

# Can people afford to pay for health care?

New evidence on financial protection in Ireland

Bridget Johnston Steve Thomas Sara Burke



### WHO Barcelona Office for Health Systems Strengthening

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

A key part of the work of the Office is to assess country and regional progress towards UHC by monitoring financial protection – the impact of out-of-pocket payments for health on living standards and poverty. Financial protection is a core dimension of health system performance and an indicator for the Sustainable Development Goals.

The Office supports countries to develop policy, monitor progress and design reforms through a combination of health system problem diagnosis, analysis of country-specific policy options, high-level policy dialogue and the sharing of international experience. It is also the home for WHO training courses on health financing and health systems strengthening for better health outcomes.

Established in 1999, the Office is supported by the Government of the Autonomous Community of Catalonia, Spain. It is part of the Division of Health Systems and Public Health of the WHO Regional Office for Europe.





# Can people afford to pay for health care?

New evidence on financial protection in Ireland Can people afford to pay for health care? New evidence on financial protection in Ireland

ISBN 978 92 890 55086

Address requests about publications of the WHO Regional Office for Europe to: Publications, WHO Regional Office for Europe, UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark. Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (http://www.euro.who.int/pubrequest).

#### © World Health Organization 2020

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/ licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for noncommercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

**Suggested citation**. Johnston B, Thomas S, Burke S. Can people afford to pay for health care? New evidence on financial protection in Ireland. Copenhagen: WHO Regional Office for Europe; 2020. Licence: CCBY-NC-SA 3.0 IGO.

**Cataloguing-in-Publication (CIP) data.** CIP data are available at http://apps.who.int/iris. Sales, rights and licensing. To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see http://www.who. int/about/licensing.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a thirdparty, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**General disclaimers.** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

The named authors alone are responsible for the views expressed in this publication.

# 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.

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

## About the series

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

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

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

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

Why is monitoring financial protection useful? The reviews identify the factors that strengthen and undermine financial protection; highlight implications for policy; and draw attention to areas that require further analysis. The overall aim of the series is to provide policy-makers and

others with robust, context-specific and actionable evidence that they can use to move towards universal health coverage. A limitation common to all analysis of financial protection is that it measures financial hardship among households who are using health services, and does not capture financial barriers to access that result in unmet need for health care. For this reason, the reviews systematically draw on evidence of unmet need, where available, to complement analysis of financial protection.

How are the reviews produced? Each review is produced by one or more country experts in collaboration with the WHO Barcelona Office for Health Systems Strengthening, part of the Division of Health Systems and Public Health of the WHO Regional Office for Europe. To facilitate comparison across countries, the reviews follow a standard template, draw on similar sources of data (see Annex 2) and use the same methods (see Annex 3). 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 4).

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.

# Contents

Acknov Abbrev	, tables & boxes vledgements iations ve summary	viii x xi xii
1.	Introduction	1
2.	Methods	5
2.1	Analytical approach	6
2.2	Data sources	7
3.	Coverage and access to health care	9
3.1	Health coverage	10
3.2	Access, use and unmet need	18
3.3	Summary	25
4.	Household spending on health	27
4.1	Out-of-pocket payments	28
4.2	PHI premiums	36
4.3	Out-of-pocket payments and PHI premiums combined	38
4.4	Informal payments	40
4.5	Trends in public and private spending on health	40
4.5	Summary	42
5.	Financial protection	43
5.1	How many households experience financial hardship?	44
5.2	Who experiences financial hardship?	46
5.3	Which health services are responsible for financial hardship?	48
5.4	How much financial hardship?	51
5.5	International comparison	52
5.6	Summary	53
6.	Factors that strengthen and undermine financial protection	55
6.1	Factors affecting people's capacity to pay for health care	56
6.2	Health system factors	58
6.3	Summary	66
7.	Implications for policy	67
Referer Annex	nces 1. The affordability of household spending	71
Annex 2 Annex 3 Annex 4	on health services and PHI premiums combined 2. Household budget surveys in Europe 3. Methods used to measure financial protection in Europe 4. Regional and global financial protection indicators 5. Glossary of terms	76 82 86 93 96

### **Figures**

Fig. 1. Public and private population coverage by scheme, 2008–2016 11

**Fig. 2.** Self-reported unmet need for health and dental care due to cost, distance and waiting time, Ireland and EU, 2008–2016 20

**Fig. 3.** Income inequality in selfreported unmet need for health and dental care due to cost, distance and waiting time in Ireland, 2008–2016 21

**Fig. 4.** Self-reported unmet need due to cost, Ireland and EU, 2014 22

**Fig. 5.** Waiting times for first outpatient appointment with a specialist, 2012–2017 24

**Fig. 6.** Waiting times for inpatient or day-case treatment in public hospitals, 2008–2017 24

Fig. 7. Share of households with and without out-of-pocket payments 28

**Fig. 8.** Share of households reporting no out-of-pocket payments by consumption quintile 29 **Fig. 9.** Annual out-of-pocket spending on health care per person by consumption quintile 30

**Fig. 10.** Out-of-pocket payments for health care as a share of household consumption by consumption quintile 30

Fig. 11. Annual out-of-pocket spending on health care per person by type of health care 31

**Fig. 12.** Breakdown of total out-ofpocket spending by type of health care 32

**Fig. 13.** Breakdown of total out-ofpocket spending by type of health care and consumption quintile 33

Fig. 14. Annual out-of-pocket spending on medicines, outpatient care and dental care by consumption quintile 34

**Fig. 15.** Annual spending on PHI premiums per person by consumption quintile 36

Fig. 16. Spending on PHI premiums as a share of household consumption by consumption quintile 37 Fig. 17. Out-of-pocket payments and PHI premiums as a share of household consumption by consumption quintile, 2009–2010 and 2015–2016 38

**Fig. 18.** Spending on PHI premiums as a share of all household spending on health by consumption quintile 39

Fig. 19. Spending on health per person by financing scheme, 2006–2016 41

**Fig. 20.** Out-of-pocket payments as a share of current spending on health, 2006–2016 41

**Fig. 21.** Share of households at risk of impoverishment after out-of-pocket payments 44

**Fig. 22.** Share of households with catastrophic out-of-pocket payments 45

**Fig. 23.** Share of households with catastrophic spending by risk of impoverishment 46

Fig. 24. Share of households with catastrophic spending by consumption quintile 47

# Tables and boxes

**Fig. 25.** Breakdown of households with catastrophic spending by household structure 47

**Fig. 26.** Breakdown of catastrophic spending by type of health care 48

**Fig. 27.** Breakdown of catastrophic spending by type of health care and consumption quintile 49

**Fig. 28.** Out-of-pocket payments as a share of total household consumption among households with catastrophic spending by consumption quintile 51

**Fig. 29.** Incidence of catastrophic spending on health and the out-of-pocket share of total spending on health in selected European countries, latest year available 52

**Fig. 30.** Changes in the cost of meeting basic needs, capacity to pay for health care and the share of households living below the basic needs line 56

**Fig. 31.** Deprivation and consistent poverty rates, 2008–2016 57

Fig. 32. At risk of poverty and social exclusion rate, 2008–2017 58

Fig. 33. Public spending on health as a share of GDP, Ireland and selected EU countries, 2006–2016 59

Fig. 34. Public spending on health as a share of total spending on health, Ireland and selected EU countries, 2006–2016 59

Fig. 35. Use of medicines in the EU, 2014 63 Table 1. Key dimensions ofcatastrophic and impoverishingspending on health6

Table 2. User charges for publiclyfinanced health services, 201914

Table 3. Coverage policy changes,2009–201815

**Table 4.** Gaps in coverage17

**Box 1.** Unmet need for health care 18

**Box 2.** Sláintecare: a new plan for universal health care in Ireland 65

## Acknowledgements

This series of financial protection reviews is produced 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. The series editors are Sarah Thomson, Jonathan Cylus and Tamás Evetovits.

The review of financial protection in Ireland was written by Bridget Johnston, Steve Thomas and Sara Burke (Centre for Health Policy and Management, Trinity College Dublin, Ireland) and edited by Ilaria Mosca and Sarah Thomson (WHO Barcelona Office).

The WHO Barcelona Office is grateful to Ciaran O'Neill (Queen's University Belfast, United Kingdom (Northern Ireland)) for his feedback on an earlier draft of the review.

Thanks are also extended to the Central Statistics Office and the Irish Social Science Data Archive for making the household budget survey data available to the authors.

WHO gratefully acknowledges funding from the United Kingdom Department for International Development, under the Making Country Health Systems Stronger programme, and from the Government of the Autonomous Community of Catalonia, Spain.

The production of this review was coordinated by Ruth Oberhauser (WHO Barcelona Office). Additional support came from Alex Mathieson (copyediting), Aleix Artigal and Alex Prieto (design and typesetting) and Juan García Domínguez (checking proofs).

Please cite the review as: Johnston B, Thomas S, Burke S (2020). Can people afford to pay for health care? New evidence on financial protection in Ireland. Copenhagen: WHO Regional Office for Europe.

### Written by:

Bridget Johnston Steve Thomas Sara Burke

### Edited by:

Ilaria Mosca Sarah Thomson

### Series editors:

Sarah Thomson Jonathan Cylus Tamás Evetovits

# Abbreviations

DTSS	Dental Treatment Service Scheme		
EHIS	European Health Interview Survey		
EU	European Union		
EU15	European Union Member States from 1 January 1995 to 30 April 2004		
EU-SILC	European Union Statistics on Income and Living Conditions		
GDP	gross domestic product		
GP	general practitioner		
HIA	Health Insurance Authority of Ireland		
HSE	Health Service Executive		
LTI	Long-term Illness (Scheme)		
OECD	Organisation for Economic Co-operation and Development		
PHI	private health insurance		
SDG	Sustainable Development Goal		
TILDA	the Irish Longitudinal Study on Ageing		

### **Executive summary**

This review is the first comprehensive analysis of financial protection in the Irish health system. Drawing on microdata from the household budget surveys carried out by the Irish Central Statistics Office in 2009–2010 and 2015–2016 (the latest data available at the time of publication), it finds that:

- in 2015–2016, 1.2% of households experienced catastrophic out-ofpocket payments and close to 1% of households were impoverished or further impoverished after out-of-pocket payments;
- catastrophic health spending is heavily concentrated among the poorest quintile and among people with medical cards;
- the incidence of catastrophic spending increased slightly during the study period, mainly among the poorest quintile; and
- catastrophic spending among the poorest quintile is driven by out-ofpocket payments for outpatient medicines, particularly in 2015–2016.

The relatively low incidence of catastrophic health spending in Ireland reflects the fact that the out-of-pocket payment share of current spending on health is low. This in turn can be attributed to the following factors:

- a third of the population medical card holders (Category I) has free access to most health services, including (before April 2010) outpatientprescribed medicines; and
- for those who have to pay user charges (Category II), there are annual caps on user charges for outpatient-prescribed medicines and inpatient care, and voluntary private health insurance (PHI) provides some protection from having to pay out of pocket for specialist care.

Gaps in coverage grew during the financial and economic crisis, prompted by cuts in public spending on health, the introduction of prescription charges for medical card holders, increases in user charges and cuts in dental benefits for all households, and cuts in the number of health workers.

These policy developments are associated with an increase in catastrophic health spending over the study period and a steady increase in unmet need for health care and dental care between 2008 and 2012, particularly among poorer households. As waiting times for specialist care increased, many people continued to pay rising PHI premiums instead of paying out of pocket for dental care or outpatient care. Being covered by PHI reduces exposure to out-of-pocket payments for many people in Ireland, but PHI represents a significant financial burden on households, accounting for around 3% of household spending on average in 2015–2016, up from 2% in 2009–2010. It also undermines equity and efficiency in the health system.

The medical card system successfully protects many households from financial hardship. Poorer households are still disproportionately likely to experience financial hardship, however, and protection has been eroded over time. Even relatively low user charges can lead to financial hardship for very poor households and, at the same time, present a financial barrier to access. Data from the European Health Interview Survey show a high degree of income inequality in unmet need for prescribed medicines in Ireland.

To improve financial protection, policy attention should focus on:

- in the short term, exempting medical card holders from prescription charges, linking the annual cap on prescription charges to income, introducing universal vouchers for dental care and extending publicly financed general practitioner (GP) care to households on lower incomes;
- simplifying what is at present an unusually complex set of eligibilities for publicly financed health services and legislating for an entitlement to health care as specified in the proposals of the report of the Committee on the Future of Healthcare, known as Sláintecare;
- introducing waiting-time guarantees for public hospital services to reduce the need for people to pay out of pocket for private outpatient specialist care;
- expanding prevention and community care services to help limit inappropriate patterns of demand for GP and specialist care; and
- introducing steps to address inequalities and inefficiencies linked to the presence of a large market for supplementary PHI.

Many of these policy measures are set out in Sláintecare; if implemented, they seem likely to reduce financial hardship and unmet need for many households.

# **1. Introduction**

This review assesses the extent to which people in Ireland experience financial hardship when they use health care, 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; WHO Regional Office for Europe, 2019). 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.

Ireland was hit hard by the 2008 economic and financial crisis, experiencing negative real GDP growth of -4.4% in 2008 and -5% in 2009 and a doubling in the unemployment rate in 2009 (Eurostat, 2019). Unemployment peaked at 15.5% in 2012 and has since fallen to a pre-crisis level of 6.7% in 2017 (Eurostat, 2019).

Public and private spending on health grew substantially in the 2000s, increasing by over 86% in real terms between 2001 and 2008. From 2009 to 2011, there were substantial cuts in public spending on health, a direct result of austerity measures introduced during the crisis. As a result, the health system struggled to maintain service levels and meet population health needs. Public spending on health plateaued between 2011 and 2014. Since 2014, total spending on health has increased by 19%, largely driven by private spending until very recently. Growth in public spending on health since 2014 has been driven by acute hospitals, increased staff numbers and growth in medicine costs (Department of Public Expenditure and Reform, 2018).

The health system underwent several changes between 2008 and 2011 that aimed to reduce public spending through rationing, shifting costs onto households through new user charges and accelerating existing reforms (Burke et al., 2014; Nolan et al., 2014). Two types of policy changes are likely to have had an impact on financial protection and patterns of spending. One was the introduction of prescription charges for medical card holders, increased public hospital charges, increased thresholds for reimbursement under the Drug Payment Scheme and reduced eligibility for medical cards (Nolan et al., 2014). The second was the introduction of financial penalties for people who take out voluntary private health insurance (PHI) after the age of 35 (Burke et al., 2016). Both reforms increased private spending on health through out-of-pocket payments and PHI premiums, particularly among people less able to afford to pay for health care.

This is the first comprehensive analysis of financial protection in Ireland. It draws on household budget survey data collected in 2009–2010 and 2015–2016. The incidence of catastrophic out-of-pocket payments is low in Ireland in comparison to many other European Union (EU) countries, but it rose between 2009–2010 and 2015–2016 and there are indications of growing and significant unmet need for health care. Catastrophic outof-pocket payments were heavily concentrated among households who were already poor in both survey periods, but more so in 2015–2016.

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, with a focus on out-of-pocket payments in section 4 and financial protection in section 5. Section 6 provides a discussion of 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 looks at the affordability of household spending on health services and PHI premiums combined. Annex 2 provides information on household budget surveys, Annex 3 the methods used, Annex 4 regional and global financial protection indicators and Annex 5 a glossary of terms.

# 2. Methods

This section summarizes the study's analytical approach and main data sources. More detailed information can be found in Annexes 2–4.

## 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 (Cylus et al., 2018; WHO Regional Office for Europe, 2019), 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.

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

Note: see Annex 5 for definitions of words in italics.

Impoverishing health spending 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 (rent) and utilities (water, electricity and fuel used for cooking and heating) by households between the 25th and 35th percentiles of the household consumption distribution who report any spending on each item, respectively, adjusted for household size and composition using Organisation for Economic Co-operation and Development (OECD) equivalence scales; these households are selected based on the assumption that they are able to meet, but not necessarily exceed, basic needs for food, housing and utilities; this standard amount is also used to define a household's capacity to pay for health care (see below) Poverty The share of households further impoverished, impoverished and at dimensions risk of impoverishment after out-of-pocket payments and the share of captured households not at risk of impoverishment after out-of-pocket payments; a household is impoverished if its total consumption falls below the basic needs line after out-of-pocket payments; further impoverished if its total consumption is below the basic needs line before out-of-pocket payments; and at risk of impoverishment if its total consumption after out-of-pocket payments comes within 120% of the basic needs line Results can be disaggregated into household quintiles by consumption Disaggregation and by other factors where relevant, as described above Data source Microdata from national household budget surveys Catastrophic health spending Definition The share of households with out-of-pocket payments that are greater than 40% of household capacity to pay for health care Numerator Out-of-pocket payments Denominator A household's capacity to pay for health care is defined as total household consumption minus a standard amount to cover basic needs; the standard amount 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, as described above; this standard amount is also used as a poverty line (basic needs line) to measure impoverishing health spending Disaggregation Results are disaggregated into household quintiles by consumption per person using OECD equivalence scales; disaggregation by place of residence (urban-rural), age of the head of the household, household composition and other factors is included where relevant

Microdata from national household budget surveys

Data source

Source: Thomson et al. (2018).

# 2.2 Data sources

The study analyses anonymized microdata from the household budget survey carried out by the Irish Central Statistics Office in 2009–2010 and 2015–2016 (Central Statistics Office, 2017a). Household budget survey data from 2004–2005 could not be analysed due to inconsistencies with the 2009–2010 data and other limitations.

The 2009–2010 survey was undertaken between August 2009 and September 2010. A total of 5891 households participated in the survey, giving a response rate of just under 40%. The 2015–2016 survey was undertaken between February 2015 and February 2016. A total of 6820 households participated in the survey, a response rate of just over 40%.

PHI premiums are usually excluded from analysis of financial protection, which focuses on payments people make at the point of using health services. To reflect the important role PHI plays in the Irish health system, section 4 includes analysis of PHI premiums and private spending on health, in addition to out-of-pocket payments.

All currency units are presented in euros.

# 3. Coverage and access to health care

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

## 3.1 Health coverage

The publicly financed health system in Ireland is governed by the 2004 Health Act, which set up the Health Service Executive (HSE) in 2005. The HSE provides health and social care through its own network of providers such as hospitals and community health organizations, and through services contracted to general practitioners (GPs), pharmacists and other health professionals, and voluntary (non-profit) hospitals and social care providers. Health coverage is largely determined by the 1970 Health Act, however, which granted people full or limited entitlement to publicly financed health services. As the following subsections show, health coverage in Ireland is extremely complex.

### 3.1.1 Population entitlement

Everyone ordinarily resident in Ireland is entitled to publicly financed health care, but access to services is largely determined on the basis of income, age and health status. The population is divided technically into two main entitlement categories:

- Category I: those who qualify for medical cards (a third of the population); and
- Category II: those without medical cards (two thirds of the population).

Other schemes provide additional benefits on the basis of age (GP visit cards) and health status (the Long-term Illness (LTI) Scheme).

People in **Category I** hold **medical cards**. These are primarily allocated on the basis of income through a stringent means test that takes into account income, savings, investments and property (except the family home). In 2018, the income threshold was set at €9568 a year for a single person living alone and €13 832 a year for a married or cohabiting couple with dependants. A small number of people obtain discretionary medical cards on the basis of "undue hardship" no matter what their income (Keane, 2014).

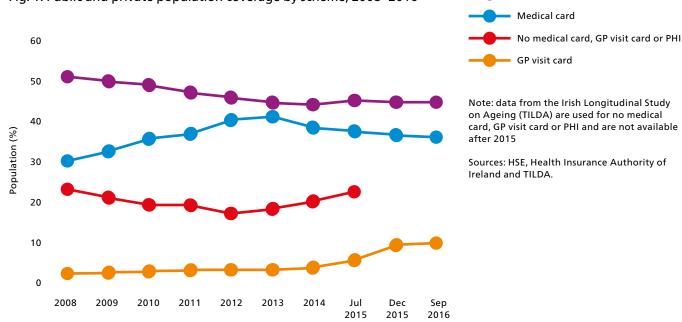
Before 2009, all people aged over 70 years were automatically entitled to medical cards, regardless of income. A means test for people aged over 70 years was introduced in 2009. In 2018, the income threshold was €26 000 a year for a single person or €46 800 a year for a couple. This is much higher than the income threshold for younger people.

In September 2017, 1.6 million people had medical cards, representing 35% of the population (HSE, 2017).

**GP visit cards** were introduced in 2005 for people on low incomes who do not qualify for medical cards because they are above the income threshold. GP visit cards provide people with free access to GP visits. In 2011, the government stated its intention to provide the whole population with free GP visits by 2016, but this was delayed. GP visit cards were extended to all children under 6 years and all adults over 70 years in 2015, benefiting around 350 000 people (HSE, 2018). By December 2017, 486 920 people (around 10% of the population) had GP visit cards. The 2016 Programme for Government committed to extend free GP care to all children aged under 18 years but this has not been implemented at the time of writing (Government of Ireland, 2016).

People with the following health conditions or disabilities are covered under the **LTI Scheme**, regardless of income: acute leukaemia, intellectual disability, cerebral palsy, mental illness (in a person under 16), cystic fibrosis, multiple sclerosis, diabetes insipidus, muscular dystrophies, diabetes mellitus, parkinsonism, epilepsy, phenylketonuria, haemophilia, spina bifida, hydrocephalus and conditions arising from the use of thalidomide. The LTI Scheme covered 142 158 people (around 3% of the population) in December 2017 (HSE, 2018).

Nearly half of the population has **PHI** (see below). People who have neither a medical card nor PHI (just over 20% of the population) fare worst in terms of timely access to health care and pay most out of pocket (Department of Health and Children, 2010). Fig. 1 shows the evolution of coverage status over time.



PHI

Fig. 1. Public and private population coverage by scheme, 2008–2016

An attempt to allocate medical cards on the basis of medical condition was made in 2014, but an expert group set up to advise the government on this matter concluded that it was not possible (Keane, 2014). More recently, the report of the Committee on the Future of Healthcare, known as Sláintecare, recommended legislating for universal entitlement to health care, which would be introduced on a phased basis over a sevenyear period (Houses of the Oireachtas, 2017).

### 3.1.2 Service coverage

There is no explicitly defined benefits package. Since 2011, there has been some limited use of health technology assessment to set priorities, but only in relation to new treatments and medicines. This is carried out by the Health Information and Quality Authority and the National Centre for Pharmacoeconomics.

Access to health services is largely determined by income, age and health status. Only a few services are universally available free of charge; these include the Maternity and Infant Care Scheme, which entitles pregnant women to GP and hospital specialist care, follow-up visits by a public health nurse, GP visits for newborn babies and vaccinations for pre-school children. School screening, cancer screening and vaccination programmes are also universally available free of charge for their specific target groups.

All residents have access to care provided in public hospitals, but with waiting times for essential diagnosis and treatment (O'Riordan et al., 2013; Burke et al., 2016) and with user charges for people in Category II.

People in Category I have access to GPs, hospital and minimum dental care (checkup, emergency treatment and extractions) without charge. The GP visit card has given an additional 10% of the population access to GPs without charge since 2015. People in Category I have had to pay prescription charges for outpatient-prescribed medicines since 2008.

People in Category II pay the full cost for GP visits, outpatient prescriptions, outpatient medical supplies and dental care. There is a monthly cap on payment for outpatient prescriptions.

Access to other primary care and social care services also depend on Category I or II status. For example, access to public health nursing for older or disabled people may vary at local level owing to factors such as service capacity and policy decisions about eligibility.

People in Category II do not have access to publicly financed optical, aural and dental care or primary care services provided by allied health professionals in the community.

Since October 2017, those in Category II who have paid social insurance contributions for more than three years through the Treatment Benefit Scheme can access a very basic level of care such as an annual dental checkup and up to €42 worth of dental treatment a year.

A GP referral is required for access to specialist care and for free access to emergency departments.

Long waiting times for diagnostic tests, outpatient specialist consultations and inpatient care are a major issue (see subsection 3.2). During the study period, waiting-time targets were as long as 18 months, in part owing to budget cuts, cuts in staff numbers and persistent overcrowding in hospitals.

### 3.1.3 User charges

User charges (co-payments) are widely applied throughout the health system and are particularly high for people without medical cards (Table 2).

Category I (medical card holders) seeks to protect the poorest households from user charges. In the past it has been shown to be an effective propoor measure (Layte et al., 2007), even though it covers only a narrow range of services. Since the introduction of austerity measures in 2009 during the financial and economic crisis, new and higher user charges have been introduced, resulting in new and increasing user charges for medical card holders (Nolan et al., 2014). Table 3 summarizes the main changes to coverage policy since 2009.

User charges for Category II (people who do not have a medical card) were already high before the crisis and increased further during the crisis. In 2008, people without medical cards paid a maximum of  $\leq$ 80 per month for prescription medicines (Nolan et al., 2014). This had increased to  $\leq$ 144 per month by 2013, before being reduced to  $\leq$ 134 in January 2018. Due to other policy measures, the cost of medicines fell during this time and fewer people now meet the threshold for full reimbursement (Brick et al., 2013).

In 2008, for example, 1.6 million people benefited from public coverage of outpatient medicines through the Drug Payment Scheme, which pays for the cost of prescribed medicines above the reimbursement threshold for Category II people; the cost of these benefits was €315 million (HSE, 2009). By the end of 2017, however, the number of people who benefited had fallen to 1.2 million and the amount spent to €65 million (HSE, 2017).

### Table 2. User charges for publicly financed health services, 2019

NA: not applicable.

Source: authors.

Service area	Type and level of user charge	Exemptions	Cap on user charges paid
Outpatient visits	GP visit: full cost of €40–60 per visit	People in Category I (low-income households)	No
	Outpatient appointment with a hospital specialist: no charge	People with GP visit cards (children under 6 years and adults over 70 years)	
	Category II: use of the emergency department without a GP referral: fixed co-payment of €100	Everyone is entitled to referral from a GP to a hospital specialist outpatient appointment without charge, but there can be long waits to access this service	
Outpatient prescription medicines	Category I: fixed co-payment of €2 per prescription item	No charges for people with conditions or disabilities covered under the LTI Scheme	Category I: €20 per household per month Category II: €134 per
	Category II: full cost		household per month
Diagnostic tests	None	NA	NA
Medical supplies	Category I: no charge	Category II: no charges for aids and appliances provided in public hospitals	No
	Category II: full cost		
Dental care	Full cost	Category I: one free dental examination and two fillings per person per year, plus unlimited extractions	No
		Category II from October 2017 for those who have paid three years of social insurance contributions: one dental examination per year and €42 per year towards scale and polish or periodontal treatment	
Inpatient care	Category I: no charge		€800 per person per year
	Category II: fixed co-payment of €80 per day in hospital		
Inpatient prescription medicines	None	NA	NA

### Table 3. Coverage policy changes, 2009–2018

Note: all changes introduced on 1 January, unless specified.

Source: authors.

Year	Category I	Category II
2009	All services: automatic entitlement to medical cards removed from people aged > 70 years and replaced with a means test (March)	All services: tax relief on unreimbursed medical expenses restricted to the standard rate of tax (20%)
		<b>Inpatient care:</b> increase in charge for attending the emergency department (without a GP referral) from €66 to €100; increase in the public hospital inpatient charge from €66 to €75 per day (with an annual cap of €750 per person)
		Medicines: increase in the monthly cap on co-payments for outpatient prescriptions from €90 to €100 per household
2010	Medicines: introduction of a fixed co-payment of €0.50 per prescription item from April (with a monthly cap €10 per	Medicines: increase in monthly cap to €120
	household) Dental care: entitlements reduced	Dental, optical and aural services: dental and ophthalmic entitlements reduced
2012		Medicines: increase in the monthly cap to €132 per household
		Dental, optical and aural services: aural entitlements cut
		Long-term illness (including mental health under 16 years of age): commitment to extended entitlement to free GP care as phase 1 of the free primary care strategy; later replaced with an alternative plan to extend universal GP care; later deferred
2013	All services: lowering of thresholds for medical cards for people aged > 70 years (excluded 40 000 people)	<b>PHI:</b> the amount of PHI premium qualifying for tax relief limited to €1 000 a year for adults and €500 for children (including students aged 18–23 years in full-time education)
	Medicines: co-payment per prescription item increased to €1.50 (increase in the monthly cap to €19.50 per household)	Inpatient care: increase in the public hospital inpatient charge to €80 per day (increase in the annual cap to €800 per person)
		Medicines: increase in monthly cap to €144 per household
2014	Medicines: co-payment increased to €2.50 (monthly cap €25 per household)	
2015		PHI: introduction of financial penalties (higher premiums) for people buying PHI for the first time after the age of 35 (lifetime community rating)
		Primary health care: free GP care introduced for children < 6 years and adults aged > 70 years (July)
2017	<b>Medicines:</b> reduction in the monthly cap from $\leq 25$ to $\leq 20$ for people aged > 70 years	Dental, optical and aural services: introduction of €42 towards annual scale and polish, biannual entitlement to free sight test and €42 towards glasses for people who have paid three years of social insurance contributions
2018	Medicines: reduction to €2 per prescription item for people aged under 70 years and monthly cap reduced to €20 per household	Medicines: monthly cap reduced to €134 per household
2019	Medicines: reduction to €2 per prescription item applied to everyone (April)	

### 3.1.4 The role of PHI

Ireland has one of the largest PHI markets in the EU, covering close to half of the population and accounting for 14.9% of total spending on health in 2016<sup>1</sup> (WHO, 2019). Measured in terms of its share of total spending on health, it is the second largest PHI market in the EU after Slovenia (15.3%); the only other PHI market of a similar size is in France (13.6%). These three are also the only EU countries in which PHI accounts for over 40% of private spending on health: 58% in France in 2016, followed by 56% in Slovenia and 53% in Ireland (WHO, 2019).

The PHI markets in France and Slovenia are large in terms of spending because they cover more than 90% of the population (WHO Regional Office for Europe, 2019). They also play an explicitly *complementary* role, covering user charges for publicly financed health services.

In contrast, PHI in Ireland plays a *supplementary* role, providing people with faster access to planned hospital treatment; it also covers some or all of the cost of treatment in private hospitals and the cost of private beds in public hospitals, depending on the type of plan purchased. PHI may also reimburse user charges for GP visits and other forms of outpatient care, again depending on the type of plan purchased, but does not cover the cost of outpatient medicines or long-term care. In some instances, PHI plans themselves involve a degree of out-of-pocket payment at the point of use.

The Irish PHI market is therefore unusual in Europe, because most supplementary markets are relatively small, both in terms of contribution to spending on health and share of the population covered (Sagan & Thomson, 2016).

Long waiting times for specialist care are one of the main reasons for taking out PHI. In a survey carried out by the Health Insurance Authority of Ireland (HIA) in 2017, 59% of respondents agreed that PHI allowed people to "skip the queue", 58% strongly believed it was "a necessity not a luxury", and 57% strongly believed it meant "always getting a better level of health-care service" (HIA & Kantar Milward Brown, 2017).

Take-up of PHI has also been strongly encouraged by the government through the provision of substantial tax subsidies. Currently, the government contributes 20% to the cost of each PHI premium. In 2013, the tax subsidy was capped and applies only to annual premiums up to €1000 for adults and €500 for children and students. Other strategies to encourage take-up of PHI include the introduction in May 2015 of financial penalties (higher premiums, known in Ireland as lifetime community rating) for people who do not take up PHI before the age of 35 (HIA, 2014).

The crisis affected take-up of PHI; in December 2008, PHI covered 51% of the population, but by December 2014 this had fallen to 45% (HIA, 2016). The introduction of lifetime community rating in 2015 led to the first increase in PHI take-up since its peak in 2008, so that by December 2016 it covered 46% of the population (HIA, 2016).

Household budget survey data on PHI show a strong link between income and take-up of PHI, with 11% in the poorest quintile reporting spending

1. This figure includes all voluntary health-care payment schemes; that is, those classified as voluntary health insurance schemes and those classified as enterprise financing schemes.

on PHI in 2015–2016 compared to 75% in the richest quintile (authors based on household budget survey data). The corresponding figures for 2009–2010 were 8% in the poorest quintile and 67% in the richest.

The household budget survey data show that 8.3% of households included in 2009–2010 had both a medical card and PHI, falling slightly to 8.1% in 2015–2016. Overall, this suggests that roughly 21% of households with medical cards also buy PHI. This is surprising given that medical card holders benefit from largely free access to outpatient and inpatient care, and that PHI does not cover outpatient medicines (for which medical card holders do have to pay user charges), but it supports evidence suggesting that people in Ireland place an exceptionally high value on PHI for its ability to ensure faster access to specialist care.

PHI premiums have increased substantially over time, rising by 7–12% a year on average between 2008 and 2012 (from €671 per policy on average in 2007 to €1048 in 2012 and €1177 in 2016) (Department of Health, 2013). These increases were much higher than increases in the cost of PHI claims (Department of Health, 2013). At the same time, tax subsidies for PHI fell from €884 million in 2012 to €325 million in 2015 (Collins, 2015; Revenue, Irish Tax and Customs, 2016).

Both the high perceived importance of PHI and the introduction of lifetime community rating in 2015 likely explain why take-up remains high despite a large increase in premiums.

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

**Population entitlement** User charges Service coverage Issues in the Eligibility is based on residence, but No waiting-time guarantees Co-payments are applied to all access to services depends on income, services, including GP visits, for governance of publicly financed age and health status people without a medical card coverage (Category II) About two thirds of the population Main gaps in Very limited coverage of primary care, Primary care, including GP visits, for publicly financed do not have a medical card (people in including GP visits, for over half of those without medical cards or GP the population coverage Category II) visit cards Very limited coverage of dental care **Outpatient prescription medicines** for the whole population There is no overall cap on co-Long waiting times for diagnostic payments for GP visits, medical tests, outpatient specialist supplies and dental care appointments, care in emergency departments and inpatient care Are these gaps No; around 20% of the population Partly; PHI covers around 46% of the Not really; some PHI plans cover covered by PHI? does not have a medical card or PHI primary care; most PHI plans do population, giving them preferential access to planned treatment in public not cover the cost of medicines and hospitals based on ability to pay long-term care; PHI plans may involve and some elective care in private co-payments at the point of use hospitals, but PHI coverage of primary care is limited

#### Table 4. Gaps in coverage

Source: authors.

# 3.2 Access, use and unmet need

Access to health services and quality of care are the main challenges facing the Irish health system (HSE, 2014). Problems with access lead to unmet need for health care (Box 1).

Box 1. Unmet need for health care

Financial protection indicators capture financial hardship among people who incur out-of-pocket payments through the use of health services, including medicines. 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 access barriers.

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

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, owing 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 (subsection 3.2). It also draws attention to changes in the share and distribution of households without out-of-pocket payments (subsection 4.1). If increases in 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 driven by increases in unmet need.

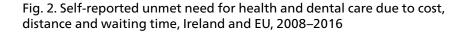
Every year, EU Member States collect data on unmet need for health and dental care through the EU Statistics on Income and Living Conditions (EU-SILC). Although this important source of data lacks explanatory power and is of limited value for comparative purposes because of differences in reporting by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

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

EU-SILC provides information on unmet need as a share of the population aged over 16 years. It only asks questions in relation to medical and dental care and the main reason for having difficulty accessing such care, whereas the EHIS provides information on unmet need among those reporting a need for care for a much broader basket of care, including social care and mental health, and asks for multiple reasons for not accessing care. The EHIS also asks people about unmet need for prescribed medicines. These methodological issues explain the difference in levels of unmet need from both surveys, with EHIS resonating strongly with the Irish experience of barriers to care.

EU-SILC data indicate that unmet need for health care and dental care rose quite sharply in Ireland between 2008 and 2012, particularly dental care. In 2008, unmet need was well below the EU average, but by 2012 it was equal to the EU average for health care and above it for dental care (Fig. 2).

The rise in unmet need for dental care can be explained by significant cuts in dental benefits in 2010 and 2012 (see Table 3), while the sharp fall in unmet need for dental care in 2015 and 2016 may be explained by incomes rising again after the crisis.

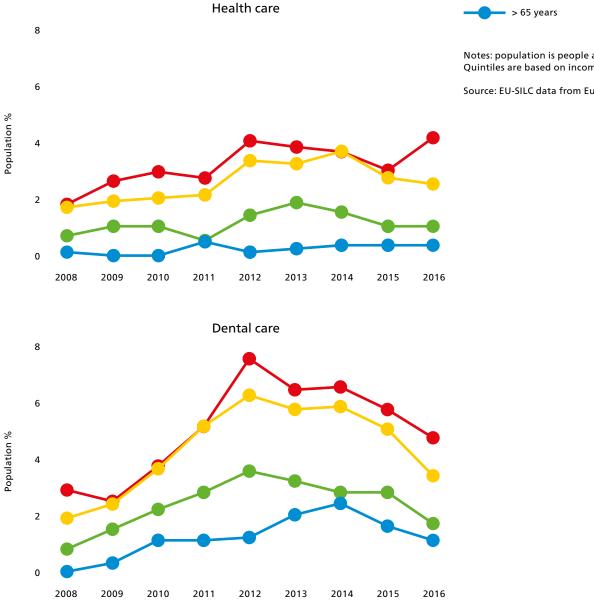




Health care Note: population is people aged over 16 years. Source: EU-SILC data from Eurostat (2019). Population % Dental care Population % 

Income inequality in unmet need is significant in Ireland. The gap between unmet need among the poorest and richest quintile grew as unmet need rose between 2008 and 2012 and remained large even after unmet need began to fall (Fig. 3). Income inequality remains particularly large for dental care. In contrast, age-related inequality does not appear to be a problem.

#### Fig. 3. Income inequality in self-reported unmet need for health and dental care due to cost, distance and waiting time in Ireland, 2008-2016



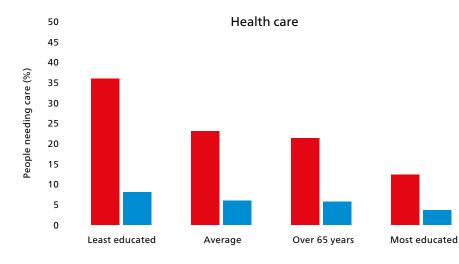
EHIS data support these trends, although they show a much higher level of unmet need in Ireland compared to other EU countries than EU-SILC. Fig. 4 shows how unmet need for different types of care due to cost was much higher in Ireland in 2014 (the most recent year of data available) than the EU average. It also shows there is stark inequality in unmet need by educational attainment, a proxy for socioeconomic status. Once again, age-related inequality does not seem to be an issue.

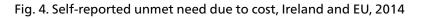
Poorest quintile

Average **Richest quintile** 

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

Source: EU-SILC data from Eurostat (2019).

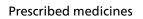


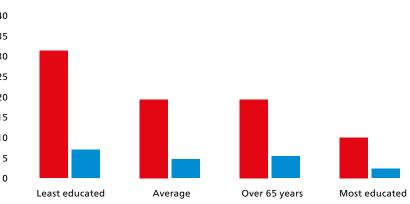


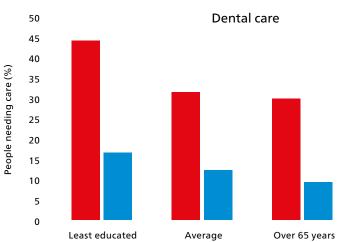


Note: self-reported unmet need among people aged over 15 years reporting a need for care.

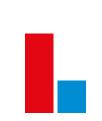
Source: EHIS data from Eurostat (2019).











Most educated

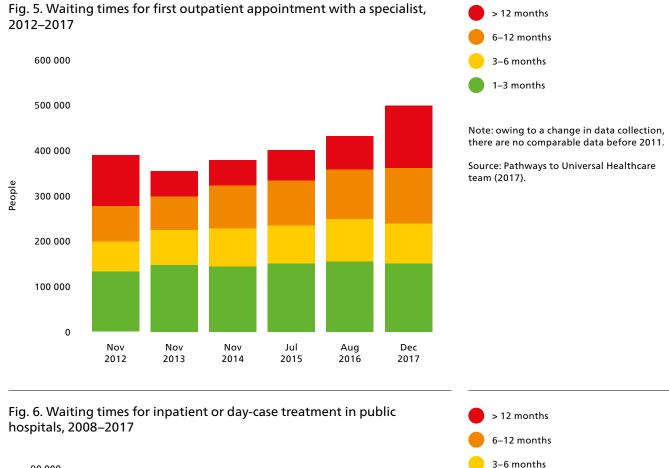
Increasingly long waiting times for diagnostic tests, outpatient specialist consultations and hospital care and socioeconomic inequalities in access to health services are major issues in Ireland.

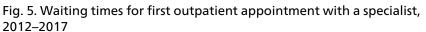
- Survey data on people over the age of 50 indicate that the use of GPs is highest among people with medical cards and people with PHI, and lowest among those with no cover (Murphy et al., 2014).
- Around 70% of survey respondents in 2012 did not use any community services; those who did tended to be medical card holders (Murphy et al., 2014).
- GPs refer patients to specialists and for diagnostic tests. Research carried out in 2012–2013 found that most GPs had access to private diagnostic testing, for which people have to pay the full cost out of pocket (some of which may be covered by PHI), but a significant share had no or very limited access to public diagnostic testing, resulting in average waiting times of 14 weeks for a public ultrasound test, 16 weeks for a public CT scan and 22 weeks for a public MRI scan (O'Riordan et al., 2013).
- The number of people waiting for over three, six and 12 months for an initial outpatient consultation with a specialist has grown steadily since 2013 (Fig. 5) (National Treatment Purchase Fund, 2018).
- There are also increasingly long waiting times for inpatient and day-case hospital treatment (Fig. 6).

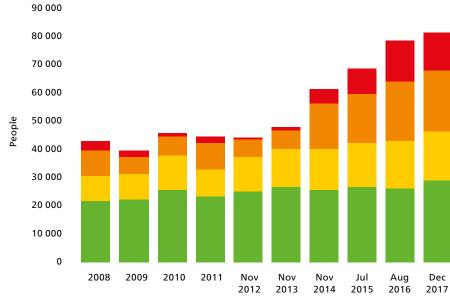
Long waiting times for hospital care are caused by budget cuts in the wake of the crisis and a 12% cut in staff in public facilities between 2007 and 2015 (HSE, 2015). Although staff numbers are now nearly back at precrisis levels, waiting times have not fallen.

People also increasingly access inpatient care through hospital emergency departments, bypassing GPs and referral pathways, which exacerbates long waiting times for elective admissions. There are now four times more emergency admissions than elective admissions (HSE, 2017), leading to concerns that public hospitals will cease to provide elective care in the future (Houses of the Oireachtas, 2016).

Owing to gaps in publicly financed coverage, long waiting times and the large share of the population with PHI, the share of hospital treatment provided by private hospitals is deemed to be high. In recent years, there has been a surge in the development of private minor injury clinics and so-called emergency departments covering urgent care on a walk-in basis rather than 24/7 emergency care, for which people pay the full cost of care out of pocket.









Source: Pathways to Universal Healthcare team (2017).

#### 3.3 Summary

Ireland has an unusually complex system of entitlements to publicly financed health services.

Although everyone ordinarily resident is eligible to benefit from publicly financed health services, entitlement is largely determined on the basis of income and age.

People below an income threshold (Category I, currently around 35% of the population) hold medical cards and therefore benefit from free access to all publicly financed health services, including free outpatient prescriptions. Following the crisis in 2008, however, medical card holders faced user charges for outpatient-prescribed medicines for the first time. These prescription charges increased over time and dental care benefits were heavily reduced.

People above the threshold (Category II) must pay substantial user charges for all health services. They also experienced increases in user charges and a reduction in dental benefits following the crisis. In 2015, however, free GP care was introduced for children under 6 years and adults aged over 70 years and dental benefits were increased in 2017 (after the study period).

Increasingly long waiting times for specialist treatment in public facilities are a major issue. They are the main reason people take up PHI. The PHI market in Ireland is one of the largest in the EU, both in terms of share of the population covered (close to half) and contribution to public and private spending on health.

People are encouraged strongly to buy PHI through large tax subsidies, and since 2015 there have been financial penalties for those who do not buy it before the age of 35. PHI does not fill all gaps in coverage, however: for example, it does not cover outpatient-prescribed medicines and offers limited coverage of primary care and dental care. Take-up of PHI is heavily concentrated among richer people.

Unmet need for health care and dental care rose substantially between 2008 and 2012. It has fallen somewhat since then but remains higher than in 2008. Income inequality in unmet need has also grown over time and remains significant.

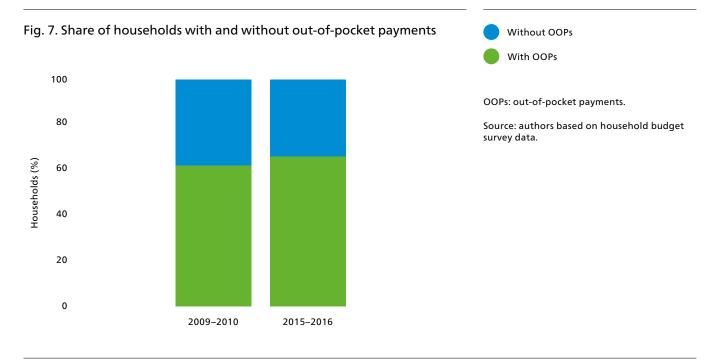
The fact that income inequality in unmet need persists even though access to publicly financed health services is determined by income suggests two things: first, the medical card system is not effective in ensuring equitable access to health care; and second, while PHI enhances access for those who have it, it exacerbates inequalities in the health system.

## 4. Household spending on health

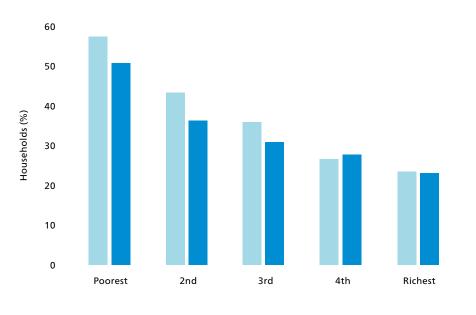
The first part of this section draws mainly on data from the household budget survey to identify trends in household spending on health: that is, out-of-pocket payments, the formal and informal payments made by people at the time of using any good or service delivered in the health system. This section also discusses household budget survey data on household spending on PHI and private spending on health, and trends in public and private spending over time based on data from National Health Accounts.

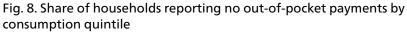
#### 4.1 Out-of-pocket payments

In 2015–2016, 66% of households paid for health care out of pocket. This share has increased slightly over time, from 62% in 2009–2010 (Fig. 7).



In both survey periods, the share of households with no out-of-pocket payments is much higher for the poorest quintile (around 50%) than the richest quintile (around 20%) (Fig. 8).

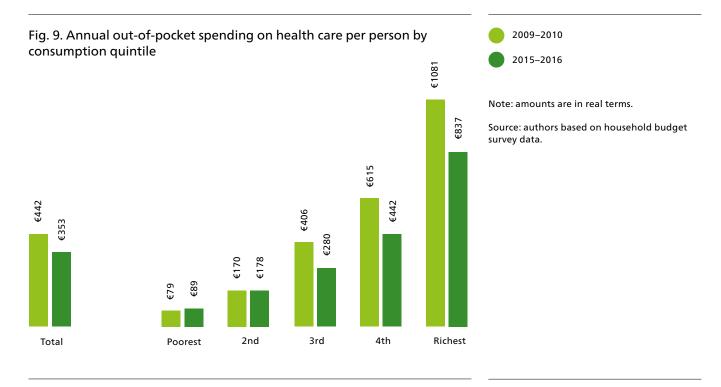




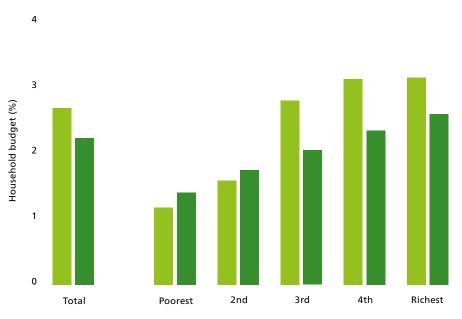


Source: authors based on household budget survey data.

When survey respondents report no out-of-pocket spending on health, it is difficult to know whether: they simply have no need for health care; they need care and are able to use services free of charge; or they need care and are unable to access services. The much higher share of people with no out-of-pocket payments among the poorest quintile may reflect exemptions from user charges for medical card holders (people in Category I; see Table 2). Out-of-pocket payments fell between 2009–2010 and 2015–2016, both in absolute terms (Fig. 9) and as a share of household consumption (Fig. 10). There were differences across households, however. By both measures, out-of-pocket payments fell only for households in the three richest quintiles; they actually increased for households in the two poorest quintiles.



#### Fig. 10. Out-of-pocket payments for health care as a share of household consumption by consumption quintile

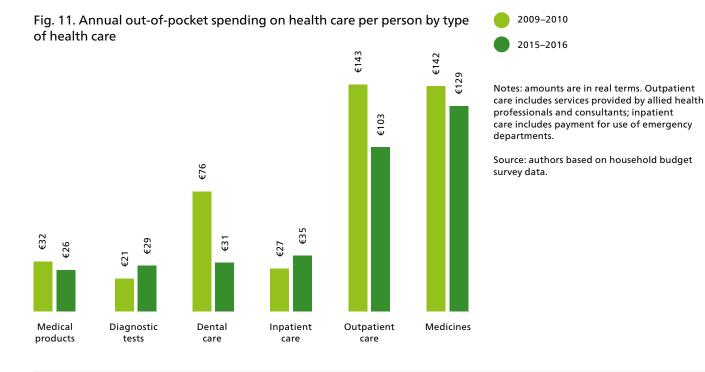


2009-2010

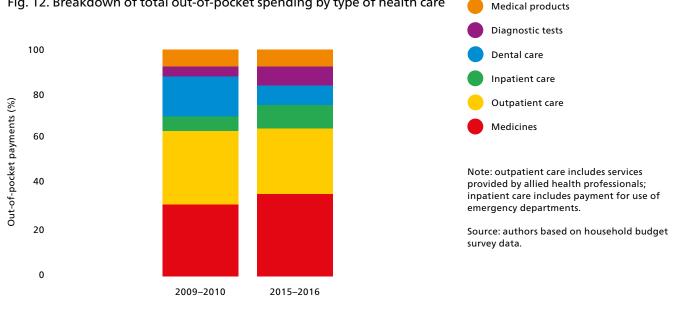
2015-2016

Source: authors based on household budget survey data.

Fig. 11 shows that the reduction in out-of-pocket payments in 2015–2016 was driven by a reduction in spending on dental care and outpatient care. Spending on diagnostic tests (and other paramedical services) and inpatient care increased, while spending on medicines and medical products remained stable. The increase in spending on diagnostics and inpatient care could have been caused by PHI products covering less or requiring higher co-payments.



In 2009–2010, outpatient care, which includes GP visits, private consultations and other non-hospital services, and medicines accounted for the largest share of out-of-pocket spending on health (32% each) (Fig. 12). These services also accounted for the largest share of out-of-pocket spending in 2015–2016, but spending on medicines increased to 37% and spending on outpatient care fell to 29%. The dental care share fell from 17% to 9%.



#### Fig. 12. Breakdown of total out-of-pocket spending by type of health care

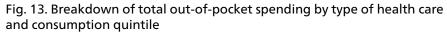
Patterns in out-of-pocket payments by type of care vary substantially across quintiles (Fig. 13).

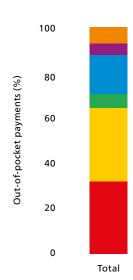
In 2009–2010, poorer households spent proportionately more on medicines and proportionately less on dental care than richer households. The share spent on outpatient care was slightly lower for the poorest quintile but similar across the other quintiles.

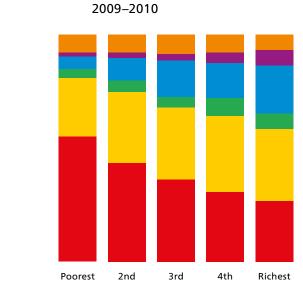
In 2015–2016, the uneven distribution of medicines remained largely the same, but the medicines share increased for all quintiles, with particularly large increases among the poorer quintiles.

Over time, there were shifts in the shares spent on outpatient care and dental care; poorer households spent markedly less proportionately on outpatient care than richer households in 2015–2016, while the share spent on dental care fell for all except the poorest quintile. For the richest quintile, the inpatient share nearly doubled (but data for all except the poorest quintile should be interpreted with caution due to low numbers).

Fig. 14 shows that spending on medicines in real terms increased for the two poorest quintiles but fell for the other quintiles. Spending on outpatient care and dental care did not change much for the two poorest quintiles, but fell substantially for the three richer quintiles, particularly for dental care.



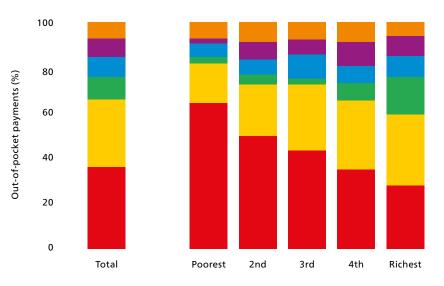




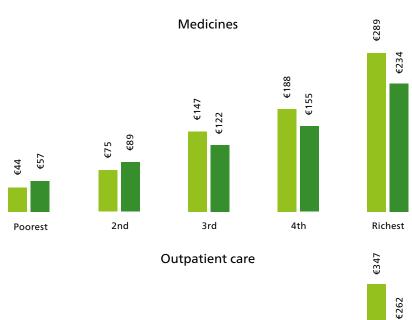


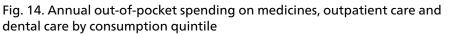
Note: outpatient care includes services provided by allied health professionals; inpatient care includes payment for use of emergency departments.

Source: authors based on household budget survey data.



2015-2016



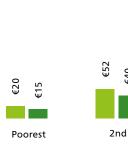


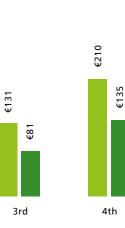


2015-2016

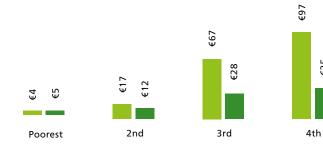
Note: amounts are in real terms.

Source: authors based on household budget survey data.

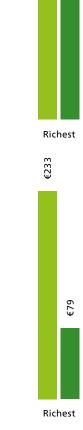








€40



€35

Increases in out-of-pocket spending among the two poorest quintiles may be explained by increases in user charges for outpatient prescription medicines for medical card holders (people in Category I) and increases in the monthly cap on co-payments for outpatient prescription medicines for people in Category II.

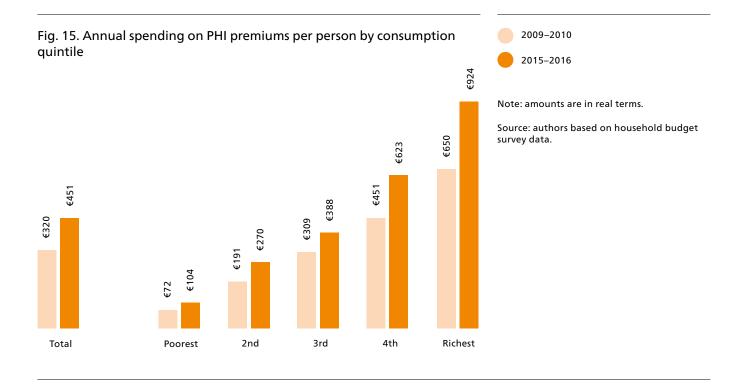
The limited share of out-of-pocket spending on dental care among the poorest quintile may reflect unmet need for dental care. Most dental care is funded through out-of-pocket payments and the limited amount that was available to medical card holders (Category I) under the Dental Treatment Service Scheme (DTSS) was one of the first items to be cut in the health budget adjustments in response to the crisis, as part of the austerity measures introduced in 2010 (Houses of the Oireachtas, 2017).

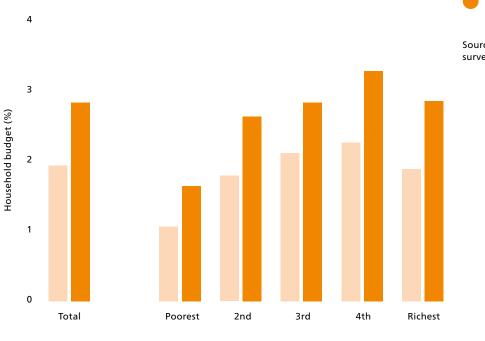
Public funding of the DTSS was cut from €62 million to €10 million between 2010 and 2015, severely limiting access to dental care for nonmedical card holders (Category II) (Houses of the Oireachtas, 2017). The impact on use of dental services was severe. Between December 2009 and December 2015, the number of people with medical cards (Category I) seeking dental care under the DTSS increased by 35%, the number of publicly financed scale and polishes fell by 97% and the number of publicly financed fillings fell by 33%. Over the same period, surgical extractions and routine extractions increased by 53% and 14% respectively, as dentists were only funded to provide emergency fillings and carry out extractions (HSE, 2016).

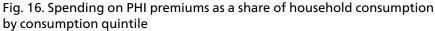
In 2009, before budget reduction measures, the average cost to the state of the DTSS per person was €252 (€86 million for 343 067 people). In December 2015, the average cost per person was €160 (€69 million for 436 000 people) (HSE, 2016).

#### 4.2 PHI premiums

Household budget survey data indicate that the share of household spending on PHI premiums rose from 49% in 2009–2010 to 52% in 2015– 2016. Spending on PHI premiums per person increased markedly across all quintiles between 2009–2010 and 2015–2016, both in absolute terms (Fig. 15) and as a share of household consumption (Fig. 16).









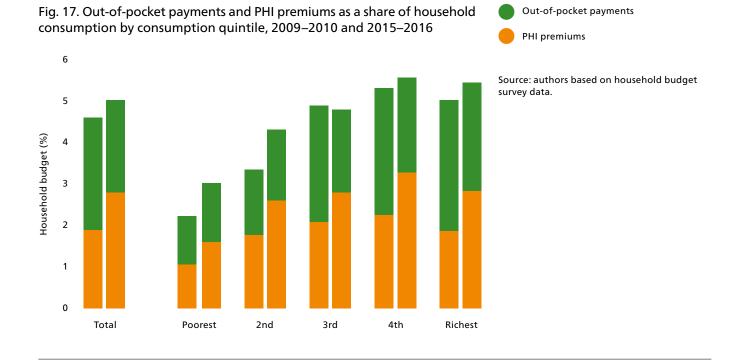
Source: authors based on household budget survey data.

The increase in spending on PHI premiums per person is probably attributable to sharp increases in the cost of PHI policies. Although demand for PHI has risen steadily since 2014, the share of the population with PHI has fallen overall from 51% in 2008 to 46% in 2016. The PHI component of the Consumer Price Index showed an increase of 120% in like-for-like coverage during this time, reflecting significantly higher premiums to maintain similar levels of coverage (Turner, 2018).

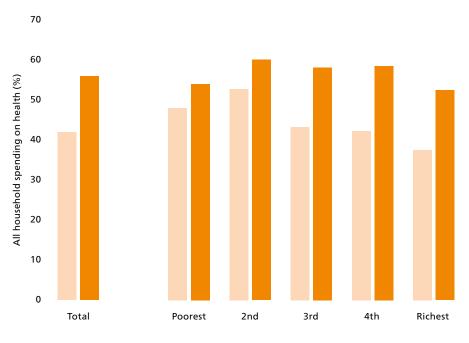
As noted in subsection 3.1.4, demand for PHI is driven to a large extent by long waiting times for specialist treatment in public facilities and, to a lesser extent, perceived differences in quality between the public and private systems. More recently, it is likely to have been given further support by the introduction of lifetime community rating in 2015, a policy that involves financial penalties for people who do not buy PHI before they are 35 years old. During the study period, PHI became the largest component of private spending on health for all quintiles (Fig. 17), even though household budgets were squeezed as a result of the crisis. This suggests that lifetime community rating encouraged some people to buy PHI for the first time and encouraged those with PHI to retain policies even when premiums were rising sharply.

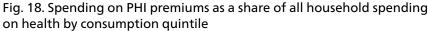
## 4.3 Out-of-pocket payments and PHI premiums combined

Looking at out-of-pocket payments and spending on PHI premiums together provides a picture of all household spending on health. Over time, this grew as a share of household consumption for all but the third quintile (Fig. 17). Among the two poorest quintiles, growth was driven by a small increase in the out-of-pocket payment share and a large increase in the PHI premiums share. For the three richest quintiles, it was entirely driven by a large increase in the PHI premiums share; the out-of-pocket payment share actually fell.



Households spend more on PHI premiums than on any single type of health care. In 2009–2010, approximately 41% of all household spending on health went towards PHI premiums on average, but by 2015–2016, the PHI premiums share had risen substantially to 56% (Fig. 18). The increase in the PHI premiums share was much greater for the three richest quintiles than for the two poorest quintiles.







Source: authors based on household budget survey data.

Given that out-of-pocket payments and PHI premiums combined did not grow much as a share of household budgets between the survey periods, the major increase in the PHI premium share suggests that PHI crowded out some out-of-pocket payments, particularly for dental care and outpatient care, potentially resulting in unmet need.

This seems to explain the reduction in out-of-pocket payments for dental care and outpatient care over time, as shown in Fig. 11 and Fig. 12. The reduction in out-of-pocket payments for outpatient care may be linked to the extension of the GP visit card to all children under 6 years old and all adults aged over 70 years in July 2015, but the reduction in out-of-pocket spending on dental care cannot be explained by increased entitlement to publicly financed dental care – in fact, dental care benefits were cut for all households in 2009 and for households in Category II in 2012. Dental care benefits for Category II were not increased until 2017, after the study period.

Household adherence to PHI during and after the crisis is remarkable considering the large increases in PHI premiums over time (see subsection 3.1.4). Many appear to have traded off their need for dental care and perhaps also outpatient care to keep hold of their PHI policies.

Both out-of-pocket payments and household spending on PHI premiums demonstrate a progressive pattern across consumption quintiles, accounting for a higher share of household consumption among richer households than poorer households (Fig. 17).

For out-of-pocket payments, this may reflect free access to publicly financed health care for poorer people (those in Category I) and a higher degree of unmet need (see Fig. 3 and Fig. 4).

For PHI, it reflects two factors. First, much lower levels of PHI take-up among poorer quintiles (11% in the poorest quintile versus 75% in the richest in 2015–2016). Second, the fact that richer households are able to spend more on buying a better quality of PHI policy – for example, a policy that covers a wider range of outpatient services, including dental care, or offers lower deductibles and other co-payments.

When spending on PHI premiums as a share of household consumption is calculated among households with PHI only, it shows a highly regressive pattern in both periods. In 2015–2016, for example, it accounted for nearly 10% of consumption in the poorest quintile, around 7% in the second quintile, around 5% in the third quintile, around 4% in the fourth quintile and just over 3% in the richest quintile.

#### 4.4 Informal payments

A Special Eurobarometer report on corruption finds that 2% of survey respondents in Ireland who had visited a public health care provider in the previous 12 months reported having had to make an extra payment or give a valuable gift to a nurse or doctor, or make a donation to the hospital; this is below the EU average of 4% (European Commission, 2017).

## 4.5 Trends in public and private spending on health

Between 2009 and 2014, the years following the crisis, there were significant cuts of over €1.5 billion to public spending on health (Burke et al., 2014). The health budget was disproportionately cut compared to the other areas of large spending such as education and social welfare (M. Connor, Griffith College, Dublin, unpublished data, 2014). As a result, public spending on health fell in real terms (Fig. 19), as a share of GDP (from 8.1% in 2009 to 5.4% in 2015) and as a share of current spending on health (from 73% to a low of 69%, putting Ireland well below the Organisation for Economic Co-operation and Development (OECD) average of 75% in 2015) (OECD, 2017; WHO, 2019).

One effect of these budget cuts was to shift costs onto households. Recent research shows that this shift from government to household spending amounted to €600 million between 2008 and 2014 (Thomas et al., 2014; Burke, 2015). As a result, the out-of-pocket payment share of current spending on health rose from 11.9% in 2008 to 13% in 2016 (Fig. 20). The PHI share rose from 8.8% to 15.2% during the same period.

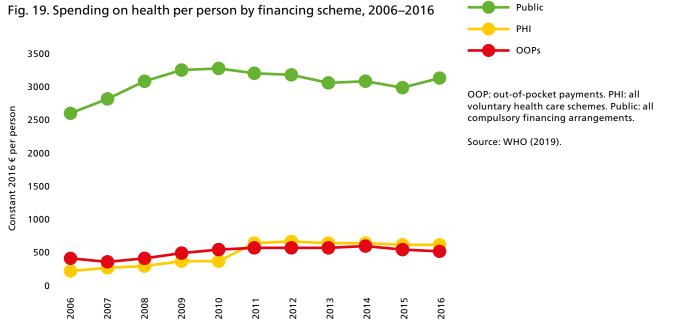
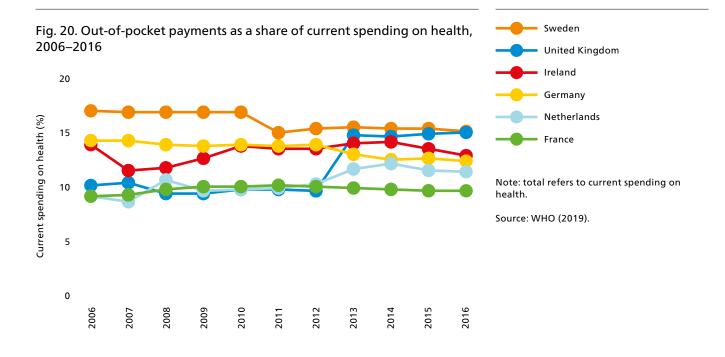


Fig. 19. Spending on health per person by financing scheme, 2006–2016

Although public spending on health began to rise again in 2014, with increases year on year, it has not kept pace with economic growth (HSE, 2017). In 2015 and 2016, the out-of-pocket payment share of total spending on health fell slightly, putting it on a par with the share in Germany, but above the shares in France and the Netherlands (Fig. 19).



#### 4.5 Summary

Out-of-pocket payments per person decreased in nominal terms and as a share of household consumption between 2009–2010 and 2015–2016, driven by a fall among the three richest quintiles. Out-of-pocket payments actually increased for the poorest two quintiles.

In both survey periods, most out-of-pocket spending was on medicines and outpatient care. Poorer quintiles spend mainly on medicines. Richer quintiles spend mainly on outpatient care.

For all quintiles, medicines accounted for a higher share of out-ofpocket payments in 2015–2016 than in 2009–2010, corresponding to the introduction of, and increases in, co-payments for outpatient prescriptions for medical card holders (Category I) and increases in the monthly cap on these co-payments for all households.

Out-of-pocket payments for dental care dropped sharply between the two survey periods for all except the poorest quintile, coinciding with major reductions in dental care benefits for all households.

Household budget survey data show that in 2015–2016, on average, households spent more buying PHI than they spent on health services, whereas in 2009–2010 they spent more on health services. For all quintiles, spending on PHI premiums per person increased substantially.

Spending on PHI premiums was remarkably resilient during the crisis, even in the face of substantial increases in premiums. Households appear to have traded off the need to pay out of pocket for dental care and GP visits with the need to keep hold of their PHI policies. This may in part explain the rapid increase in unmet need for health care and dental care between 2008 and 2012.

Cuts to public spending on health during the crisis shifted €600 million on to households between 2008 and 2014, pushing up the out-of-pocket payment and PHI shares of total spending on health.

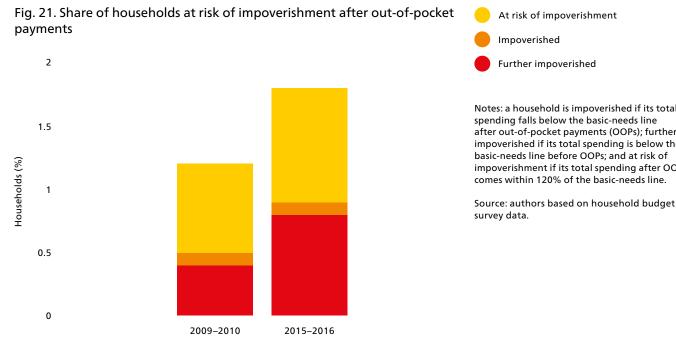
## 5. Financial protection

This section uses data from the Irish household budget survey 2009–2010 and 2015–2016 to assess the extent to which out-of-pocket payments result in financial hardship for households that use health services, including medicines. It 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. 21 shows the relationship between out-of-pocket payments and risk of impoverishment. The poverty line used in this study reflects the cost of spending on basic needs (food, rent and utilities) among a relatively poor segment of the Irish population (households between the 25th and 35th percentiles of the consumption distribution, adjusted for household size and composition). The average cost of meeting these basic needs - the basic needs line – was €755 per month in 2009–2010 and €793 per month in 2015–2016. Households were classified as poor if their equivalized consumption was below the basic needs line. Using this definition of poverty, about 1.7% and 2.1% of households were classified as poor in 2009–2010 and 2015–2016, respectively. Note that these figures are lower than consistent poverty rates in Ireland, which were 6.3% in 2010 and 8.7% in 2015 (Central Statistics Office, 2017b).



Notes: 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: and at risk of impoverishment if its total spending after OOPs comes within 120% of the basic-needs line.

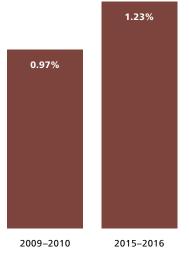
The share of households at risk of impoverishment, impoverished or further impoverished after out-of-pocket payments on health increased from 1.2% in 2009–2010 (about 63 000 people) to around 1.8% in 2015–2016 (about 102 000 people) (Fig. 21). The share of households impoverished or further impoverished was low in both periods, at 0.5% in 2009–2010 and 0.9% in 2015–2016. Over time, the number of impoverished people remained stable (at about 4000) but the number of further impoverished people rose from about 26 000 to about 48 000. This trend is driven by an increase in the share of households living below the basic needs line.

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

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

In 2009–2010, just under 1% of households (about 43 000 people) experienced catastrophic expenditure (Fig. 22). This increased to 1.2% of households (involving about 64 000 people) in 2015–2016.

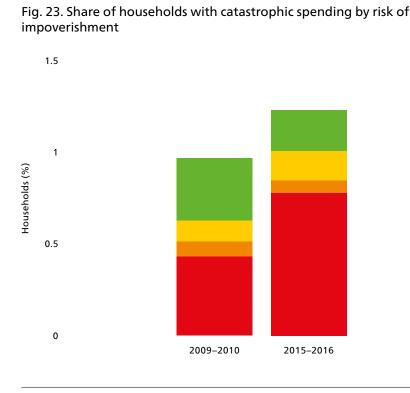
Fig. 22. Share of households with catastrophic out-of-pocket payments survey data. 1.23%

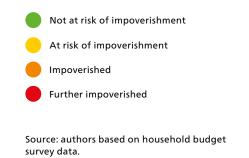


Source: authors based on household budget

## 5.2 Who experiences financial hardship?

Catastrophic out-of-pocket payments are heavily concentrated among households that are further impoverished in both survey periods (Fig. 23). The share of further impoverished households rose substantially from 43% in 2009–2010 to 78% in 2015–2016, while the share of households not at risk of impoverishment fell from 34% to 22%.





The incidence of catastrophic out-of-pocket payments varies significantly across consumption quintiles and is highly concentrated among the poorest quintile (Fig. 24). In 2009–2010, 3.9% of households in the poorest quintile experienced catastrophic out-of-pocket spending, compared to less than 0.5% of households in the other quintiles. In 2015–2016, incidence in the poorest quintile had risen to 5.2% but remained roughly the same in the other quintiles. The increase in overall catastrophic incidence between the two survey periods was almost entirely driven by an increase among the poorest quintile.

Among households with catastrophic health spending in 2009–2010, nearly 77.5% were medical card holders (Category I), while an additional 2% held a GP visit card. In 2015–2016, the share of households with catastrophic spending that held a medical card (Category I) had risen to 85.6%, with 2.1% holding a GP visit card.

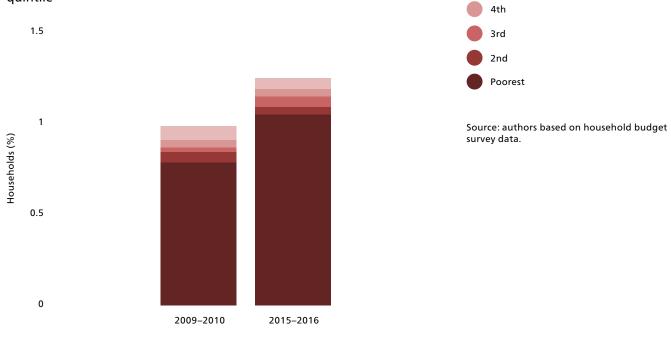
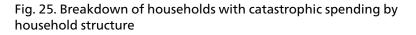
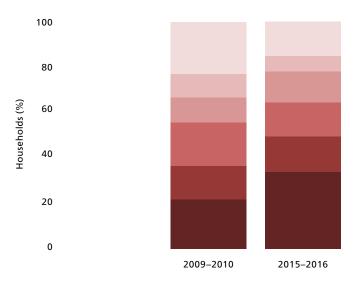


Fig. 24. Share of households with catastrophic spending by consumption quintile

In 2009–2010, households headed by a single person over the age of 65 and households with children under the age of 14 were overrepresented among catastrophic spenders (Fig. 25). A similar trend is seen in 2015–2016.





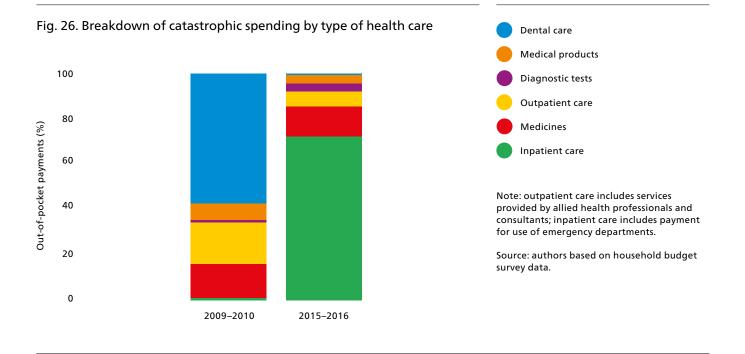


Richest

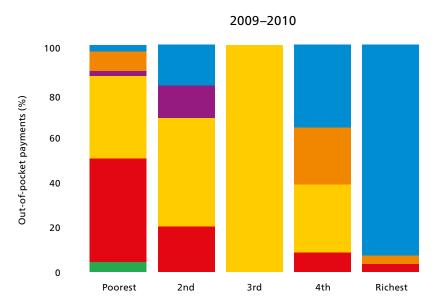
Source: authors based on household budget survey data.

## 5.3 Which health services are responsible for financial hardship?

The largest share of out-of-pocket payments among households with catastrophic health spending went towards dental care (58%) in 2009–2010 and inpatient care (72%) in 2015–2016 (Fig. 26). Inpatient care includes inpatient and emergency department fees, both of which increased following the crisis. In both survey periods, however, the largest single spending item is driven by spending in the two richest quintiles (Fig. 27).



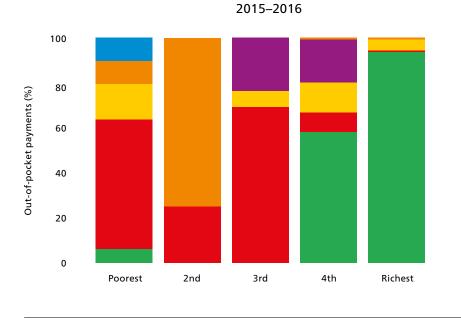
#### Fig. 27. Breakdown of catastrophic spending by type of health care and consumption quintile





Notes: outpatient care includes services provided by allied health professionals and consultants; inpatient care includes payment for use of emergency departments. Data for all except the poorest quintile need to be interpreted with caution due to the small numbers involved.

Source: authors based on household budget survey data.



For the poorest quintile, out-of-pocket payments among households with catastrophic health spending is almost entirely driven by medicines, outpatient care and medical products in both survey periods (Fig. 27). Over time, the medicines share increased from 46% to 57%, while the outpatient share fell from 37% to 16%. The dental care share also increased, rising from 3% to 10%.

These shifts in spending among the poorest quintile may reflect the following changes in coverage policy:

- a significant reduction in the range of dental services available to medical card holders (Category I) from April 2010;
- the introduction of outpatient prescription charges for medical card holders from April 2010 and increases in, and caps for, these charges in 2013 and 2014; and
- the extension of GP visit cards to all children under 6 and all adults over 70 years of age from July 2015; previously, GP visit cards were available only to people of low income who were not eligible for medical cards.

In 2009–2010, almost all out-of-pocket payments for outpatient medicines among households with catastrophic health spending were for over-thecounter (non-prescribed) products (98%) rather than prescribed medicines (90% overall, rising to 100% in the poorest quintile). In 2015–2016, the over-the-counter share had fallen to 22% overall and 33% among the poorest quintile.

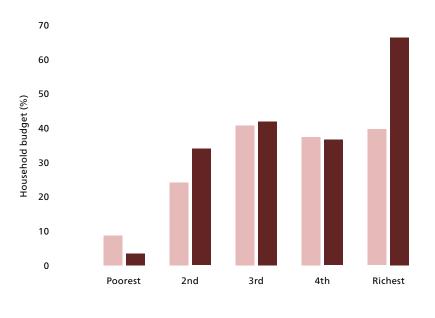
The low spending on prescribed medicines in 2009–2010 may be explained to some extent by the timing of the introduction of the prescription charge for medical card holders (Category I) in April 2010, which means the prescription charge was in place for just six of the 14 months of the household budget survey. In the second survey period, by which time the prescription charge had increased five-fold to €2.50 per item, it seems clear that many poor households had switched from spending on over-the-counter medicines to spending on prescribed medicines.

#### 5.4 How much financial hardship?

Among households with catastrophic health spending, the average amount spent on health as a share of total household spending rises progressively with income (Fig. 28). In 2015–2016, the richest quintile spent an average of 67% of their budget on out-of-pocket payments, while the poorest quintile spent just over 3%.

This is in line with recent research showing that families with very sick or disabled children can spend 30–40% of their income on the health and social care of their child (A. McNamara, Trinity College Dublin, unpublished data, 2014).

Fig. 28. Out-of-pocket payments as a share of total household consumption among households with catastrophic spending by consumption quintile





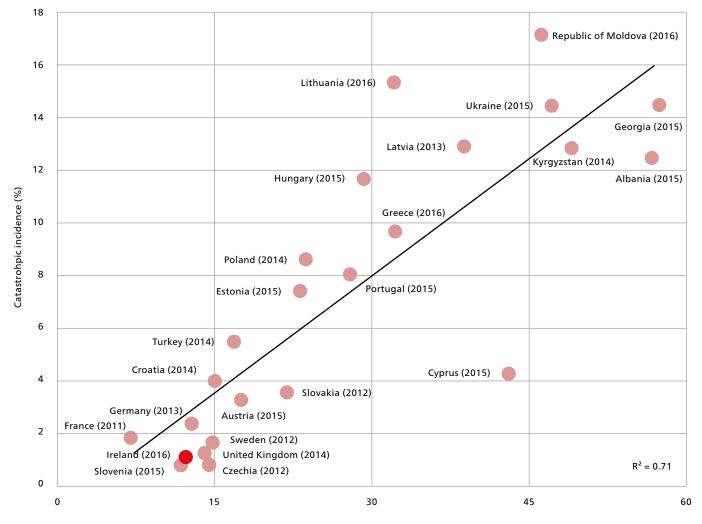
Source: authors based on household budget survey data.

#### 5.5 International comparison

The incidence of catastrophic out-of-pocket payments is low in Ireland in comparison with many other EU countries, including other EU15 (EU Member States from 1 January 1995) countries (Fig. 29). Ireland's low incidence may reflect unmet need for health care owing to financial barriers to access and some of the longest waiting times for specialist care in the EU.

Fig. 29. Incidence of catastrophic spending on health and the out-ofpocket share of total spending on health in selected European countries, latest year available Notes: R<sup>2</sup>: coefficient of determination. The out-of-pocket payment data are for the same year as the catastrophic spending data. Ireland is highlighted in red.

Source: WHO Regional Office for Europe (2019).



Out-of-pocket payments as a share of current spending on health (%)

#### 5.6 Summary

In 2015–2016, 1.2% of households experienced catastrophic out-of-pocket payments and close to 1% of households were impoverished or further impoverished after out-of-pocket payments. Catastrophic health spending is heavily concentrated among the poorest quintile and among people with medical cards.

The incidence of catastrophic spending increased slightly during the study period, but the increase was almost entirely driven by growing financial hardship among the poorest quintile.

In 2009–2010, catastrophic spending mainly went towards dental care. By 2015–2016, the largest share was spent on inpatient care. In both survey periods, this reflects spending among households in the two richest quintiles. For households in the poorest quintile, catastrophic spending is consistently driven by out-of-pocket payments for medicines.

These trends give rise to concerns about the effectiveness of the medical card system and policies such as the introduction of prescription charges for medical card holders, increases in the cap on these charges and reductions in dental care benefits.

# 6. Factors that strengthen and undermine financial protection

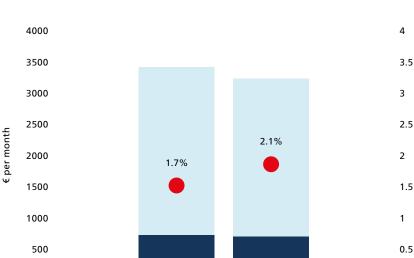
This section considers the factors that may be responsible for financial hardship caused by out-of-pocket payments in Ireland and that may explain the trend over time. Factors outside the health system that affect people's capacity to pay for health care, such as changes in living standards and the cost of living, are discussed first, and then factors within the health system.

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

The following paragraphs draw on data from the household budget survey and other national sources to review changes in people's capacity to pay for health care. All datasets indicate an increase in poverty in Ireland over time, and a reduction in households' capacity to pay for health care.

As was stated in the introductory section, Ireland was hit hard by the 2008 economic and financial crisis, experiencing a decline in real GDP in 2008 (-4.4%) and 2009 (-5%) and a doubling in the unemployment rate in 2009 (Eurostat, 2019). Unemployment peaked at 15.5% in 2012 and has since fallen to a pre-crisis level of 6.7% in 2017 (Eurostat, 2019).

Both the average cost of meeting basic needs (food, housing and utilities) and average household capacity to pay for health care increased slightly over time, but the share of households living below the basic needs line rose more, from 1.7% to 2.1% (Fig. 30), indicating a decline in living standards.

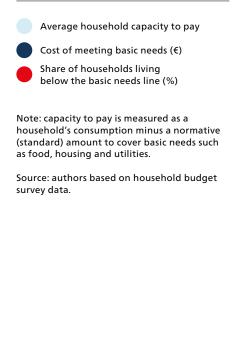


2009-2010

2015-2016

0

Fig. 30. Changes in the cost of meeting basic needs, capacity to pay for health care and the share of households living below the basic needs line

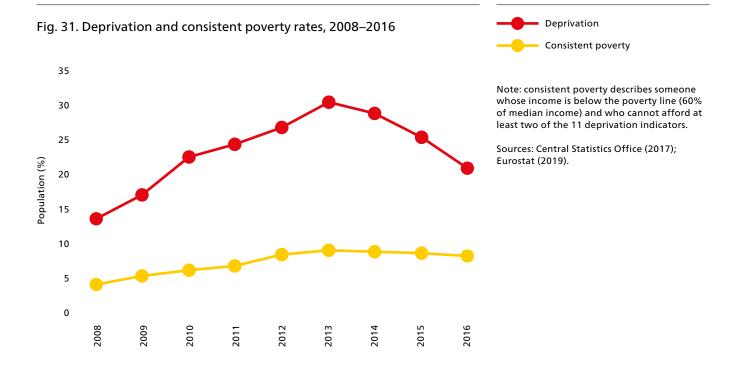


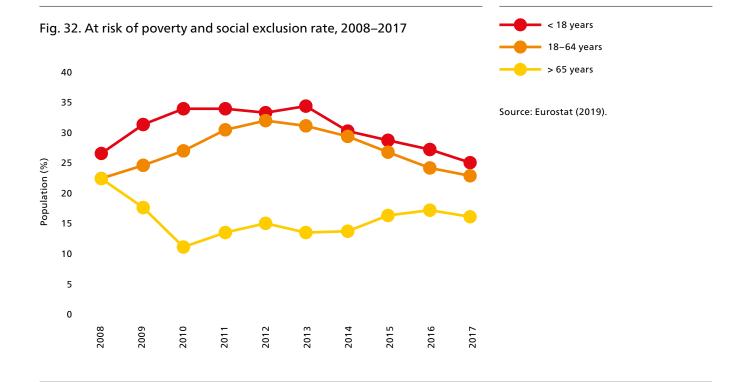
%

Households (

0

Other national data confirm a pattern of rising poverty using poverty lines that are higher than the basic needs line used in this review. Fig. 31 and Fig. 32 show that poverty rates rose sharply from 2008 to 2012 and, by some measures, have still not fallen to pre-crisis levels. Fig. 31 shows significant age-related differences in the share of the population at risk of poverty and social exclusion; as the crisis hit and unemployment rose, poverty rates among children and people of working age grew rapidly, while poverty rates among older people fell sharply initially and then began to rise. Unemployed people and children in non-working households are most susceptible to poverty (Healy et al., 2015).





These trends suggest that the substantial shift in the distribution of catastrophic and impoverishing health spending towards very poor households (see Fig. 23, for example) may in part be linked to rising poverty levels during and after the crisis.

## 6.2 Health system factors

This subsection looks at health spending and health coverage. Healthseeking behaviour and the relationship between unmet need and financial protection are also taken into account.

#### 6.2.1 Health spending

Levels of public spending on health are lower in Ireland than in other countries in western Europe, both as a share of GDP (Fig. 33) and as a share of total spending on health (Fig. 34). The public share of total spending on health fell from a peak of 79% in 2008 to a low of 70% in 2014, rising only slightly to 72% in 2016 (WHO, 2019).

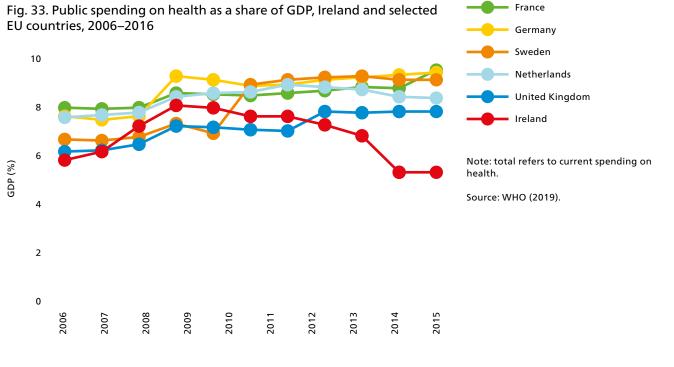
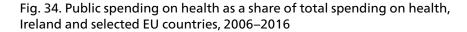
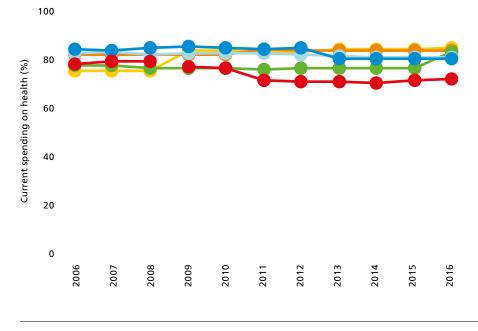


Fig. 33. Public spending on health as a share of GDP, Ireland and selected







Note: public refers to all compulsory financing arrangements.

Source: WHO (2019).

This decline reflects the transfer of €600 million from the government on to people during the crisis. Cuts to the health budget and staff numbers have had a direct impact on households in the form of increased rationing of health services through mechanisms such as longer waiting times for essential diagnosis and treatment. Although public spending on health has increased significantly since 2015, problems with long waiting times persist, as do many of the user charges introduced during the crisis.

Even before the crisis, Ireland's relatively heavy reliance on private spending on health, split fairly evenly between out-of-pocket payments and PHI, limited the potential for equitable access to health services (Smith & Normand, 2009, 2011; Turner, 2016).

#### 6.2.2 Health coverage

Gaps in coverage are one consequence of Ireland's complex system of entitlements. Coverage gaps were increased during the crisis, mainly through reductions in the benefits package and new or higher user charges (see Table 3 for a summary of changes to coverage policy). Budget cuts also had an impact on access through longer waiting times. Unmet need rose during the crisis, particularly for dental care and among poorer people (see Fig. 3).

Rules around **population entitlement** to publicly financed health services in Ireland are among the most complex in the EU (Thomson et al., 2014). Eligibility is based on residence, not on citizenship or payment of taxes or contributions, which is a good starting point for universality, but entitlement for many publicly financed benefits depends on meeting additional criteria such as income and, more recently, age.

Since 1970, eligibility to publicly financed health services has largely been based on income; low-income people (Category I) received medical cards, giving them access to most health services – including outpatient-prescribed medicines – free at the point of use. In 2001, the government extended medical cards to everyone aged over 70 years, but in March 2009, before the start of the first survey period in this study, the means test for older people was reinstated and in 2013 the income threshold was reduced, removing medical cards from a further 40 000 older people.

The main gap in the publicly financed **benefits package** is dental care. In January 2010, about halfway through the first survey period in this study, the following benefits were removed from people in Category I and Category II: biannual scale and polish, extended gum cleaning, unlimited fillings, root canal treatment, X-rays, dentures, denture repairs and miscellaneous items. Dental benefits for non-medical card holders were limited to an annual checkup and for medical card holders to an annual checkup plus two fillings a year and extractions. After the study period, in 2017, modest cash benefits (€42 a year) were introduced for non-medical card holders who have paid three years of social insurance contributions.

Until 2010, people with medical cards had access to publicly financed health services without paying any **user charges (co-payments)**. In April 2010, halfway through the first survey period in the study, **medical card** 

**holders** had to pay prescription charges for the first time. The initially low fixed co-payment of  $\leq 0.50$  per prescription item was increased to  $\leq 1.50$  in 2013 and  $\leq 2.50$  in 2014. Although there is a cap on prescription charges, this is relatively high for low-income people –  $\leq 120$  per household per year in 2010, rising to  $\leq 300$  by 2014. After the study period, both the prescription charge and the cap were lowered slightly (to  $\leq 2$  and  $\leq 20$ , respectively) for older people in 2017 and people aged under 70 in 2018.

Non-medical card holders have always had to pay heavy user charges for almost all health services. Before the study, these user charges included: €40–60 per GP visit with no annual cap; the full cost of outpatient prescriptions up to an annual cap of €1080 per household; €66 per day in hospital up to an annual cap of €660 per person; and €66 for use of the emergency department without a GP referral. In July 2015, towards the start of the second survey period in this study, GP visit cards extended free GP care to all children under 6 years and all adults aged over 70 years. With the exception of GP visit fees, all of these user charges were increased substantially, first in 2009, then again in 2012 and 2013. As a result, by 2013, non-medical card holders were paying the full cost of outpatient prescriptions up to an annual cap of €1728 per household (lowered to €1608 in 2018). The inpatient care annual cap was raised to €800 per person. The emergency department charge was raised to €100.

The other important issue is the absence of **waiting-time guarantees**. Waiting times are high for outpatient specialist care and elective surgical procedures (both inpatient and day cases). Faster access to specialist care is one of the main reasons people buy PHI, resulting in a two-tier system in which people who do not have PHI face unacceptable waiting times for treatment in public facilities (OECD, 2017). Take-up of PHI, which is concentrated among people with higher socioeconomic status, is encouraged by substantial tax subsidies (20% of the cost of the premium, capped at €200 per year for adults and €100 per year for children and students in 2013) and, since May 2015, financial penalties for those who do not buy PHI before the age of 35.

#### 6.2.3 Impact on financial protection

The low incidence of catastrophic health spending in Ireland can be attributed to the following factors:

- around 35% of the population holds a medical card and benefits from free access to a comprehensive set of publicly financed benefits, including (before April 2010) free access to outpatient-prescribed medicines; before March 2009, all people aged 70 and over held medical cards, so many of those with a greater need for health care benefited from free access to health care;
- for those who have to pay user charges, there are annual caps on copayments for outpatient-prescribed medicines and inpatient care;
- there is high take-up of PHI, providing people with faster access to specialist outpatient, day-case and inpatient care in public and private hospitals, meaning most people do not have to pay the high user

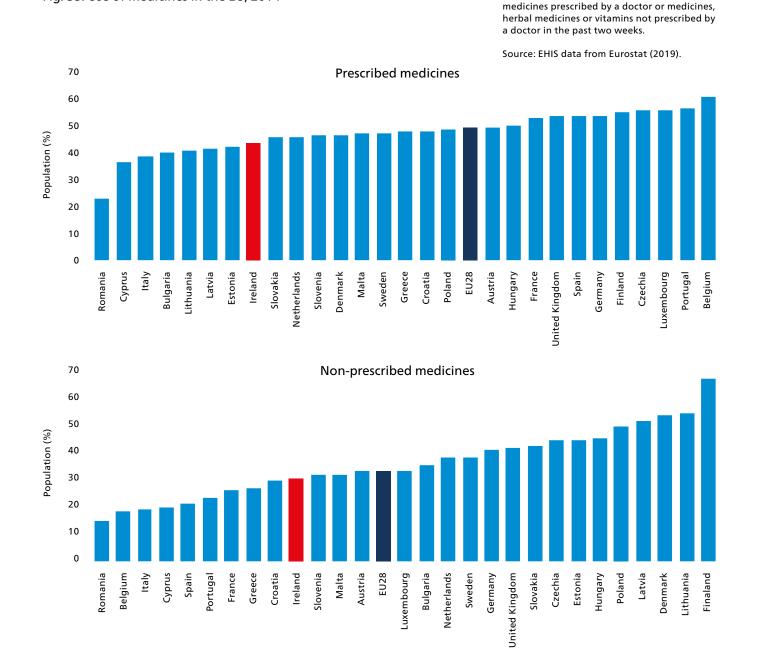
charges in place for inpatient care; before the crisis, PHI covered around 50% of the population – this share fell following the crisis but remains high (46%) and continues to increase; and

• the out-of-pocket payment share of total spending on health is low, ranging from 10.5–14.2% between 2000 and 2016, even when public spending on health fell due to budget cuts during the crisis.

Catastrophic spending on health is heavily concentrated among households that are further impoverished, impoverished and at risk of impoverishment after out-of-pocket payments, all of which are in the poorest quintile (see Fig. 22 and Fig. 23). In 2009–2010, about 4% of households in the poorest quintile experienced catastrophic spending, rising to over 5% in 2015–2016 and driving an increase in the overall incidence of catastrophic spending from 1% to 1.2%. Catastrophic spending on health is also heavily concentrated among households with medical cards. Among households with catastrophic spending, the share with medical cards rose from 77% in 2009–2010 to 86% in 2015–2016.

These results indicate that although the medical card system successfully protects many households from financial hardship, it does not provide enough protection for the poorest households, and that this protection has been eroded even further over time. In both survey periods, outpatient medicines account for the largest share of out-of-pocket spending among households in the poorest quintile. In 2015–2016, the medicines share increased and spending shifted from over-the-counter to prescribed medicines, probably reflecting the introduction and then subsequent increases in outpatient-prescription charges for medical card holders findings that suggest that even relatively low fixed co-payments with an annual cap can result in financial hardship for very poor households and at the same time present a financial barrier to access. EHIS data show that the use of both prescribed and non-prescribed medicines is on average lower in Ireland than in EU (Fig. 35). They also show that unmet need for prescribed medicines in Ireland is on average more than twice as high as the EU average and, within Ireland, more than twice as high among the least educated than the most educated people (see Fig. 4).

Around 20% of the population is not covered by a medical card, a GP visit card or PHI. Given that such a large share of the population is subject to heavy user charges, it is perhaps surprising that the incidence of catastrophic health spending is not higher. One reason for this may be unmet need. Unmet need has been a growing problem in Ireland since the crisis, as Fig. 3 shows.



#### Fig. 35. Use of medicines in the EU, 2014

63

Note: share of the population who used

Between the two survey periods, out-of-pocket payments rose for the two poorest quintiles and fell for the other three quintiles, both in absolute terms and as a share of household consumption (see Fig. 9 and Fig. 10), despite significant cuts to public spending on health. This suggests that some households opted not to spend more on health care overall, foregoing the use of health care or prioritizing the use of some services over others – medicines versus dental care, for example. This hypothesis is borne out by the tripling in self-reported unmet need for dental care between 2008 and 2012 (Fig. 3).

It is also notable that PHI premiums rose in nominal terms and as a share of household consumption for all quintiles during the study period, indicating that many people chose to hold on to PHI despite substantial premium increases. It is possible that household spending on PHI premiums also contributed to rising unmet need for health care following the crisis.

Being covered by PHI is likely to reduce out-of-pocket payments for the many households with PHI. Nevertheless, PHI represents a significant financial burden on households in Ireland, accounting for around 3% of household consumption in 2015–2016 (up from 2% in 2009–2010). It also undermines equity and efficiency in the health system in several ways.

- Although on average PHI premiums are progressively distributed across all households (see Fig. 16), they are a much more regressive form of financing than public spending on health because they are set as a flat rate rather than linked to income; this is compounded by tax subsidies that benefit those who are able to spend more on PHI rather than targeting those with lower incomes.
- PHI is purchased to obtain faster access to treatment in the context of long waiting times, but take-up is heavily concentrated among richer households, exacerbating inequalities in access to health care.
- Because incentives are not aligned across the publicly and privately financed parts of the health system, public resources for health care appear to be skewed towards those with PHI (Smith & Normand, 2011; Smith & Turner, in press).

A new vision for health services is set out in Sláintecare, a report from the Oireachtas Committee on the Future of Healthcare established in July 2016 (Oireachtas Committee on the Future of Healthcare, 2017) (Box 2). The Sláintecare proposals move the health system towards universalism. The findings of this study suggest that the proposals may not be enough to improve financial protection for poor households, however. Without exemptions from prescription charges for poor and regular users of health care, the incidence of catastrophic health spending is likely to remain high among the poorest quintile. Limited access to publicly financed dental care is another issue that is not yet addressed by the Sláintecare proposals.

#### Box 2. Sláintecare: a new plan for universal health care in Ireland

Sláintecare is a vision for a new health service detailed in the report from the Oireachtas Committee on the Future of Healthcare published in May 2017. It is the first time there has been political consensus on a health reform plan for the future and cross-party support to deliver a universal health system.

The main components of Sláintecare include the following:

- entitlement for all Irish residents to all health and social care services;
- no user charges to access GP, primary or hospital care and reduced user charges for outpatient medicines;
- care provided at the lowest level of complexity, often outside hospital, in an integrated way;
- e-health as key tool for developing a universal health system and integrated care;
- a strong focus on public health and health promotion;
- maximum waiting-time guarantees: four hours for emergency departments; 10 days for a diagnostic test; 10 weeks for an outpatient appointment; 12 weeks for an inpatient procedure;
- private care phased out of public hospitals;
- significant expansion of access to diagnostics in the community;
- earlier and better access to mental health services;
- an expanded workforce including allied health professionals, nurses and doctors; the importance of addressing recruitment and retention issues of all health-care staff and the development of integrated workforce planning is emphasized in the report;
- a new HSE Board, to be established promptly;
- accountability and clinical governance, to be legislated for; and
- a national health fund set up to ringfence funding for a transitional fund and expansion of entitlements.

The report sets out specific costings and timelines for implementation, recommending the establishment of an implementation office to drive the reform. The expansion of entitlements will cost an additional  $\leq 2.8$  billion by year 10, with a one-off transitional fund of  $\leq 3$  billion required over the first six years for infrastructure investment, expanded training capacity and timely implementation of the e-health strategy.

In August 2018, the government appointed an executive director to lead the Sláintecare Implementation Office and published a Sláintecare implementation strategy.

Source: Oireachtas Committee on the Future of Healthcare (2017).

## 6.3 Summary

The low incidence of catastrophic health spending in Ireland can be attributed to the fact that over a third of the population has free access to most health services, including (before April 2010) outpatient-prescribed medicines. For those who have to pay user charges, there are annual caps on co-payments for outpatient-prescribed medicines and inpatient care, and high take-up of PHI provides them with some protection from having to pay out of pocket for specialist care. As a result of these factors, the outof-pocket payment share of total spending on health is relatively low.

There are gaps in coverage, nevertheless. These gaps were expanded during the crisis, leading to higher financial hardship and greater unmet need over time.

The increase in the share of people with catastrophic health spending between 2009–2010 and 2015–2016 is linked to cuts in public spending on health, the introduction of prescription charges for medical card holders and increases in user charges for all households. The increase was concentrated among poorer households, resulting in a substantial shift in the distribution of catastrophic and impoverishing health spending towards very poor households. This shift may also be linked to rising poverty levels during and after the crisis.

Although the medical card system successfully protects many households from financial hardship, poorer households are still disproportionately likely to experience financial hardship, and protection has been eroded over time. Even relatively low fixed co-payments can lead to financial hardship for very poor households and, at the same time, present a financial barrier to access. EHIS data show that the use of both prescribed and non-prescribed medicines is lower in Ireland than in the EU, while unmet need for prescribed medicines is much higher. The degree of income inequality in unmet need for prescribed medicines is also high.

Cuts in dental benefits for all households and cuts in the number of health workers are associated with a steady increase in unmet need for health care and dental care between 2008 and 2012, particularly among poorer households. As waiting times for specialist care increased, many people continued to pay rising PHI premiums instead of paying out of pocket for dental care or outpatient care.

Being covered by PHI reduces exposure to out-of-pocket payments for many people. PHI nevertheless represents a significant financial burden on households, accounting for around 3% of household consumption in 2015–2016, up from 2% in 2009–2010. It also undermines equity and efficiency in the health system.

The findings of this study suggest that although the Sláintecare proposals move the health system towards universalism, they may not be enough to improve financial protection for poor households. Without exemptions from prescription charges for poor and regular users of health care, the incidence of catastrophic health spending is likely to remain high among the poorest quintile. Limited access to publicly financed dental care is another issue that is not yet addressed by the Sláintecare proposals.

# 7. Implications for policy

The incidence of catastrophic out-of-pocket payments is low in Ireland in comparison to most other EU countries, reflecting the fact that the poorest 35% of the population (Category I) has free access to most health services, including outpatient-prescribed medicines before 2010. This degree of protection for poor households is unusual among EU countries. In addition, high take-up of PHI offers some protection to many people who would otherwise have to pay heavy user charges for publicly financed outpatient and inpatient care (Category II).

There are gaps in coverage, nevertheless, particularly for outpatientprescribed medicines and dental care for all households and outpatient care for households in Category II. These gaps were expanded during the crisis, leading not only to higher financial hardship but also to greater unmet need.

In 2015–2016, nearly 1% of households were impoverished or further impoverished by out-of-pocket payments and 1.2% of households experienced catastrophic health spending, an increase from 0.5% and 1% respectively in 2009–2010. Financial hardship is heavily concentrated among poor households. During the study period, the share of households with catastrophic spending among the poorest quintile rose from 3.9% to 5.2%, while the share of medical card holders (Category I) among households with catastrophic spending rose from 77% to 86%.

The pattern of out-of-pocket payments among households with catastrophic spending closely reflects gaps in coverage and coverage policy changes over time.

- For the poorest quintile, catastrophic spending is almost entirely driven by medicines, outpatient care and medical products. Over time, the medicines and dental care share increased, while the outpatient care share fell, reflecting a significant reduction in the range of dental services available to medical card holders, the introduction of outpatient prescription charges for medical card holders in April 2010 and increases in, and caps for, these charges in 2013 and 2014.
- Catastrophic spending among households in the other quintiles shifted from outpatient care and dental care to medicines and inpatient care, reflecting growing unmet need for dental care in response to serious reductions in dental care benefits for Category II in 2010 and 2012.
- The fall in the outpatient care share of catastrophic spending, seen across all except the richest quintile, may reflect the extension of GP visit cards to all children under 6 and all adults over 70 years of age from July 2015.

These findings indicate that cuts in public spending leading to reductions in publicly financed coverage shift costs onto households and increase financial hardship, particularly among poor people.

They also suggest that although the medical card system successfully protects many households from financial hardship, gaps in coverage remain for the poorest households. Even relatively low fixed co-payments – the prescription charges introduced in 2010 and increased in 2013 and

2014 – can lead to financial hardship for very poor households and, at the same time, present a financial barrier to access. EHIS data show that the use of both prescribed and non-prescribed medicines is lower in Ireland than in the EU, while unmet need for prescribed medicines is much higher. The degree of income inequality in unmet need for prescribed medicines is also high.

The Sláintecare proposals aim to reduce prescription charges, which will clearly improve financial protection. The results of this study suggest the proposals should go further, however, and exempt poor households from prescription charges altogether.

Two other findings from the study have important implications for policy.

First, household spending on PHI premiums rose during the study period, so that by 2015–2016 it had overtaken household spending through out-of-pocket payments. This suggests that lifetime community rating encouraged some people to buy PHI for the first time and encouraged those with PHI to retain policies even when premiums were rising sharply. Household spending on PHI premiums appears to have crowded out some out-of-pocket spending over time – notably spending on dental care – possibly contributing to rising unmet need following the crisis.

Although PHI is likely to reduce out-of-pocket payments for those who have it, spending on PHI premiums represents a significant and growing financial burden on households, accounting for around 3% of household consumption in 2015–2016 (up from 2% in 2009–2010). The introduction of lifetime community rating in 2015 is likely to have added to this financial burden. PHI also undermines equity and efficiency in the health system, particularly through the presence of substantial tax subsidies that benefit those who are able to spend more on PHI rather than targeting those with lower incomes.

Second, the reduction in out-of-pocket spending per person among the three richest quintiles and the shift in out-of-pocket spending away from dental care at a time when entitlement to publicly financed health care was being cut, including a serious reduction in dental care benefits, coincides with substantial growth in unmet need for health care and dental care across all quintiles. Income-related inequality in unmet need also grew, particularly for dental care.

If unmet need had not grown, it is possible that the increase in catastrophic health spending over time would have been even greater.

Policy attention should now focus on:

- improving protection for medical card holders (Category I) by exempting them from prescription charges and increasing dental benefits;
- reducing out-of-pocket payments for outpatient-prescribed medicines and dental care for households in Category II by changing from the current system of patients paying the full cost of prescription up to a high annual cap to an income-related cap, and by introducing universal vouchers for dental care;

- extending publicly financed GP care to households on lower incomes;
- expanding prevention and community care services to help limit inappropriate patterns of demand for GP and specialist care;
- reducing co-payments for inpatient care;
- introducing waiting-time guarantees for public hospital services to reduce the need for people to pay out of pocket for private outpatient specialist care;
- simplifying what is at present an unusually complex set of entitlements to publicly financed health services; and
- introducing steps to address inequalities and inefficiencies linked to the presence of an unusually large market for supplementary PHI.

Many of these policy measures are set out in the Sláintecare proposals, which if implemented would reduce financial hardship and unmet need for many households.

## References

2. All websites accessed on 19 May 2020

Arora V, Karanikolos M, Clair A, Reeves A, Stuckler D, McKee M (2015). Data resource profile: the European Union Statistics on Income and Living Conditions (EU-SILC). Int J Epidemiol. 44(2):451–61. doi:10.1093/ije/dyv069.

Brick A, Gorecki, P, Nolan A (2013). Ireland: pharmaceutical prices, prescribing practices and usage of generics in a comparative context. Research series number 32. Dublin: Economic & Social Research Institute (ESRI) (https://www.esri.ie/publications/ireland-pharmaceutical-pricesprescribing-practices-and-usage-of-generics-in-a-comparative-context).<sup>2</sup>

Burke S (2015). Indicators of universal healthcare in Ireland: mapping the pathways to universal healthcare in Ireland. First seminar, 22 September 2015. Dublin: Trinity College.

Burke S, Normand C, Barry S, Thomas S (2016). From universal health insurance to universal healthcare? The shifting health policy landscape in Ireland since the economic crisis. Health Policy 120(3):235–40. doi:10.1016/j.healthpol.2015.12.001.

Burke S, Thomas S, Barry S, Keegan C (2014). Indicators of health system coverage and activity in Ireland during the economic crisis, 2008–2014 – from "more with less" to "less with less". Health Policy 117(3):275–8. doi:10.1016/j.healthpol.2014.07.001.

Central Statistics Office (2017a). Household Budget Survey (HBS), 2009–2010, 2015–2016 [datasets]. Irish Social Science Data Archive. Dublin: University College Dublin (http://www.ucd.ie/issda/hbs).

Central Statistics Office (2017b). Survey of Income and Living Conditions (SILC) 2016 Results. Cork: CSO.

Collins M (2015). A future Irish healthcare system. Some context, some thoughts. Dublin: Nevin Economic Research Institute.

Cylus J, Thomson S, Evetovits T (2018). Catastrophic health spending in Europe: equity and policy implications of different calculation methods. Bull World Health Organ. 96(9):599–609. doi:10.2471/BLT.18.209031.

Department of Health (2013). Review of measures to reduce costs in the private health insurance market 2013. Independent report to the Minister for Health and Health Insurance Council. Dublin: Department of Health.

Department of Health and Children (2010). Report of the expert group on resource allocation and financing in the health sector. Dublin: Government Publications (https://www.lenus.ie/handle/10147/108017).

Department of Public Expenditure and Reform (2018). Health budget oversight and management: alignment of health budget and national service plan. Dublin: Department of Public Expenditure and Reform (http://www.budget.gov.ie/Budgets/2019/Documents/Health%20 Budget%20Oversight%20and%20Management.pdf). European Commission (2017). Special Eurobarometer 470: corruption. In: EU Open Data Portal [website]. Brussels: European Commission (http:// ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/ getSurveyDetail/instruments/SPECIAL/surveyKy/2176).

Eurostat (2019). Database. In: Eurostat [website]. Brussels: Eurostat (http://ec.europa.eu/eurostat/data/database).

Expert Panel on Effective Ways of Investing in Health (2016). Report of the Expert Panel on Effective Ways of Investing in Health (EXPH) on access to health services in the European Union. Brussels: European Commission (https://ec.europa.eu/health/expert\_panel/sites/expertpanel/files/015\_access\_healthservices\_en.pdf).

Expert Panel on Effective Ways of Investing in Health (2017). Report of the Expert Panel on Effective Ways of Investing in Health (EXPH) on benchmarking access to healthcare in the European Union. Luxembourg: Publications Office of the European Union (https://ec.europa.eu/health/ expert\_panel/sites/expertpanel/files/docsdir/opinion\_benchmarking\_ healthcareaccess\_en.pdf).

Government of Ireland (2016). Programme for a partnership government. Dublin: Government of Ireland (https://www.gov.ie/en/ publication/8040b7-programme-for-government-programme-for-apartnership-government/).

Health Insurance Authority (2014). Lifetime community rating (LCR) explained. In: The Health Insurance Authority [website]. Dublin: Health Insurance Authority (https://www.hia.ie/consumer-information/lifetimecommunity-rating-explained?referrer=/blog/publications/introduction-oflifetime-community-rating-lcr-to-the-private-health-insurance-market-faq/).

Health Insurance Authority (2016). 2016 annual report & accounts. Dublin: Health Insurance Authority (https://www.hia.ie/sites/default/ files/62580%20HIA%20Annual%20Report%20ENGLISH%20with%20 Cover.pdf).

Health Insurance Authority, Kantar Milward Brown (2017). A review of private health insurance in Ireland, 2017. Dublin: Health Insurance Authority, Kantar Milward Brown (https://www.hia.ie/publication/consumer-surveys).

Health Service Executive (2009). Primary Care Reimbursement Service: statistical analysis of claims and payments 2009. Dublin: Health Service Executive.

Health Service Executive (2014). Report of the expert panel on medical need for medical card eligibility. Dublin: Health Service Executive (https://www.hse.ie/eng/services/publications/corporate/expertpanelmedicalneed.pdf).

Health Service Executive (2015). Health service performance report. January 2015. Dublin: Health Service Executive (https://www.hse.ie/eng/services/publications/performancereports/january-2015-performance-report.pdf).

Health Service Executive (2016). Primary Care Reimbursement Service (PCRS): statistical analysis of claims and payments 2015. Dublin: Health Service Executive (https://www.hse.ie/eng/staff/pcrs/pcrs-publications/pcrs-statistical-analysis-of-claims-and-payments-2015.pdf).

Health Service Executive (2017). Management data report: September 2017. Dublin: Health Service Executive (https://www.hse.ie/eng/services/publications/performancereports/september-2017-management-data-report.pdf).

Health Service Executive (2018). Number of eligible persons per scheme/CHO. In: PCRS Business Intelligence [website]. Dublin: Health Service Executive.

Healy S, Delaney A, Leahy A, Murphy M, Reynolds B, Robinson J (2015). Towards a just society. Securing economic development, social equity and sustainability. Dublin: Social Justice Ireland (https://library.concordeurope. org/record/1856/files/DEEEP-BOOK-2017-001.pdf?version=1).

Houses of the Oireachtas (2016). Committee on the Future of Healthcare debate – meeting, Wednesday 30th November 2016 (opening presentation statement by Tony O'Brien). In: Houses of the Oireachtas [website]. Dublin: Houses of the Oireachtas (https://www. oireachtas.ie/en/debates/debate/committee\_on\_the\_future\_of\_ healthcare/2016-11-30/2/).

Houses of the Oireachtas (2017). Committee on the Future of Healthcare. Sláintecare report. Dublin: Houses of the Oireachtas (https://www. oireachtas.ie/en/committees/32/future-of-healthcare/).

Layte R, Nolan A, Nolan B (2007). Poor prescriptions. Poverty and access to community health services. Dublin: Combat Poverty Agency.

Murphy C, Moore P, McHugh S, Nolan H (2014). Health and social care utilisation. In: Nolan A, O'Regan C, Dooley C, Wallace D, Hever A, Cronin H et al., editors. The over 50s in a changing Ireland. Economic circumstances, health and well-being 2014. Dublin: The Irish Longitudinal Study on Ageing (TILDA):123–52 (https://www.ucd.ie/t4cms/0053-02\_TILDA\_Wave2\_v2.3\_Key\_Findings\_Report.pdf).

National Treatment Purchase Fund (2018). Inpatient/day case active waiting list. In: National Treatment Purchase Fund [website]. Dublin: National Treatment Purchase Fund (https://www.ntpf.ie/home/inpatient.htm).

Nolan A, Barry S, Burke S, Thomas S (2014). The impact of the financial crisis on the health system and health in Ireland. Copenhagen: Regional Office for Europe (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies) (http://www.euro.who.int/\_\_data/assets/pdf\_file/0011/266384/The-impact-of-the-financial-crisis-on-the-health-system-and-health-in-Ireland.pdf?ua=1).

Organisation for Economic Co-operation and Development (2017). Health at a glance 2017. Paris: Organization for Economic Cooperation and Development (https://www.oecd-ilibrary.org/social-issues-migrationhealth/health-at-a-glance-2017\_health\_glance-2017-en). O'Riordan M, Collins C, Doran, G (2013). Access to diagnostics – a key enabler for a primary care led health service. Dublin: Irish College of General Practitioners (https://pdfs.semanticscholar. org/3257/3f8b13fb238cc847bb69837fdbb967168576.pdf?\_ ga=2.108793026.1981855745.1574967916-1557203673.1574517997).

Revenue, Irish Tax and Customs (2016). Changes to medical insurance relief. Information for employers. Dublin: Revenue, Irish Tax and Customs (https://psc.ie/wp-content/uploads/2016/07/changes-medical-insurance-relief-info-for-employers.pdf).

Sagan A, Thomson S (2016). Voluntary health insurance in Europe: role and regulation. Copenhagen: WHO Regional Office for Europe (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies) (http://www.euro.who.int/ en/publications/abstracts/voluntary-health-insurance-in-europe-countryexperience-2016).

Smith S, Normand C (2009). Analysing equity in health care financing: a flow of funds approach. Soc Sci Med. 69(3):379–86. doi: 10.1016/j. socscimed.2009.05.030.

Smith S, Normand C (2011). Equity in health care: the Irish perspective. Health Econ Policy Law 6(2):205–17. doi: 10.1017/S1744133110000289.

Smith S, Turner B (in press). Uncovering the complex role of private health insurance in Ireland. In: Thomson S, Sagan A, Mossialos E, editors. Private health insurance: history, politics, performance. Cambridge: Cambridge University Press.

Thomas S, Burke S, Barry S (2014). The Irish health-care system and austerity: sharing the pain. Lancet 383(9928):1545–6. doi:10.1016/S0140-6736(14)60744-3.

Thomson S, Evetovits T, Cylus J (2018). Financial protection in highincome countries: a comparison of the Czech Republic, Estonia and Latvia. Copenhagen: WHO Regional Office for Europe (http://www.euro. who.int/en/health-topics/Health-systems/health-systems-financing/ publications/2018/financial-protection-in-high-income-countries.-acomparison-of-the-czech-republic,-estonia-and-latvia-2018).

Thomson S, Jowett M, Mladovsky P (2014). Health system responses to financial pressures in Ireland. Policy options in an international context. Copenhagen: WHO Regional Office for Europe (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies) (http://www.euro.who.int/en/publications/ abstracts/health-system-responses-to-financial-pressures-in-ireland-2014).

Turner B (2016). Ireland. In: Sagan A, Thomson S (2016). Voluntary health insurance in Europe: role and regulation. Copenhagen: WHO Regional Office for Europe, European Observatory on Health Systems and Policies:77–82 (http://www.euro.who.int/en/publications/abstracts/ voluntary-health-insurance-in-europe-country-experience-2016). Turner B (2018). Putting Ireland's health spending into perspective. Lancet 391(10123):833–4. doi:10.1016/S0140-6736(18)30461-6.

Wagstaff A, van Doorslaer E (2003). Catastrophe and impoverishment in paying in health care: with applications to Vietnam 1993–1998. Health Econ. 12(11):921–34.

WHO (2010). The world health report. Health systems financing: the path to universal health coverage. Geneva: World Health Organization (https://www.who.int/whr/2010/en/).

WHO (2019). Global health expenditure database. In: World Health Organization [website]. Geneva: World Health Organization (https://apps. who.int/nha/database).

WHO Regional Office for Europe (2019). Can people afford to pay for health care? New evidence on financial protection in Europe. Copenhagen: WHO Regional Office for Europe (http://www.euro. who.int/en/health-topics/Health-systems/health-systems-financing/ publications/2019/can-people-afford-to-pay-for-health-care-newevidence-on-financial-protection-in-europe-2019).

Xu K, Evans D, Carrin G, Aguilar-Rivera A, Musgrove P, Evans T (2007). Protecting households from catastrophic health spending. Health Affairs 26(4):972–83. doi:10.1377/hlthaff.26.4.972.

Xu K, Evans D, Kawabata K, Zeramdini R, Klavus J, Murray C (2003). Household catastrophic health expenditure: a multicountry analysis. Lancet 362(9378):111–17. doi:10.1016/S0140-6736(03)13861-5.

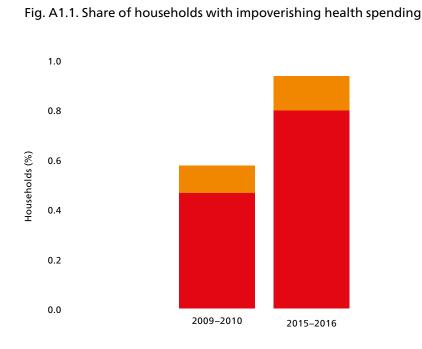
## Annex 1. The affordability of household spending on health services and private health insurance premiums combined

Financial protection analysis focuses on out-of-pocket payments and typically does not include household spending on private health insurance (PHI) premiums. This is because PHI premiums, like taxes or social insurance contributions, involve pre-payment that explicitly is intended to reduce exposure to out-of-pocket payments.

In most countries, the bulk of household spending on health is through out-of-pocket payments for health services; PHI premiums usually account only for a small share. In Ireland, however, PHI accounts for a large share of household spending on health, and its share has grown over time, rising from 41% in 2009–2010 to 56% in 2015–2016. It is now the single largest area of household spending on health.

The following figures set out the results of adding PHI premiums to the report's analysis of financial protection, which is based on out-of-pocket payments only. The combination of out-of-pocket payments and PHI premiums is referred to as household spending on health.

Fig. A1.1 shows the share of households with impoverishing health spending, which rose from 0.6% in 2009–2010 to 0.9% in 2015–2016.



Impoverished

Further impoverished

Source: authors based on household budget survey data.

Households with unaffordable spending on health are defined as those that spend more than 40% of their capacity to pay out-of-pocket payments and PHI premiums. In 2009–2010, around 1.3% of households experienced unaffordable spending on health, rising slightly to around 2% in 2015–2016 (Fig. A1.2). These results are only marginally higher than those obtained when only out-of-pocket payments are taken into consideration (1% in 2009–2010 and 1.2% in 2015–2016; see Fig. 23 in the main report).

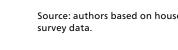
Fig. A1.2. Share of households experiencing unaffordable spending on health

2.0%

2009-2010 2015-2016

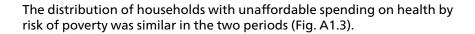
1.3%

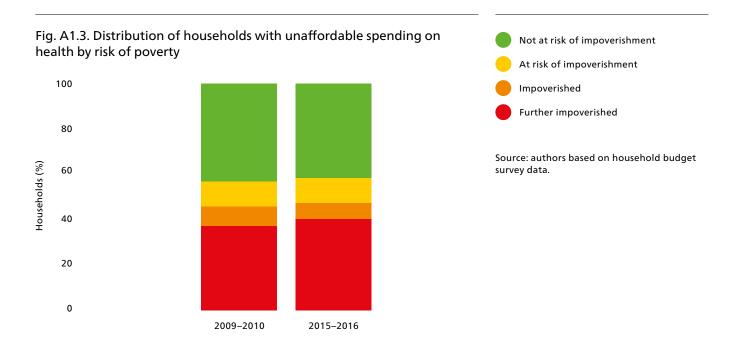
Source: authors based on household budget





77





The incidence of unaffordable spending on health varies substantially across consumption quintiles and was concentrated among the poorest 40% of households in both periods (Fig. A1.4). By 2015–2016, the share of households in the poorest quintile experiencing unaffordable spending had grown considerably, while the share in the second quintile fell.

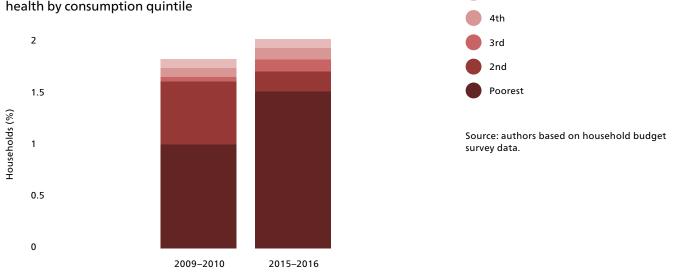
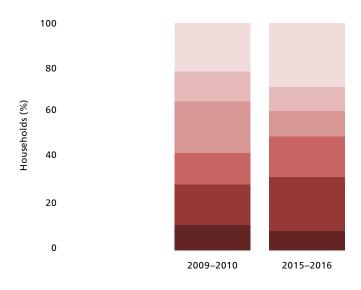


Fig. A1.4. Distribution of households with unaffordable spending on health by consumption quintile

A breakdown of the composition of households experiencing unaffordable spending on health shows the majority in 2009–2010 were households headed by a single person over the age of 65 (18%) and those with at least one child under the age of 14 (36%) (Fig. A1.5). By 2015–2016, the share of households headed by a single person over the age of 65 experiencing unaffordable spending on health had grown to 24%, while decreasing for those with at least one child under the age of 14 (22%).

## Fig. A1.5. Distribution of households with unaffordable spending on health by household composition

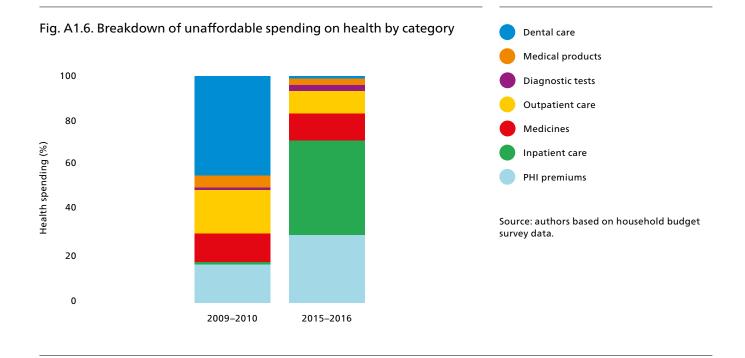




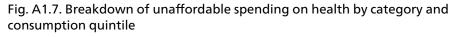
Richest

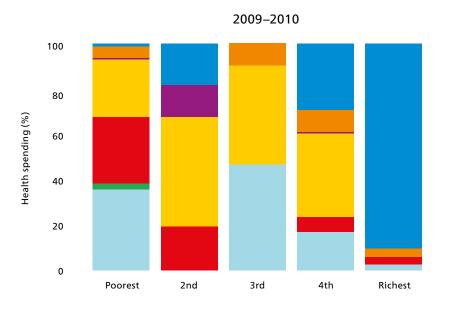
Source: authors based on household budget survey data.

In 2009–2010, the largest share of unaffordable household spending on health (44%) went towards dental care; just under 20% went towards both outpatient care and PHI premiums. In 2015–2016, the largest share was for inpatient care (41%) followed by PHI premiums (30%, up from 17%). The increase in the share spent on PHI premiums led to a substantial decrease in the shares spent on dental care and outpatient care (Fig. A1.6).



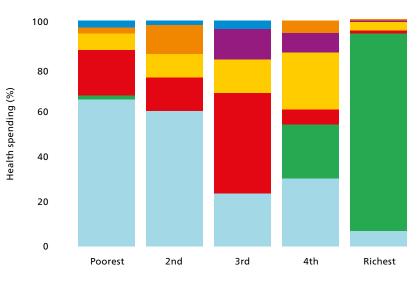
The distribution of unaffordable spending on health by type of care varies by consumption quintile (Fig. A1.7), although the data for all except the poorest quintile should be interpreted with caution due to the small numbers involved. The share spent on PHI premiums increased over time for all except the third quintile. The increases were particularly large among the two poorest quintiles.







Source: authors based on household budget survey data.



2015–2016

## Annex 2. 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). A new European version of COICOP known as ECOICOP, intended to encourage further harmonization across countries, was introduced in 2016 (Eurostat, 2016).

Information on health-related consumption comes under COICOP code 6, which is further divided into three groups, as shown in Table A2.1. 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).

In a very small minority of countries in Europe (Belgium, France, Luxembourg and Switzerland), people entitled to publicly financed health care may pay for treatment themselves, then claim or receive reimbursement from their publicly financed health insurance fund (OECD, 2019). In a wider range of countries, people may also be reimbursed by entities offering voluntary health insurance – for example, private insurance companies or occupational health schemes. To avoid households reporting payments that are subsequently reimbursed, many household budget surveys in Europe specify that household spending on health should be net of any reimbursement from a third party such as the government, a health insurance fund or a private insurance company (Heijink et al., 2011).

Some surveys ask households about spending on voluntary health insurance. 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?

Classification tools such as COICOP (and ECOICOP in Europe) support standardization, but they do not address variation in the instruments used to capture data (e.g. diaries, questionnaires, interviews, registers), response rates and unobservable differences such as whether the survey sample is truly nationally representative. Cross-national variation in survey instruments can affect levels of spending and the distribution of spending across households. It is important to note, however, that its effect on spending on health in relation to total consumption – which is what financial protection indicators measure – may not be so great.

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 A2.1. Health-related consumption expenditure in household budget surveys

Source: United Nations Statistics Division (2018).

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

#### References

Eurostat (2015). Household Budget Survey 2010 Wave EU Quality report. Brussels: Eurostat (http://ec.europa.eu/eurostat/ documents/54431/1966394/LC142-15EN\_HBS\_2010\_Quality\_Report\_ ver2+July+2015.pdf/fc3c8aca-c456-49ed-85e4-757d4342015f).

Eurostat (2016). Regulation (EU) 2016/792 of the European Parliament and of the Council of 11 May 2016 on harmonised indices of consumer prices and the house price index, and repealing Council Regulation (EC) No 2494/95. O. J. E. U. L135/11:1–28 (https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32016R0792&from=EN).

Heijink R, Xu K, Saksena P, Evans D (2011). Validity and comparability of out-of-pocket health expenditure from household surveys: a review of the literature and current survey instruments. Geneva: World Health Organization (HSS/HSF/DP.E.11.1; https://www.who.int/health\_ financing/documents/dp\_e\_11\_01-oop\_errors.pdf?ua=1). OECD (2019). Health systems characteristics survey 2016 [online database]. Paris: Organisation for Economic Co-operation and Development (https://gdd.oecd.org/subject.aspx?Subject=hsc).

United Nations Statistics Division (2018). COICOP 2018 structure and explanatory notes. In: United Nations Statistics Division [website]. New York (NY): United Nations Statistics Division (https://unstats.un.org/unsd/classifications/expertgroup/egm2017/ac340-5b.PDF).

Yerramilli P, Fernández O, Thomson S (2018). Financial protection in Europe: a systematic review of the literature and mapping of data availability. Health Policy 122(5):493–508 (http://www.healthpolicyjrnl. com/article/S0168-8510(18)30049-6/fulltext).

## Annex 3. 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) and WHO Regional Office for Europe (2019).

#### 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 guantified 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-ofpocket 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 categories based on their level of out-of-pocket spending on health in relation to the poverty line (the basic needs line):

- no out-of-pocket payments: households that report no out-of-pocket payments;
- not at risk of impoverishment after out-of-pocket payments: non-poor households (those whose equivalent person total consumption exceeds the poverty line) with out-of-pocket payments that do not push them below 120% of the poverty line (i.e. households whose per equivalent person consumption net of out-of-pocket payments is at or above 120% of the poverty line);
- at risk of impoverishment after out-of-pocket payments: non-poor households with out-of-pocket payments that push them below 120% of the poverty line; this review uses a multiple of 120%, but estimates were also prepared using 105% and 110%;
- impoverished after out-of-pocket payments: households who were nonpoor before out-of-pocket payments, but are pushed below the poverty line after out-of-pocket payments; 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; and
- further impoverished after out-of-pocket payments: poor households (those whose equivalent person total consumption is below the poverty line) who incur 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 for health care. Thresholds are arbitrary. The threshold used most often with capacity to pay measures is 40%. This review uses 40% for reporting purposes, but estimates were also prepared 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; i.e. all households who are impoverished after out-of-pocket payments, because their out-of-pocket payments are greater than their capacity to pay for health care; and
- those with out-of-pocket payments whose ratio of out-of-pocket payments to capacity to pay is less than zero (negative); i.e. all households who are further impoverished after out-of-pocket payments, because they do not have any capacity to pay for health care.

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

#### References

Thomson S, Evetovits T, Cylus J, Jakab M (2016). Monitoring financial protection to assess progress towards universal health coverage in Europe. Public Health Panorama. 2(3):357–66 (http://www.euro.who.int/en/publications/public-health-panorama/journal-issues/volume-2,-issue-3,-september-2016/original-research2).

United Nations Statistics Division (2018). COICOP code 06 detailed structure and explanatory notes. In: United Nations Statistics Division [website]. New York (NY): United Nations Statistics Division (https://unstats.un.org/unsd/cr/registry/regcs.asp?Cl=5&Lg=1&Co=06).

Wagstaff A, Eozenou P (2014). CATA meets IMPOV: a unified approach to measuring financial protection in health. Washington (DC): The World Bank (Policy Research Working Paper No. 6861).

WHO Regional Office for Europe (2019). Can people afford to pay for health care? New evidence on financial protection in Europe. Copenhagen: WHO Regional Office for Europe (http://www.euro. who.int/en/health-topics/Health-systems/health-systems-financing/ publications/2019/can-people-afford-to-pay-for-health-care-newevidence-on-financial-protection-in-europe-2019). Xu K, Evans D, Carrin G, Aguilar-Rivera A, Musgrove P, Evans T (2007). Protecting households from catastrophic health spending. Health Aff. 26(4):972–83.

Xu K, Evans D, Kawabata K, Zeramdini R, Klavus J, Murray C (2003). Household catastrophic health expenditure: a multicountry analysis. Lancet. 362:111–7. **Regional indicators** 

# Annex 4. Regional and global financial protection indicators

WHO uses regional and global indicators to monitor financial protection in the European Region, as shown in Table A4.1.

Table A4.1. Regional and global financial protection indicators in the European Region

icators + Glo

**Global** indicators

Note: PPP: purchasing power parity.

Sources: WHO headquarters and WHO Regional Office for Europe.

Risk of poverty due to out-of-pocket payments: the proportion of households further impoverished, impoverished, at risk of impoverishment or not at risk of impoverishment after out-of-pocket payments using a country-specific line based on household spending to meet basic needs (food, housing and utilities)	<ul> <li>Changes in the incidence and severity of poverty due to household expenditure on health using:</li> <li>an extreme poverty line of PPP-adjusted US\$ 1.90 per person per day</li> <li>a poverty line of PPP-adjusted US\$ 3.10 per person per day</li> <li>a relative poverty line of 60% of median consumption or income per person per day</li> </ul>				
Catastrophic out-of-pocket payments					
The proportion of households with out- of-pocket payments greater than 40% of household capacity to pay for health care	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)				

#### **Regional indicators**

The regional indicators 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.

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

#### **Global indicators**

The global indicators 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, the global indicator 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, the regional indicator 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.

The approach used in the European Region results in the incidence of catastrophic out-of-pocket payments being highly concentrated among poor households in all countries (Cylus et al., 2018). 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 poverty lines set at US\$ 1.90 or US\$ 3.10 a day in purchasing power parity (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 – facilitate international comparison (Saksena et al., 2014).

#### References

Cylus J, Thomson S, Evetovits T (2018). Catastrophic health spending in Europe: equity and policy implications of different calculation methods. Bull World Health Organ. 96:599–609 (http://dx.doi.org/10.2471/BLT.18.209031).

Saksena P, Smith T, Tediosi F (2014). Inputs for universal health coverage: a methodological contribution to finding proxy indicators for financial hardship due to health expenditure. BMC Health Serv Res. 14:577.

WHO, World Bank. Tracking universal health coverage: first global monitoring report. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/174536/1/9789241564977\_eng.pdf?ua=1).

WHO, World Bank. Tracking universal health coverage: 2017 global monitoring report. Geneva: World Health Organization; 2017 (http://www.who.int/healthinfo/universal\_health\_coverage/report/2017/en/).

Yerramilli P, Fernández O, Thomson S (2018). Financial protection in Europe: a systematic review of the literature and mapping of data availability. Health Policy 122(5):493–508 (http://www.healthpolicyjrnl. com/article/S0168-8510(18)30049-6/fulltext).

## Annex 5. 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 reported levels of consumption expenditure or income over a given time period. The available data rarely capture all of the financial resources available to a household – for example, resources in the form of 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 health spending. 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 and households who are further impoverished.

**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 *balance billing* (a system in which providers are allowed to charge patients more than the price or tariff determined by the third-party payer), *extra billing* (billing for services that are not included in the benefits package) 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 person:** 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 years or over count as 0.7 equivalent adults and children under 13 count as 0.5 equivalent adults.

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

**Financial hardship:** People experience financial hardship when out-ofpocket 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 impoverished households:** Poor households (those whose equivalent person total consumption is below the poverty line or basic needs line) who incur 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.

Impoverished households: Households who were non-poor before outof-pocket payments, but are pushed below the poverty line or basic needs line after out-of-pocket payments.

**Impoverishing out-of-pocket payments:** Also referred to as impoverishing health spending. 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.

**Informal payment:** a direct contribution made in addition to any contribution determined by the terms of entitlement, in cash or in kind, by patients or others acting on their behalf, to health care providers for services to which patients are entitled.

**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: formal co-payments (user charges or user fees) for covered goods and services; formal payments for the private purchase of goods and services; and 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 households into quintiles based on per equivalent person 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:** Everyone can 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.

### World Health Organization Regional Office for Europe

	Regional Office for Eu	rope	
a specialized 1948 with al health ional Office proughout the	UN City, Marmorvej 51 Tel.: +45 45 33 70 00 F Email: eurocontact@w Website: www.euro.wl	/ho.int	, Denmark
red to the ries it serves.			
	Luxembourg	Slovakia	
	Malta Monaco	Slovenia Spain	
	Montenegro	Sweden	
	Netherlands North Macedonia	Switzerland Tajikistan	
	Norway Poland	Turkey Turkmenistan	
	Portugal	Ukraine United Kingdom	
n	Republic of Moldova Romania	Uzbekistan	
	Russian Federation San Marino		
	Serbia		
	•		
•			•

### Member States

Albania Andorra Armenia Austria Azerbaijan Belarus Belgium Bosnia and Herzegovina Bulgaria Croatia Cyprus Czechia Denmark Estonia	Finland France Georgia Germany Greece Hungary Iceland Ireland Israel Italy Kazakhstan Kyrgyzstan Latvia Lithuania	Luxembourg Malta Monaco Montenegro Netherlands North Macedonia Norway Poland Portugal Republic of Moldova Romania Russian Federation San Marino Serbia			
ISBN 9789289055086					
9 <sup>1789289</sup> 055086>					