

## Research article

# MONITORING FINANCIAL PROTECTION TO ASSESS PROGRESS TOWARDS UNIVERSAL HEALTH COVERAGE IN EUROPE

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## ABSTRACT

European countries led the way in moving towards universal health coverage in the 20th century. The economic crisis and other factors have challenged this achievement in some countries, highlighting the need for vigilance to sustain progress. Assessments of universal health coverage commonly measure health system performance in two areas: (i) the extent to which people are prevented from using services because of access barriers (unmet

need for health care); and (ii) the extent to which people are shielded from financial hardship when they use health services (financial protection). The European Union regularly monitors unmet need, but Europe lacks a comprehensive set of estimates for financial protection, even though the necessary data are routinely available in most countries. To address this gap, the World Health Organization Regional Office for Europe has

initiated a project to produce up-to-date estimates of financial protection using a new approach better suited to high- and middle-income countries in the region. We explain why financial protection matters, briefly review conventional ways of measuring it, show how the World Health Organization European Region's adapted metrics add value and describe how context-specific monitoring can generate actionable evidence for policy-making.

**Keywords:** FINANCIAL PROTECTION, HEALTH SYSTEM PERFORMANCE, UNIVERSAL HEALTH COVERAGE, UNMET NEED

## STATUS OF UNIVERSAL HEALTH COVERAGE IN EUROPE

Universal health coverage (UHC) means that everyone can use effective health services when they need them without experiencing financial hardship (1). Moving towards UHC involves meeting three distinct goals: (i) providing access to needed health services; (ii) ensuring services are of sufficient quality to be effective; (iii) and securing financial protection (the focus of this paper). Universality and equity are central to each goal.

During the 20th century, European countries led the way in moving towards UHC, providing a model for

others to follow. Yet, few European policy-makers would claim to be fully satisfied with their country's progress in meeting all three goals. Moreover, in the wake of the economic crisis, few would argue that UHC achievements are irrevocable.

Efforts to monitor progress towards UHC focus on health system performance in two areas: access to health services and financial protection. Access is commonly assessed by looking at the extent to which people are prevented from using health services (i.e. foregoing care and having unmet need) due to barriers relating to cost, distance to facilities or long waiting times. Countries in the European Union (EU) have some idea of how well they are doing in terms of access to health care because unmet need has been monitored since 2005 through the annual EU Survey on Income and Living Conditions (EU-SILC; carried out in the 28

Member States plus Iceland, Norway and Switzerland). These data suggest that unmet need for health care is generally low – on average, experienced by less than 4% of the EU population, although there are notable exceptions across and within countries (2). Cost is the most important reason for unmet need.

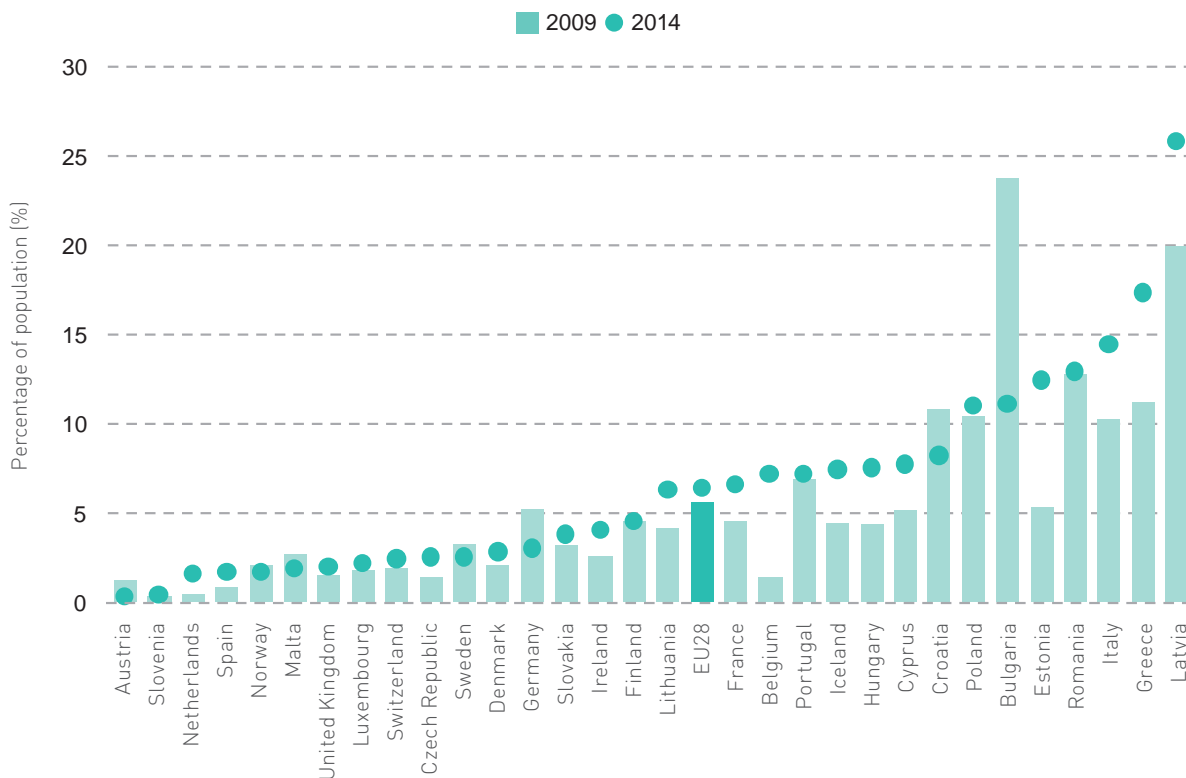
EU data on unmet need also suggest that there have been important changes in performance over time. Between 2005 and 2009, unmet need remained stable or fell in the vast majority of countries, but this positive trend was reversed following the onset of the economic crisis (2). To illustrate, Fig. 1 shows that unmet need was higher among the poorest fifth of the population in 2014 than in 2009 in 21 of the 28 EU countries. The fact that so many high-income countries failed to protect access to health services during and after the crisis, especially for the most vulnerable people, should be a matter of concern to national and international policy-makers (3,4). It highlights the importance of constant vigilance to ensure sustained progress towards UHC.

In contrast, most European countries do not have up-to-date information on how well they are doing in terms of financial protection. This is surprising given the importance of financial protection to UHC, the presence of well-established indicators for measuring financial protection and the routine availability of the data needed to prepare estimates.

To address this gap, the World Health Organization Regional Office for Europe has developed a new approach to monitoring financial protection. We have adapted conventional measures so that they are more relevant to high- and middle-income countries across the region and are working closely with national experts to provide context-specific assessments.

In this article, we will show that systematic monitoring of financial protection is critical for assessing country-level and regional progress towards UHC and can provide actionable evidence for policy. We will explain why analysis of financial protection matters, review different ways of measuring it and

**FIG. 1. UNMET NEED FOR HEALTH CARE DUE TO COST, DISTANCE AND WAITING TIME AMONG POOR PEOPLE IN EUROPE BEFORE AND AFTER THE ECONOMIC CRISIS**



EU28: mean value for the 28 Member states; data are for the poorest fifth of the population.

Source: Eurostat (2).

describe how our new approach adds value. By combining up-to-date estimates of financial protection with detailed national analysis, it is possible to generate new evidence, raise awareness of an important dimension of health system performance and identify concrete policies to alleviate financial hardship.

## FINANCIAL PROTECTION ANALYSIS

Financial hardship is an outcome of using health services and having to pay for them at the point of use. Out-of-pocket payments – formal or informal payments made by people at the time of using any health care good or service – are unlikely to cause

problems if they are small and paid by people who are well off. However, even small payments can cause financial hardship for poor people and those who need to pay for some or all of the costs of ongoing treatment – for example, for medicines for chronic conditions. Financial hardship caused by out-of-pocket payments for health may prevent households from spending enough on other basic needs such as food, housing and heating. In the long term, this could lead to further deprivation and ill-health.

Health systems that provide strong financial protection keep out-of-pocket payments to a minimum using a combination of strategies (1). These include ensuring adequate and stable public funding; providing universal population entitlement to a wide range of publicly financed health services, with limited use of copayments (user charges); securing equitable and timely access to good quality care delivered at the lowest cost; and implementing policies to protect vulnerable groups of people. As outpatient medicines account for a large share of out-of-pocket payments (5), policies to expand publicly financed coverage of medicines, reduce medicine prices, and ensure cost-effective prescribing, dispensing and use of medicines play a vital role in strengthening financial protection.

The incidence of financial hardship tends to be higher in poorer than in richer countries (6,7), partly because public spending on health is generally much lower as a share of national wealth (i.e. gross domestic product) in poorer countries. However, financial protection is also an issue in high-income countries, for the reasons set out in Box 1.

Analysis at national or subnational levels can provide policy-makers with information on the magnitude, distribution and causes of financial hardship.

- *Magnitude* – the number of people who experience financial hardship as a result of out-of-pocket payments.
- *Distribution* – who these people are and whether some groups are systematically disadvantaged. Datasets always allow disaggregation by household income (consumption) status and often by other household characteristics such as size, composition and place of residence and the age, gender and occupational status of the head of the household.
- *Causes* – the role of different types of health service in driving financial hardship. Most datasets allow

### BOX 1. FIVE REASONS WHY FINANCIAL PROTECTION IS AN IMPORTANT ISSUE IN HIGH-INCOME COUNTRIES

1. Financial protection is a core health system objective (i.e. a central component of health system performance assessment) in rich and poor countries alike. Its global relevance is reflected in the inclusion of UHC as one of the sustainable development goals. All countries have committed to meeting the sustainable development goals.
2. Not all high-income countries provide universal population entitlement to a wide range of publicly financed health services. Almost all require copayments at the point of use. Publicly financed coverage of outpatient medicines is often weak.
3. Many high-income countries still rely heavily on out-of-pocket payments. In the World Health Organization European Region, for example, out-of-pocket payments accounted for over a fifth of total spending on health in 15 out of 34 high-income countries in 2014 (8).
4. Policy choices matter. Even high-income countries face fiscal constraints and must make trade-offs when allocating resources. They also have people who are poor or vulnerable in other ways. Failure to spend limited resources efficiently and to provide effective protection for vulnerable groups (e.g. through exemptions from copayments) is likely to exacerbate financial hardship.
5. Policy achievements can be undone. Many people have been disadvantaged by an erosion of health coverage due to changes introduced during the recent economic crisis, with adverse consequences for access (3,4). Health coverage was also eroded in many countries following the collapse of the Soviet Union in the early 1990s (9).

Source: adapted from Thomson et al. (10).

disaggregation by inpatient care, outpatient care, medicines, medical products, diagnostic tests and dental care.

Analysing temporal trends within a country can make it easier to identify correlations among the socioeconomic environment, the health system, and the incidence, distribution and drivers of financial hardship. For example, it may be possible to link a change (or the absence of change) in financial hardship to changes (or the absence of change) in the health system and in policies beyond the health system.

To prepare estimates, analysts need access to survey data on household spending levels and patterns, including spending on health care goods and services. EU Member States are required to conduct household budget surveys at least once every five years, although some do this annually. Many other countries in the region also carry out regular household budget surveys. These collect data on the level and composition of out-of-pocket payments for health care goods and services, including both formal and informal payments (although it is not usually possible to distinguish formal from informal payments).

## MEASURES OF FINANCIAL PROTECTION

Financial protection is traditionally measured using two indicators associated with the use of health services: impoverishing and catastrophic out-of-pocket payments (6,11–13). Both indicators estimate the number of households in which out-of-pocket payments for health care exceed a predefined threshold. In both cases, it is not the absolute amount of out-of-pocket spending that is important, but rather the impact that it has on household living standards.

The threshold used to estimate the incidence of impoverishing out-of-pocket payments is a poverty line, which can be defined in different ways. To measure the extent of impoverishment involves identifying households initially above the poverty line (non-poor households) who find themselves below the poverty line after paying out of pocket for health care (now poor households).

For catastrophic out-of-pocket payments, the threshold is a share of a household's budget or a household's

capacity to pay. A simple approach is to consider out-of-pocket payments to be catastrophic if they exceed a share – for example, 25% – of a household's budget, with budget defined as the household's total income or total consumption (i.e. actual spending) (12,14). Consumption is often regarded as a more stable indicator of living standards than income, especially in contexts where incomes are irregular or partially in kind. The obvious disadvantage of the budget share approach, however, is that it underestimates financial hardship among poorer households: after spending 25% of its budget on health care, a poor household will have much less money to spend on other things compared with a rich household, and will need to spend most of it on meeting basic needs such as food, housing and heating (15).

More refined approaches define out-of-pocket payments as catastrophic if they exceed a share of the household's capacity to pay (the household's budget remaining after deducting an amount to cover spending on basic needs). This amount could be normative (the same for all households of equivalent size) (6) or reflect a household's actual spending on basic needs (12). Studies that account for capacity to pay have traditionally used normative or actual food spending as a proxy for spending on basic needs. The main disadvantage with this is that food is not necessarily a good proxy for basic needs in high- and middle-income countries because households (and countries) tend to spend proportionately less on food as they get richer; nor is it a good proxy for basic needs in countries with cold climates, where heating is a necessity. As a result, conventional capacity-to-pay approaches are likely to underestimate financial hardship in richer countries and, as with the budget share approach, in poorer households.

In response to these limitations and in the absence of an up-to-date assessment of financial protection in European health systems (13,14), the World Health Organization Regional Office for Europe has initiated a new approach to monitoring financial protection that makes three important contributions to knowledge and evidence. First, it has adapted conventional measures of financial protection to make them more relevant to high- and middle-income countries. Second, it will provide up-to-date estimates for a wide range of countries in the region, including countries where estimates have never been available before. This will

help raise awareness of financial protection at national and regional levels. Third, by working closely with national experts to produce detailed and context-specific assessments, it will generate evidence that is actionable.

## ADAPTING MEASURES FOR HIGH- AND MIDDLE-INCOME COUNTRIES

We will briefly describe the main changes we have made to conventional measures in our approach to financial protection analysis and note some implications for policy. First, our approach uses a country-specific poverty line based on household spending to meet basic needs. It extends the concept of basic needs to include the cost of housing and utilities (water, gas, electricity and heating), in addition to the cost of food. We begin by calculating a normative amount that reflects spending on food, housing and utilities among relatively poor households (those between the 25th and 35th percentiles of the household consumption distribution) in a given country. Preliminary results show that our basic needs line is consistently higher than the food-based line used in conventional approaches but lower than poverty lines widely used in the World Health Organization

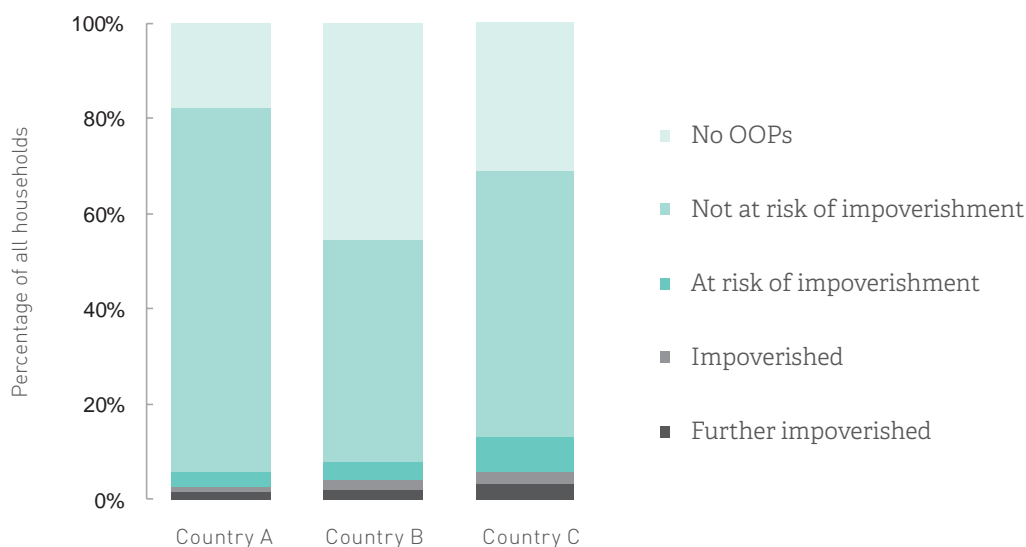
European Region. For example, it is substantially lower than the EU poverty line of 60% of median income.

We then divide the population into five mutually exclusive groups according to where households stand in relation to the basic needs line, drawing on the work of Wagstaff and Eozenou (16), as shown in Fig. 2:

- households that do not incur any out-of-pocket payments at all – that is, *non-spenders*;
- households that are *not at risk of impoverishment* because they do not come close to the basic needs line after paying out of pocket;
- households *at risk of impoverishment* because they come close to the basic needs line after paying out of pocket;
- households that are *impoverished* after paying out of pocket – that is, they do not have enough left over to meet their basic needs; and
- households that are *further impoverished* because they are already below the basic needs line before paying out of pocket.

This change draws attention to people who are rarely visible in conventional approaches: those in households that are further impoverished, are at risk of impoverishment or do not spend on health care. Highlighting out-of-pocket spending in people already living below the basic needs

**FIG. 2. BREAKDOWN OF THE POPULATION BY RISK OF IMPOVERISHMENT AFTER PAYING OUT OF POCKET FOR HEALTH SERVICES**



OOP: out-of-pocket payment.

OOPs include formal and informal payments. At risk of impoverishment refers to households who come within 120% of the basic needs line after paying out of pocket.

Source: authors' estimates using data from three countries.

line is useful, given the emphasis that many health systems place on protecting poor people – for example, by exempting them from copayments. Policy-makers will also find it useful to understand how out-of-pocket payments affect a household's risk of not having enough to spend on basic needs.

Similarly, it is useful to highlight non-spenders, some of whom may face financial barriers to access. Unfortunately, most datasets do not tell us whether non-spenders forego health care, but making them visible allows us to raise questions about the possibility of unmet need, particularly for health systems that do not exempt people from copayments.

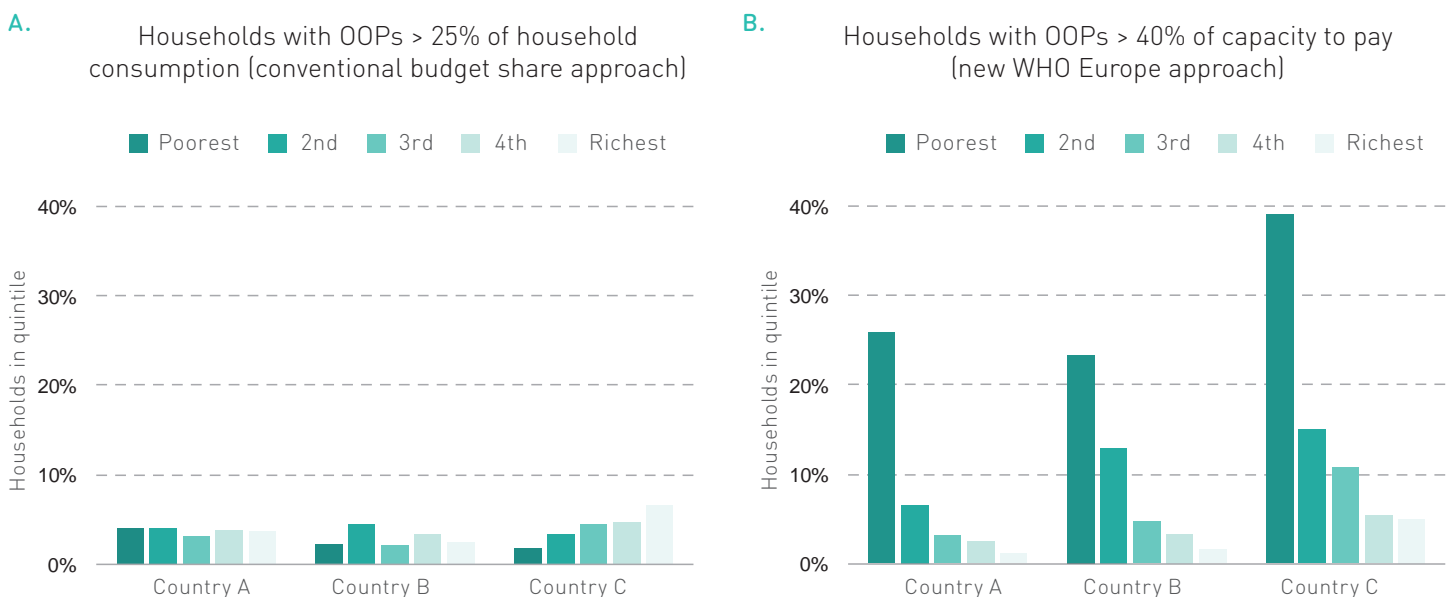
To estimate the incidence of catastrophic out-of-pocket payments, we count all households in which out-of-pocket payments account for more than a given share of capacity to pay. As in conventional budget share and capacity-to-pay approaches, the choice of threshold is arbitrary, but we usually present results using a threshold of 40%. Our approach differs in our treatment of households living below the basic needs line before paying out of pocket. Because these households do not have any capacity to pay – their capacity to pay is negative – we count all of them with out-of-pocket payments when calculating the incidence of catastrophic spending. In contrast, conventional approaches do not allow households to have a negative

capacity to pay and therefore apply a different threshold to people below and above the poverty or basic needs line before paying out of pocket, which underestimates financial hardship among poorer households.

This departure from convention has two important outcomes. First, in treating already very poor households in the same way as non-poor households, it corrects for underestimation and makes financial hardship among poorer households more visible in relation to richer households. Second, it implicitly requires the out-of-pocket health spending of richer households to represent a higher share of their budget compared with poorer households before it can be classified as catastrophic.

The first outcome can be seen in Fig. 3. In conventional approaches (Fig. 3a), the distribution of households with catastrophic out-of-pocket payments is either proportionate (country A; that is, all households are equally likely to face financial hardship) or progressive (country C; that is, that richer households are most likely to face financial hardship). In some cases, there is no clear pattern (country B). In our new approach (Fig. 3b), the distribution is consistently regressive, meaning that poorer households are consistently most likely to face financial hardship. This makes intuitive sense and immediately signals where policy needs to focus in order to improve financial protection.

**FIG. 3. HOUSEHOLDS WITH CATASTROPHIC SPENDING BY CONSUMPTION QUINTILE: A COMPARISON OF RESULTS USING DIFFERENT APPROACHES**



OOP: out-of-pocket payment. OOPs include formal and informal payments.

Source: authors' estimates using data from three countries.



Fig. 4 illustrates the second outcome. With conventional approaches (Fig. 4a), the amount of catastrophic spending on health care, as a share of the household budget, is similar across all households or may even be slightly regressive, meaning that the poor have to spend a larger share of their budget out of pocket than the rich for their health spending to be classified as catastrophic (country B). In our new approach (Fig. 4b), the distribution is consistently progressive, in line with normative equity goals and policy concerns in practice. As we have noted, many health systems exempt poor people from copayments to ensure they have less out-of-pocket spending compared with richer people.

Some will argue that this change in measurement artificially inflates the incidence of catastrophic out-of-pocket payments because it classifies all out-of-pocket payments by any household living below the basic needs line as catastrophic, even if such payments are very small. In our view, however, the change is consistent with normative and empirical policy objectives. Preliminary results also show that the average amount spent on health care by this group ranges from around 3% to around 10% of the household budget. So, while the absolute amount spent may seem small in some cases, it is not an insignificant share of an already very poor household's budget.

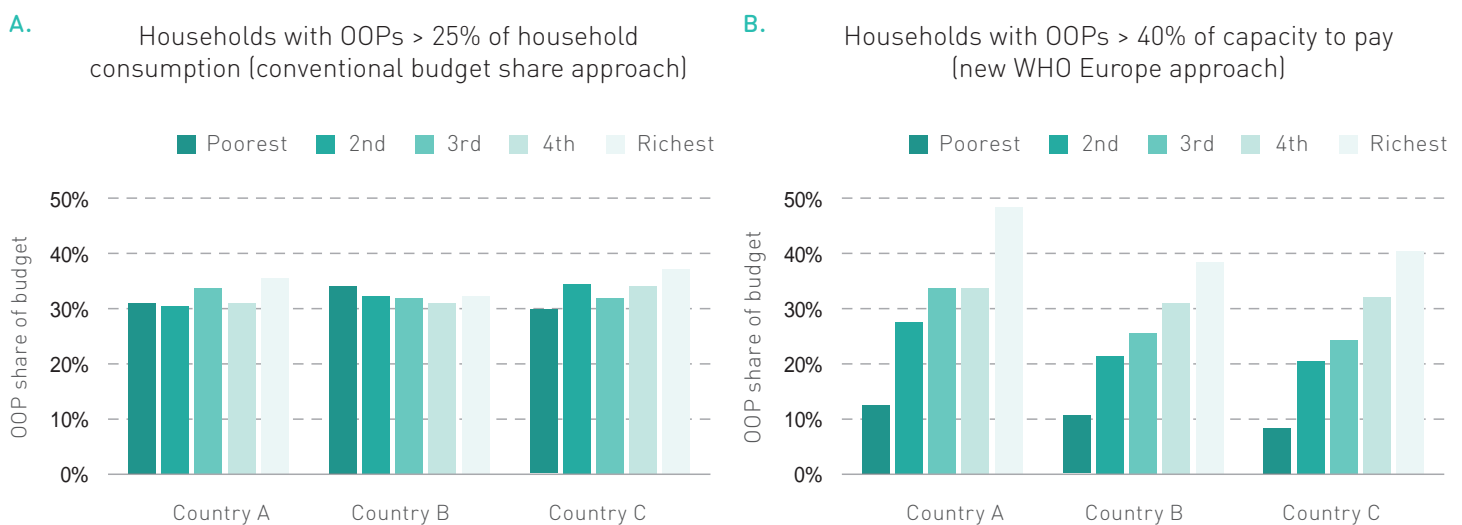
Finally, we are able to summarize the population breakdown by risk of impoverishment and the incidence of catastrophic out-of-pocket payments in a single chart (Fig. 5).

## GENERATING ACTIONABLE EVIDENCE FOR POLICY

In the past, international studies of financial protection have focused on producing numbers on the incidence of impoverishing or catastrophic spending across multiple countries. They have not presented results on the distribution of financial hardship – perhaps because there was no clear pattern across countries – or on the drivers of financial hardship; nor have they offered country-level analysis (6,7,14,17). Focusing on numbers serves advocacy purposes by drawing attention to the magnitude of the problem facing countries or regions. However, it does not provide actionable guidance for policy-makers.

Our approach aims to provide policy-makers with evidence they can act upon. To produce this evidence, the World Health Organization Regional Office for Europe is working closely with one or more experts in each country of the study to prepare a comprehensive

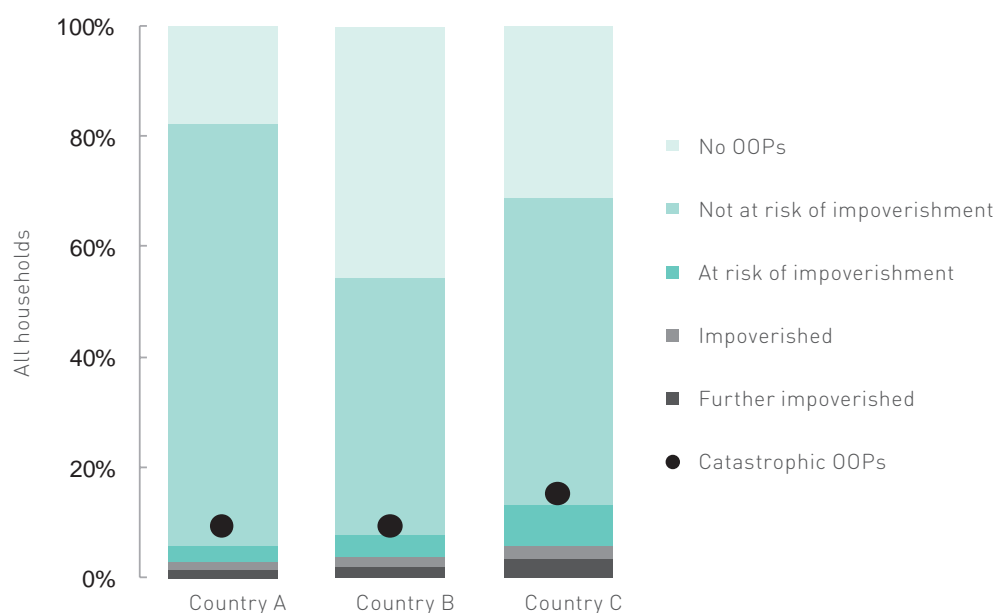
**FIG. 4. OOPs AS A SHARE OF THE HOUSEHOLD BUDGET AMONG CATASTROPHIC HOUSEHOLDS: A COMPARISON OF RESULTS USING DIFFERENT APPROACHES**



OOP: out-of-pocket payment.

OOPs include formal and informal payments.

Source: authors' estimates using data from three countries.

**FIG. 5. HOUSEHOLDS AT RISK OF IMPOVERISHMENT AFTER PAYING OUT OF POCKET AND THE INCIDENCE OF CATASTROPHIC OUT-OF-POCKET PAYMENTS**

OOP: out-of-pocket payment.

OOPs include formal and informal payments. At risk of impoverishment refers to households who come within 120% of the basic needs line after paying out of pocket.

Source: authors' estimates using data from three countries.

national assessment of the incidence, distribution and drivers of financial hardship, while using data from at least two discrete years to allow analysis over time or before and after reform.

The national assessment analyses financial protection in the context of health system factors such as changes in spending on health, changes in health coverage and evidence of unmet need. It also considers the role of factors beyond the health system that affect people's capacity to pay out of pocket, including changes in employment rates and social protection policies. This type of analysis makes it possible to identify the policies and health services associated with financial hardship for different groups of people, which in turn gives policy-makers a good idea of where to focus their attention.

National assessments will feed into a regional overview. Although a comparative analysis is challenging due to differences in the quality of household survey data, it is possible to establish patterns across countries. Preliminary results from our study show that financial hardship is consistently concentrated among the two poorest quintiles (Fig. 3) and consistently driven mainly

by out-of-pocket spending on outpatient medicines, particularly for poorer households (Fig. 6). For richer households, financial hardship is more likely to be driven by spending on dental care and inpatient care (as well as medicines), probably reflecting enhanced access to dental care or treatment in private facilities for this group.

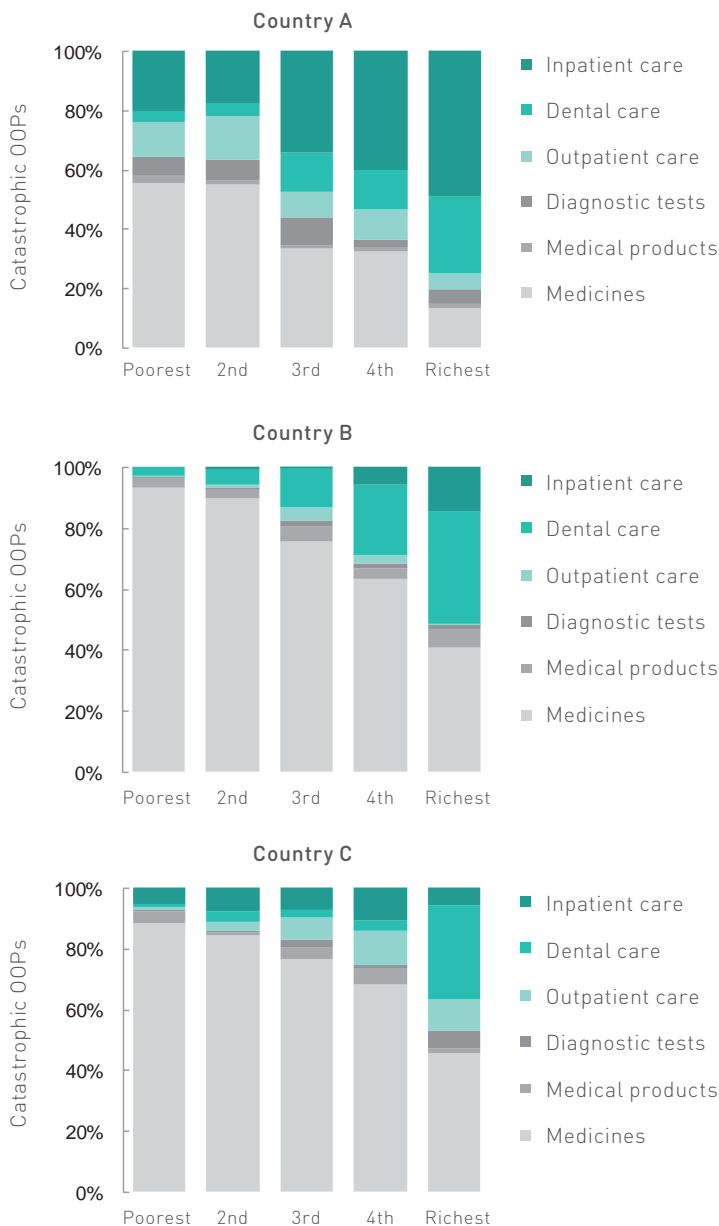
Preliminary results also show that the incidence of catastrophic out-of-pocket payments varies considerably across countries, affecting between 1% and 18% of the population in the countries in our study. In line with earlier studies, we find financial hardship to be associated with out-of-pocket payments as a share of total spending on health (6,7,13), but it is also influenced by policies. For example, countries can learn from cross-national differences in health coverage, including the ways in which copayments are used and the mechanisms used to protect people against copayments, especially for medicines.

## FROM EVIDENCE TO POLICY

Equitable access to effective health services and financial protection are key goals for UHC and for



**FIG. 6. DRIVERS OF IMPOVERISHING AND CATASTROPHIC OUT-OF-POCKET PAYMENTS BY CONSUMPTION QUINTILE**



OOP: out-of-pocket payment.

OOPs include formal and informal payments.

Source: Authors' estimates using data from three countries.

health systems. Many countries in the World Health Organization European Region already monitor unmet need for health care, but the Region lacks a comprehensive set of comparable estimates for financial protection, even though the necessary data are routinely available.

Systematic monitoring of financial protection across a wide range of countries, accompanied by in-depth

national analysis, will help raise awareness about the magnitude of financial hardship in Europe. It will lead to a better understanding of the factors and policies that cause financial hardship and allow countries to identify concrete ways of improving financial protection, particularly for vulnerable groups of people. A further advantage is that policies introduced to alleviate financial hardship are also likely to reduce unmet need.

The World Health Organization Regional Office for Europe is ready to work with Member States to ensure that the evidence generated by our study results in policy changes to strengthen financial protection and promote equitable access to health services. To this end, we seek to facilitate national and international policy dialogue to share results, foster cross-country learning and support evidence-informed policy development.

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