

# Can people afford to pay for health care?

New evidence on financial protection in Austria Thomas Czypionka Gerald Röhrling Eva Six

### 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.

200 21 2020

705

TTTT

11111



# Can people afford to pay for health care?

New evidence on financial protection in Austria

Written by: Thomas Czypionka Gerald Röhrling Eva Six

Edited by: Ilaria Mosca Sarah Thomson

Series editors: Sarah Thomson Jonathan Cylus Tamás Evetovits

# 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.

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

ISBN 9789289053396

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 2018

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full. 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 the World Health Organization 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 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 the World Health Organization 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 the World Health Organization 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 the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

### About the series

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

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

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

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

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

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

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

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

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

# Contents

|       | res, tables and boxes   | vi   |
|-------|---|------|
|       | eviations   | viii |
|       | owledgements<br>  | ix   |
| Execu | utive summary   | X    |
| 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   | Coverage  | 10   |
| 3.2   | Access, use and unmet need                                      | 16   |
| 3.3   | Summary   | 19   |
| 4.    | Household spending on health                                    | 21   |
| 4.1   | Out-of-pocket payments  | 22   |
| 4.2   | Informal payments   | 29   |
| 4.3   | What drives changes in out-of-pocket payments?                  | 29   |
| 4.4   | Summary   | 31   |
| 5.    | Financial protection  | 33   |
| 5.1   | How many households experience financial hardship?              | 34   |
| 5.2   | Who experiences financial hardship?                             | 36   |
| 5.3   | Which health services are responsible for financial protection? | 39   |
| 5.4   | How much financial hardship?                                    | 41   |
| 5.5   | International comparison  | 43   |
| 5.6   | Summary   | 44   |
| 6.    | Factors that strengthen and undermine financial protection      | 45   |
| 6.1   | Factors affecting people's capacity to pay for health care      | 46   |
| 6.2   | Health system factors   | 49   |
| 6.3   | Summary   | 54   |
| 7.    | Implications for policy   | 57   |
| Refer | rences  | 60   |
| Anne  | ex 1. Household budget surveys in Europe                        | 65   |
|       | ex 2. Methods used to measure financial protection in Europe    | 68   |
| Anne  | ex 3. Regional and global financial protection indicators       | 74   |
| Anne  | ex 4. Glossary of terms   | 77   |

### **Figures**

**Fig. 1.** Income inequality in selfreported unmet need for health and dental care due to cost, distance and waiting time in Austria, 2004–2016 18

Fig. 2. Self-reported unmet need due to cost in Austria by labour market status, 2014 19

Fig. 3. Share of households with and without out-of-pocket payments 22

**Fig. 4.** Share of households reporting no out-of-pocket payments by consumption quintile 23

**Fig. 5.** Annual out-of-pocket spending on health care per person by consumption quintile 23

**Fig. 6.** Out-of-pocket payments for health care as a share of household consumption by consumption quintile 24

**Fig. 7.** Breakdown of total out-ofpocket spending by type of health care 25

**Fig. 8.** Breakdown of total out-ofpocket spending by type of health care and consumption quintile 26

**Fig. 9.** Annual out-of-pocket spending on health care per person by type of health care 27 **Fig. 10.** Annual out-of-pocket spending on health care per person by type of health care and consumption quintile 28

**Fig. 11.** Spending on health per person by financing scheme, 2004–2015 29

Fig. 12. Out-of-pocket payments as a share of total spending on health, 2004–2015 30

Fig. 13. Share of households at risk of impoverishment after out-ofpocket payments 34

**Fig. 14.** Share of households with catastrophic out-of-pocket payments 35

**Fig. 15.** Share of households with catastrophic spending by risk of impoverishment 36

**Fig. 16.** Share of households with catastrophic spending by consumption quintile 37

**Fig. 17.** Breakdown of households with catastrophic spending by age, household structure and economic activity 38

**Fig. 18.** Breakdown of catastrophic spending by type of health care 39

**Fig. 19.** Breakdown of catastrophic spending by type of health care and consumption quintile 40

**Fig. 20.** Out-of-pocket payments as a share of total household spending among households with catastrophic spending by consumption quintile 41

**Fig. 21.** Out-of-pocket payments as a share of total household spending among further impoverished households 42

**Fig. 22.** Incidence of catastrophic spending on health and the out-of-pocket share of total spending on health in selected European countries, latest year available 43

**Fig. 23.** Changes in the cost of meeting basic needs, capacity to pay and the share of households living below the basic needs line 46

**Fig. 24.** Trends in wages, pensions and poverty, 2005–2015 47

**Fig. 25.** Breakdown of the poorest consumption quintile by age and economic activity 48

**Fig. 26.** Public spending on health and GDP per person in the EU, 2015 49

# Tables

# Boxes

| <b>Fig. 27.</b> Breakdown of total spending<br>on health by financing scheme, EU15,<br>2015<br>50                   | <b>Table 1.</b> Key dimensions of<br>catastrophic and impoverishing<br>spending on health<br>6 |
|---|--|
| <b>Fig. 28.</b> Public spending on health as a share of total government spending, selected EU15 countries, 2015 50 | <b>Table 2.</b> User charges for publicly financed health services, 2017<br>14                 |
| <b>Fig. 29.</b> Public and private payments for outpatient prescribed medicines, 2004–2014                          | <b>Table 3.</b> Changes to coverage policy,<br>2004–2017<br>15                                 |
| 53  | <b>Table 4.</b> Gaps in coverage<br>15   |

**Box 1.** Unmet need for health care 17

# Abbreviations

| ASVG    | General Social Security Act (Allgemeines Sozialversicherungsgesetz)  |
|---------|--|
| B-KUVG  | Act on Civil Servants' Health and Accident Insurance (Beamten-       |
|         | Kranken- und Unfallversicherungsgesetz)                              |
| BSVG    | Farmers' Social Insurance Act (Bauern-Sozialversicherungsgesetz)     |
| BVA     | Insurance Institution of Public Employees (Versicherungsanstalt      |
|         | öffentlicher Bediensteter)   |
| EHIS    | European Health Interview Survey                                     |
| EU      | European Union   |
| EU15    | European Union Member States from 1 January 1995 to 30 April 2004    |
| EU27    | European Union Member States as of 1 January 2007                    |
| EU28    | European Union Member States as of 1 July 2013                       |
| EU-SILC | European Union Statistics on Income and Living Conditions            |
| GDP     | gross domestic product   |
| GSVG    | Act on Social Insurance for the Self-Employed (Gewerbliches          |
|         | Sozialversicherungsgesetz)   |
| HVSV    | Federation of Austrian Social Security Institutions (Hauptverband    |
|         | der österreichischen Sozialversicherungsträger)                      |
| LSE     | London School of Economics and Political Science (United Kingdom)    |
| OECD    | Organisation for Economic Co-operation and Development               |
| REGO    | cap on prescription fees (Rezeptgebührenobergrenze)                  |
| SVA     | Social Insurance Institution of Commerce and Industry                |
|         | (Sozialversicherungsanstalt der gewerblichen Wirtschaft)             |
| SVB     | Social Insurance Institution for Farmers (Sozialversicherungsanstalt |
|         | der Bauern)  |
| VAEB    | Austrian Miners' and Railway Workers' Insurance Fund                 |
|         | (Versicherungsanstalt für Eisenbahnen und Bergbau)                   |
| VHI     | voluntary health insurance   |
| VVO     | Association of Austrian Insurance Companies                          |
|         | (Versicherungsverband Österreich)                                    |
| WKO     | Austrian Economic Chamber (Wirtschaftskammer Österreich)             |

# 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, directed by Hans Kluge, in the WHO Regional Office for Europe. The series editors are Sarah Thomson, Jonathan Cylus and Tamás Evetovits.

The review of financial protection in Austria was written by Thomas Cyzpionka, Gerald Röhrling and Eva Six (Institute for Advanced Studies). It was edited by Ilaria Mosca and Sarah Thomson (WHO Barcelona Office).

The WHO Barcelona Office is grateful to Stefan Eichwalder (Federal Ministry of Labour, Social Affairs, Health and Consumer Protection), Josef Probst (Federation of Austrian Social Security Institutions) and August Österle (Vienna University of Economics and Business) for their feedback on an earlier draft of the review.

Thanks are also extended to Statistics Austria for making the household budget survey data available to the authors.

Data on financial protection were shared with Statistics Austria as part of a WHO consultation on universal health coverage indicators held in 2017 and 2018.

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 Nancy Gravesen (copyediting), Aleix Artigal and Alex Prieto (design and typesetting) and Juan García Domínguez (checking proofs).

Please cite the review as: Czypionka T, Röhrling G, Six E (2018). Can people afford to pay for health care? New evidence on financial protection in Austria. Copenhagen: WHO Regional Office for Europe.

### **Executive summary**

The incidence of catastrophic spending on health in Austria is lower than in many other countries in Europe, but higher than in France, Germany, the Netherlands, Slovenia, Sweden and the United Kingdom.

Publicly financed mandatory health insurance covers most of the population (98–99.9%, depending on the source of data) and the publicly financed benefits package is relatively broad, although waiting times for inpatient care are an issue. The main gap in coverage comes from user charges (co-payments), which are applied to most health services and can be high for some groups of people. Importantly, the type and level of co-payment often varies significantly across social insurance schemes and funds, especially for medical products, exacerbating inequality in access to health care. Co-payments for prescribed medicines, however, are uniform across the country, and their design is generally more protective than the design of co-payments for other health services: there is a fixed co-payment per pack (as opposed to percentage co-payments), with automatic exemptions for some vulnerable groups of people and an income-related cap per person set at 2% of net household income.

Voluntary health insurance does not address coverage gaps caused by copayments, but mainly plays a supplementary role, allowing people to choose among contracted physicians, use non-contracted physicians, purchase greater comfort in hospitals and obtain faster access to elective treatment in public hospitals.

Self-reported unmet need for health care is very low by European Union standards, including for dental care. Although there is some income inequality in unmet need for dental care, the gap between rich and poor has narrowed over time.

Several steps have been taken in recent years to improve equity in the use of health services and strengthen financial protection, including extending coverage to previously underserved parts of the population, reducing co-payments and enhancing protection from co-payments. A process to harmonize benefits and co-payments across social insurance schemes and funds was initiated in 2017 and is being implemented gradually.

In 2014/2015, 3.2% of households in Austria experienced catastrophic outof-pocket payments. Catastrophic out-of-pocket payments affect the poorest households most and are also heavily concentrated among older households and households with children. The overall incidence of catastrophic spending on health rose from 2.1% to 3.2% between 2009/2010 and 2014/2015, largely driven by an increase among the poorest quintile. This could reflect the impact on households of the economic crisis and rising unemployment. Dental care is the largest single cause of financial hardship, reflecting limited coverage and inequalities in coverage that favour richer households. For the poorest quintile, medical products and outpatient medicines are the next most important contributors to financial hardship. Overall, however, outpatient medicines are a relatively minor cause of financial hardship, even though they are the second-largest area of out-of-pocket spending on health after dental care. This reflects the very high share of public spending on outpatient prescriptions (88%) compared to dental care and medical products (48%), which in turn attests to the relatively protective design of co-payment policy for outpatient prescriptions and more recent efforts to reduce out-ofpocket payments for medicines. The introduction of an income-related cap on co-payments for outpatient prescriptions in 2008 - combined with a cut in the value-added tax rate for medicines in 2009 – appears to have led to an absolute fall in out-of-pocket spending on outpatient medicines between 2009/2010 and 2014/2015 and to a reduction in the outpatient medicines share of catastrophic health spending, especially for the poorest quintile.

To improve financial protection, policy attention should focus on coverage of dental care and medical products, learning lessons from the protective features of coverage and co-payment policy for outpatient prescriptions. Ensuring that low-income households are systematically exempt from all co-payments, and extending the income-related cap on co-payments for outpatient prescriptions to co-payments for all health services, would improve financial protection, especially for poorer people. Some of this improvement could be financed by better use of public resources and redistribution across social insurance schemes through a risk-equalization mechanism.

# 1. Introduction

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

Austria has a highly developed health system with near universal coverage of its population through non-competing social insurance funds organized under different schemes. Membership of a particular scheme is determined by profession, location of employment or place of residence. Some selfemployed professionals – for example, doctors and pharmacists – can opt as a group to purchase substitutive private health insurance instead of joining a social insurance fund, but few choose to do so.

Public spending on health as a share of GDP was 7.8% in 2015, slightly above the average of 7.3% for EU15 countries (the European Union (EU) Member States from 1 January 1995 to 30 April 2004), but lower than in countries such as Denmark, France, Germany, the Netherlands, Sweden and the United Kingdom (WHO, 2018). Public spending per person has increased steadily over time, and was not significantly affected by the financial and economic crisis, which resulted in a fall in GDP in 2009 (Eurostat, 2018a). Out-of-pocket payments accounted for 18% of total spending on health in 2015, a higher share than in most EU15 countries and substantially higher than in France, Germany and the Netherlands (WHO, 2018).

In recent years, several steps have been taken to improve equity in the use of health services and strengthen financial protection, including extending coverage to previously underserved parts of the population, reducing copayments and enhancing protection from co-payments. Many but not all publicly financed benefits are harmonized across social insurance funds. Concern about significant variation in benefits and co-payments gained further momentum in 2017, and a process to harmonize them was initiated.

This review presents the first comprehensive and up-to-date analysis of financial protection in Austria (Yerramilli et al., 2018). Previous analyses have focused on out-of-pocket payments, without assessing financial protection (Sanwald & Theurl, 2015, 2016, 2017). Studies that have assessed financial protection in Austria include a global analysis, which used household budget survey data from 1999/2000 (Xu et al., 2007), and European analyses, which have focused on people aged over 50 (Scheil-Adlung & Bonan, 2013; Arsenijevic et al., 2016; Palladino et al., 2016). The methods used in this study are different from the methods used in previous analyses.

The review is structured as follows. Section 2 sets out the analytical approach and sources of data used to measure financial protection. Section 3 provides a brief overview of health coverage and access to health care. Sections 4 and 5 present the results of the statistical analysis of household budget survey data, with a focus on out-of-pocket payments in section 4 and financial protection in section 5. Section 6 provides a discussion of the results of the financial protection analysis and identifies factors that strengthen and undermine financial protection: those that affect people's capacity to pay for health care and health system factors. Section 7 highlights implications for policy. Sections 3, 4, 5 and 6 each end with a short summary of the section's main points. Annex 1 provides information on household budget surveys, Annex 2 the methods used and Annex 3 regional and global financial protection indicators. Annex 4 contains a glossary of terms.

# 2. Methods

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

# 2.1 Analytical approach

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

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

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

Source: Thomson et al. (2018).

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

# 2.2 Data sources

The study analyses anonymized microdata from the Austrian household budget surveys (*Konsumerhebungen*) conducted by Statistics Austria in 2004/2005, 2009/2010 and 2014/2015. The data sample was generated from the central register of residents (*Zentrales Melderegister*). It consisted of 8400 households in 2004/2005, 6534 households in 2009/2010 and 7162 households in 2014/2015 (Statistics Austria, 2006, 2011, 2016).

As the share of households with catastrophic out-of-pocket payments is relatively low in Austria, the number of observations is small. This means that the results for some categories – mainly the higher consumption quintiles – should be interpreted with a degree of caution.

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, service coverage and user charges) and reviews the role played by voluntary health insurance (VHI). It summarizes some key trends in rates of health service use, levels of unmet need for health care, and inequalities in service use and unmet need.

# 3.1 Coverage

Responsibility for legislation and implementation of the social insurance system lies with the federal (central) level, except for the hospital sector, which is predominantly the responsibility of the federal states (*Bundesländer*).

The system has three branches (health, pensions and work accidents) organized through different laws resulting in the following schemes.

**Employees, freelancers, apprentices and those receiving government benefits** (unemployment benefits, childcare benefits, pensions) are protected by the General Social Security Act (ASVG) of 1956 that covers around 77% of the population through a mix of regional and occupation-based social insurance funds (calculations based on the Federation of Austrian Social Security Institutions (HVSV), 2016).

Farmers (4%) are covered under the Farmers' Social Insurance Act (BSVG).

**Self-employed people** (8%) are covered under the Act on Social Insurance for the Self-Employed (GSVG).

**Officials and civil servants** (8%) are insured under the Act on Civil Servants' Health and Accident Insurance (B-KUVG) by the Insurance Institution of Public Employees (BVA). At regional level, some civil servants are covered under one of the 15 health care and work accident insurance carriers (*Krankenfürsorgeanstalten*, KFA) established by regional governments. In 2015, about 145042 civil servants and their dependants were insured under this scheme. However, due to a lack of data, the exact number is not known (Fuchs et al., 2017).

The remaining 3% of the population are insured by five small health insurance funds or the Austrian Miners' and Railway Workers' Insurance Fund (VAEB) (HVSV, 2016).

#### 3.1.1 Population entitlement

Health insurance is mandatory and covers almost the entire population (99.9%), according to administrative data (HVSV, 2017b). Membership of a social insurance scheme is determined by profession, location of the employer or place of residence and extends to the dependants of those paying contributions: children (up to the age of 27 if they are in education), spouses and partners (same-sex couples). Some members of the liberal professions (for example, self-employed physicians, pharmacists or veterinarians) can choose as a group to opt out of social insurance and purchase substitutive private insurance. In 2015, about 20 000 people opted out (Fuchs et al., 2017).

Conscripts and prisoners are not insured; medical care is provided directly by the respective government ministry (Fuchs et al., 2017).

Lack of data prevents a definitive statement about the actual number of uninsured people. Survey data suggest that around 2% of residents are without coverage, mostly people without stable employment, people with serious mental health problems, unemployed people (women in particular) and migrants (often those without legal residential status) (Muckenhuber et al., 2011; Habersack et al., 2011). A recent analysis indicates that people lacking coverage are mainly unregistered asylum seekers, students too old to be covered as dependants<sup>1</sup> and unemployed people (Fuchs et al., 2017). However, administrative data report that only 0.01% of the population lacks coverage.

#### 3.1.2 Service coverage

Any insured person has a legal entitlement to health benefits in kind and in cash. Around 91% of all health benefits are provided in kind (HVSV, 2016). Benefits cover a wide range of service areas: primary care, inpatient care and outpatient specialist care, psychotherapy, speech therapy, physiotherapy and occupational therapy, pharmaceutical products (medicines), therapeutic aids, dentistry, medical nursing care at home, medical rehabilitation and transportation expenses.

Social security laws mainly provide a functional description of these benefits, without using positive lists. This gives the social insurance schemes and funds some leeway in defining benefits together with their provincial contractual partners (the chamber of doctors). Thus, while many areas of benefits are harmonized across schemes and funds, some are not – most commonly, medical devices, medical and therapeutic aids and psychotherapy.

In 2017, a process to harmonize benefits across schemes was initiated. This entails adjustments to current contracts and laws (HVSV, 2017a). To date, 11 of 23 service areas have been harmonized, including health promotion, wheelchairs and transport costs. Some benefits such as psychotherapy or some medical products have not yet been harmonized (HVSV, 2017a).

Waiting times are an issue for elective treatment in public hospitals. Research has identified considerable differences in waiting times for elective surgery across the states (*Länder*) (Czypionka et al., 2007). Although there are no waiting time guarantees, in 2011 a waiting-list management system was introduced for planned surgery.

### 3.1.3 User charges

User charges vary significantly across the schemes (Table 2). For most health services, people covered under ASVG (employees) and BSVG (farmers) are more likely to benefit from care that is free at the point of use than self-employed people (GSVG) and civil servants (B-KUVG). User charges also vary across different funds in the same scheme, especially for therapeutic and medical aids, medical devices and psychotherapy. This results in substantial variation in user charges as a share of a social insurance fund's total health

1. Survey data indicate that 1.4% of students (0.05% of the population) are not insured (Institut für Höhere Studien, 2016).

revenue: for example, 3.4% (ASVG), 5.9% (BSVG), 7.0% (B-KUVG) and 7.4% (GSVG) in 2015 (LSE, 2017).

This variation is a concern in Austria, particularly for medical products and dental care, because some schemes can afford to be more generous than others. It has its roots in the historical development of the schemes. The ASVG (employees) originally mainly covered blue-collar workers and other low-income earners, so the system of benefits in kind is expressly strong in this law, as is the exemption from most user charges. In contrast, people covered under the GSVG (self-employed) and, especially, the B-KUVG (civil servants) were seen as higher-income earners, so user charges were deemed to be more acceptable. However, in 2017 a process was initiated to harmonize benefits and differences in user charges across schemes and funds (HVSV, 2017a).

User charges for **outpatient visits** vary across social insurance schemes. Some require people to pay 10% or 20% of the tariff for contracted physicians. All require out-of-pocket payment for use of non-contracted physicians; the tariffs for these physicians vary considerably. Since 2006, there has been a cap on user charges for civil servants (B-KUGV); the cap depends on the sum of co-payments, net household income and the size of the household (BVA, 2017). In 2013, a cap of 5% of the contributor's net annual income was set for self-employed people (GSVG) (SVA, 2017).

User charges for **medical products** (for example, glasses, orthopaedic arch supports, trusses and wheelchairs) have varied substantially across schemes and, within the ASVG (employees), across funds, with differences amounting to thousands of euros (LSE, 2017). Most people were covered up to €1328 per medical aid (LSE, 2017), but some regional funds in the ASVG applied a lower threshold. The process to abolish differences in user charges for medical products initiated in 2017 is gradually being implemented (HVSV, 2017a).

Benefit ceilings also vary substantially for different therapeutic appliances used in cases of mutilation, disfigurement and physical disability (i.e. electrical wheelchairs). For example, regional funds in Wien and Tirol cover up to €498, while regional funds in Niederösterreich, Oberösterreich and Salzburg can provide benefits of up to €3320. People insured under BSVG, B-KUVG and GSVG receive benefits up to €3320 (LSE, 2017).

In contrast to medical products, user charges for **medicines** are set centrally and apply in the same way to all social insurance schemes and funds. The charges are simple: a fixed co-payment per pack (€5.85 in 2017) for prescribed medicines on a positive list (the Reimbursement Codex) (HVSV, 2017c). Since 1983, the prescription fee has been automatically adjusted based on a formula linked to the average health insurance contribution base (HVSV, 2017a, 2017b, 2017c). Between 2000 and 2017, the fixed co-payment rose from €4.00 to €5.85 (Österreichische Apothekerkammer, 2017). Only pharmaceuticals on the positive list are covered.

Certain population groups are exempt from the prescription fee. People receiving the minimum pension, conscientious objectors choosing alternative civilian service, people with notifiable communicable diseases<sup>2</sup> and asylum seekers are automatically exempt. People with low incomes can apply for an exemption (§31 paragraph 8 ASVG). The exemption is granted if monthly net income is lower than €889.84 (for single people) or €1334.17 (for couples) (in

 People with the following diseases are exempt from prescription fees: sexually transmitted diseases, including HIV/AIDs; diseases like hepatitis or cholera; diseases like measles or mumps; and tuberculosis. 2017). These limits are increased by €137.30 for each child (HVSV, 2017b), so the threshold for a couple with two children would be €1608.77 a month in 2017. According to the most recent available data, 517601 people (around 6% of the population) are exempt (LSE, 2017).

Since 2008, people have also benefited from a cap on prescription fees, which is set at 2% of the contributor's net annual income (REGO). Dependants' prescription fees are included in this cap (HVSV, 2017c). In 2015, 400 506 people (around 4.5% of the population) reached the cap (LSE, 2017).

User charges for **dental care** vary across social insurance schemes and funds and for different types of treatment (Sanwald & Theurl, 2016). Basic dental services are offered with negligible user charges for employees (ASVG), and farmers (BSVG) pay a quarterly lump-sum fee; civil servants (B-KUVG) pay 10% of the costs since 2016, and self-employed people (GSVG) pay 20% of the costs (Sanwald & Theurl, 2016). For specialized treatments (like endodontic services) private payments are substantial and account for approximately 50% of the costs. Since 2014, there is free coverage for serious orthodontic needs (braces) for children under 18 years (§ 447i ASVG).

Over time, several **changes to coverage policy** are likely to have affected out-of-pocket payments (Table 3). All except one change has aimed to reduce out-of-pocket spending.

### 3.1.4 The role of VHI

VHI mainly plays a supplementary role, offering single or double rooms in hospitals (*Sonderklasse*, special class), wider choice via private providers, choice of hospital physician and faster access to elective care (i.e. shorter waiting times). Although illegal to prioritize patients with VHI, empirical evidence shows that VHI policy holders can obtain faster access to elective care in public hospitals (§16 Federal Hospitals Act) (Czypionka et al., 2013).

VHI also plays a complementary role, providing access to goods and services that are not covered by the social insurance scheme, and a substitutive role for those who opt out of the social insurance scheme (Czypionka & Sigl, 2016).

In 2015, VHI covered around 36% of the population (VVO, 2016), financed 5% of current spending on health care and accounted for 28% of private spending on health (WHO, 2018). VHI coverage for outpatient care is growing at annual rates of around 10% (VVO, 2016).

Individual plans dominate the VHI market; group insurance schemes only account for 28% of total premium income. More than half of the people with VHI are between 20 and 50 years old, and approximately 20% of policies are purchased for children under the age of one (Czypionka & Sigl, 2016). Self-employed people and white-collar workers are more likely to take out VHI. No additional information on the socioeconomic characteristics of people with VHI is available.

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

### Table 2. User charges for publicly financed health services, 2017

Notes: NA: not applicable. Diagnostic tests include other paramedical services; medical products include non-medicine products and equipment. In 2017, a process to harmonize benefits across schemes was initiated and is gradually being implemented.

Sources: BVA (2017), HVSV (2017b, 2017c), SVA (2016, 2017), SVB (2017).

| Service area                         | Type and level of user charge   | Exemptions   | Cap on user charges paid   |
|--------------------------------------|---|--|--|
| Outpatient visits                    | <b>Employees (ASVG):</b> annual fee of €11.40 for an e-card; no further charge for contracted providers; 20% of the tariff for non-contracted providers   | Children under 27, pensioners<br>and low-income people   | Use of contracted providers: the<br>annual fee acts as a cap<br>Use of non-contracted providers; no    |
|                                      | Farmers (BSVG): quarterly fee (if treated) of €9.61<br>(€38.44 a year); no further charge for contracted<br>providers; percentage co-payment of 20% of the tariff<br>for non-contracted providers   | Children under 27 and<br>low-income people   | Use of contracted providers: the<br>quarterly fee acts as a cap<br>Use of non-contracted providers; no |
|                                      | for non-conducted providers   | Νο   |  |
|                                      | Self-employed (GSVG): percentage co-payment of<br>20% of the tariff (10% if they reach five personal<br>health goals: blood pressure, weight, exercise,<br>tobacco, alcohol)  |  | 5% of the net annual income of the person paying contributions   |
|                                      |   | No   |  |
|                                      | <b>Civil servants (B-KUVG):</b> percentage co-payment<br>of 10% of the tariff (20% for removal orthodontic<br>devices)  |  | Depends on the sum of co-<br>payments and household size and<br>net income                             |
| Dental care                          | Same as outpatient visits, if the examination is medically necessary ( <b>conservation and surgery</b> ); prostheses and hygienist visits are not fully covered.  | Serious orthodontic needs<br>for children under 18   | Same as outpatient visits for<br>employees, self-employed people<br>and civil servants                 |
|                                      | For specialized dental services/orthodontics<br>Employees (ASVG): fee of €11.35 per calendar year<br>Farmers (BSVG): percentage co-payment of 50%<br>Self-employed (GSVG): percentage co-payment of<br>50%<br>Civil servants (B-KUVG): percentage co-payment<br>of 10–20% |  |  |
| Outpatient prescription<br>medicines | Fixed co-payment of €5.85 per pack for medicines<br>on the positive list  | Automatic exemption:<br>people on the minimum<br>pension, conscientious<br>objectors choosing<br>alternative civilian service,<br>asylum seekers<br>Exemption following<br>application:<br>low-income people | Co-payments must not exceed 2%<br>of the net annual income of the<br>person paying contributions       |
| Diagnostic tests                     | None if the examination is medically necessary/<br>referred by a contracted health worker   | Detailed rules are laid down<br>in the official scale of fees<br>( <i>Honorarordnungen</i> ) of the<br>different funds   | NA   |
| Medical products                     | Percentage co-payment; varies across funds; 10%<br>(20% for self-employed), minimum of €33.20 per<br>item (€99.60 for visual aids)  | People who require<br>medical products due to<br>disfigurement or disability or<br>are undergoing rehabilitation   | Self-employed (GSVG): 5% of the<br>net annual income of the person<br>paying contributions             |
|                                      |   | Low-income people, children<br>under 15 years and people<br>younger than 24 years and<br>still in education  | Civil servants (B-KUVG): depends<br>on the sum of co-payments and<br>household size and net income     |

| Service area                     | Type and level of user charge  | Exemptions   | Cap on user charges paid  |
|----------------------------------|--|--|---|
| Inpatient care                   | Fixed co-payment of €1–19 per day depending on the state ( <i>Land</i> ) | Automatic exemption:<br>people on the minimum<br>pension, conscientious<br>objectors choosing<br>alternative civilian service,<br>asylum seekers<br>Exemption following<br>application:<br>low-income people | €336–532 in a calendar year<br>(the co-payment is waived after<br>a person has spent 28 days in<br>hospital in a calendar year) |
| Inpatient prescription medicines | None   | NA   | NA  |

### Table 3. Changes to coverage policy, 2004–2017

| Year | Change  | Health service targeted         | Population group targeted                                 |
|------|---|---------------------------------|---|
| 2005 | Cutback in legal minimum benefits for vision aids             | Vision aids                     | Employees (ASVG)  |
| 2006 | Introduction of a cap on co-payments                          | Outpatient visits               | Civil servants (B-KUGV)                                   |
| 2008 | Introduction of an income-related cap on co-payments (REGO)   | Outpatient prescribed medicines | All insured   |
| 2009 | Value-added tax rate on all medicines reduced from 20% to 10% | All medicines                   | Whole population  |
| 2013 | Introduction of an income-related cap<br>on co-payments       | Outpatient visits               | Self-employed people (GSVG)                               |
| 2013 | Introduction of a cap on co-payments                          | Outpatient visits               | Farmers (BSVG)  |
| 2015 | Free coverage of orthodontic braces                           | Dental care                     | Insured children under 18 with severe tooth displacements |
| 2016 | Percentage co-payment rate reduced from 20% to 10%            | Outpatient visits               | Civil servants (B-KUGV)                                   |
| 2017 | Abolition of co-payments for hospital stays                   | Inpatient care                  | Children under 18   |

### Table 4. Gaps in coverage

Source: authors.

Source: authors.

|  | Population<br>entitlement  | Service coverage  | User charges   |
|--|--|---|--|
| Issues in the<br>governance of publicly<br>financed coverage | Migrants without a<br>legal resident permit<br>and some marginalized<br>individuals are not<br>insured | Benefits vary across social insurance schemes and<br>sometimes across funds and states ( <i>Länder</i> ); no waiting<br>time guarantees; informal payments to obtain faster<br>access to inpatient care | Variation in co-payment policy<br>across social insurance schemes<br>and funds for outpatient visits,<br>dental care and medical products;<br>regional variation in co-payments<br>for inpatient care  |
| Main gaps in publicly<br>financed coverage                   | 0.01–2% uninsured<br>(depending on the<br>data source)   | Waiting times for inpatient care  | No overall cap on co-payments;<br>no universal cap for co-payments<br>for medical products; low-income<br>people and regular users of health<br>care are not systematically exempt<br>from co-payments |
| Are these gaps covered<br>by VHI?                            | No   | Yes; covers around 36% of the population for faster access to treatment   | No   |

# 3.2 Access, use and unmet need

According to the Organisation for Economic Co-Operation and Development (OECD, 2018), Austria has the highest number of practising physicians per 1000 inhabitants in the EU, and this number has steadily increased from 3.7 physicians in 2000 to 5.1 physicians in 2014. However, the number of nurses per 1000 inhabitants is relatively low in comparison to the EU average, although slightly increasing (OECD, 2018).

The number of dentists per 100000 inhabitants has been steadily increasing from 46 dentists in 2000 to 57 dentists in 2014. Although dentist density is lower than the EU average of 68, the average number of consultations with a dentist per person per year is comparable to the EU average (1.15 in Austria vs 1.09 among 18 EU countries in 2015). The average number of consultations has fallen since 2000 (1.30).

Acute hospital discharge rates are very high in Austria in comparison to the EU average. The use of inpatient care increased slightly from 25.9 inpatient care discharges per 100 persons in 2000 to 28.1 discharges in 2008 but fell to 26.3 discharges in 2014 (WHO Regional Office for Europe, 2016). The level and development of outpatient contacts is similar to the EU average. In 2014, there were on average 7 outpatient contacts per person per year in the EU and 6.8 contacts in Austria. This level has been relatively steady since 2000.

The use of medicines has increased substantially since 1999. The share of people who used prescribed medicines was 35.4% in 1999, 47.9% in 2006 and 49.2% in 2014, which is higher than the EU average (47%). Non-prescribed medicines were used by 16.3% of the population in 1999, 23.9% of the population in 2006 and 34.3% in 2014, which is slightly lower than the EU average (34.6%) (Statistics Austria, 1999, 2008, 2015).

Within Austria, the use of non-prescribed medicines is higher among richer people, who use more over-the-counter medicines than poorer people (Sanwald & Theurl, 2014). Reports suggest that people with lower incomes see specialists less often than people with higher incomes and face greater barriers to access due to geographical distance (Riffer & Schenk, 2016).

According to the Austrian Health Interview Survey carried out in 2014, 55% of women and 44% of men used prescription medicines in the two weeks prior to the survey, and the consumption of medicines significantly increased with age. On average, women (of all age groups) used more prescription medicines than men (Statistics Austria, 2015). In addition, 30% of women and 28% of men used non-prescribed medicines, but the use of non-prescribed medicines did not increase with age (Statistics Austria, 2015).

A common measure for perceived problems with access to health services is unmet need (Box 1). Data on unmet need vary by sources. Results from the European Union Statistics on Income and Living Conditions (EU-SILC) indicate that, in comparison with other EU countries, very few people in Austria experience unmet need for health or dental care (0.2% and 0.5% of the population in 2016 for health care and dental care respectively, compared to an EU average of 2.5% and 4.0%) (Eurostat, 2018b). However, in the past there has been substantial income inequality in unmet need for dental care (Fig. 1), reflecting the fact that most orthodontic treatments, dental prostheses and oral hygiene treatments are not covered by social insurance. The coverage of serious orthodontic needs for children under 18 improved in 2014. Income inequality in unmet need has narrowed over time.

#### 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. They do not, however, indicate whether out-of-pocket payments create a barrier to access, resulting in unmet need for health care. Unmet need is an indicator of access, defined as instances in which people need health care but do not receive it because of barriers to access.

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

Financial protection analysis that does not account for unmet need could be misinterpreted. A country may have a relatively low incidence of catastrophic out-of-pocket payments because many people do not use health care, 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 (section 3.2). It also draws attention to changes in the share and distribution of households without any out-of-pocket payments (section 4.1). If increases in the share of households without out-of-pocket payments cannot be explained by changes in the health system – for example, enhanced protection for certain households – they may be driven by increases in unmet need.

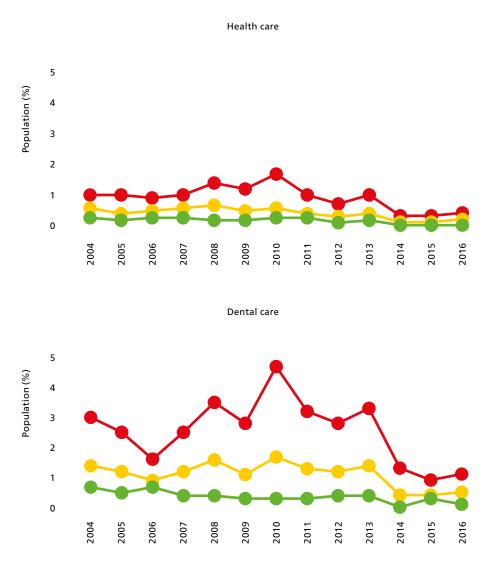
Every year, EU Member States collect data on unmet need for health and dental care through EU-SILC. Although this important source of data lacks explanatory power and is of limited value for comparative purposes because of differences in reporting by countries, it is useful for identifying trends over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

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

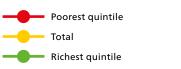
Whereas EU-SILC provides information on unmet need as a share of the population aged over 16 years, EHIS provides information on unmet need among those reporting a need for care. EHIS also asks people about unmet need for prescribed medicines.

Source: WHO Barcelona Office for Health Systems Strengthening.

# Fig. 1. Income inequality in self-reported unmet need for health and dental care due to cost, distance and waiting time in Austria, 2004–2016

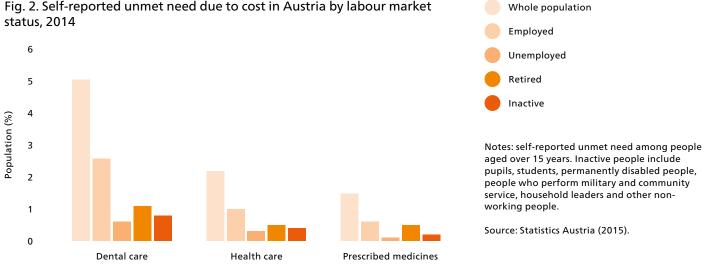


Data from the Austrian Health Interview Survey (part of EHIS) show unmet need due to cost by labour market status (Fig. 2). Employed people are the largest group with unmet need, followed by retired people.



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

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



# Fig. 2. Self-reported unmet need due to cost in Austria by labour market

### 3.3 Summary

Publicly financed mandatory health insurance covers most of the population (98–99.9%, depending on the source of data). Those most likely not to have any form of coverage include migrants without residence permits and marginalized groups such as people in precarious working conditions and unregistered unemployed people.

The publicly financed benefits package is relatively broad, but waiting times for inpatient care are an issue.

User charges (co-payments) are applied to most health services and can be high for some groups of people. Importantly, the type and level of co-payment often varies significantly across social insurance schemes and funds, especially for medical products, exacerbating inequality in access to health care.

Co-payments for prescribed medicines, however, are uniform across the country, and their design is generally more protective than the design of copayments for other health services: there is a fixed co-payment per pack (as opposed to percentage co-payments), with automatic exemptions for some vulnerable groups of people and an income-related cap per person set at 2% of net household income.

VHI does not address coverage gaps caused by co-payments, but mainly plays a supplementary role, allowing people to choose among contracted physicians, use non-contracted physicians, purchase greater comfort in hospitals and obtain faster access (i.e. shorter waiting times) to elective treatment in public hospitals. In 2015, VHI covered around 36% of the population and accounted for about 5% of total spending on health and 28% of private spending on health.

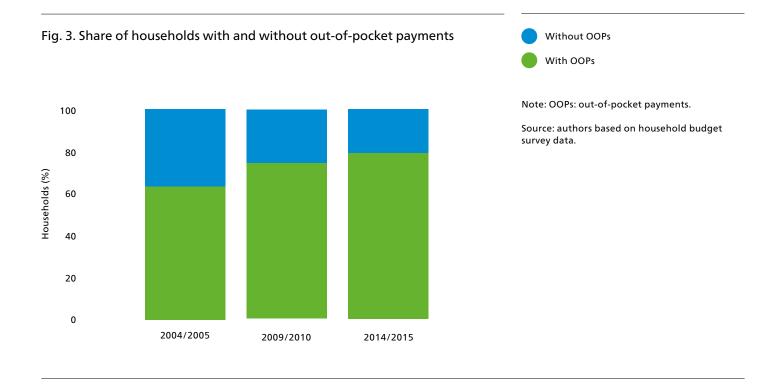
Self-reported unmet need for health care is very low by EU standards, including for dental care. Although there is some income inequality in unmet need for dental care, the gap between rich and poor has narrowed over time. Several steps have been taken in recent years to improve equity in the use of health services and strengthen financial protection, including extending coverage to previously underserved parts of the population, reducing co-payments and enhancing protection from co-payments. A process to harmonize benefits and co-payments across social insurance schemes and funds was initiated in 2017 and is being implemented gradually.

# 4. Household spending on health

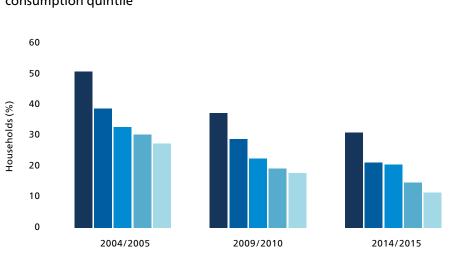
In the first part of this section, data from the household budget survey are used to present trends in household spending on health: that is, out-ofpocket payments, the formal and informal payments made by people at the time of using any good or service delivered in the health system. Out-ofpocket payments that are subsequently reimbursed by social insurance funds or VHI are not included in the analysis. The section also briefly presents the role of informal payments and the main drivers of changes in out-of-pocket payments over time.

# 4.1 Out-of-pocket payments

The share of households making out-of-pocket payments has risen steadily over time, rising from 63% in 2004/2005 to 80% in 2014/2015 (Fig. 3).



Across all three timeframes, households without out-of-pocket payments are more likely to be poor than rich (Fig. 4). In 2014/2015, around 30% of households in the poorest quintile had no out-of-pocket payments, compared to 11% in the richest quintile. Over time, the share of the poorest quintile not making out-of-pocket payments has fallen considerably.



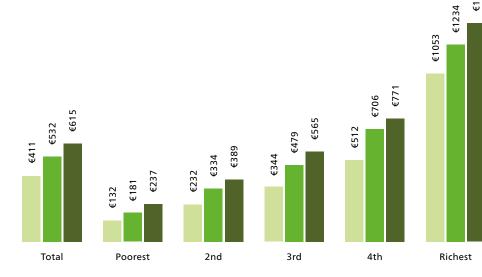
### Fig. 4. Share of households reporting no out-of-pocket payments by consumption quintile



Source: authors based on household budget survey data.

The average annual amount spent out-of-pocket on health per person has increased over time, rising in nominal terms from  $\notin$ 411 in 2004/2005 to  $\notin$ 532 in 2009/2010 and  $\notin$ 615 in 2014/2015. This increase was seen for all quintiles (Fig. 5.), with the steepest increase between 2004/2005 and 2009/2010 (+29.4%) versus 2009/2010 to 2014/2015 (+15.6%). In relative terms, the amount spent out-of-pocket payment by the richest quintile reports the smallest increase over time, whereas the poorer quintiles show a much steeper increase in annual out-of-pocket spending.

#### Fig. 5. Annual out-of-pocket spending on health care per person by consumption quintile





€1367

Source: authors based on household budget survey data.

Out-of-pocket spending as a share of total household consumption (spending) steadily increased over time across all quintiles (Fig. 6). Out-of-pocket payments as a share of household spending were 3.4% in 2004/2005, 3.8% in 2009/2010 and 4.2% in 2014/2015. This is quite high in comparison to other countries in western Europe. Note that it excludes household spending on VHI premiums. Fig. 6 shows the quite high increase in the out-of-pocket share of household spending for the poorest quintile from 3.2% in 2009/2010 to 3.9% in 2014/2015 and the relatively steady share of out-of-pocket payments of the richest quintile.

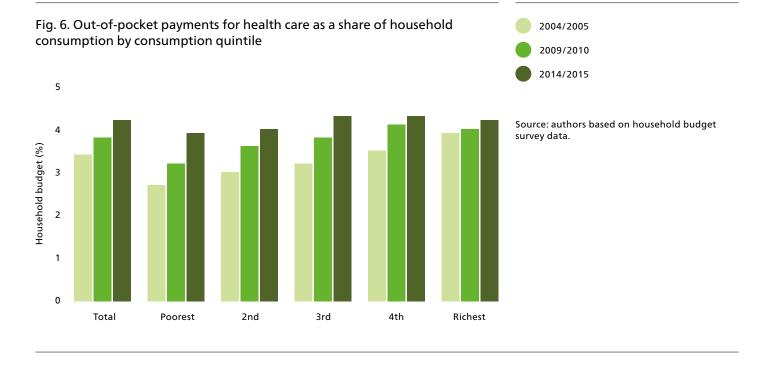


Fig. 7 presents the breakdown of total out-of-pocket spending by type of health service. It is important to note the change in the category definition "dental products" (United Nations Classification of individual consumption by purpose 6.1.3.2) between the household budget survey of 2004/2005 and 2009/2010, and that of 2014/2015. Statistics Austria reclassified this category from "medical products" to "dental care". This hinders any particular statements about changes over time for the categories "medical products" and "dental care" separately but allows looking at these categories together.

In 2004/2005 and 2009/2010, the categories "medical products" and "medicines" together accounted for the largest share (about 65%) of outof-pocket payments. During this period, the medicines share fell from 33% to 23% of all out-of-pocket payments, while the medical products share rose from 32% to 44%, perhaps due to cuts in the legal minimum benefits for eye care in 2005 (§137 paragraph 2a ASVG) and the introduction of a cap on prescription fees in 2008.

From 2009/2010 to 2014/2015, out-of-pocket spending shifted from the category "medical products" to "dental care", because of the reclassification of

"dental products". In 2014/2015, medicines and dental care accounted for the largest share of out-of-pocket spending. The inpatient and diagnostic tests share of out-of-pocket payments did not change over time.

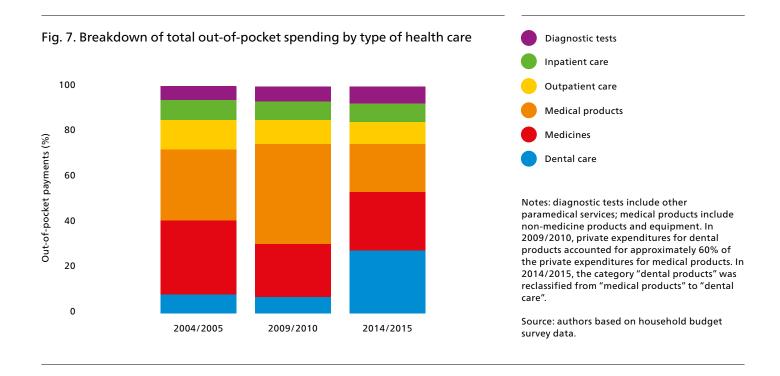
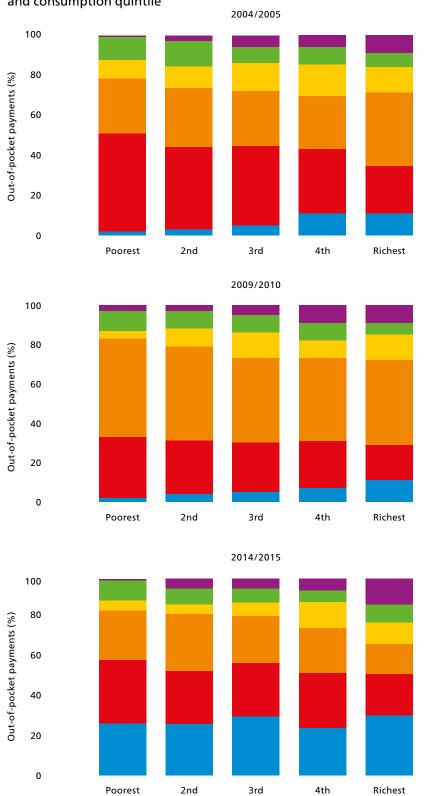


Fig. 8 reports the breakdown of total out-of-pocket spending by type of health care and quintile. In 2014/2015, medicines, dental care and medical products accounted for the largest share of out-of-pocket spending for all quintiles. Out-of-pocket payments for medicines were 32% of total out-of-pocket spending in the poorest quintile and 21% in the richest quintile. Medical products showed a similar variance, at 25% in the poorest (29% in the second) quintile and 15% in the richest quintile. Dental care accounted for a larger share of out-of-pocket spending in the richest quintile than in the poorest quintile.

These findings remain quite stable over time, except for the categories medicines and medical products. From 2004/2005 to 2009/2010, the share of medical products increased substantially (20% for the poorest and second quintiles, 15% for the third and fourth quintiles, and about 6% for the richest quintile). The share of medicines declined to this same extent. One possible explanation for this development could be the cut in the value-added tax rate (from 20% to 10%) for over-the-counter medicines in 2009 (WKO, 2017) and the introduction of a cap on prescription fees in 2008.



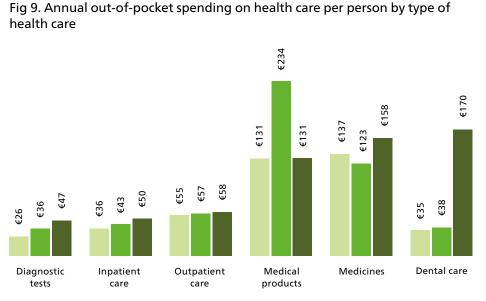
## Fig. 8. Breakdown of total out-of-pocket spending by type of health care and consumption quintile



Notes: diagnostic tests include other paramedical services; medical products include non-medicine products and equipment. In 2014/2015 the category "dental products" was reclassified from "medical products" to "dental care".

Source: authors based on household budget survey data.

Out-of-pocket spending on medical products nearly doubled in nominal terms from 2004/2005 to 2009/2010 (Fig. 9). A possible explanation for this development may be the cutback in the legal minimum benefits for vision aids in 2005 (§137 paragraph 2a ASVG). Out-of-pocket spending on diagnostic tests also increased substantially, but from a lower starting point than medical products. Average annual out-of-pocket spending on inpatient and outpatient care slightly increased. Note that the substantial absolute increase in spending on dental care and the decrease on medical products from 2009/2010 to 2014/2015 is because of the classification change.



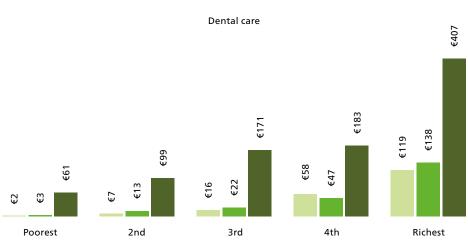
2004/2005 2009/2010 2014/2015

Notes: diagnostic tests include other paramedical services; medical products include non-medicine products and equipment. In 2014/2015, the category "dental products" was reclassified from "medical products" to "dental care".

Source: authors based on household budget survey data.

Fig. 10 shows how the average annual out-of-pocket spending on medicines is higher among richer quintiles. A drop in average annual spending on medicines is observed across all quintiles from 2004/2005 to 2009/2010.

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

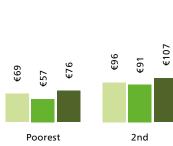


Medicines

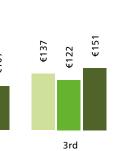


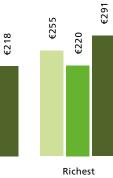
Note: medical products include non-medicine products and equipment.

Source: authors based on household budget survey data.



€38

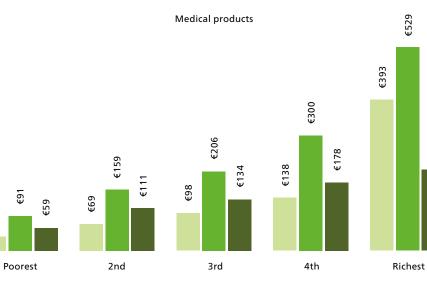




€211

€169 €171

4th



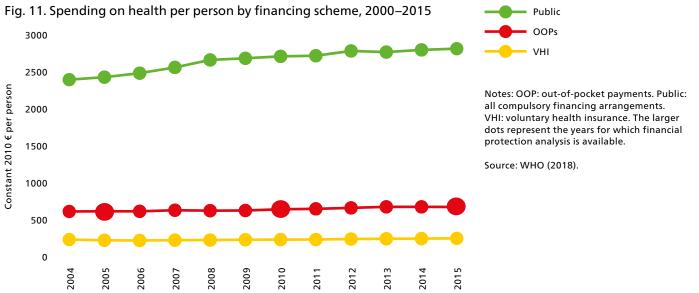
#### 4.2 Informal payments

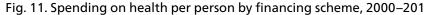
The main reason for informal payments in Austria is to obtain preferential, faster treatment, particularly for inpatient care (Hofmarcher & Quentin, 2013). Surveys in Lower Austrian hospitals have found that shorter waiting times for elective operations were offered to 8% of respondents in return for private payments, while 15% indicated that the service provider had suggested visiting a private clinic to get an earlier operation date (Czypionka et al., 2013). Research identifying considerable differences in waiting times for elective surgery across the states (Länder) has also found that some physicians offer a reduction in waiting time in return for patients paying a private supplement or making a private visit (Czypionka et al., 2007).

A 2017 Special Eurobarometer report on corruption found that 9% of survey respondents in Austria who had visited a public health care provider in the previous 12 months reported having had to make an extra payment or give a valuable gift to a nurse or doctor, or make a donation to the hospital (European Commission, 2017). This is above the EU average of 4%.

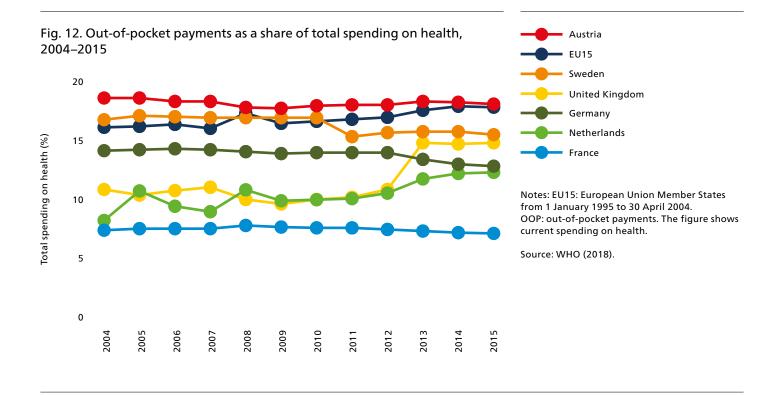
#### 4.3 What drives changes in out-of-pocket payments?

Public spending on health per person has increased steadily over time, although the rate of increase slowed after 2008 (Fig. 11). Per person spending out-of-pocket and through VHI has also increased over time, but at a slower rate than public spending.





The out-of-pocket payment share of total spending on health increased between 2000 and 2004 (data not shown), fell between 2004 and 2009 and has since increased slightly (Fig. 12). At 18% in 2015, it is higher than in most EU15 countries.



#### 4.4 Summary

Household budget survey data indicate that the share of households spending out-of-pocket on health has increased substantially over time, rising from 63% in 2004/2005 to 80% in 2014/2015. This increase took place across all quintiles. The share of the poorest quintile spending out-of-pocket rose from 48% in 2004/2005 to 68% in 2014/2015.

Not only is a greater share of households spending out of pocket on health now than previously, the average annual amount spent out-of-pocket – per person and as a share of total household spending – has increased steadily over time for all quintiles. This increase was particularly sharp among the poorest quintile.

Out-of-pocket payments are mainly spent on dental care, medicines and medical products. There is some variation in spending across quintiles. The largest share of out-of-pocket payments was spent on medicines and medical products among the poorer quintiles and on dental care in the richest quintile.

Informal payments are present in the health system, mainly to give people preferential, faster access to treatment. A 2017 EU-wide survey found 9% of respondents in Austria had incurred informal payments. This is above the EU average of 4%.

National health accounts data also show an increase in out-of-pocket payments per person over time. At 18% in 2015, the out-of-pocket share of total spending on health in Austria is higher than in most EU15 countries.

# 5. Financial protection

This section uses data from the Austrian household budget survey to assess the extent to which out-of-pocket payments result in financial hardship for households who use health services. The section shows the relationship between out-of-pocket spending on health and risk of impoverishment, and presents estimates of the incidence, distribution and drivers of catastrophic out-of-pocket payments.

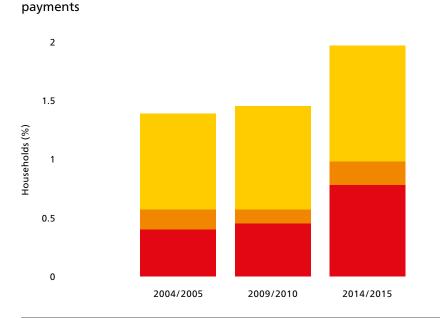
## 5.1 How many households experience financial hardship?

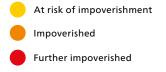
#### 5.1.1 Out-of-pocket payments and risk of impoverishment

Fig. 13 shows the share of households at risk of impoverishment after outof-pocket spending on health. The poverty line reflects the cost of spending on basic needs (food, rent and utilities) among a relatively poor part of the Austrian population (households between the 25th and 35th percentiles of the consumption distribution, adjusted for household size and composition). The monthly cost of meeting these basic needs – the basic needs line – was  $\in 606$  per month in 2004/2005,  $\in 679$  in 2009/2010 and  $\notin 715$  in 2014/2015.

In 2014/2015, 2% of all households were further impoverished, impoverished or at risk of impoverishment after out-of-pocket payments. The share of further impoverished households has nearly doubled over time, rising from 0.4% in 2004/2005 to 0.8% in 2014/2015. The share of households impoverished after out-of-pocket payments rose between 2009/2010 and 2014/2015, but from a very low base. The share of households at risk of impoverishment has increased slightly from 0.8% in 2004/2005 to 1% in 2014/2015.

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





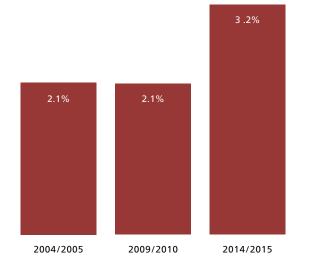
Note: a household is impoverished if its total spending falls below the basic needs line after out-of-pocket payments (OOPs); further impoverished if its total spending is below the basic needs line before OOPs; at risk of impoverishment if its total spending after OOPs comes within 120% of the basic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

Source: authors based on household budget survey data.

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

Households with catastrophic out-of-pocket payments are defined as those who spend more than 40% of their capacity to pay on out-of-pocket payments; this includes impoverished as well as further impoverished households. The share of households with catastrophic out-of-pocket payments did not change between 2004/2005 and 2009/2010 and then increased from 2.1% in 2009/2010 to 3.2% in 2014/2015 (Fig. 14).

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



Source: authors based on household budget survey data.



# 5.2 Who experiences financial hardship?

In all three timeframes, around half of all households with catastrophic spending are already poor or at risk of poverty after out-of-pocket payments. Over time, the share of households who are further impoverished has increased, rising from 19% to 24% of households with catastrophic spending on health (Fig. 15).

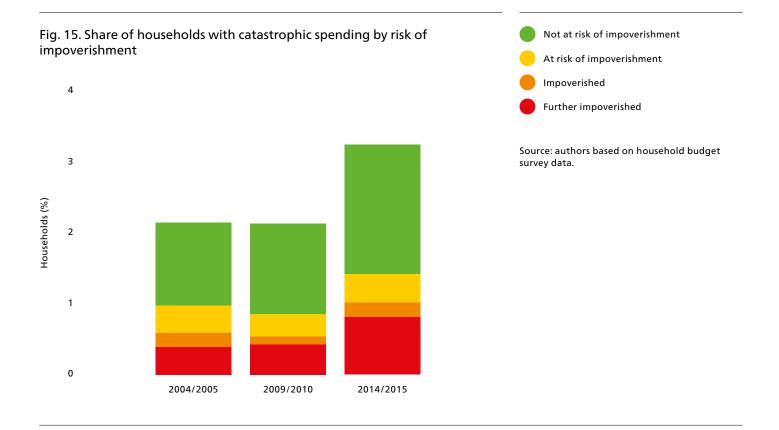
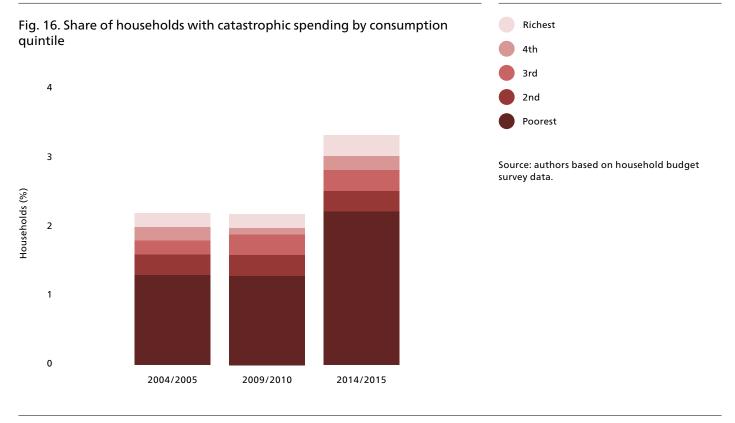
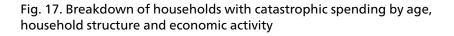


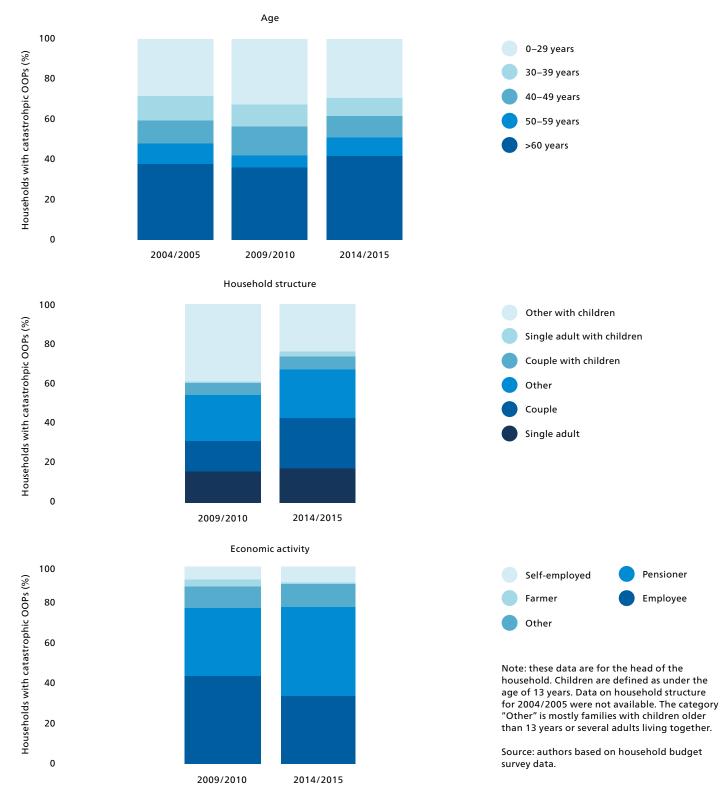
Fig. 16 shows that the incidence of catastrophic payments is highly concentrated among the poorest quintile. The share of the poorest quintile with catastrophic spending nearly doubled between 2009/2010 and 2014/2015, rising from 1.3% to 2.2%. The increase in the overall incidence of catastrophic out-of-pocket payments was nearly entirely driven by this increase in the poorest quintile.



Catastrophic out-of-pocket payments are also heavily concentrated among older people (aged over 60), households with children under 13 years,

pensioners and employees (Fig. 17).





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

Overall, the largest areas of catastrophic out-of-pocket spending are dental care, medicines and medical products (Fig. 18). Between 2004/2005 and 2009/2010 the share of medical products increased from 23.8% to 37.2%. The change in the category definition of "dental products" makes the development from 2009/2010 to 2014/2015 less clear. Medical products and dental care together increased from 51.5% in 2004/2005 to 61.9% in 2009/2010, and then dropped to 39.2% in 2014/2015. The increase in the share of medical products may result from a cutback of the legal minimum benefits for vision aids in 2005 (§137 paragraph 2a ASVG).

Between 2009/2010 and 2014/2015, the share of catastrophic out-of-pocket payments on inpatient care, outpatient care and diagnostic tests increased, pushing down the other shares. The share of catastrophic spending on medicines decreased between 2004/2005 and 2014/2015, probably due to the cut in the value-added tax rate for medicines in 2009 and the introduction of a cap on co-payments for prescribed medicines in 2008 (WKO, 2017).

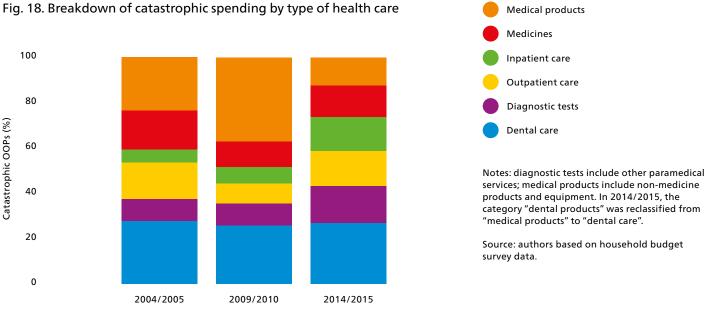
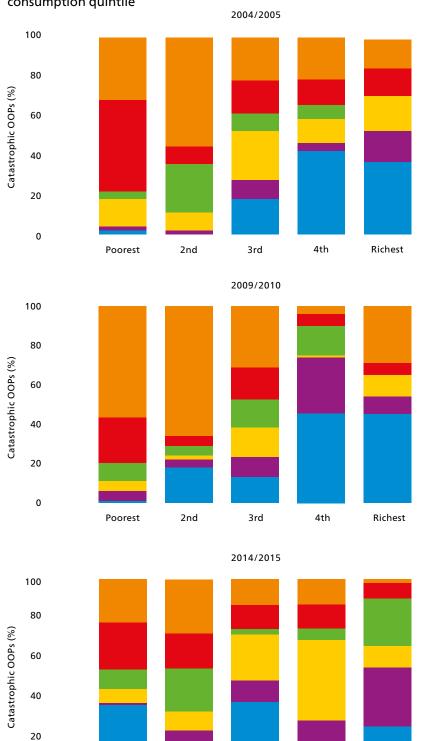


Fig. 19 shows the breakdown of catastrophic spending by type of health care service and quintile. In 2004/2005 and 2009/2010, the category "dental care" accounted for the largest share of catastrophic spending of households within the richest quintile. For poorer households, medical products and medicines accounted for the largest part of their health care spending in these periods.



3rd

4th

Richest

0

Poorest

2nd

### Fig. 19. Breakdown of catastrophic spending by type of health care and consumption quintile



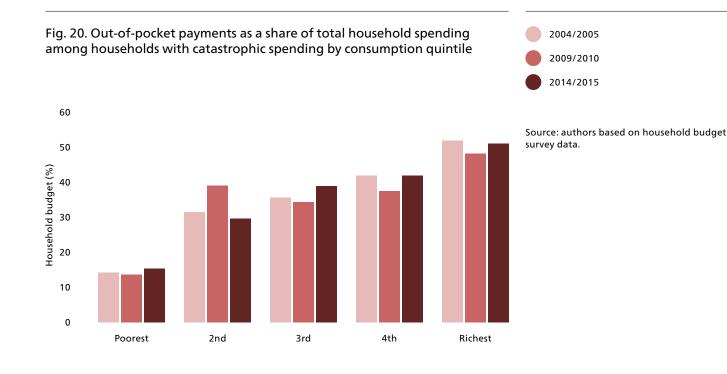
Notes: diagnostic tests include other paramedical services; medical products include non-medicine products and equipment. In 2014/2015, the category "dental products" was reclassified from "medical products" to "dental care".

Source: authors based on household budget survey data.

Between 2009/2010 and 2014/2015, the pattern of catastrophic spending on health care changed, so that in 2014/2015 the catastrophic expenditures are somewhat more evenly distributed across the quintiles. Fig. 19 should be interpreted with caution. The overall share of households with catastrophic out-of-pocket payments is low, with a small number of observations and high volatility for some categories.

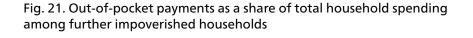
#### 5.4 How much financial hardship?

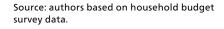
Among all households with catastrophic out-of-pocket payments, the amount spent on health care as a share of total household spending rises progressively with income (Fig. 20).

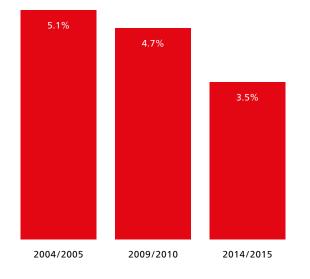


41

Very poor households – those who are already living below the basic needs line and are therefore further impoverished after out-of-pocket payments – spent, on average, 3.5% of their budget on health care in 2014/2015 (Fig. 21). Although this share has fallen over time (from 5.1% in 2004/2005), it remains higher than the share spent by further impoverished households in countries such as France, Germany and the United Kingdom (Fig. 22).







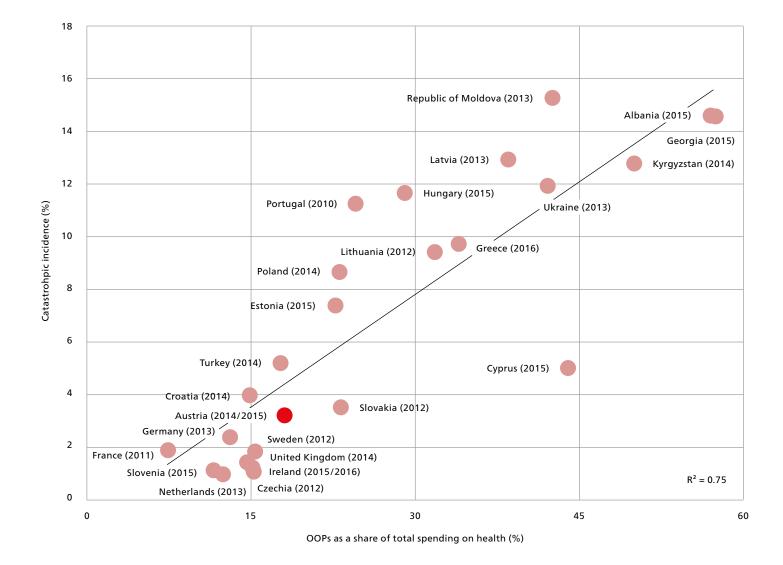
#### 5.5 International comparison

The incidence of catastrophic out-of-pocket payments is low in Austria in comparison to many EU countries. However, it seems to be slightly higher in Austria than in countries such as France, Germany, Slovenia, Sweden and the United Kingdom (Fig. 22).

Fig. 22. Incidence of catastrophic spending on health and the out-of-pocket share of total spending on health in selected European countries, latest year available

Notes: OOPs: out-of-pocket payments. R<sup>2</sup>: coefficient of determination. The OOP data are for the same year as the catastrophic spending data. Austria is highlighted in red.

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



43

#### 5.6 Summary

In 2014/2015, 3.2% of households in Austria experienced catastrophic out-of-pocket payments. While the incidence of catastrophic out-of-pocket payments is low in Austria in comparison to many central and eastern European countries, it is higher than in western European countries such as France, Germany, Sweden and the United Kingdom.

Households with catastrophic out-of-pocket payments are highly concentrated among the poorest quintile. They are also heavily concentrated among older people (aged over 60), households with children under 13 years and households headed by pensioners and employees. Around half of all households with catastrophic spending are already poor or at risk of poverty after out-of-pocket payments. Over time, the share of households with catastrophic spending on health who are further impoverished after out-ofpocket payments has increased, rising from 19% to 24%.

The incidence of households with catastrophic spending on health has increased over time, rising from 2.1% in 2009/2010 to 3.2% in 2014/2015. This increase is almost entirely the result of a doubling in the incidence of catastrophic out-of-pocket payments among the poorest quintile.

The largest areas of catastrophic out-of-pocket spending are dental care, medical products and medicines. An increase in the share of catastrophic out-of-pocket payments for medical products between 2004/2005 and 2009/2010 may be due to a cut in legal minimum benefits for vision aids in 2005. The share of catastrophic spending on medicines decreased between 2004/2005 and 2014/2015, probably due to the introduction of an income-related cap on co-payments for prescribed medicines in 2008 and a cut in the value-added tax rate for medicines in 2009, from 20% to 10%.

# 6. Factors that strengthen and undermine financial protection

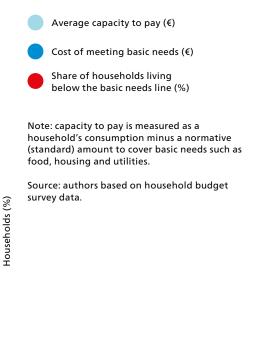
This section considers the factors that may be responsible for financial hardship caused by out-of-pocket payments in Austria and which may explain the trend over time. It begins by looking at factors outside the health system affecting people's capacity to pay – for example, changes in incomes and the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

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

Household budget survey data indicate an increase in average capacity to pay across households between 2004/2005 and 2009/2010 (Fig. 23), but following the 2009 fall in GDP, growth in GDP and household capacity to pay stagnated. In contrast, average spending to meet basic needs (food, utilities and housing) has increased across all years. The share of households living below the basic needs line rose marginally between 2009/2010 and 2014/2015, perhaps due to rising unemployment. The unemployment rate increased from 4.8% in 2010 to 5.7% in 2015 (Statistics Austria, 2017a).

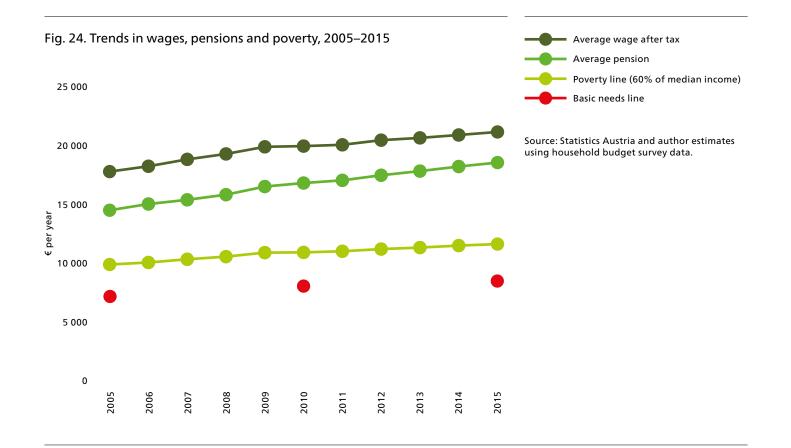
2 2500 2000 1.5 1.51% 1500 1.37% € per month 1.35% 1000 0.5 500 0 0 2004/2005 2009/2010 2014/2015

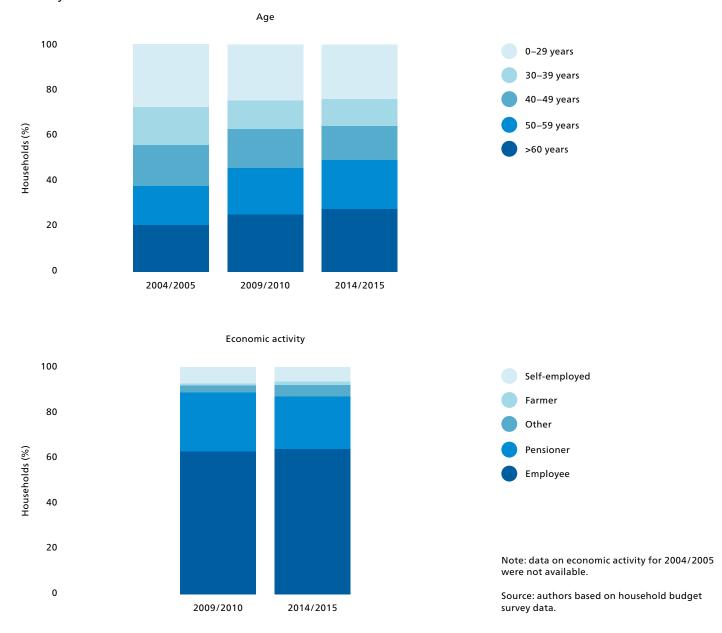
Fig. 23. Changes in the cost of meeting basic needs, capacity to pay and the share of households living below the basic needs line



National statistics show that the share of people at risk of poverty or social exclusion is highest for unemployed people, domestic workers, migrants and people with a low level of education (Statistics Austria, 2017b). Households with more than two children, single parent households and female pensioners living alone are also vulnerable (Statistics Austria, 2017b). This may be partly related to the prevalence of traditional family norms, which result in women facing considerable problems in building up adequate social rights, e.g. for retirement (Hofmann & Atzmüller, 2015). Although the *average* pension is well above the national poverty line and the basic needs line used in this study (Fig. 24), people aged over 60 years account for the largest share of the poorest quintile, followed by people under 30 (Fig. 25). The latter may be due to the high unemployment rate among young people (Statistics Austria, 2017a).

Social protection benefits are relatively high in Austria in comparison to other EU countries (Eurostat, 2017). The nationally unified needs-based minimum benefit scheme that came into effect in 2010 expired in 2016. Since then, each individual state (*Land*) has reinstated different minimum benefits rules. Income inequality is a growing issue; the Gini index rose from 28.7 in 2005 to 30.5 in 2012 (World Bank, 2017).





## Fig. 25. Breakdown of the poorest consumption quintile by age and economic activity

#### 6.2 Health system factors

The following paragraphs look at trends in health spending and health coverage, then focus in more detail on the three areas that account for the greatest share of catastrophic spending overall and among the poorest consumption quintile: dental care, medical products and outpatient medicines.

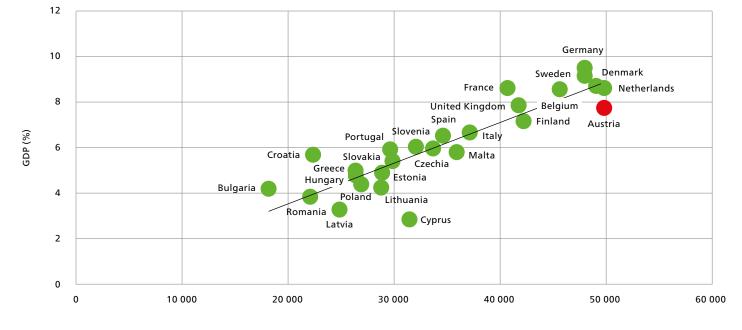
#### 6.2.1 Health spending

Public spending on health as a share of GDP is lower than Austria can afford given its level of GDP (Fig. 26) and is also lower than in countries such as France, Denmark, Germany, the Netherlands and Sweden. In terms of the breakdown of total spending on health, Austria's public share is lower than in countries with a similar level of GDP, while its out-of-pocket share is higher (Fig. 27), perhaps reflecting the relatively low priority given to the health sector in allocating public spending. Fig. 28 shows how the health share of all public spending is low in Austria relative to comparator countries. These health spending patterns may be one reason why Austria does not seem to do as well as comparator countries in terms of financial protection.

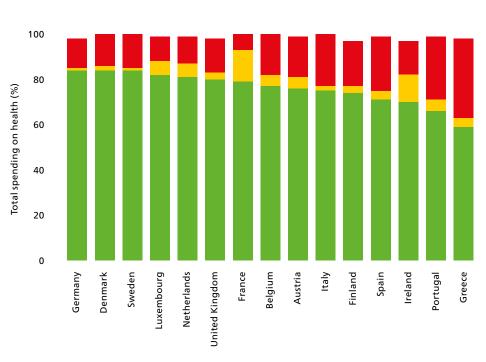
Fig. 26. Public spending on health and GDP per person in the EU, 2015

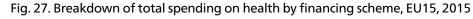
Notes: EU: European Union. GDP: gross domestic product. PPP: purchasing power parity. Public refers to all compulsory financing arrangements. The figure excludes Ireland and Luxembourg. Austria is shown in red.

Source: WHO (2018).



GDP per person in current PPP







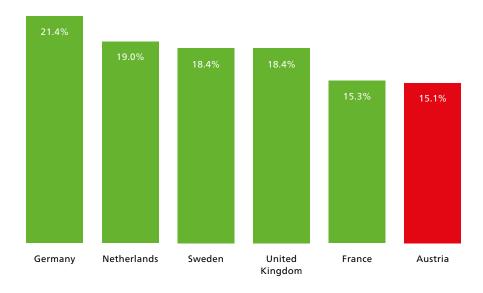
Notes: EU15: European Union Member States from 1 January 1995 to 30 April 2004. OOP: out-of-pocket payments. Public: all compulsory financing arrangements. VHI: voluntary health insurance. The figure shows current spending on health.

Source: WHO (2018).

Fig. 28. Public spending on health as a share of total government spending, selected EU15 countries, 2015

Notes: EU15: European Union Member States from 1 January 1995 to 30 April 2004. Public spending on health refers to compulsory financing arrangements.

Source: WHO (2018).



#### 6.2.2 Health coverage

Coverage policy has undergone various changes in recent years, mainly intended to reduce out-of-pocket spending on medicines, on dental care for children and on outpatient care for civil servants and self-employed people (Table 3). The main gaps in coverage are summarized in Table 4.

The share of the population covered by publicly financed insurance is high, ranging from 98% to 99.9% depending on the data source (Muckenhuber et al., 2011; HVSV, 2017b). The uninsured tend to be poor (Statistics Austria, 2017a) and come from marginalized groups such as migrants without legal residential status (Muckenhuber et al., 2011).

The two main issues with **publicly financed service coverage** are the absence of uniform benefits across the insured population and waiting times for inpatient care. Benefits vary significantly across social insurance schemes (outpatient visits, dental care) and, in some cases, across funds in the same scheme (ASVG). Because the schemes are broadly associated with different socioeconomic groups, the lack of uniform benefits exacerbates income inequality in access to health care and may explain income inequality in unmet need for dental care (Fig. 1).

VHI provides faster access to treatment. It is purchased by around 36% of the population, but take up is likely to be concentrated among people with higher socioeconomic status. There is also evidence to suggest people make informal payments to obtain faster access to treatment. This, and the presence of co-payments for inpatient care (relatively unusual in EU countries), may explain why inpatient care accounts for a not insignificant share of catastrophic out-of-pocket payments overall and among the poorest quintile (Fig. 18 and 19).

**User charges for publicly financed health services** are widespread. Co-payments for dental care and medical products are a clear source of financial hardship in Austria. In contrast to many countries, however, medicines are not a major cause of financial hardship in Austria, which reflects both the relatively robust design of co-payments for medicines – a uniform policy across the whole population, the use of a fixed co-payment with exemptions for low-income households and an income-related cap on co-payments – and weaknesses in the design of co-payments for other health services, such as substantial variation across groups of people. These coverage and co-payment design issues are explored in more detail below.

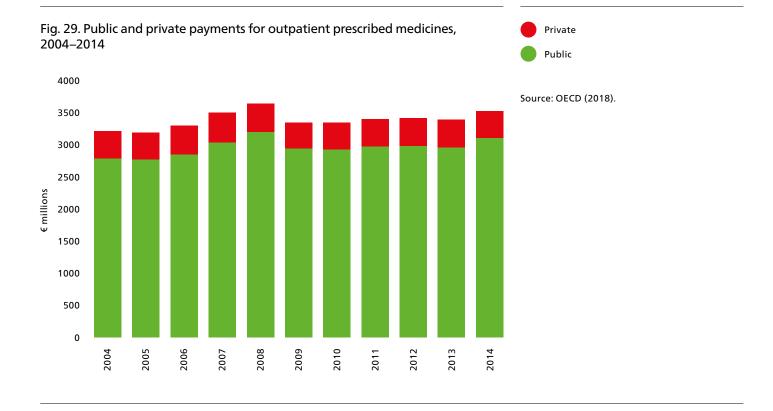
**Dental care** in Austria is predominantly funded through out-of-pocket payments. In 2011, 50% of total spending on dental care was out of pocket, with the remainder coming from public sources (48%) and VHI (2%) (Sanwald & Theurl, 2016). Household budget survey data show that dental care is the single largest area of spending among all households with catastrophic out-of-pocket payments (27% in 2014/2015, Fig. 18) and accounts for a particularly large share of catastrophic spending among the poorest quintile (36%, Fig. 19).

Dental care coverage and co-payment policies vary across social insurance funds. Employees and farmers pay low co-payments for basic dental care (routine conservation and surgery), whereas civil servants and self-employed people – who are generally higher earners than employees – must make percentage co-payments of around 20% of the service price. For other dental services, however, employee coverage is much less generous than coverage for richer groups. In the case of orthodontic braces, for example, the Wien regional employee fund covered up to a maximum benefit of  $\notin$ 498 per year; the Vorarlberg regional employee fund covered up to  $\notin$ 830 per year, and civil servants were covered up to  $\notin$ 1328 per treatment in 2016 (LSE, 2017).

This inequality is reflected in the breakdown of out-of-pocket payments by health service over time. In 2004/2005 and 2009/2010, dental products were classified as medical products rather than under dental care. For these years, the share of out-of-pocket spending on dental care among the poorest quintile of households was close to zero, but was progressively higher for the other quintiles (Fig. 8). In 2014/2015, dental products were reclassified under dental care. The share of out-of-pocket spending on dental care among the poorest quintile rose to 26% and was similar to the share spent by the other quintiles. This pattern is repeated for the poorest quintile of households with catastrophic out-of-pocket payments (Fig. 19).

**Medical products** are another area in which private spending dominates. In 2015, private spending accounted for 52% of total spending on medical products vs 48% for public sources (OECD, 2018). Once again, there has been substantial variation in coverage and co-payment policies, often to the disadvantage of generally poorer groups of people such as employees. Low-income people, children under 15 years old and people under 24 years old and still in education are exempt from co-payments, which is a protective aspect of co-payment design for medical products. The extent of coverage – that is, the maximum amount of benefit available – varies enormously not only across social insurance schemes and funds, but also across products and regions. In 2017, a process to harmonize benefits across funds was initiated and is being gradually implemented (HVSV, 2017a).

In contrast to dental care and medical products, **outpatient prescribed medicines** are largely publicly financed (Fig. 29). In 2015, public spending accounted for 88% of total spending on outpatient prescribed medicines compared to only 48% for dental care and medical products. For this reason, although household budget survey data indicate that outpatient medicines account for the second-largest share of out-of-pocket payments in Austria (26% in 2014/2015), they are a relatively minor share of catastrophic out-ofpocket payments (14%).



The very high share of public spending on prescribed medicines reflects the design of co-payment policy, which differs from co-payment policy for other outpatient services in the following ways.

- It is uniform across the population, enhancing equity.
- It uses fixed co-payments per item rather than percentage co-payments, so the cost to the user is immediately clear, enhancing transparency and reducing financial uncertainty.
- Low-income people are exempt; in contrast to other services, the exemption applies to all insured people.
- There is an income-related cap on co-payments per person, of 2% of the contributor's net annual income (REGO); in contrast to other services, the cap applies to all insured people.

The co-payment cap was introduced in 2008. The impact of this change appears to be reflected in the small reductions in private spending on outpatient prescribed medicines in 2008 and 2009 (Fig. 29). Household budget survey data also show reductions in the level of out-of-pocket spending on outpatient medicines in 2009/2010 compared to 2004/2005 (Fig. 10), in the outpatient medicines share of all out-of-pocket spending (from 33% to 23%, Fig. 7), in the outpatient medicines share of all catastrophic out-of-pocket payments (from 17% to 11%, Fig. 18) and, most importantly, in the outpatient medicines share of catastrophic out-of-pocket payments in the poorest quintile (from 47% to 23%, Fig. 19). These reductions are notable

given that the share of people aged over 50 in the poorest quintile rose from 38% to 46% during the same period (Fig. 25).

From 1 January 2009, the value-added tax rate for medicines was reduced from 20% to 10% (WKO, 2017), leading to savings for the social insurance funds for prescribed medicines (Leonhart, 2009). The value-added tax cut may explain the drop in public spending on outpatient prescribed medicines in 2009 (Fig. 29). It would also have reduced the cost of over-the-counter medicines for households and may have played a role in the reductions in household spending on outpatient medicines described above. Around 34% of people reported using non-prescribed medicines in Austria in 2014, which is very close to the EU28 average (Statistics Austria, 2014). Within Austria, the use of non-prescribed medicines is higher among richer people due to their higher use of over-the-counter medicines (Sanwald & Theurl, 2014). In 2014, the use of non-prescribed medicines ranged from 31% in the poorest income quintile to 39% in the richest (Statistics Austria, 2014). Mayer & Österle (2015) report that people with higher levels of education and income are more likely to buy non-prescribed medicines, whereas individuals with lower levels of education and income are more likely to use prescribed medicines.

In spite of relatively strong protection against user charges for outpatient medicines, household budget survey data show that they account for a quarter (24%) of catastrophic out-of-pocket payments for households in the poorest quintile in 2014/2015 (Fig. 19).

#### 6.3 Summary

The increase in the share of households with catastrophic out-of-pocket payments between 2009/2010 and 2014/2015 is largely the result of a doubling in the incidence of catastrophic spending on health among the poorest quintile. This could reflect stagnation in capacity to pay for health following the economic crisis and, perhaps, a small increase in the share of people aged over 50 in the poorest quintile, leading to greater need for health care in this quintile.

Inequality in publicly financed coverage of non-basic dental care and medical products favours richer households. Limited coverage of dental care is the most important health system factor leading to financial hardship in Austria, especially among the poorest quintile.

Although outpatient medicines account for the second-largest share of outof-pocket payments in Austria after dental care (26% in 2014/2015), they are a minor share of catastrophic out-of-pocket payments (14%). This reflects the fact that the public share of spending on outpatient prescribed medicines is very high: 88% for outpatient prescribed medicines in 2015 compared to only 48% for dental care and medical products.

In turn, the high share of public spending on outpatient prescribed medicines reflects the relatively strong design of co-payment policy for outpatient prescriptions, which is more protective than co-payment policy for other areas of outpatient care due to: the use of a low fixed co-payment rather than percentage co-payments; an exemption for low-income households that

applies to all insured people; and an income-related cap per person that also applies to all insured people. Also, in contrast to other areas of outpatient care, co-payments for prescriptions are determined centrally and apply to all insured people, regardless of insurance scheme or fund or place of residence.

The income-related cap on co-payments for prescriptions introduced in 2008, combined with the reduction in value-added tax for all medicines that came into effect at the beginning of 2009, are likely to be behind the absolute fall in out-of-pocket payments for outpatient medicines between 2004/2005 and 2009/2010 and the reduction in the outpatient medicines share of catastrophic health spending seen during this period, which was especially large for the poorest quintile.

# 7. Implications for policy

Catastrophic out-of-pocket payments affect the poorest households the most and are also heavily concentrated among older households and households with children.

**Financial protection has deteriorated over time for the poorest households.** The increase in financial hardship seen between 2009/2010 and 2014/2015 is largely the result of a doubling in the incidence of catastrophic spending on health among the poorest quintile. This could reflect the impact of the economic crisis and rising unemployment on households and, perhaps, a small increase in the share of people aged over 50 in the poorest quintile, leading to greater need for health care in this quintile.

Dental care is the largest single cause of financial hardship, reflecting limited coverage and inequalities in coverage that favour richer households. For the poorest quintile, medical products and outpatient medicines are the next most important contributors to financial hardship. Overall, however, outpatient medicines are a relatively minor cause of financial hardship, even though they are the second-largest area of out-of-pocket spending on health after dental care. This reflects the very high share of public spending on outpatient prescriptions (88%) compared to dental care and medical products (48%), which in turn attests to the relatively protective design of co-payment policy for outpatient prescriptions and more recent efforts to reduce out-of-pocket payments for medicines. The introduction of an income-related cap on co-payments for outpatient prescriptions in 2008 - combined with a cut in the value-added tax rate for medicines in 2009 – appears to have led to an absolute fall in out-of-pocket spending on outpatient medicines between 2009/2010 and 2014/2015 and to a fall in the outpatient medicines share of catastrophic health spending, especially for the poorest quintile.

To improve financial protection, policy attention should focus on coverage of dental care and medical products, learning lessons from the protective features of coverage and co-payment policy for outpatient prescriptions: the use of a low fixed co-payment rather than percentage co-payments, an exemption for low-income households that applies to all insured people and an income-related cap per person that also applies to all insured people. In contrast to other areas of outpatient care, co-payments for prescriptions are determined centrally and apply to all insured people, regardless of insurance scheme or health insurance fund or place of residence, reducing socioeconomic inequalities in access to health care. The root cause of variation in coverage and co-payment policy lies in systematic socioeconomic differences in the membership of the social insurance schemes and the absence of a risk equalization mechanism to address them, leading to inequity and inefficiency.

The widespread use of co-payments in the Austrian health system warrants attention given that financial protection does not appear to be as strong in Austria as in countries such as France, Germany, Slovenia, Sweden and the United Kingdom. Policy-makers should carefully consider whether co-payments are the most effective instrument for addressing inappropriate use of health services, which is most often driven by supply-side factors. It would also be good to consider whether the outcome – the shifting of financial risk onto people in need of health care, leading to financial hardship, especially for poorer households – is desirable.

Policy choices are important to guarantee better financial protection. Ensuring that low-income households are systematically exempt from all co-payments, and extending the income-related cap on co-payments for outpatient prescriptions to co-payments for all health services, would improve financial protection, especially for poorer people. Some of this improvement could be financed by redistribution across social insurance schemes through a risk equalization mechanism, and through better use of existing public resources.

## References

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. 44:451–61.doi:10.1093/ije/dyv069.

Arsenijevic J, Pavlova M, Rechel B, Groot W (2016). Catastrophic Health Care Expenditure among Older People with Chronic Diseases in 15 European Countries. PLoS ONE [Internet]. 2016 July 5; 11(7) (http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0157765).

BVA (2017). Satzung der Versicherungsanstalt öffentlich Bediensteter 2016. Amtliche Verlautbarung der österreichischen Sozialversicherung. Wien: Versicherungsanstalt öffentlicher Bediensteter.

Czypionka T, Kraus M, Riedel M, Röhrling G (2007). Warten auf Elektivoperationen in Österreich: eine Frage der Transparenz. Health System Watch IV/Winter 2007.

Czypionka T, Kraus M, Röhrling G (2013). Wartezeiten auf Elektivoperationen – Neues zur Frage der Transparenz? Health System Watch II/Oktober 2013.

Czypionka T, Sigl C (2016). Austria. In: Sagan A, Thomson S (editors). Voluntary health insurance in Europe. Country experience. Copenhagen: WHO Regional Office for Europe (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies) (pp. 11–15; Observatory Studies Series (42; http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/voluntary-health-insurance-in-europe-country-experience-2016).

European Commission (2017). Corruption. Special Eurobarometer 470 Report. Brussels: European Commission (Wave EB88.2; http://ec.europa. eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/ instruments/SPECIAL/surveyKy/2176).

Eurostat (2017). Social protection statistics – main indicators. Brussels: European Commission (http://ec.europa.eu/eurostat/statistics-explained/ index.php/Social\_protection\_statistics\_-\_main\_indicators).

Eurostat (2018a). European Health Interview Survey [online database]. Brussels: European Commission (http://ec.europa.eu/eurostat/web/ microdata/european-health-interview-survey).

Eurostat (2018b). EU Statistics on Income and Living Conditions (EU-SILC) [online database]. Brussels: European Commission (http://ec.europa.eu/eurostat/web/income-and-living-conditions/data/main-tables).

EXPH (2016). Opinion on Access to Health Services in the European Union, 2016. Brussels: European Commission (https://ec.europa.eu/health/expert\_panel/sites/expertpanel/files/015\_access\_healthservices\_en.pdf).

EXPH (2017). Opinion on Benchmarking Access to Healthcare in the EU, 2017. Brussels: European Commission, 2017 (https://ec.europa.eu/health/expert\_panel/ sites/expertpanel/files/docsdir/opinion\_benchmarking\_healthcareaccess\_en.pdf). Fuchs M, Hollan K, Schenk M (2017). Analyse der nicht-krankenversicherten Personen in Österreich. Endbericht. Wien: Hauptverband der österreichischen Sozialversicherungsträger.

Habersack M, Gerlich IA, Mandl M (2011). Migrant women in Austria: difficulties with access to health care services. Ethn Inequal Health Soc Care. 4(1):6–15.

Hofmann J, Atzmüller R (2015). "Austria, Island of the Blessed"? Social Inequality and Wealth Distribution in Austria. Vienna: International Sociological Association Forum 2016 (https://isaforum2016.wordpress. com/2015/05/22/austria-island-of-the-blessed-social-inequality-and-wealthdistribution-in-austria/).

Hofmarcher M, Quentin W (2013). Austria: Health system review. Health Systems in Transition 15(7):1–291 (http://www.euro.who.int/en/about-us/ partners/observatory/publications/health-system-reviews-hits/full-list-ofcountry-hits/austria-hit-2013).

HVSV (2016). Statistisches Handbuch der österreichischen Sozialversicherung 2016. Wien: Hauptverband der österreichischen Sozialversicherungsträger.

HVSV (2017a). Gleiche Leistung für gleiches Geld. Presseinformation 3 Oktober 2017. Wien: Hauptverband der österreichischen Sozialversicherungsträger (http://www.hauptverband.at/portal27/ hvbportal/content?contentid=10007.784847&viewmode=content&portal:co mponentId=gtn79cd10df-c589-4309-9e7d-eefd92d15755).

HVSV (2017b). Handbuch der österreichischen Sozialversicherung 2017. Wien: Hauptverband der österreichischen Sozialversicherungsträger.

HVSV (2017c). Leistungsrechtliche Werte in der Sozialversicherung 2017. Wien: Hauptverband der österreichischen Sozialversicherungsträger.

Institut für Höhere Studien (2016). Studierenden-Sozialerhebung 2015. Bericht zur sozialen Lage der Studierenden. Band 2: Studierende. Wien: Institut für Höhere Studien.

Leonhart W (2009). Mehrwertsteuer auf Medikamente. Senkung des Steuersatzes. Österreichische Ärztezeitung Nr. 3 (10 Februar 2009).

LSE (2017). Efficiency Review of Austria's Social Insurance and Healthcare System. Volume 1 – International Comparisons and Policy Options. London: London School of Economics and Political Science (LSE Health).

Mayer S, Österle A (2015). Socioeconomic determinants of prescribed and non-prescribed medicine consumption in Austria. Eur J Public Health. 25(4):597–603.

Muckenhuber J, Freidl W, Rásky É (2011). Healthcare for migrants and for marginalized individuals: The Marienambulanz in Graz, Austria. Wiener klinische Wochenschrift 123:(17–18):559–61.

OECD (2018). Health Statistics [online database]. Paris: Organisation for Economic Co-operation and Development (http://www.oecd.org/health/health-statistics.htm).

Österreichische Apothekerkammer (2017). Rezeptgebühren 1956–2017. In: Österreichische Apothekerkammer [website]. Wien: Österreichische Apothekerkammer (http://www.apotheker.or.at/ internet/oeak/newspresse.nsf/1bd86a866fd269b5c1256d21002d53da/ d2fcb57ed4671f75c1256f2c005d30f3?OpenDocument).

Palladino R, Lee JT, Hone T, Filippidis FT, Millett C (2016). The Great Recession and Increased Cost Sharing in European Health Systems. Health Aff (Millwood). 35(7):1204–13.

Riffer F, Schenk M (2016). Lücken und Barrieren im österreichischen Gesundheitssystem. Wien: Die Armutskonferenz Österreichisches Netzwerk gegen Armut und soziale Ausgrenzung.

Sanwald A, Theurl E (2014). What drives out-of-pocket health expenditures of private households? Empirical evidence from the Austrian household budget survey. Innsbruck: Faculty of Economics and Statistics, University of Innsbruck (Working Papers 2014-04).

Sanwald A, Theurl E (2015). Out-of-pocket payments in the Austrian healthcare system – a distributional analysis. Int J Equity Health. 14:94.

Sanwald A, Theurl E (2016). Out-of-pocket expenditure by private households for dental services – empirical evidence from Austria. Health Econ Rev. 6:10.

Sanwald A, Theurl E (2017). Out-of-pocket expenditures for pharmaceuticals: lessons from the Austrian household budget survey. Eur J Health Econ. 18:435–47.

Scheil-Adlung X, Bonan J (2013). Gaps in social protection for health care and long-term care in Europe: are the elderly faced with financial ruin? Int Soc Secur Rev. 66(1):25–48.

Statistics Austria (1999). Mikrozensus 1999. Vienna: Statistics Austria.

Statistics Austria (2006). Verbrauchsausgaben, Hauptergebnisse der Konsumerhebung 2004/05. Vienna: Statistics Austria.

Statistics Austria (2008). Österreichische Gesundheitsbefragung 2006/07. Vienna: Statistics Austria.

Statistics Austria (2011). Verbrauchsausgaben, Hauptergebnisse der Konsumerhebung 2009/10. Vienna: Statistics Austria.

Statistics Austria (2014). Datenerhebung EU-SILC 2014. Vienna: Statistics Austria.

Statistics Austria (2015). Österreichische Gesundheitsbefragung 2014. Vienna: Statistics Austria.

Statistics Austria (2016). Ausgaben der privaten Haushalte, Hauptergebnisse der Konsumerhebung 2014/15. Präsentation zur Pressekonferenz 18 Oktober 2016. Vienna: Statistics Austria.

Statistics Austria (2017a). Teilzeiterwerbstätige (ILO) nach Grund für Teilzeitarbeit, Alter und Geschlecht - Jahresdurchschnitt 2017. In: Statistics Austria [website]. Vienna: Statistics Austria (http://www.statistik.at/ web\_de/statistiken/menschen\_und\_gesellschaft/soziales/gender-statistik/ erwerbstaetigkeit/062499.html).

Statistics Austria (2017b). Tabellenband EU-SILC 2016. Einkommen, Armut und Lebensbedingungen. Vienna: Statistics Austria (pp. 74–5) (https:// www.sozialministerium.at/cms/site/attachments/7/0/0/CH3434/ CMS1493709119968/tabellenband\_eu-silc\_2016.pdf).

SVA (2016). Satzung der Sozialversicherungsanstalt der gewerblichen Wirtschaft 2017. Amtliche Verlautbarung der österreichischen Sozialversicherung. Wien: Sozialversicherungsanstalt der gewerblichen Wirtschaft.

SVA (2017). Gesund ist, selbständig gesund zu bleiben. Das SVA Vorsorgeprogramm Selbstständig Gesund. Wien: Sozialversicherungsanstalt der gewerblichen Wirtschaft (https://www.svagw.at/portal27/svaportal/ content?contentid=10007.747990&viewmode=content).

SVB (2017). Satzung der Sozialversicherungsanstalt der Bauern 2017. Amtliche Verlautbarung der österreichischen Sozialversicherung. Wien: Sozialversicherungsanstalt der Bauern.

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).

VVO (2016). 2015 in Zahlen und Worten. Jahresbericht. Wien: Versicherungsverband Österreich.

Wagstaff A, van Doorslaer E (2003). Catastrophe and impoverishment in paying in health care: with applications to Vietnam 1993–1998. Health Econ. 2(11):921–33.

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

WHO (2018). Global Health Expenditure Database [online database]. Geneva: World Health Organization (http://apps.who.int/nha/database/Select/Indicators/en).

WHO Regional Office for Europe (2016). European Health Information Gateway [online database]. Copenhagen: WHO Regional Office for Europe (https://gateway.euro.who.int/en/hfa-explorer/).

WKO (2017). Die wichtigsten Anwendungsfälle für die ermäßigten Umsatzsteuersätze von 10% bzw. 13%. In: Wirtschaftskammer Österreich [Webseite]. Wien: Wirtschaftskammer Österreich (https://www.wko.at/service/ steuern/Die\_wichtigsten\_Anwendungsfaelle\_fuer\_die\_ermaessigten\_Ums.html).

World Bank (2017). GINI index (World Bank estimate) [online database]. Washington (DC): The World Bank Group (https://data.worldbank.org/indicator/SI.POV.GINI?locations=AT).

Xu K, Evans D, Carrin G, Aguilar-Rivera A, Musgrove P, Evans T (2007). Protecting households from catastrophic health spending. Health Aff (Millwood). 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.

Yerramilli P, Fernández Ó, Thomson S (2018). Financial protection in Europe: a systematic review of the literature and mapping of data availability. Health Policy (http://www.healthpolicyjrnl.com/article/S0168-8510(18)30049-6/fulltext).<sup>3</sup>

3. Websites accessed 30 May 2018.

## Annex 1. Household budget surveys in Europe

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

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

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

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

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

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

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

Are household budget surveys comparable across countries? Household budget surveys vary across countries in terms of frequency, timing, content and structure. These differences limit comparability. Even among EU countries, where there have been sustained efforts to harmonize data collection, differences remain. An important methodological difference in quantitative terms is owneroccupier imputed rent. Not all countries impute rent and, among those that do, the methods used to impute rent vary substantially (Eurostat, 2015). In this series, imputed rent is excluded when measuring total household consumption.

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

Source: United Nations Statistics Division (2018).

| COICOP codes  | Includes  | Excludes  |
|---|---|---|
| 06.1 Medical products,<br>appliances and equipment<br>06.1.1 Pharmaceutical products<br>06.1.2 Other medical products<br>06.1.3 Therapeutic appliances<br>and equipment | This covers medicaments, prostheses, medical appliances and<br>equipment and other health-related products purchased by<br>individuals or households, either with or without a prescription,<br>usually from dispensing chemists, pharmacists or medical<br>equipment suppliers. They are intended for consumption or use<br>outside a health facility or institution.  | Products supplied directly to outpatients<br>by medical, dental and paramedical<br>practitioners or to inpatients by hospitals<br>and the like are included in outpatient<br>services (06.2) or hospital services (06.3).   |
| <b>06.2 Outpatient services</b><br>06.2.1 Medical services<br>06.2.2 Dental services<br>06.2.3 Paramedical services   | This covers medical, dental and paramedical services delivered to<br>outpatients by medical, dental and paramedical practitioners and<br>auxiliaries. The services may be delivered at home or in individual<br>or group consulting facilities, dispensaries and the outpatient<br>clinics of hospitals and the like. Outpatient services include the<br>medicaments, prostheses, medical appliances and equipment and<br>other health-related products supplied directly to outpatients by<br>medical, dental and paramedical practitioners and auxiliaries.   | Medical, dental and paramedical services<br>provided to inpatients by hospitals and the<br>like are included in hospital services (06.3).   |
| 06.3 Hospital services  | Hospitalization is defined as occurring when a patient is<br>accommodated in a hospital for the duration of the treatment.<br>Hospital day care and home-based hospital treatment are<br>included, as are hospices for terminally ill persons. This group<br>covers the services of general and specialist hospitals; the<br>services of medical centres, maternity centres, nursing homes<br>and convalescent homes that chiefly provide inpatient health<br>care; the services of institutions serving older people in which<br>medical monitoring is an essential component; and the services<br>of rehabilitation centres providing inpatient health care and<br>rehabilitative therapy where the objective is to treat the patient<br>rather than to provide long-term support. Hospitals are defined as<br>institutions that offer inpatient care under the direct supervision<br>of qualified medical doctors. Medical centres, maternity centres,<br>nursing homes and convalescent homes also provide inpatient<br>care, but their services are supervised and frequently delivered by<br>staff of lower qualification than medical doctors. | This group does not cover the services<br>of facilities (such as surgeries, clinics<br>and dispensaries) devoted exclusively to<br>outpatient care (06.2). Nor does it include<br>the services of retirement homes for older<br>people, institutions for disabled people and<br>rehabilitation centres providing primarily<br>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, accessed 19 March 2018).

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, accessed 19 March 2018).

Yerramilli P, Fernández O, Thomson S (2018). Financial protection in Europe: a systematic review of the literature and mapping of data availability. Health Policy (http://www.healthpolicyjrnl.com/article/S0168-8510(18)30049-6/ fulltext, accessed 19 March 2018).

# Annex 2. Methods used to measure financial protection in Europe

#### Background

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

#### Data sources and requirements

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

The following variables are required at household level:

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

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

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

#### Defining household consumption expenditure variables

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

#### Total household consumption expenditure not including imputed rent

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

#### Food expenditure

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

#### Housing expenditure on rent and utilities

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

#### Health expenditure (out-of-pocket payments)

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

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

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

#### Defining a basic needs line

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

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

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

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

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

#### Calculating the basic needs line

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

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

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

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

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

#### Calculating basic needs expenditure levels for each household

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

#### Capacity to pay for health care

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

#### Estimating impoverishing out-of-pocket payments

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

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

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

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

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

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

#### Estimating catastrophic out-of-pocket payments

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

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

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

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

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

#### Distribution of catastrophic out-of-pocket payments

The first equity dimension is expenditure quintile. Expenditure quintiles are determined based on equivalized per person household expenditure. Household weights should be used when grouping the population by quintile. Countries may find it relevant to analyse other equity dimensions such as differences between urban and rural populations, regions, men and women, age groups and types of household. In some countries it is common to finance out-of-pocket payments from savings or borrowing, which might artificially inflate a household's consumption and affect household ranking. Where this is an issue, it may be preferable to calculate quintiles based on non-health equivalized per person household expenditure.

#### Structure of catastrophic out-of-pocket payments

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

#### 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, accessed 19 March 2018).

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, accessed 19 March 2018).

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).

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 (R1, R2)

Indicator R1: the proportion of households

Indicator R2: risk of poverty due to out-

impoverished, at risk of impoverishment or not

payments using a country-specific line based on household spending to meet basic needs (food,

at risk of impoverishment after out-of-pocket

of-pocket payments - the proportion of households further impoverished,

of household capacity to pay

with out-of-pocket payments greater than 40%

## Annex 3. Regional and global financial protection indicators

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

Catastrophic out-of-pocket payments

Impoverishing out-of-pocket payments

Global indicators (G1-G4)

Indicator G1: the proportion of the population with large household expenditure on health as a

share of total household consumption or income

(greater than 10% or 25% of total household

expenditure on health using an international

poverty line of PPP-adjusted US\$ 1.90 per

Indicator G3: changes in the incidence

Indicator G2: changes in the incidence and severity of poverty due to household

consumption or income)

person per day

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

Note: PPP: purchasing power parity.

Sources: WHO headquarters and WHO Regional Office for Europe.

|                  | ousing and utilities)   | and severity of poverty due to household<br>expenditure on health using an international<br>poverty line of PPP-adjusted US\$ 3.10 per<br>person per day   |
|------------------|---|--|
|                  |   | Indicator G4: changes in the incidence<br>and severity of poverty due to household<br>expenditure on health using a relative poverty<br>line of 60% of median consumption or income<br>per person per day  |
| F                | legional indicators   |  |
| S<br>S<br>V<br>f | tates. They were developed by the W<br>trengthening (part of the Division of<br>VHO Regional Office for Europe), at t<br>or Europe, to meet demand from Me<br>nore suited to high- and middle-incor | ment to the needs of European Member<br>(HO Barcelona Office for Health Systems<br>Health Systems and Public Health in the<br>he request of the WHO Regional Director<br>mber States for performance measures<br>me countries and with a stronger focus on<br>I Committee resolutions (see Annex 2). |
| A                | 5   | for monitoring financial protection is   |

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

#### **Global indicators**

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

At the global level, support by WHO for the monitoring of financial protection is underpinned by World Health Assembly resolution WHA64.9 on sustainable health financing structures and universal coverage, which was adopted by Member States in May 2011. More recently, with the adoption of the 2030 Agenda for Sustainable Development and its concomitant Sustainable Development Goals (SDGs) in 2015, the United Nations has recognized WHO as the custodian agency for SDG3 (Good health and wellbeing: 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.

#### The choice of global or regional indicator has implications for policy

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

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

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

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

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

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

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

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

#### References

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, accessed 19 March 2018).

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/, accessed 19 March 2018).

Yerramilli P, Fernández O, Thomson S (2018). Financial protection in Europe: a systematic review of the literature and mapping of data availability. Health Policy (https://www.healthpolicyjrnl.com/article/S0168-8510(18)30049-6/fulltext, accessed 19 March 2018).

### Annex 4. Glossary of terms

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

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

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

Budget: See household budget.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### The WHO Regional Office for Europe

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

#### **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 Norway Poland Portugal **Republic of Moldova** Romania **Russian Federation** San Marino Serbia Slovakia Slovenia Spain Sweden Switzerland Tajikistan The former Yugoslav Republic of Macedonia Turkey Turkmenistan Ukraine United Kingdom Uzbekistan



World Health Organization Regional Office for Europe UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark

Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01 Email: eurocontact@who.int Website: www.euro.who.int