010, at €124 per year (Fig. 8), despite increases in co-payment levels in 2009. Co-payments affected income groups quite differently, however. The decrease in spending was due to decreases per person in poorer households (the bottom three consumption quintiles), while wealthier households (those in the top two consumption quintiles) increased spending in 2010 and 2013. Out-of-pocket payments per person were higher in 2013 in all quintiles than in previous years for which data were available.



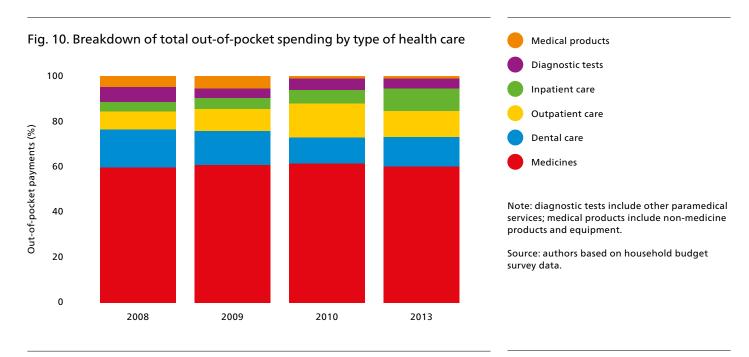
Overall, out-of-pocket payments also increased as a share of total household consumption (spending), rising by 1 percentage point between 2008 and 2013 (Fig. 9). The trends varied by quintile, however. While the out-of-pocket share of household spending rose in nearly every year for the wealthiest three quintiles between 2008 and 2013, it fell among the poorest two quintiles in 2009 and 2010, before rising sharply by 2013, especially for the second quintile. The pattern of change in the poorest quintiles may be explained by the co-payment exemptions introduced in the Social Safety Net in 2009, subsequently abolished for all but the very poorest households in 2012 (Box 1), as well as by changes in health care-seeking behaviour due to financial pressure associated with the crisis.

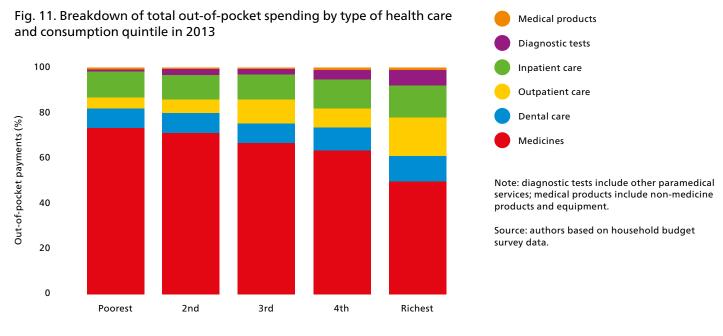
The average share of total household consumption spent on health care in Latvia in 2013, nearly 7%, is higher than in other countries. In Estonia and Lithuania, for example, the average share was about 4% in 2012 (Murauskienė & Thomson, 2018; Võrk & Habicht, 2018). Household budget surveys in 2014, 2015 and 2016 (not available to the authors at the time this review was initiated) indicate that the share has continued to increase in Latvia.



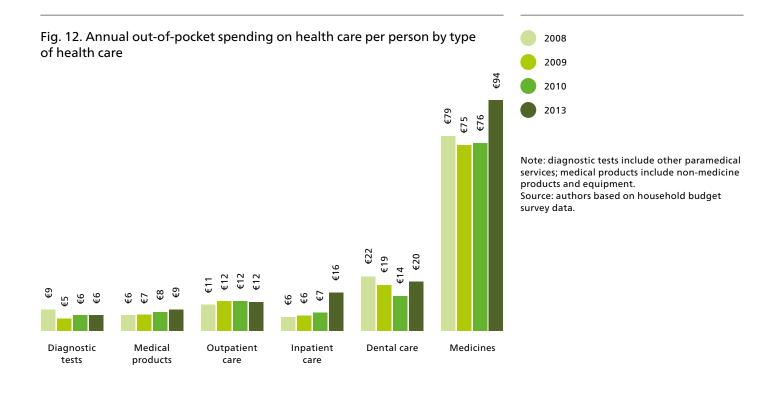
Medicines accounted for the largest share of out-of-pocket payments (about 60%) each year (Fig. 10). Although the share spent on dental care decreased by 25% between 2008 and 2013, it was still the second largest out-of-pocket expenditure item in 2013. The share spent on outpatient care increased between 2008 and 2010, driven by richer quintiles, but dropped slightly afterwards. Since 2008, there has been a steady increase in the share of out-of-pocket payments spent on inpatient care, which more than doubled from 4.3% in 2008 to 10% in 2013.

In all income quintiles, medicines are the main item paid for out of pocket, from just under 50% for the richest income quintile to 73% for the poorest (Fig. 11). In contrast, richer households spent a larger share out of pocket on diagnostic tests (six times more) and outpatient care (three times more) than poorer households.





During the crisis years, out-of-pocket spending on health decreased among the poorer quintiles, as also reflected in spending on different types of health services.

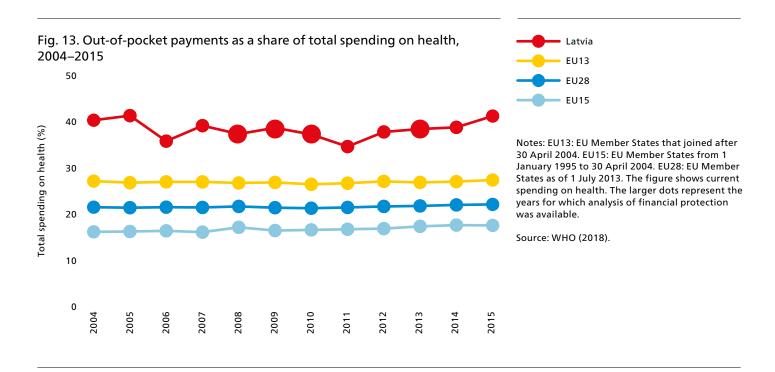


### 4.2 Informal payments

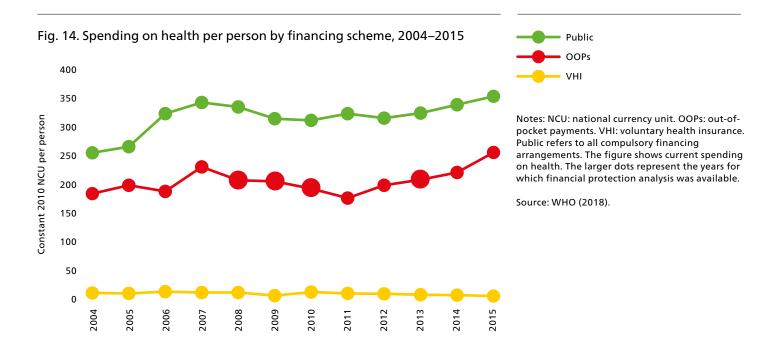
Informal payments include all unofficial payments made to health care workers for services that are supposed to be fully funded by the NHS. There is limited direct information on the size of the problem in Latvia. In the 2017 Special Eurobarometer report on corruption, 8% of respondents in Latvia who had visited a public health care provider in the previous 12 months (as compared with an EU28 average of 4% and an EU13 average of 9%) 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). One of the main causes of informal payments is limited access to health care due to long waiting times; illegal payments are made in order to receive treatment such as specialist or hospital care.

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

National health accounts data show that the share of out-of-pocket payment in total spending on health in Latvia is among the highest in the EU (Fig. 13). In 2015, only Bulgaria and Cyprus had higher shares (WHO, 2018).



The share of out-of-pocket payment in total spending on health fell in Latvia in 2010 and 2011, due to an increase in public spending on health per person and a decrease in out-of-pocket spending per person (Fig. 14). Public spending on health per person rose rapidly in the years before the crisis, but began to fall in 2008 in response to the worsening economic climate and continued to fall in 2009 and 2010. In 2011, it rose again, but it did not reach its pre-crisis level until 2015.



Another factor that drove increases in out-of-pocket payments was the dramatic increase in health care costs in 2008 and 2009. In the pre-crisis year of 2008, prices increased by 13.4% over those of 2007 (Table 5); in 2009, they increased by a further 17.8%. Thus, the average prices for health care increased by 34% in those 2 years, and the average prices for hospital care doubled. People who paid out of pocket for these services would have been exposed to these increases.

Finally, co-payments were increased for some services; for example, the co-payment for hospital stays increased substantially in 2009, although it was subsequently reduced in 2010 and 2015 (Table 3).

Table 5. Changes in health care tariffs (percentage change from previous year)

Source: Central Statistical Bureau (2018).

	2008	2009	2010	2011	2012	2013
Health	13.4	17.8	0.1	-2.6	0.4	1.3
Medical products	7.3	12.2	2.0	-4.2	0.0	1.4
Outpatient services	28.3	17.1	-4.5	0.7	1.0	0.8
Hospital services	3.0	99.6	1.4	0.7	1.4	2.0

## 4.4 Summary

Household budget survey data suggest that out-of-pocket spending on health in Latvia represents a high share of total household spending. The share was close to 7% in Latvia in 2013, while it was about 4% in Estonia and in Lithuania in 2012.

Outpatient medicines were the main driver of out-of-pocket payments for all income groups in all years, but their contribution to out-of-pocket spending on health was higher in poorer quintiles. After 2009, the share of out-of-pocket payment for outpatient and inpatient care increased, particularly for richer households.

On average, out-of-pocket payments were higher in 2013 than in 2008, in both nominal terms and as a share of household budgets, even though the share of households that did not make out-of-pocket payments fell in 2009 and 2010. The trend over time was not the same for all quintiles: out-of-pocket spending on health by poorer quintiles and the share of poorer households that made no out-of-pocket payments fell in 2009 and 2010 and rose again in 2013, while out-of-pocket spending on health continued to rise over time for the richer quintiles.

The reduction in out-of-pocket payments by poorer households may be explained by the introduction of co-payment exemption policies for the poorest households in 2009, extended to other lower income households between 2010 and 2012. There is also evidence, however, of an increase in self-reported unmet need for health and dental care from 2010. After 2009,

income inequality in unmet need for health and dental care, which had been narrowing, widened considerably and is among the widest in the EU.

Indirect evidence on the extent of informal payments in Latvia suggests that they are made mainly to by-pass waiting lists.

National health accounts indicate that the share of out-of-pocket payment in total health spending in Latvia has remained consistently among the highest in the EU over time. It fell in 2010 and 2011, as public spending on health increased, but rose again to its pre-crisis level of 38% by 2013 and had reached 42% by 2015.

# 5. Financial protection

In this section, data from the Latvian household budget survey are used 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.

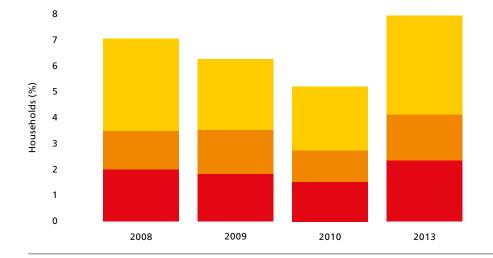
# 5.1 How many households experience financial hardship?

#### 5.1.1 Out-of-pocket payments and risk of impoverishment

Fig. 15 shows the share of households at risk of impoverishment after out-of-pocket spending on health care. The poverty line reflects the cost of spending on basic needs (food, rent and utilities) among a relatively poor part of the Latvian population (households between the 25th and 35th percentiles of the consumption distribution, adjusted for household size and composition). In 2012 the monthly cost of meeting these basic needs – the basic needs line – was €2240 per year, or €187 per month.

In 2013, nearly 8% of households were impoverished, further impoverished or at risk of impoverishment after making out-of-pocket payments. The share of impoverished households rose in 2009, fell in 2010 and increased again in 2013. The share of further impoverished households fell from 2.0% in 2008, to 1.8% in 2009, to 1.5% in 2010 and then increased to 2.4% in 2013. Together, the share of households that were either impoverished or further impoverished by out-of-pocket payments dropped in 2010 but increased to a combined 4.2% of the population in 2013. The share of households at risk of impoverishment decreased in 2009 and 2010 but doubled between 2010 and 2013, rising from 2% to 4% of the population.

Fig. 15. Share of households at risk of impoverishment after out-of-pocket payments



At risk of impoverishment

Impoverished

Further impoverished

Note: a household is impoverished if its total spending falls below the basic needs line after out-of-pocket payments (OOPs); further impoverished if its total spending is below the basic needs line before OOPs; at risk of impoverishment if its total spending after OOPs comes within 120% of the basic needs line.

Source: authors based on household budget survey data.

#### 5.1.2 Catastrophic out-of-pocket payments

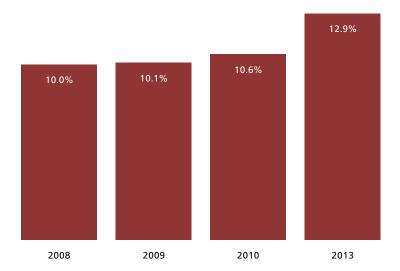
Households with catastrophic levels of out-of-pocket spending are defined as those who spend more than 40% of their capacity to pay for health care. This includes households who are impoverished after out-of-pocket payments (because they no longer have any capacity to pay) and further impoverished (because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

Overall, the incidence of catastrophic spending on health remained relatively stable between 2008 and 2010, at 10%, and then rose to 13% in 2013 (Fig. 16). In 2013, roughly 103 000 households (214 000 people) experienced catastrophic spending, which is considerably more than during the critical period of the crisis (2009–2010).

Although the overall incidence of catastrophic spending did not change in 2009 and 2010, the share of households further impoverished, impoverished or at risk of poverty after out-of-pocket payments fell during those 2 years. This may reflect the introduction of exemptions from co-payments for very poor households in 2009 and the extension of co-payment exemptions and reductions to more low-income households in 2010. Exemptions for all but the poorest households were discontinued in 2012.

Fig. 16. Share of households with catastrophic out-of-pocket payments

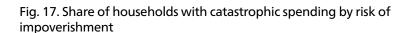
Source: authors based on household budget survey data.

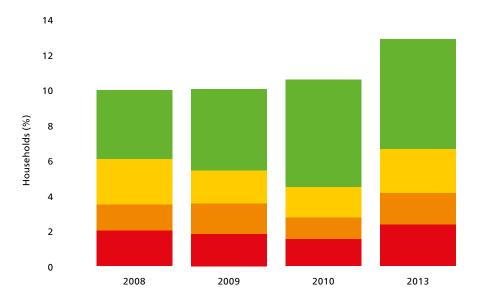


## 5.2 Who experiences financial hardship?

In 2013, just over half of all households with catastrophic out-of-pocket payments were already very poor or at risk of impoverishment after out-of-pocket payments (the red, orange and yellow bands in Fig. 17). In 2010, this share fell, even though the overall incidence of catastrophic households increased slightly. This suggests that the overall increase in that year was driven mainly by an increase in richer quintiles – a pattern that was reversed in 2013, when the share of households that were further impoverished, impoverished and at risk of impoverishment increased but the share of households not at risk remained the same.

Fig. 18 confirms this pattern. It shows that the incidence of catastrophic out-of-pocket spending is highly concentrated among the poorer quintiles in all years. In 2008, over 25% of households in the poorest quintile and only 1% among the richest quintile experienced catastrophic spending on health. Between 2008 and 2009, the incidence of catastrophic spending fell for the poorest two quintiles but increased for the three richest quintiles. In 2010, the incidence of catastrophic expenditure increased for all quintiles except the poorest. By 2013, however, households in the poorest two quintiles accounted for the overall increase in the incidence of catastrophic expenditure. This pattern reflects the abolition of co-payment exemptions for all except the very poorest households in 2012 and suggests that improvement in the economy after the crisis mainly benefited richer households.

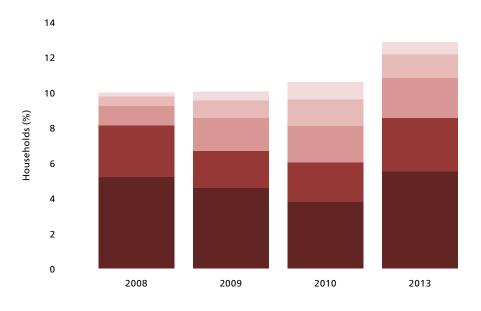






Source: authors based on household budget survey data.

Fig. 18. Share of households with catastrophic spending by consumption quintile





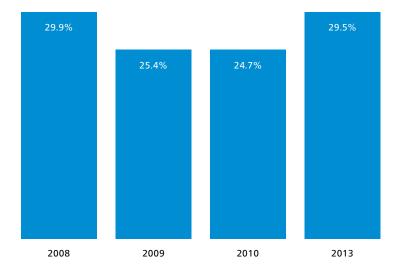


Source: authors based on household budget survey data.

The incidence of catastrophic spending on health is heavily concentrated among pensioners. In 2013, nearly 30% of all pensioner households experienced catastrophic out-of-pocket payments; thus, 70% of all households with catastrophic spending were pensioner households. This pattern is seen in all years, but to a slightly smaller extent in 2009 and 2010 (Fig. 19). The fall in the share of pensioners with catastrophic spending in the years immediately after the crisis may reflect the co-payment exemptions introduced in 2009 and abolished for all but the very poorest households in 2012.

Fig. 19. Share of pensioner households with catastrophic out-of-pocket payments

Source: authors based on household budget survey data.



# 5.3 Which health services are responsible for financial hardship?

Medicines are by far the largest single driver of catastrophic spending on health, accounting for around 70% in all years (Fig. 20). Over time, there has been a marked shift in catastrophic spending, from outpatient care and dental care towards inpatient care.

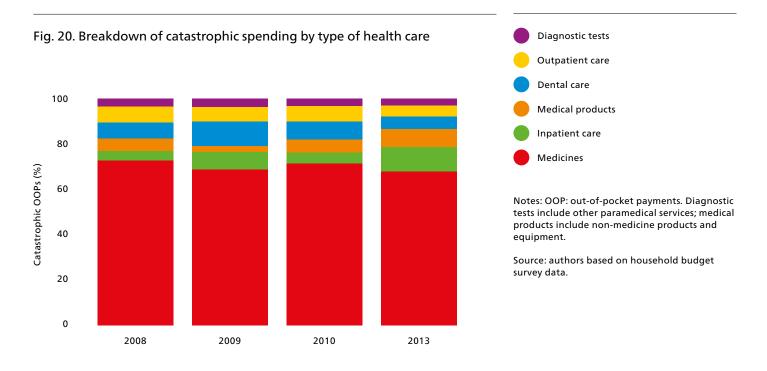
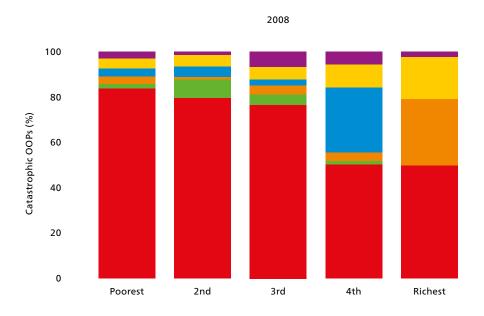


Fig. 21 shows that the pattern of catastrophic spending differed by quintile between 2008 and 2013. In all 4 years, the cost of outpatient medicines was almost exclusively responsible for catastrophic spending in all quintiles; however, while this cost was the main driver of catastrophic spending by the poorest quintiles, the share was much lower for the richest quintile. Inpatient care and medical products play a more important role in progressively richer households. Dental care is also a significant item of catastrophic spending, including for the poorest households, for whom the share increased between 2010 and 2013. The levels of unmet need for dental care rose after the onset of the crisis, especially in the poorest quintile (Fig. 5).

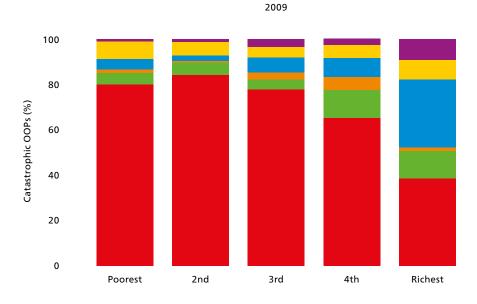
Fig. 21. Breakdown of catastrophic spending by type of health care and consumption quintile

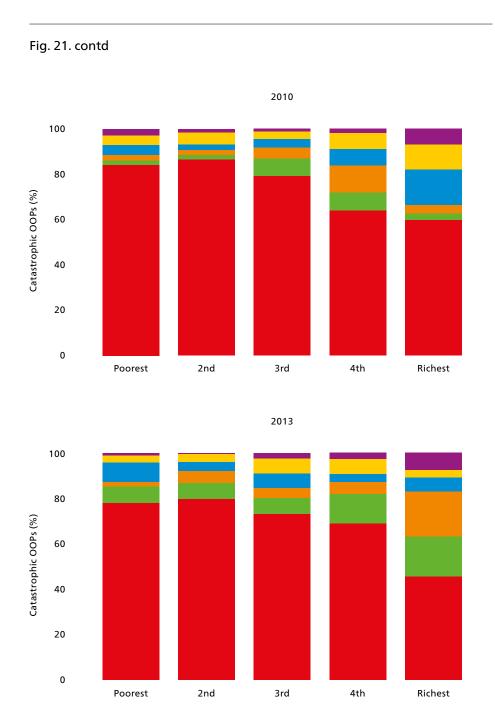




Notes: OOP: out-of-pocket payments. Diagnostic tests include other paramedical services; medical products include non-medicine products and equipment.

Source: authors based on household budget survey data.







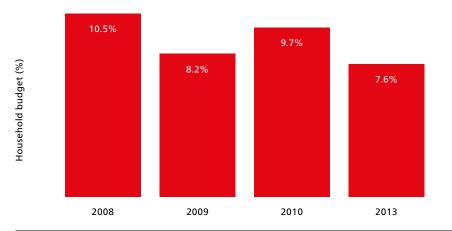
Notes: OOP: out-of-pocket payments. Diagnostic tests include other paramedical services; medical products include non-medicine products and equipment.

Source: authors based on household budget survey data.

## 5.4 How much financial hardship?

The average amount spent out-of-pocket payment as a share of total household spending by the very poorest households, who were already living below the basic needs line and are further impoverished by out-of-pocket payments, was just over 10% in 2008 and close to 8% in 2013 (Fig. 22). Thus, even very poor households, some of whom have been exempt from copayments since 2009, may spend a significant share of their budget on health.

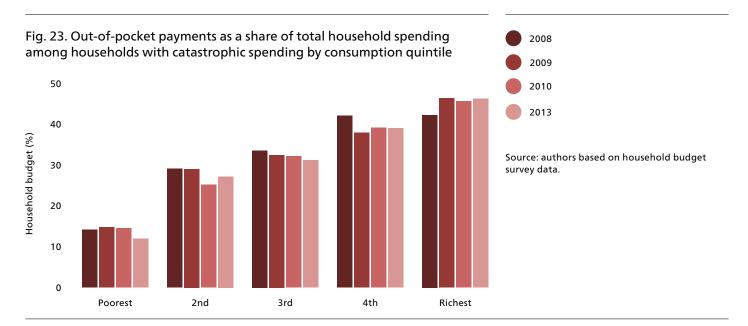
Fig. 22. Out-of-pocket payments as a share of total household spending among further impoverished households



Notes: a household is further impoverished if its total spending is below the basic needs line before out-of-pocket payments. In Latvia, these households account for 6–7% of all households (see section 6).

Source: authors based on household budget survey data.

In households with catastrophic spending, the richest quintile spent an average of 46% of their budget on health in 2013, while the poorest quintile spent 12% (Fig. 23). Over time, the share of out-of-pocket payment increased in the richest quintile.



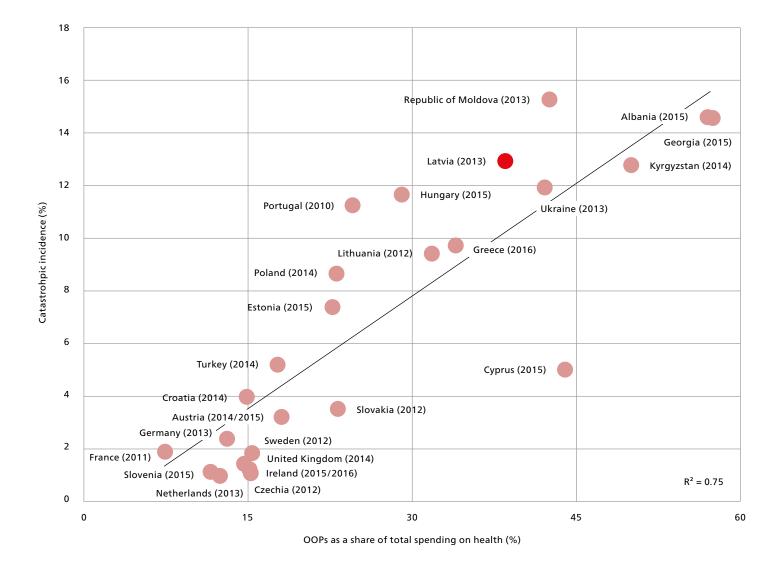
## 5.5 International comparison

The incidence of catastrophic and impoverishing out-of-pocket payments in Latvia is higher than in other countries in the EU (Fig. 24). Catastrophic out-of-pocket payments in Latvia are due almost entirely to spending on outpatient medicines, and this is also the case in other countries where the incidence of catastrophic spending on health is high.

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. R<sup>2</sup>: coefficient of determination. The OOPs data are for the same year as those for catastrophic spending. Latvia is highlighted in red.

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



## 5.6 Summary

In 2013, 13% of households experienced catastrophic out-of-pocket payments, and 4% of households were impoverished or further impoverished after out-of-pocket payments; an additional 4% of households were at risk of impoverishment.

Catastrophic spending was highly concentrated in poorer households and affected pensioners significantly more than any other group. In 2013, 70% of households with catastrophic spending were pensioner households.

On average, medicines are the largest single driver of catastrophic spending among all households, but the share is much higher in the two poorest quintiles (around 80% in 2013) than in the richest quintile (46%). The share of catastrophic spending on medicines has remained fairly constant over time. Inpatient care and medical products are progressively more important in richer households. Dental care is also a significant cause of catastrophic spending on health, including for the poorest households, and the share has increased over time.

Between 2008 and 2013, catastrophic spending patterns varied across households. The incidence fell in the poorest quintile and among pensioner households in 2009 and 2010, only to rise significantly by 2013. This pattern was also seen in households that were further impoverished, impoverished or at risk of impoverishment after out-of-pocket payments. In contrast, the incidence of catastrophic spending increased in the three richest quintiles in 2009 and 2010 and had not changed by 2013. In 2013, the overall level of catastrophic spending was significantly higher than it had been in 2008, driven largely by an increase in the poorest quintiles.

# 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 Latvia and that may explain the trend over time. Factors outside the health system that affect people's capacity to pay for health care, such as changes in living standards and the cost of living, are discussed first, and then factors within the health system.

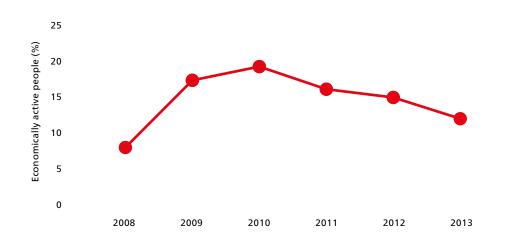
## 6.1 Factors affecting people's capacity to pay for health care

This section draws on data from the Latvian household budget survey and other sources to review changes in people's capacity to pay for health care, focusing on those who face the highest risk of falling into poverty.

Latvia experienced remarkably rapid economic growth between 2000 and 2007, at an average of about 10.3% annually, which was the fastest of any EU country. The economic crisis that began in 2008 exposed several problems, including a sharp decrease in domestic consumption, a suboptimal banking sector, foreign currency denominated loans, an unsustainable real estate bubble, shrinking export volumes, the onset of negative trade balances and low levels of productivity (Bukovskis, 2014).

In 2009, GDP fell by nearly 18%, and unemployment rose rapidly, to a peak of 20% in 2010 (Fig. 25). By 2013, per capita GDP had recovered to its 2008 level, and unemployment had fallen, although it remained high, at 12%. Long-term unemployment continued to be problematic: it increased from 2.0% in 2008 to 8.8% in 2010–2011, although it fell to 5.8% in 2013. The unemployment rate would have grown even more sharply if part of the population had not left Latvia to seek jobs abroad, particularly during the peak crisis period. Approximately 70 000 people left the country in 2009–2010, accounting for nearly 40% of emigration between 2004 and 2014.

Fig. 25. Unemployment rates, 2008-2013



Note: the unemployment rate is the share of unemployed people in the total number of economically active people.

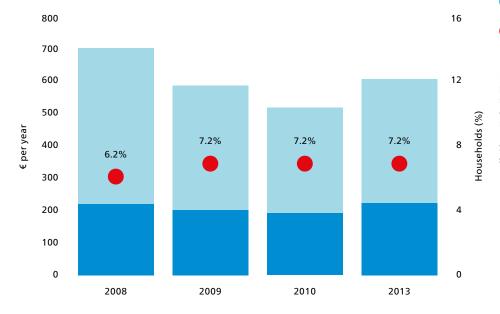
Source: Central Statistics Bureau (2018).

economically active people.

The effects of the crisis were most pronounced for households in which someone was unemployed. As a result of rising unemployment, households' disposable income from wages and salaries fell rapidly; the share of income from wages and salaries was 76% in 2008 but fell to 68% in 2009 and to 64% in 2010 (Central Statistics Bureau, 2018).

Household budget survey data show that household spending on basic needs (food, housing, utilities) fell between 2008 and 2010; as a result, the basic needs line in our analysis dropped from €2209 to €1922 per year, or by 13% (Fig. 26). During the same period, household capacity to pay for health care fell by a much greater percentage (32%). Between 2010 and 2013, household spending on basic needs rose again to just above pre-crisis levels (€2240), leading to a rise in the share of households that were unable to meet their basic needs. By 2013, household capacity to pay had increased, but, as the cost of meeting basic needs had also increased, the share of households below the basic needs line remained at 7.2%. These figures suggest that, while there was some recovery after the crisis, the population as a whole was generally less well off in 2013 than in 2008 because of higher unemployment and falling wages.

Fig. 26. Changes in the cost of meeting basic needs, capacity to pay and the share of households living below the basic needs line



Average household capacity to pay (€)

Cost of meeting basic needs (€)

Share of households living below the basic needs line (%)

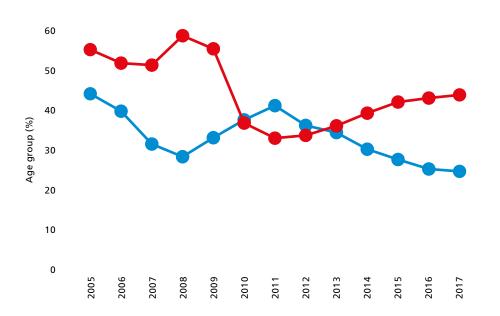
Notes: the basic needs line and capacity to pay are per household. Capacity to pay is measured as a household's consumption minus a normative (standard) amount to cover basic needs such as food, housing and utilities.

Source: authors based on household budget survey data.

Although Latvia has a means-tested social support system, pensions and other social benefits are quite low. For example, the average annual pension in 2013 was €3112, which is not much higher than the basic needs line of €2240 per year. During the crisis, pensioners were better protected than people in employment, because pensions increased every year between 2008 and 2013, while wages fell between 2008 and 2010. Fig. 27 shows how the risk of poverty or social exclusion changed during and after the crisis: between 2008

and 2011, the risk decreased for people aged over 65 years and increased for those aged 16–64 years. The risk changed again after 2011, and by 2013 older people were once again at higher risk of poverty than younger people. These shifts between older and younger households may explain some of the reduction in catastrophic and impoverishing out-of-pocket payments among the poorest quintiles and among pensioner households in 2009 and 2010.

Fig. 27. Risk of poverty or social exclusion among younger people (16–64 years) and older people (aged 65 and over), 2005–2017





Notes: a person is at risk of poverty or social exclusion if they live in a household at rzisk of poverty, a severely materially deprived household, or a household with very low work intensity. The poverty line used to assess poverty here is 60% of the national median equivalised disposable income after social transfers.

Source: Eurostat (2018c).

#### 6.2 Health system factors

This section looks at health spending and health coverage, including for outpatient medicines. Health-seeking behaviour and the relationship between unmet need and financial protection are also taken into account.

#### 6.2.1 Health spending

Latvia's level of public spending on health as a share of GDP is low (Fig. 28), largely because of the very small share of total government spending allocated to health – only 8.9% in 2015, which is the second-lowest share among EU countries, where the average is 13.5% (Fig. 29).

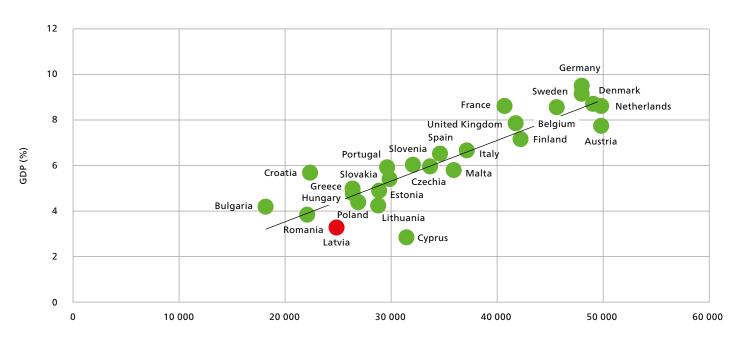
Public spending on health per person decreased sharply between 2008 and 2010 in response to the worsening economic climate, with a gradual recovery since 2011 (Fig. 14). National health accounts data indicate that out-of-pocket payments per person also fell during and after the crisis but increased rapidly after 2012. Household budget survey data suggest

that the decrease in out-of-pocket payments was concentrated in the poorest three quintiles. There are three possible explanations. First, as unemployment rose, wages fell and pensions remained stable, so that the share of older people in the poorest quintile might have decreased in 2009 and 2010, reducing their need for health care. Second, poorer households may have foregone or delayed seeking care in response to growing financial pressure. Third, co-payment exemptions were in place for poorer households from 2009 to the end of 2012.

Fig. 28. 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. Latvia is shown in red.

Source: WHO (2018).

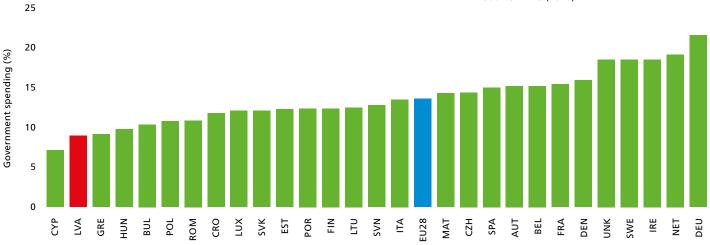


GDP per person in current PPP

Fig. 29. Public spending on health as a share of total government spending in the EU, 2015

Notes: EU28: European Union Member States as of 1 July 2013. Public refers to all compulsory financing arrangements for current spending on health.

Source: WHO (2018).



#### 6.2.2 Health coverage

Health coverage has been affected by policies for fiscal consolidation in response to the economic crisis. While population coverage remained the same (based on residence), changes were made in both service coverage and user charges.

No changes were made to **population entitlement** to publicly financed health care during the years covered in the analysis. From 2018, however, the Government has changed the basis for entitlement from residence to health insurance status by introducing a compulsory health insurance scheme (or, more precisely, by linking eligibility to receive health services to payment of a social insurance contribution). The rationale for the change is that there is little political or public support for increasing public spending on health, even though the health system is underfunded and despite high out-of-pocket payments and long waiting times. Income tax evasion is a problem in Latvia and undermines public revenues. The change from near universal coverage in a system in which entitlement is based on residence to one that links entitlement to payment of health insurance contributions must, however, be monitored carefully in order to avoid creating gaps in population coverage, particularly for those who are not economically active or who do not otherwise meet the eligibility criteria (Taube et al., 2015).

With regard to **service coverage**, the extent of the publicly financed benefits package was reduced after the economic crisis in 2008 in order to contain public spending on health, by excluding services such as planned chronic care and some secondary care services and, more generally, through the quota system of volume limits for the services covered. The quota system leads to long waiting times, which encourages those who can afford it to pay out of pocket for private treatment.

Although dental care for adults is not covered, relatively little catastrophic spending is for dental care in all quintiles (Fig. 21). This probably reflects unmet need for dental care, which grew steadily between 2008 and 2011. By 2015, unmet need for dental care had still not fallen to its 2008 low (Fig. 5).

Extensive application of **user charges** to all health services appears to be a major driver of catastrophic out-of-pocket spending. Not only do copayments apply to almost all health services, but the levels rose significantly for some services in 2009, including outpatient visits to specialists (reduced slightly in 2010), inpatient stays (reduced in 2015) and inpatient surgical interventions (see Table 3).

Exemption from all co-payments (the Social Safety Net) was introduced in 2009 for the very poorest households, earning less than €1536 per person per year (€128 per person per month). The means-tested threshold for this exemption is, however, very low and much lower than the basic needs line, which was about €2000 per year in 2009 and 2010 and rose to €2240 in 2013 (Fig. 25).

Between 2010 and 2012, Social Safety Net co-payment exemptions were extended to people with slightly higher incomes, between €1536 and €2052 per person a year (€128 and €171 per person per month), and co-payment reductions were introduced for people with incomes between €2052 and €2556 per person per year (€171 and €213 per person per month).

About 10% of the Latvian population benefited from co-payment exemptions or reductions between 2010 and 2012. The policy coincided with a decrease in catastrophic spending in the poorest quintile in 2009 and 2010 and for the second quintile in 2009, suggesting that it reduced the financial pressure on those households. Some households may have chosen to forego or delay seeking health care during this period, and this is reflected in the steep rise in unmet need due to cost, distance and waiting time in 2010 for health care and in 2010 and 2011 for dental care for all households but particularly those in the poorest quintile (Fig. 5).

The cap on co-payments for inpatient, outpatient and diagnostic services was doubled in 2009, rising from about €250 per year to €569 per person per year and from about €100 to €356 per hospitalization. The cap of €569 represented approximately one and a half months' minimum wage. To put this in perspective, in 2013, a person would have to spend 16% of his or her average budget or 20% of the average pension on co-payments before meeting the cap. In order for any cap on co-payments to be effective in promoting financial protection and providing certainty, it should be set low enough, either as a fixed amount or (ideally) as a share of household income so, that households do not experience financial hardship before meeting the cap.

#### 6.2.3 Outpatient medicines

Out-of-pocket payments for outpatient medicines are by far the largest source of financial hardship for households in Latvia, particularly among the poorer quintiles. This probably reflects several factors, including the very limited positive list of prescription medicines that are covered, the design of co-payment policy, the prices of medicines and the extensive use of over-the-counter medicines.

As co-payments apply to most prescribed outpatient medicines on the positive list, several aspects of co-payment policy undermine financial protection.

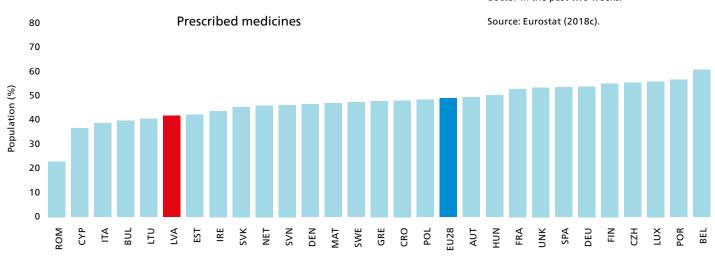
- Percentage co-payments place a significant burden on patients. A fixed co-payment of €0.71 per prescription applies to medicines that are fully covered; however, percentage co-payments of 25% or 50%, plus reference pricing, apply to all other prescription medicines that are covered. Thus, the size of out-of-pocket payments depends on the price and volume of medicines that people need, representing a particularly onerous burden for people who take medicines regularly, such as those with chronic conditions and older people, and for those who have conditions that require more expensive medicines.
- Exemption policies are not strong enough. Full exemption from copayment for outpatient medicines on the positive list applies to some people, including children under 18 years and the very poor (the latter through the Social Safety Net) but not to pensioners or to many people who use health care regularly. According to a World Bank report (Griffin & Mozhaeva, 2013), about half the eligible people of retirement age did not take advantage of the Social Safety Net's extended exemptions and co-payment reductions when they were in place (2010 and 2011). It is not clear whether this was because of inadequate information or outreach, bureaucratic hurdles or stigma associated with using the programme.
- There is no cap on co-payments for medicines, unlike for other health services. This creates a particularly heavy burden for people who need medicines regularly or need more expensive medicines and do not qualify for exemptions.
- Inappropriate prescribing or dispensing increases the financial burden on people. In 2012, the Government amended the reference pricing system for medicines on the list by reducing the number of pharmaceutical products in each reference group to one, the cheapest one. At the same time, regulations were introduced to ensure that prescribing is based on the active ingredient (international nonproprietary name), and pharmacists must dispense the cheapest medicine in the reference group unless the patient requests an alternative. The new system was intended to promote competition among pharmaceutical companies and to encourage them to lower their prices in order for their products to receive the status of a reference medicine. This led to estimated savings of around €5.3 million for the NHS in 2012. Patients who are prescribed or who choose a different medicine from that in the reference group must pay the difference in price out of pocket. The fact that the average price paid per pack continued to increase into 2013 (Fig. 3) suggests that more should be done to ensure that physicians, pharmacists and patients prescribe, dispense and use the cheapest alternative.
- Co-payment for visits to a general practitioner or an outpatient specialist may deter people from obtaining a prescription. If co-payments and waiting times create barriers to access, people may find it easier to turn to self-treatment with over-the-counter medicines, increasing their out-of-pocket payments.

Survey data from 2014 show that, while use of prescribed medicines is lower in Latvia than in other EU countries, use of non-prescribed medicines is very

high (Fig. 30). The reasons are worth exploring in more detail, because high use of non-prescribed medicines means reliance on out-of-pocket payments to finance outpatient medicines. In 2015, out-of-pocket payments were the dominant method of financing outpatient medicines (Fig. 31).



Note: Share of the population who used medicines prescribed by a doctor or medicines, herbal medicines or vitamins not prescribed by a doctor in the past two weeks.



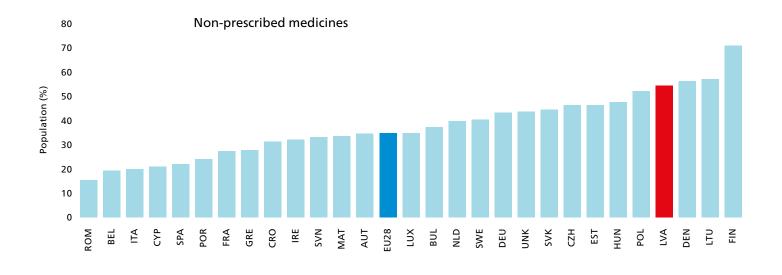
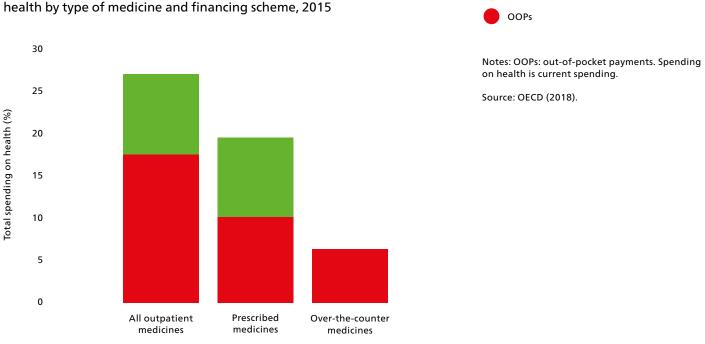


Fig. 31. Spending on outpatient medicines as a share of total spending on health by type of medicine and financing scheme, 2015



Public

#### 6.3 Summary

Public spending on health is much lower in Latvia than in other EU countries, largely due to the small share of total government spending allocated to health (8.9% in 2015; EU average, 13.5%). Because of low levels of public spending on health, the share of out-of-pocket payment in total spending on health is among the highest in the EU.

Out-of-pocket payments lead to financial hardship in three ways: first, exclusion from NHS coverage, such as dental care for adults and a limited positive list of outpatient medicines; second, volume limits for NHS services, resulting in long waiting times, which encourage those who can afford it to pay out of pocket for private treatment (or self-treatment in the case of medicines); and third, application of user charges for almost all NHS care, with weak protection mechanisms.

Pensioners in Latvia are more vulnerable to financial hardship than any other group, reflecting higher risks of poverty and social exclusion than younger people and a greater need for health care.

Outpatient medicines are the most important source of financial hardship, due to very limited publicly financed coverage, use of percentage co-payments and exclusion of medicines from the annual cap on co-payments. Co-payments for primary care visits and inappropriate prescribing and dispensing are also likely to exacerbate financial hardship arising from the use of medicines. The high use of non-prescribed medicines in Latvia requires policy attention.

Although there is a cap on co-payments for NHS inpatient, outpatient and diagnostic services, it is set at a very high level (€569 per person per year overall and €356 per hospitalization) and does not apply to outpatient medicines or medical products. The €569 cap is equal to one and a half months' minimum wage. Thus, in 2013, a person would have had to spend 16% of the average household budget or 20% of the average pension on copayments before meeting the cap. The cap is therefore likely to protect only households in which there are very heavy users of health services or that can afford to use more expensive health services.

The overall incidence of catastrophic spending on health remained stable in 2009 and 2010 but was significantly higher in 2013; however, the pattern of change varied by income and by risk of impoverishment. Financial protection appeared to improve for poorer households in 2009 and 2010, but became much worse in 2013; for richer households, while financial protection appeared to be worse in 2009 and 2010, it did not change in 2013.

Possible explanations for the apparent improvement in financial protection for poorer households in 2009 and 2010 include:

- introduction in 2009 of exemption from co-payments for very poor households through the Social Safety Net, which was extended to other low-income households from 2010 to 2012;
- considerably widened income inequality in unmet need for health and dental care, which had been narrowing after 2009, with increased selfreported unmet need for health and dental care from 2010; and
- the fact that pensions were maintained during the crisis, so that the risk of poverty fell among older people and increased among younger people.

# 7. Implications for policy

Financial protection in Latvia is weaker than in other EU Member States. Catastrophic out-of-pocket payments affect the poorest households most and are concentrated among older people.

Financial protection has deteriorated over time: it was worse for all income groups in 2013 than in 2008. In 2009 and 2010, financial protection appeared to improve for poorer households and worsen for richer households. In 2013, financial protection was much worse for poorer households than in 2010 but had not changed for richer households.

Unmet need for health and dental care is very high, especially for poorer people, and has increased since the crisis. Foregoing care reduces out-of-pocket payments and can decrease catastrophic spending. Self-reported unmet need for health care rose substantially in all income groups after 2009 and particularly steeply in the three poorest quintiles. The incidence of catastrophic spending by the poorest households may therefore be lower than it would be if unmet need was not so high.

Co-payment exemptions under the Social Safety Net programme played a key role in mitigating some of the adverse effects of the crisis. The incidence of catastrophic spending fell for the poorest quintile in 2009 and 2010, after introduction of the programme. Between 2010 and 2013, the increase in the incidence of catastrophic spending was steepest in the two poorest quintiles, reflecting discontinuation of protection through the Social Safety Net for all except the very poorest households in 2012. The fact that pensions were maintained during the crisis played a role in protecting older people, with their generally greater need for health care.

Out-of-pocket spending on outpatient medicines is a major source of financial hardship for households. Outpatient medicines account for about 70% of all catastrophic out-of-pocket payments, rising to around 80% for the poorest quintiles.

Policy should focus on improving access to and the affordability of outpatient medicines. Coverage policy could be strengthened by: extending the positive list of outpatient medicines covered; introducing additional exemptions from co-payments for prescribed medicines for poor households and people with chronic conditions; decreasing the use of percentage co-payments; including prescribed medicines in the cap on co-payments; significantly lowering the cap on co-payments, which is currently too high to protect most people, or setting it as a very low share of household income rather than as a fixed amount; and reducing or abolishing co-payments for primary care visits. Attention should be paid to improving the prescription and dispensing of outpatient medicines so that physicians, pharmacists and patients prescribe, dispense and use the cheapest alternatives. The use of non-prescribed medicines, which is much higher than in other EU countries, also requires attention.

The quota system of service volumes leads to long waiting times, barriers to access and higher out-of-pocket payments for those who can afford private treatment. Addressing the negative impact of this implicit rationing system on financial protection will require additional resources to fund adequate volumes of services to meet population health needs and to reduce waiting times.

Strengthening financial protection will require additional public investment in the health system. Public spending on health in Latvia is lower than in most EU countries and lower than it can afford, given its GDP. As a result, the health system relies heavily on private spending through out-of-pocket payments. At the same time as public spending on health has been falling, unmet need for health and dental care has been rising. Without increased public spending on health, Latvia will have difficulty in moving towards universal health coverage. It will not be able to meet the health needs of its population or reduce financial hardship for households, especially poorer households. It will also be difficult for it to improve other aspects of its health system performance.

Any increase in public spending on health should be used to strengthen protection for poor adults and regular users of health care, building on lessons learnt from the Social Safety Net programme.

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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

#### 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

#### 06.2 Outpatient services

06.2.1 Medical services 06.2.2 Dental services 06.2.3 Paramedical services

#### Includes

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.

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.

#### **Excludes**

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).

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:

equivalent household size = 1 + 0.7\* (number of adults – 1) + 0.5\* (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 equivalized 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 equivalized 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 outof-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 outof-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) 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

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

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

# **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.

Note: PPP: purchasing power parity.

Sources: WHO headquarters and WHO Regional Office for Europe.

### **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 are 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 years 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 then 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 are 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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